Dual-method Usability Evaluation Report

www.tesco.ie

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Executive Summary

This report outlines an evaluation carried out on Tesco.ie to measure its usability, utility and desirability. It concludes with recommendations and redesign proposals to improve the user experience of the site, aiming to help Tesco gain customer loyalty and ensure retention. A user's ability to plan a meal and purchase ingredients was the focus of this evaluation, as Tesco believe the current user flow to be disjointed and frustrating.

The site's efficiency, effectiveness and user satisfaction were measured through heuristic evaluation and usability testing. Methods were chosen for practicality and cost-effectiveness (Section 2).

A review was conducted by four designers individually to evaluate the site against a defined set of heuristics, reporting encountered violations and listing positive findings (Section 3.1).

Usability testing was conducted with fourteen participants, four of them using the think-aloud method, and ten conventional usability test. These participants were recruited and evaluated for their fit as representative users with a screening questionnaire. This was followed by a pre-test questionnaire which collected demographic data on selected participants, as well as presenting them with a priming activity.

Sessions were conducted in either a tester's home or office. A screen and audio recording captured the participant's interaction and conversation. The structure of each session was outlined in a script, guiding the tester and ensuring standard and comparability.

Qualitative data was collected during a "homepage tour" where participants shared their initial reaction to the landing page. Participants were then asked to complete ten tasks which were written in line with evaluation objectives, a mix of both specific and exploratory. To set the context and help participants engage with the interface, the tasks were set within the scenario set out in the priming activity.

Quantitative data was collected on time-on-task, success rate, and a post-test SUS user rating. Qualitative insights were gained through observation, the think-aloud methodology and a post-test interview (Section 3.2).

Heuristic evaluation results were analyzed, and suggest a low overall conformity of 36-39%. Specifically purchase decision and information architecture come in lowest at 4% and 17% respectively (Section 4.1).

Usability test insights and metrics were logged and shared using a Rainbow Spreadsheet. The analysis was done using an affinity map as well as within the Rainbow Spreadsheet (Section 4.2).

Qualitative insights indicated an overwhelming and uninviting interface which left users feeling the site was "cluttered" and "cold", and not achieving the immersive experience of shopping in-store or on a competitor's sites (Section 4.2.1).

Quantitative results also indicate a poor user experience. Task completion rate of the whole test per participant was 70% or less, which is low by industry standards. Time-on-task was measured, which will serve as a benchmark for future improvements, or for comparing against competing sites (Section 4.2.2).

An average 56.43% SUS rating also suggests a poor user experience (Section 4.3).

Based on these findings, a prioritized set of recommendations for design changes have been made. Wire-frames visualise redesign proposals for the homepage, the recipes search, recipe and groceries page (Section 5).

1. Introduction

Tesco is a British multinational grocery and general merchandise retailer. Variety of services is offered on their e-commerce website Tesco.ie, creating value for their customers and earning their loyalty. The success of the website depends on the people who shop with them. Ease of use would increase the number of returning customers. The goal of the company is to ensure that customers are satisfied with the website, they like it and they will shop again.

Tesco was looking for ways to create a delightful experience for its customers and reinforce the use of their website. On Tesco.ie, customers can search recipes and shop ingredients. The path from meal planning to ingredient purchase was disrupted, causing users drop out of the purchase process before the final checkout. Users had to manually fill their shopping basket with recipe ingredient list. This made a shopping experience time-consuming and frustrating. Seamless integration allowing customers to instantly order recipe ingredients would solve that problem.

This study aims to identify issues and recommend design changes to help users accomplish the task of planning a meal and buying ingredients. A dual-method usability evaluation was used to get insights into interface problems. Usability testing focuses on users journey and type of content, while heuristics review was directed at e-commerce interaction factors and overall user interface factors.

This report details procedure, findings and recommendations to enhance the usability of Tesco.ie.

2. HCI Goals to be Evaluated

The objective of this project was to identify potential usability issues in Tesco.ie:

1. Identify and prioritise important issues, weaknesses and strengths of the general UI navigation and structure.
2. Assess the overall effectiveness and ease of use of the navigational structure on Tesco.ie.
3. Determine the strengths and weaknesses of the information displayed on Tesco.ie.
4. Identify potential obstacles to find a recipe, buy ingredients, find special offers and use "Multisearch"
5. Finding out what features customers use the most or does not use at all.
6. Finding out what the customers encountered while navigating the website.
7. How satisfied where customers with the ability to get everything that is required to make a quick dinner.
8. Make recommendations for how to fix the most severe problems.

Through the user testing and expert feedback, the reference to human-computer interface design was provided to improve functionality and usability.
The usability testing process measured the degree in which the website is efficient, effective, and if users are satisfied with Tesco.ie (Nielsen, 2012).

Effectiveness defines "how good product is at doing what it suppose to do" (Preece, Sharp, & Rogers, 2016). To measure it, the accuracy and completeness of goals achievements were monitored. The number of errors and successful task completion was recorded.
Efficiency is the effort required to complete a task. The lower the number of steps and shorten the time to complete a task, the more efficient the product is. The efficiency would be determined by measuring the time on each task to compare it with the standard performance times.
Satisfaction answers: "What users think of the product once they have used it?" (Preece, Sharp, & Rogers, 2016). To get an answer, users were asked to rate: quality, ease of use, likability, user affect, overall features, support, interfaces, output, finding help.

Utility tells if the system has set of functions enabling users to carry out tasks (Preece, Sharp, & Rogers, 2016). With experts' help and list of guidelines (heuristics), website's functionality, navigation, information architecture, page structure and layout, e-commerce features were assessed and issues identified.
To address most urgent issues first, all the findings were prioritised based on their severity, which is a task criticality multiplied by an impact and a frequency (Rosemberg, 2018).

3. Evaluation Methodology

Two procedures were used to evaluate Tesco.ie. Using both heuristic review and usability testing is a practical, cost-effective approach to usability evaluation.

With Heuristic Evaluation (Nielsen, 1992) we were able to gain knowledge on how to improve the user's experience while browsing the recipe and buying ingredients. A heuristic evaluation comprises specific tasks or elements that evaluators must examine while navigating the website. The evaluators were instructed to review the website, check which heuristics it violated, report and rate the severity of usability problems they encountered. This technique is inexpensive and good for finding common interface problems. It helps the evaluators focus their attention on specific issues. Ethical and practical problems associated with testing methods involving real users are not carried in the heuristic review (Wong, 2018).
It is extremely important to choose the appropriate set of heuristics to avoid overlooking certain usability problems. Another disadvantage is the time required to train, brief evaluators, conduct evaluation and debriefing sessions. Problems identified by the evaluators might be not actually problems (Wong, 2018). An individual evaluation was chosen over the team evaluation (Appendix A). It is more time consuming than a group review, but more issues can be identified with it.

The second procedure was usability testing. Four users completed tasks while thinking aloud. Think aloud (Nielsen, 2012) methodology helped to collect qualitative data and gain an insight into what users really think. Hearing their misconceptions helps to generate redesign recommendations. More specific problems of the system use can be identified (Barrington, 2007), but usability metrics, such as accuracy and time on task are not accurate with think aloud (Nielsen, 2001). For this reason, ten participants tested the website with conventional usability testing. That allowed to measure time (efficiency) which, later will be compared with the time required to complete similar tasks on the competitor's websites or to check if the redesign improved an efficiency.

It is vital to get a correct audience for usability testing. Tasks used for testing had to reflect research goals and provide participants with clear instructions. It was not easy to write them, and giving the wrong instructions could completely change the outcome of the study (Schade, 2017).

3.1 Heuristic Evaluation Methodology

The heuristic evaluation process described by Euphemia Wong (Wong, 2018) was used in this study.

Step 1 - Heuristics
Heuristics were selected (Appendix B3) from various sources. The full list of sources is included in the Appendix A. 10 Nielsen and Molich's heuristics (Nielsen, 1995) were

developed in the 90s and because of technological advances, designers are encouraged to use own heuristics (Wong, 2018).

To ensure that the evaluation is accurate, heuristics specific for the e-commerce websites (Bonastre & Granollers, 2014) have been added. A number of heuristics from the Researched Based Web Guidelines have also been selected, to apply "best practices for content, design, and usability" (Figure 1).

HEURISTICS SOURCES		
1	LIGHTNER	N. J. Lightner, "Evaluating e-commerce functionality with a focus on customer service", in Communications of the ACM, 47 (1), pp. 88-92.
2	RBWG	Researched Based Web Guidelines (http://www.usability.gov/guidelines/)
3	Redish	Ginny Redish's Questions for Evaluating your Website (recommendations from a usability expert)
4	AT	Anthro-Tech Best Practices and Guidelines for Usable Web Sites (recommendations from usability experts)
6	IMDS	M. Cao, Q. Zhang, and J. Seydel, "B2C E-commerce web site quality: An empirical examination", in Industrial Management & Data Systems, 105 (5), pp. 645-661.
7	LIANG	T. P. Liang, and H. J. Lai, "Effect of store design on consumer purchases: An empirical study of on-line bookstores", in Information & Management, 39 (6), pp. 431-444.
8	NIELSEN	10 Usability Heuristics for User Interface Design (https://www.nngroup.com/articles/ten-usability-heuristics/)

Figure 1: Sources of selected heuristics.

Step 2 - Evaluators

Four evaluators were selected (Appendix A). According to (Nielsen & Molich, 1990), 3 to 5 evaluators would be able to detect about two third of the usability problems. All the chosen experts had experience in the web design field and were familiar with the online shop's operations and patterns. (Sreedhar, 2017)

Step 3 - Brief

In the brief (Appendix B2) the evaluators were informed how to conduct a heuristic review. They were provided with necessary materials to proceed.

Step 4 - Evaluation

The evaluation was conducted independently by each expert. They went through the interface a number of times and examined the efficacy of the chosen web elements (Appendix A). They focused on the goals of the system, using a checklist (Appendix B4) to note if the website complies with selected guidelines and describe the problem.

Step 5 - Results

The results from all evaluators were collated in a spreadsheet (Appendix B5). It was calculated what percentage the website complies with the guidelines (Appendix B6). For each checklist item rating of -1 (doesn't comply with the guideline), 0 (kind of complies), 1 (complies) was added. If a guideline was not relevant, the field was left blank.

Step 6 - Debriefing

In the debriefing session, findings were collated in two lists, positive findings (Appendix B7) and issues (Appendix B8). The severity of each issue was ranked, giving it a score from 0 to 4 (Figure 2), and ease of fixing was ranked from 0 to 3 (Figure 3). The

ranking helped to prioritise which issues should be addressed first. The heuristics violated by each issue were noted.

SEVERITY RANKING	
Rating	
0	Violates a heuristic but doesn't seem to be a usability problem.
1	Superficial usability problem: may be easily overcome by user or occurs extremely infrequently. Does not need to be fixed for next release unless extra time is available.
2	Minor usability problem: may occur more frequently or be more difficult to overcome. Fixing this should be given low priority for next release.
3	Major usability problem: occurs frequently and persistently or users may be unable or unaware of how to fix the problem. Important to fix, so should be given high priority.
4	Usability catastrophe: Seriously impairs use of product and cannot be overcome by users. Imperative to fix this before product can be released.

EASE OF FIXING RANKING	
Rating	
0	Problem would be extremely easy to fix. Could be completed by one team member before next release.
1	Problem would be easy to fix. Involves specific interface elements and solution is clear.
2	Problem would require some effort to fix. Involves multiple aspects of the interface or would require team of developers to implement changes before next release or solution is not clear.
3	Usability problem would be difficult to fix. Requires concentrated development effort to finish before next release, involves multiple aspects of interface. Solution may not be immediately obvious or may be disputed.

Figure 2: Severity ranking of the issues.

Figure 3: Ease of fixing ranking the issues.

3.2 Usability Testing Methodology and SUS Questionnaire

Usability testing was planned using steps listed by Lewis (2006):

Step 1 - Define the test objectives.
Two types of data were measured: **quantitative** (time-on-tasks, ability to complete tasks successfully) and **qualitative**:

- How easily do users understand what is clickable?
- How user navigate to complete tasks?
- How users navigate between different sections and pages?
- How easily and successfully do users find the products or information they are looking for?
- How well do users understand the symbols and icons? Which ones are problematic and Why?
- Where on the site do users go to find Search? Why?
- How easily can users return to the homepage?

Step 2 - Recruit users who represent the target market.
Screening questionnaire (Appendix C5) was sent (Appendix C3, C4) to potential

participants to select those who are over 18, do their grocery shopping, and use the Internet (Appendix D1). Out of all who completed the questionnaire, a group of fourteen participants was recruited to represent the target audience of Tesco.ie (Appendix D2). They were males and females of diverse professions, different cultural groups and age levels (Preece, Sharp, & Rogers, 2016). Four of the users were asked to test the website with think aloud protocol. Ten, as recommended by Rubin, Chisnell, & Spool (2011) were testing it in a conventional way.

Step 3 - Select the tasks to be conducted.
Tasks were selected to match objectives of testing (Rubin, Chisnell, & Spool, 2011). Each task was worded without giving clues on how to complete the task (Meyer, 2018). The goal was to let the users attempt to solve the task based on their understanding of the website. Finding and choosing their preferred bottle of wine or dessert was designed as an exploratory task (Meyer, 2018), to gain insights into the user's decision-making process and to see how the site helps them browse and choose products. Other tasks were testing if the users can find specific items.

For each task, importance was set using the Fibonacci's scale: 1,3,5,8 (Rosemberg, 2018) and expected behaviour was defined (Figure 4), allowing each attempt to be measured as a success, partial success or failure (Figure 5).

TASKS - The tasks assessed in this test			
ID	Importance 1, 3, 5 or 8 (Fibonacci's scale)	Task	Expected Behavior
1	8	Find a recipe similar to the one you would like to make for your friend.	User clicks 'Inspiring Recipes' on the Home Page and goes to the Recipes Page. User finds the chosen recipe, and clicks recipe link.
2	8	Add the first 3 ingredients into your shopping basket.	User scrolls down to the ingredients list. Adds three products to Basket.
3	8	Get a bottle of wine similar to the one you decided on.	User finds the chosen wine, and adds it to the Basket
4	8	How about dessert? Get the dessert you decided on.	User finds the chosen dessert, and adds it to the Basket
5	8	For snacks get a 250G box of Jacob's Italian Cracker Lightly Salt.	User finds specific poduct, and adds it to the Basket
6	8	Swap the bottle of wine for something similar but at half price offer at the moment.	User removes bottle of wine from basket and find new wine with "Half price" label and add to basket
7	8	For the cleanup after, buy the following cleaning products: - a 780 ml bottle of Fairy Original Washing Up Liquid - 1 Medium box of Marigold Extra Life Kitchen Gloves - a 9 pack of Cushelle Quilted Toilet Rolls	User goes to the Multi-Search and clicks 'Edit' and adds all ingredients to the field, then clicks Go button. Finds all four products and adds them to the Basket.
8	8	Check how much it cost?	User reads the total of the items in the shopping basket.
9	8	Why not add another bottle of that wine you got on offer	User clicks + button next to the wine bottle in the shopping basket.
10	8	Please find the Multi Search box and buy the following items: - 1 L carton of Avonmore Milk - 100g Kenco Smooth Instant Coffee - A 12 pack of free-range eggs - A pancake ready-mix	User finds Multi Search when asked for it. User goes to the Multi-Search and clicks 'Edit' and adds all ingredients to the field, then clicks Go button. Finds all four products and adds them to the Basket.

Figure 4: The tasks assessed in the usability test and expected behaviour.

SUCCESS CRITERIA for Scoring Scenarios (Effectiveness)		
Item	Value	Description
Success	1	• Completes the task with minimal effort • Reaches destination within 2 attempts • Does not receive hints from the facilitator • Does not encounter error messages • Does not mention frustration • Does not have suggestions for improvement
Partial Success	2	• Completes the task with moderate effort • Reaches destination within 3 attempts • Receives 1 hint from the facilitator • Encounters 1 or 2 error messages • Has to back up or reenter information • Has minor suggestions for improvement • Mentions minor frustration or expresses minor confusion
Failure	3	• Completes with considerable effort • Reaches destination in 4 or more attempts • Receives 2 or more hints from the facilitator • Encounters more than 2 error messages or the same error message more than once • Has to back up or re-enter information several times • Has major suggestions for improvement • Mentions frustration or confusion • Mentions they would have to call or speak with someone to complete the task • Concludes the task is complete, when it is not
Skip	4	• Does not complete the task • Gives up while trying to complete the task and concludes they cannot successfully complete it. • Task skipped due to time
N/A		• Not applicable - task not scored

Figure 5: Success criteria for scoring scenarios (more in Appendix C1).

Step 4 - Create task scenarios.

To provide participants with context and help them engage with the interface, a scenario was written (Nielsen Norman Group, 2014).

A discussion was held on the priming activity, the participants were asked what their choices of main courses, wine and desserts were. These questions served a number of purposes. It was important to allow participants to establish their motivations for why they would be attempting the tasks given to them, and encouraging them to suspend disbelief whilst performing a simulated activity (Meyer 2018). The scenario was matching research goals (Farrell, 2017) listed in Appendix C1.

SCENARIO - The details that the moderator tells before starting the test, so that the participant has a better understanding of the context of use			
Scenario 1	"If you were to have your friend over for dinner this weekend, from the menu below, what main course would you most like to cook for them, what bottle of wine would you choose to have, and what would you serve as a desert?		
	Main Course ☐ Stuffed Chicken ☐ Turkey meatballs ☐ Chickpea bean stew ☐ Roasted Pepper and Chorizo Salad	Wine ☐ Rioja ☐ Merlot ☐ Sauvignon ☐ Pinot Grigio	Dessert ☐ Ice Cream ☐ Frozen Desserts ☐ Pie ☐ Cake

Figure 6: Scenario helping understand the context of use. For more information see Appendix C1

Step 5 - Decide how tasks will be measured and recorded.

Selected participants were assigned to four researchers (Appendix C1). Tests took place at the researcher's offices or homes. The duration of each session was approximately 40 minutes. Laptops and desktop computers with Quicktime or ScreenFlow were used

to capture the screen recordings and conversations (Figure 7).

PARTICIPANTS						
Participant ID	**Participant Name**	**Researcher**	**Method**	**Test location**	**Device**	**Equipment / tool**
P1	Lucas	Gabi	Think Aloud	Home (in person)	Macbook	Quicktime
P2	Tammy	Gabi	Conventional Usability Test	Home (in person)	Macbook	Quicktime
P3	Thawana	Gabi	Conventional Usability Test	Home (in person)	Macbook	Quicktime
P4	Rodrigo	Jordana	Conventional Usability Test	Home (in person)	Macbook	Quicktime
P5	Hugo	Jordana	Conventional Usability Test	Home (in person)	Macbook	Quicktime
P6	Maribel	Jordana	Think Aloud	Home (in person)	Macbook	Quicktime
P7	Arnold	Agnieszka	Think Aloud	Home (in person)	iMac	ScreenFlow
P8	Ciara	Agnieszka	Conventional Usability Test	Office (in person)	iMac	ScreenFlow
P9	Ania	Agnieszka	Conventional Usability Test	Home (in person)	iMac	ScreenFlow
P10	Manuel	Agnieszka	Conventional Usability Test	Home (in person)	iMac	ScreenFlow
P11	Audrey	Elias	Conventional Usability Test	Home (in person)	Macbook	Quicktime
P12	Ciaran	Elias	Conventional Usability Test	Office (in person)	Macbook	Quicktime
P13	Amanda	Elias	Think Aloud	Home (in person)	Macbook	Quicktime
P14	Lauren	Agnieszka	Conventional Usability Test	Office (in person)	iMac	ScreenFlow

Figure 7: Participants of usability tests.

Each participant was asked to sign the Consent Form (Appendix D4) and complete tasks in the same order. Priming activity and usability test were recorded. Participants' reactions were observed during tests and afterwards from the recordings (Preece, Sharp, & Rogers, 2016). Notes were taken during and after each session (Appendix D5). All the recorded materials were stored on the Google Drive and shared among researchers. (**Data Folder**:
https://drive.google.com/open?id=11u1i-ZWXgogL4a3Am4VBJNZSCyR2c2J8).
For collaboration purposes, to collate all test results and to avoid writing exhausting reports, Rainbow Spreadsheet (Sharon, 2013) was used by all the team members (**Rainbow Spreadsheet**:
https://drive.google.com/open?id=19s_kTwWNWGpJeEt8Gr1EeyP-GNw-8NowZdqCYWjbTPs).

Step 6 - Prepare the test plan, satisfaction questionnaire, data analysis procedure and the usability laboratory.
The test plan was created (Appendix C1) to define objectives of the study, assign participants to researchers, assign test type to the participants, describe the environment, equipment and logistics, define task list and scenario, list evaluated elements of the website, define metrics and success criteria.
Each participant was asked to complete four activities:

- **Pre-test Questionnaire**
  The questionnaire was created with the help of Google Forms. Prior to the test session, participants were asked a series of background questions (Appendix C6, D2). The goal was to collect demographic data and prepare participants for the usability testing. Pre-test questionnaire results (Appendix D2) show, that participants were of a mixed professional background and the majority was 25-34 years old. All of the participants use the Internet once a day or more. Browsing, Internet banking and social media are their main online activities. The majority is

not a frequent online shopper. Only four of the participants had experience doing their grocery shopping online though not that often - once in a while. This was an important factor because their performance could be different depending on the level of familiarity with grocery shopping online.

With the same idea in mind, they were asked about their familiarity with Tesco.ie, eight of the participants had visited the site in the past, although six of them did it over three months ago and none of them did it recently.

- **Conventional Usability Test / Think Aloud Test**

  During the testing session, the facilitators' role was to provide an overview of the study to participants, define the purpose of usability testing, respond to requests for assistance, record participants' actions and comments.

  The facilitators were following the procedure described in the Usability Testing Guide (Appendix C7) and were taking notes. The Guide was to ensure that all participants were treated in the same way (Preece, Sharp, & Rogers, 2016). This was important as four researchers were holding sessions separately, and the script ensured that each session did adhere to the designed evaluation methodology, and therefore the outcomes were comparable as well as credible. The guide included an explanation of thinking-aloud where required.

  To help participants relax before the test (Moule, 2012), they were asked few "tell me about yourself" questions and about Tesco.ie Home Page (Appendix C7).

  After that, participants were provided with the printed list of tasks to be completed (Rubin, 2011) and asked to complete each of them one at the time.

  In case of think-aloud testing, participants were asked to tell what they were doing and thinking at every moment and task on time was not recorded.

- **Post-test Interview**

  After testing, participants were asked questions regarding their impressions of the website and results were collated in the Rainbow Spreadsheet (Appendix E3).

- **SUS Questionnaire**

  To measure satisfaction, participants were asked to fill in System Usability Scale (SUS) questionnaire (Brooke, 2013). It is a quick and cheap method tested for over 30 years. Participants ranked 10 questions from 1 to 5, based on their level of agreement (Appendix C8). The score was calculated in a spreadsheet (Appendix D3) and compared with the industry standards.

SUS Scores - Descriptive Statistics of SUS Scores for Adjective Ratings						
	SUS yields a single number representing a composite measure of the overall usability of the system being studied. Note that scores for individual items are not meaningful on their own.					
	http://uxpajournal.org/wp-content/uploads/pdf/JUS_Bangor_May2009.pdf https://uiuxtrend.com/measuring-system-usability-scale-sus/					
Adjective	**Grade Scale**	**SUS Score**				
Excellent	A	> 80.3				
Good	B	68 - 80.3				
OK	C	68		67 - average score for a large web application		
Poor	D	51 - 68		(Quantifying the User Experience: Practical Statistics		
Awful	F	< 51				

Figure 8: SUS scores.

Step 7 - Conduct the usability test with users from the target group.

Step 8 - Capture and analyse the results.

Step 9 - Present and communicate the test results.

4. Evaluation Results and Analysis

4.1 Heuristic Evaluation Results and Analysis

Twelve goals (tasks) of the website (Appendix B1) were reviewed for each selected heuristic (Appendix B3). The results from all four evaluators were collected in the spreadsheet (Appendix B5) ([Spreadsheet](https://drive.google.com/open?id=1uO8y5D1__wn8naCe8bK77g9AOSldBxYLGlXrNixR5Nk):
https://drive.google.com/open?id=1uO8y5D1__wn8naCe8bK77g9AOSldBxYLGlXrNixR5Nk). In the Summary Tab (Appendix B6) a score for each group of heuristics was calculated. The average score given by each evaluator is quite low, 36-39%. That is the percentage Tesco.ie conforms to all listed heuristics. There were several places where Tesco.ie did not conform to selected heuristics (Figure 9). Purchase decision making and Information architecture got the lowest scores, 4% and 17% respectively. Branding of the website had the lowest number of issues and its score was 88%. It seems that Help and Home Page follows the guidelines quite well with scores 75% and 71% (Figure 9).
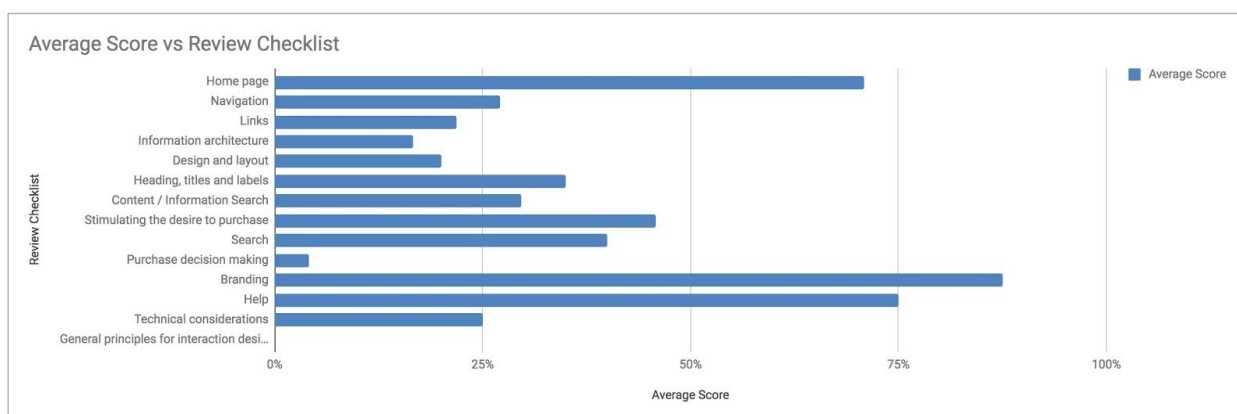
Figure 9: Parts of the website and how they conform with heuristics.

In the debriefing session, the list of issues was established by the evaluators and their severity was ranked (Appendix B8). Positive findings were also identified (Appendix B7).

4.2 Usability Testing Results and Analysis

The Rainbow Spreadsheet (Sharon, 2013) was used to collate all the qualitative and quantitative results, analyse it, make calculations, remove duplicates and prioritise based on the same criteria. Each participant had an ID (P1, P2, etc.), colour code and was assigned to one of the evaluators who was conducting tests and entering data.

4.2.1 Qualitative Data

Think Aloud, Observations, Post-test Interview

Qualitative data was gathered from Think Aloud comments and Post-test interviews (Appendix E3, E5). In the interviews, participants expressed their opinion and feelings with the evaluators: "Clutter homepage", "busy and cold overall looking (blue, white and grey)", "inconsistency between pages", "lack of product vision", were the most mention comments gathered. Opinions about "Multisearch" box were mixed: most useful feature for six participants and the least for four of them. Some participants once pointed to it, mentioned that they loved it and that it was a very useful feature. Some were able to find it but not sure how it works. Others tried it and still preferred to use a regular search box (Appendix E3).

Initially, issues were grouped using affinity diagramming technique (Pernice, 2018). Each group was based on the tasks given to the participants: Recipe Search, Recipe Page, Groceries Tab, Search and also General UI.
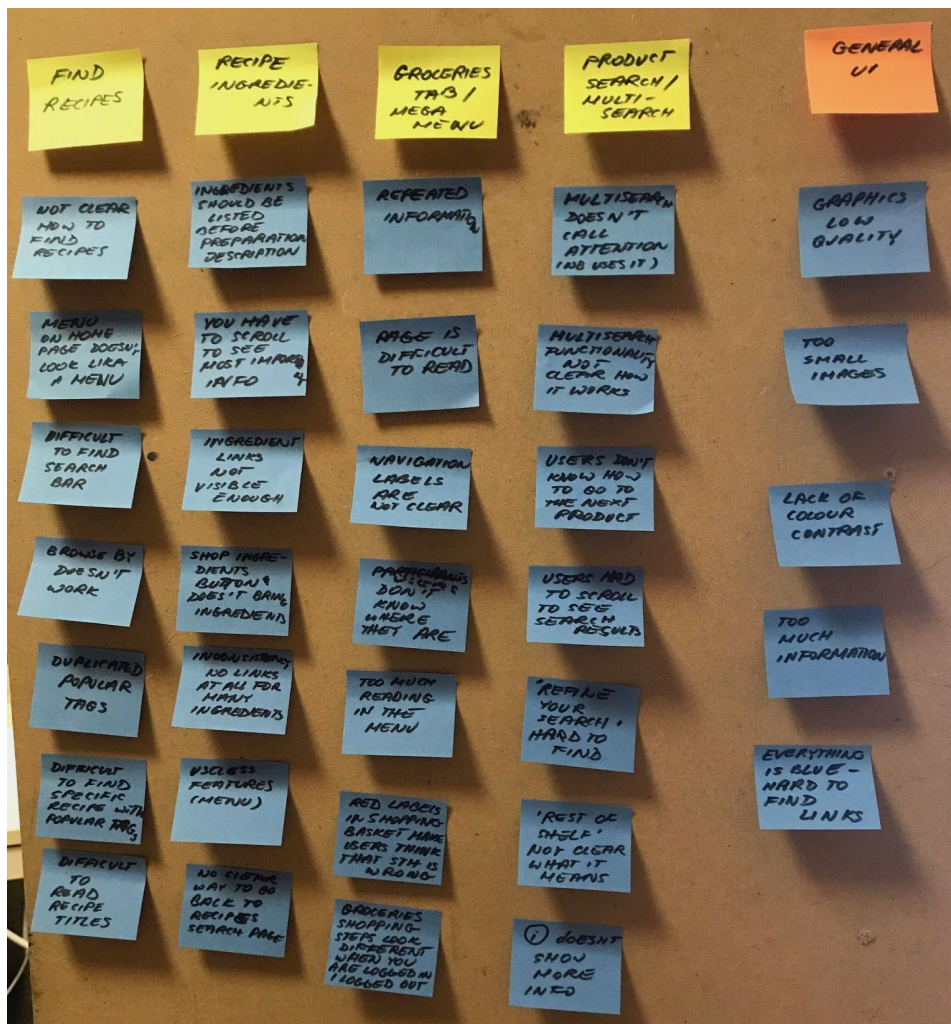
Figure 10: Affinity diagram of issues.

Two lists were created in the Rainbow Spreadsheet: identified issues (Appendix F2) and positive findings (Appendix F1), they were extended later with the observations extracted from evaluations (Appendix B8).

For each observation, it was counted how many participants encountered that specific issue showing the frequency of it. Criticality of each task and impact of each issue (Appendix C1) were set by the evaluators providing the parameters needed to calculate the severity (task criticality x impact x frequency). Once the severity was known, the issues were prioritised (Appendix F3, also Figure 13).

4.2.2 Quantitative Data

Tasks Completions Rate (Effectiveness)
The occurrences of tasks with a success rate (Appendix C1) of 1 or 2 were counted, divided by the number of tasks undertaken and multiplied by 100% to calculate average completion rate percentage. This percentage presents how effective Tesco.ie is when users are trying to complete tasks.

The completion rate of the whole test per participant was, in its majority, 70% or less. Based on Sergeev (2010), the effectiveness of Tesco.ie is bad (Figure 11). All participants succeeded in completing tasks 3,4,5 and 8, with a completion rate of 100%. Only one participant succeeded in Task 7, using "Multisearch" box without Facilitator's help (Appendix E2).

Effectiveness					
	As a rule, the optimum respondent number for product effectiveness test is 11-15. This number of respondents is enough to reveal 90-95% of all major user errors in the product, statistical error of the result calculation being about 10%, so the overall product Effectiveness can be determined with sufficient degree of confidence:				
	http://ui-designer.net/usability/effectiveness.htm				
good	90-100%				
normal	75-90%				
bad	50-75%				
awful	0-50%				

Figure 11: Effectiveness score.

	Task 1		Task 2		Task 3		Task 4		Task 5		Task 6		Task 7		Task 8		Task 9		Task 10	
METRICS	Success (1-4)	Time (MM:SS)*	Success (1-4)	Time (MM:SS)*	Success (1-4)	Time (MM:SS)*	Success (1-4)	Time (MM:SS)*	Success (1-4)	Time (MM:SS)*	Success (1-4)	Time (MM:SS)*	Success (1-4)	Time (MM:SS)*	Success (1-4)	Time (MM:SS)*	Success (1-4)	Time (MM:SS)*	Success (1-4)	Time (MM:SS)*
Average Time		02:06		01:52		00:31		00:50		00:28		01:38		01:35		00:06		00:12		02:40
Success	3		6		12		13		13		9		1		14		11		6	
Partial Success	4		1		2		1		1		3		0		0		1		3	
Failure	7		7		0		0		0		2		13		0		2		4	
Skip	0		0		0		0		0		0		0		0		0		1	
Completion Rate*	50%		50%		100%		100%		100%		86%		7%		100%		86%		64%	

SUCCESS CRITERIA		
1	Success	
2	Partial Success	
3	Failure	
4	Skip	

NOTE:
* To add time type it in format: 00:00:00 (hh:mm:SS)
* For Think Aloud we don't measure time (N/A): P1, P6, P7, P13
* Completion Rate: tasks with success rate 1 and 2 / number of tasks

Figure 12: Completion rate and average time results for each task for all participants.

Time on task (Efficiency)

Screen recordings were used to measure how long it took to complete every task (Appendix E2, also Figure 12). In case of think-aloud tests and tasks with a success score of 3 or 4, time was not measured. The average time on a task allows estimating the efficiency of Tesco.ie if compared with benchmarks from competitors websites.

4.3 SUS Questionnaire Results and Analysis

SUS questionnaire was filled by all the participants. The collected results indicated that the participants less satisfied with the website, in its majority, were the ones with a design background (15%, 22.50% and 25% SUS score). Although the overall score was 56.43% (Appendix E4), meaning that the user satisfaction is poor when compared with industry scores suggested by Sauro & Lewis (2016).

4.4 Summary and Limitations

Both methods - heuristics evaluation and usability testing, made the study more reliable and provided valuable insights on usability problems on Tesco.ie (Figure 13).

ID	Where	Task #	Observations	Severity
32	Groceries Tab	5	Was overwhelmed with the amount of information and needed more time to find information.	123.43
21	Multisearch Widget	4	Wasn't using multisearch to find multiple products. It didn't drag attention at all.	118.86
11	Recipe Page	2	Had to memorise ingredients which had no links to add them to the basket.	109.71
38	Groceries Tab	5	Is not able to find product in the Mega Menu and uses Search Bar instead.	100.57
35	Search Results List	6	Didn't understand the difference between different types of offers.	96.00
2	Recipes Search Page	1	Had difficulties finding search bar on the Recipes Page.	82.29
5	Recipes Search Page	1	Wasn't able to find specific recipes with 'Popular Tags'.	82.29
40	Shopping Basket	2	Had difficulties noticing that item was added to the basket.	82.29
23	Multisearch Widget	4	Didn't know how to go to the next product in the multisearch tool.	68.57
8	Recipe Page	2	Had to scroll down significantly the page to see the top of recipe and ingredients list.	64.00
16	Groceries Tab	3	Was not clear what the button label means (for example 'Book a slot')	54.86
17	Groceries Tab	3	Was confused where he/she is on the page and what to do net (after clicking 'Buy Ingredients')	54.86
22	Multisearch Widget	4	Wasn't clear what can be done with multisearch tool.	54.86
10	Recipe Page	2	Was confused with 'Shop Ingredients' button. It wasn't bringing what they were looking for.	54.86
6	Recipes Search Page	1	Was focusing more on the images and not reading recipe titles.	54.86
27	Search Results List	4	Couldn't find relevant products in the search results list.	54.86
34	Shopping Basket	6	Had to look closer at the screen to spot the product listed in the shopping basket.	54.86
37	Shopping Basket	7	Didn't notice that can change number of products in the basket with plus or minus.	54.86
30	Groceries Tab	5	Couldn't see what is on the image because of its size.	45.71
39	Multisearch Widget	10	Could't find Multi-search straight away.	45.71
14	Groceries Tab	3	Was confused by the repeated information.	41.14
15	Groceries Tab	3	Had difficulties to read information because of it's amount.	41.14
33	Recipe Page	2	Didn't find list of ingredients at all.	41.14
36	Recipe Page	2	Couldn't go directly to shop ingredietns, had to switch Browser tab to go to Home Page to start shopping.	41.14
3	Recipes Search Page	1	Couldn't find recipe with 'Browse by' dropdowns.	36.57
1	Home Page	1	Couldn't easily find Recipes link.	28.57
31	Groceries Tab	5	Had difficulties to find links because of a blue colour all over the page.	27.43
18	Mega Menu	3	Had difficulties finding the right link in the Mega Menu.	27.43

Figure 13: The most severe issues.

The findings cannot be generalised to the entire population of Tesco.ie users, but they contribute to creating user experience guidelines. Properly developed persona should be included in screening participants to ensure that design recommendations are for the right audience.

The study confirmed what Tesco was concerned about, the user satisfaction is poor. Some of the tasks like finding and using "Multisearch" box users weren't able to accomplish. Not only buying ingredients was causing problems, but just finding a recipe was difficult and it had only 50% completion rate. Findings show that some features on the recipe search page don't work at all and they should be completely redesigned. Some participants were not able to find their chosen recipes, despite they were listed on the page. Mostly all these participants did not bridge the ingredients from the recipe to the grocery page, they just added the ingredients they thought the recipe should contain. It was difficult for the participants to keep ingredients information in their short-term memory (Nielsen, 2009).

With inconsistent navigation menus, hard to understand functionality and poor presentation of content the majority of participants felt that they need to learn the website or consult other channels in order to accomplish their goals.

With the Tesco's goal of earning customers loyalty, this is unacceptable and the website requires to be redesigned.

5. Recommended Design Changes

A range of issues was identified with both methods (Appendix B8, F2, F3). After brainstorming, all the solutions were collated in the spreadsheet (Appendix G1) and marked which issues they are solving. For each solution, ROI (return on investment) was calculated by dividing effectiveness (sum of all issue severities) by complexity to implement it, estimated by the team (Rosemberg, 2018). Next, solutions were prioritised to implement first those with highest ROI (Appendix G2, Figure 14).

ID	Solution Idea	Where	Solution ROI
31	Make Multisearch box more visible	Multisearch Widget	242.29
32	Simplify how Multisearch works	Multisearch Widget	242.29
20	Remove all unnecessary information, which is not necessary to complete the task.	Groceries Tab	205.71
22	Make sure that buttons have easy to understand labels.		187.43
21	Make sure that content is not duplicated (for example 'Book a Slot' buttons)	Groceries Tab	164.57
26	Make font size bigger		155.43
27	Use color for navigation buttons and make them bigger.	Shopping Basket	128.00
30	Add tooltips to offer labels and other labels which might be not clear to the user.		96.00
14	Ensure recipe image ends above the fold, around 80% vh	Recipe Page	64.00
19	Optimize page realestate; eg. move "Share" buttons to a fixed panel on left, reduce tag size and rearrange recipe details, ingredients and preparation divs		64.00
29	Make sure that graphics are of a good quality.		62.86

Figure 14: Solutions with the highest ROI.

To propose design changes the most severe issues were grouped into bigger problems:

Recipes Search Page (Appendix G3):
1. It is difficult to find Inspiring Recipes button on Home Page.
2. It is not clear how to find recipes on the Inspiring Recipes Page.

Recipe Page with List of Ingredients (Appendix G4):
3. It is difficult to add ingredients of a chosen recipe to the basket.

Groceries Tab, Mega Menu and Shopping Basket (Appendix G5):
4. Groceries Page is overwhelming with content, with no clear indication of what to do next and confusing duplicated buttons and labels.
5. Mega Menu is too complex, has too many links. This type of structure creates a tedious journey with no quick option to find a product.
6. Shopping Basket is difficult to read and navigate and some important details are missing.

Multi-search Widget and List of Results (Appendix G6):
7. Multisearch is hard to see without help and it is not clear how it works.
8. Have to scroll down to see search results, it is not clear how to refine the results, and there are some features that are not important.

Each problem was analysed and provided with recommendations to inform the design (Appendix G3, G4, G5, G6). Based on this, the wireframes for the pages were created (Figures 16-25).

Figure 15: Example of the recommendation. More in Appendices G3, G4, G5, G6.

5.1 Homepage

Users felt overwhelmed when visiting Tesco.ie: "There are too many different calls to actions on the Homepage and most of them don't apply to me." It was necessary to establish a hierarchy of elements such as menus, images, and messages, prioritising and making critical information more visible (Philips, 2016). Use of white space (Soegaard, 2018), as well as better quality images and more contrast (Tubik Studio, 2017), was required to support readability. The proposed design aims to remove the excess of information and follow the Aesthetic and Minimalist Design Principle (Philips, 2016). It is also recommended, to redesign all Tesco.ie subpages to improve consistency and learnability (Philips, 2016).
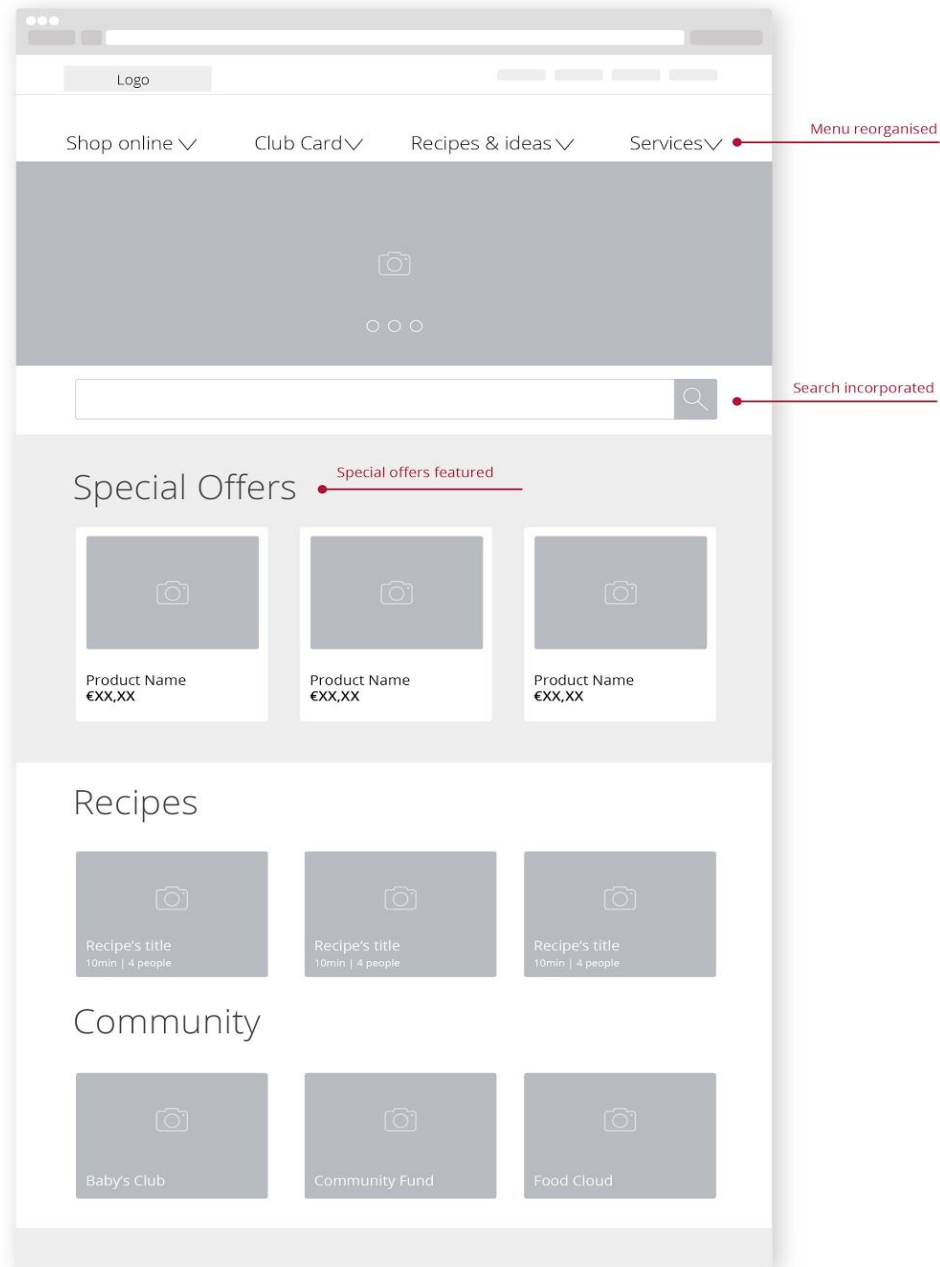
Figure 16: Homepage wireframe.

5.2 Recipes Search Page

The number of browsing options and their ineffectiveness was confusing to the users.
The feature Browse By and Tags are replaced by checkboxes Filters.
Following the Visual Hierarchy rule (Philips, 2016), the Search Bar was moved closer to
the Filters, so users can see it straight away and know it is a Search Bar to find recipes.
According to some participants, it looked more like a "general search" rather than
recipe search because of where it was placed.
Recipes thumbnails and texts are redesigned, so users can notice the recipe titles

instead of misleading images. Titles, preparation time and servings are placed on the images. The new recipes load when the user clicks the Load More button.
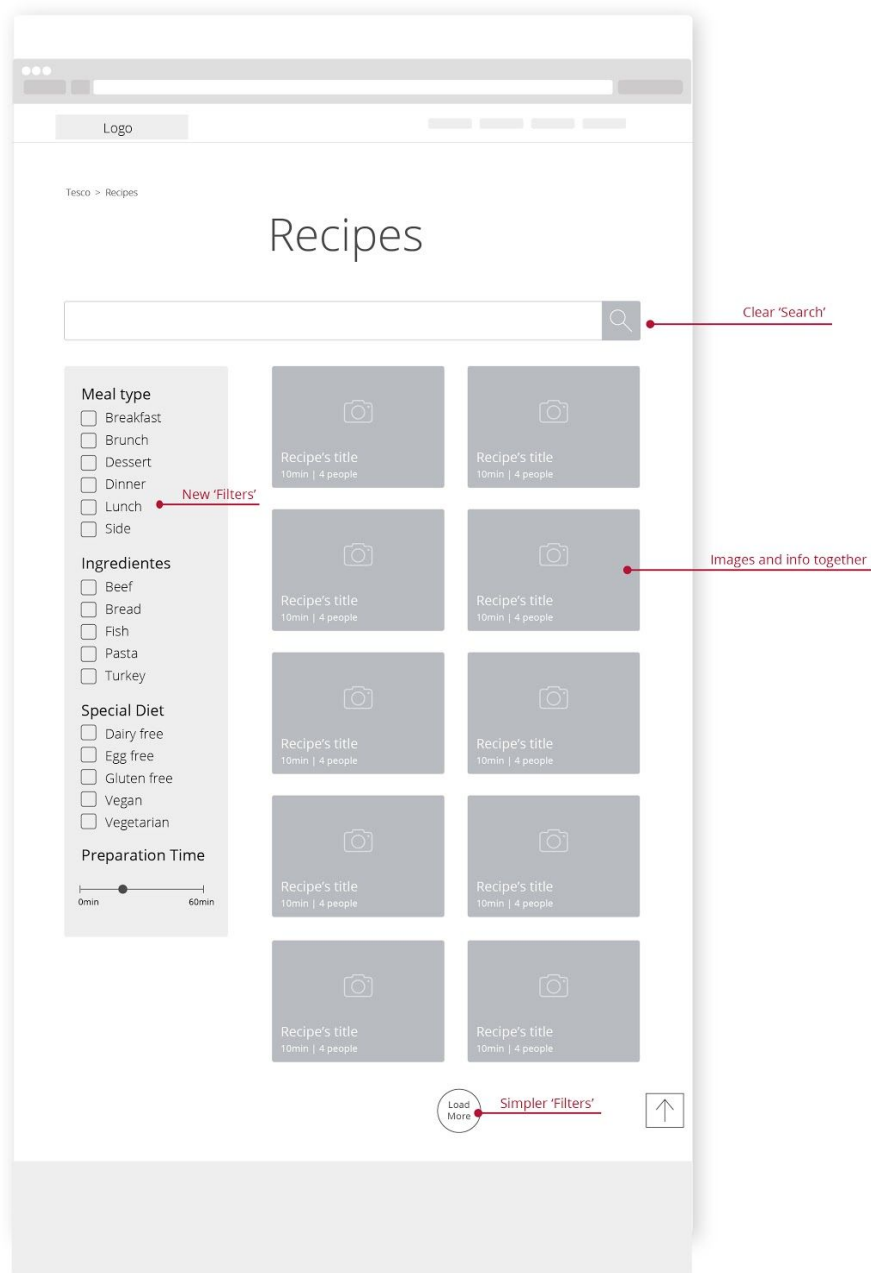
Figure 17: Recipe Search Page wireframe.

5.3 Recipe Page with List of Ingredients

On Recipe Page, information most relevant to the user's search was placed below the fold. According to the Visual Hierarchy principle (Philips, 2016), content had to be rearranged to show ingredients above the fold.
During the expert review, it was identified that F-Pattern for reading content is not followed on this page (Babich, 2017). In the new design, ingredients list was moved to

the left to help users read the recipe. The description is positioned under the title and share buttons are placed in a side panel. All ingredients links were removed and checkboxes added, allowing users to tick the ingredients they wish to buy. 'Shop Ingredients' button was renamed to 'Start Shopping', to match homepage drop-down menu. "So where is the food now?" participants were asking after clicking on Shop Ingredients, and being redirected to the Groceries Page. Instead, they should be able to see ingredients options recommendations. The Navigation Bar was removed as its links were irrelevant (Philips, 2016) for the users who were looking for recipes.
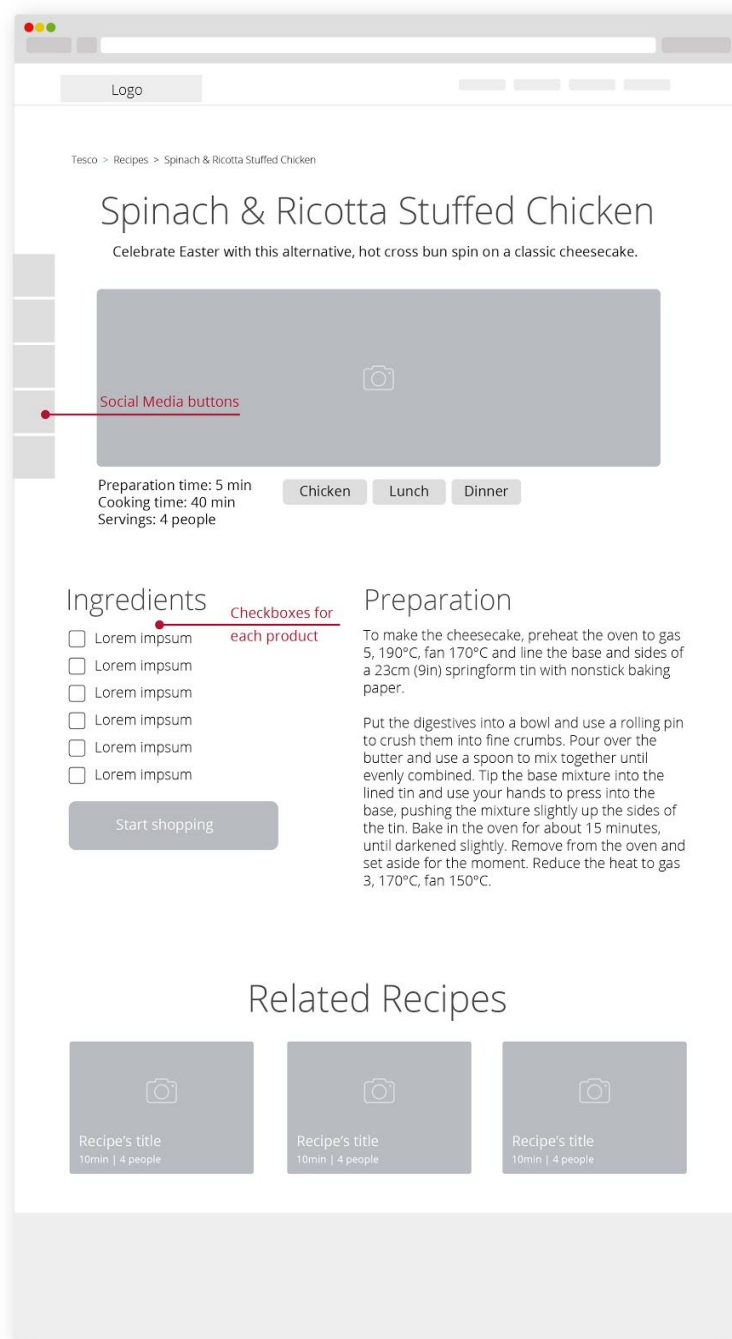
Figure 18: Recipe Page with List of Ingredients wireframe.

5.4 Groceries Tab, Mega Menu & Shopping Basket

The main complaint about the Groceries Tab was the excessive amount of information and duplicated buttons which slow down the shopping. One participant said, "I'd rather go to the physical shop because there's so much going on here". In the proposed design all unnecessary or duplicated content is removed and the full basket is hidden to keep the only necessary minimum in front of the users (Philips, 2016). Content is divided into clear sections with visible Call to Action buttons (Alton, 2016). Hard to understand labels, like "Book a slot", were renamed to improve discoverability (Philips, 2016). Further research should be conducted to name all the labels in an easy to understand way and improve findability (Thurow, 2015).
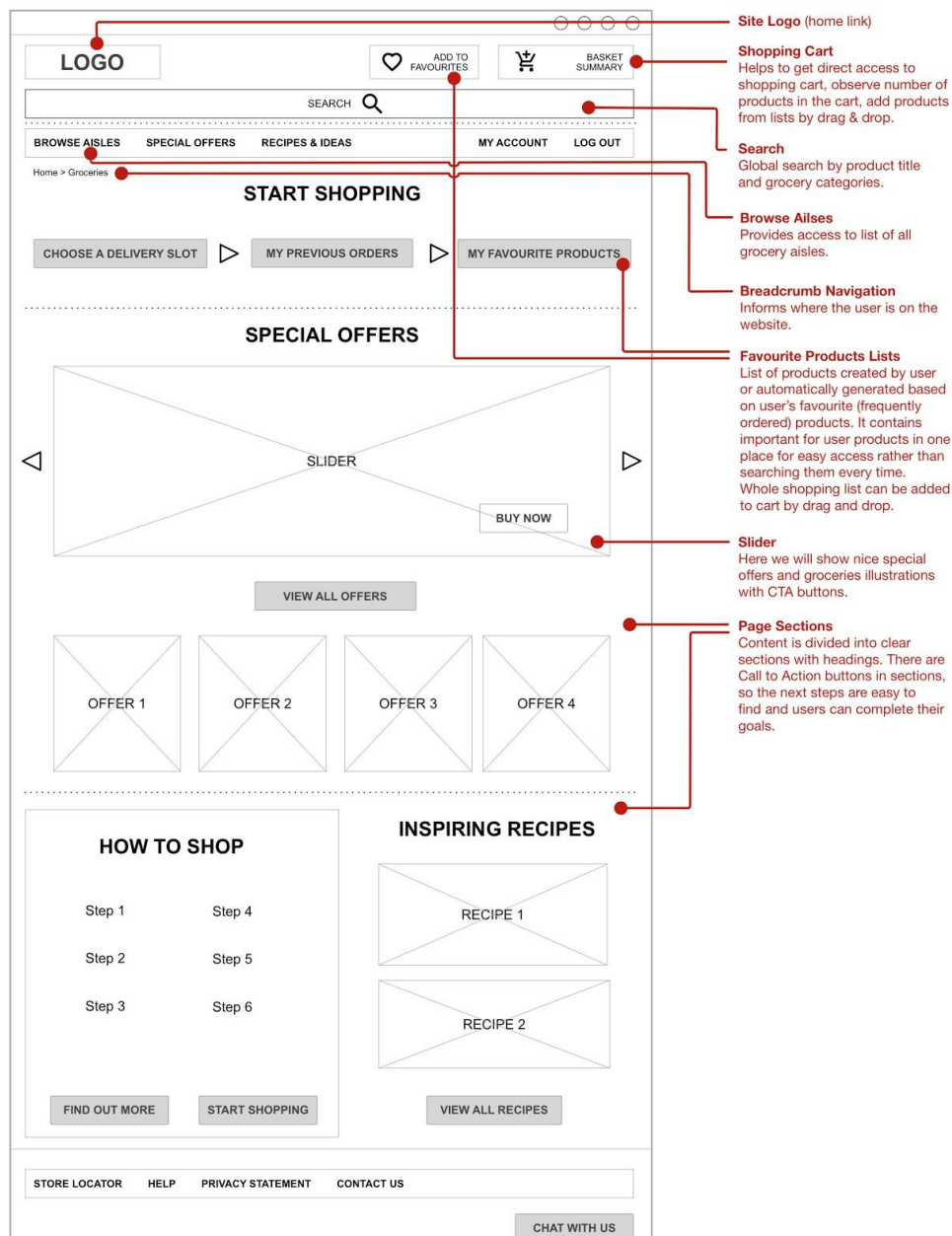
Figure 19: Groceries Tab wireframe.

The cluttered menu was replaced by nested menus with vertical lists to avoid showing all the information at once, follow the design concept of constraints (Philips, 2016) and improve the speed of scanning it by the users (Nielsen, 2009). The new menu also helps users to move from link to link with a single eye movement (Babich, 2017). Colour changes help users to navigate (Nielsen, 2004). Products are grouped by aisles (Figure 20) like in a physical store to utilise customers mental model (Philips, 2016) and make the experience more intuitive (Krug, 2014).
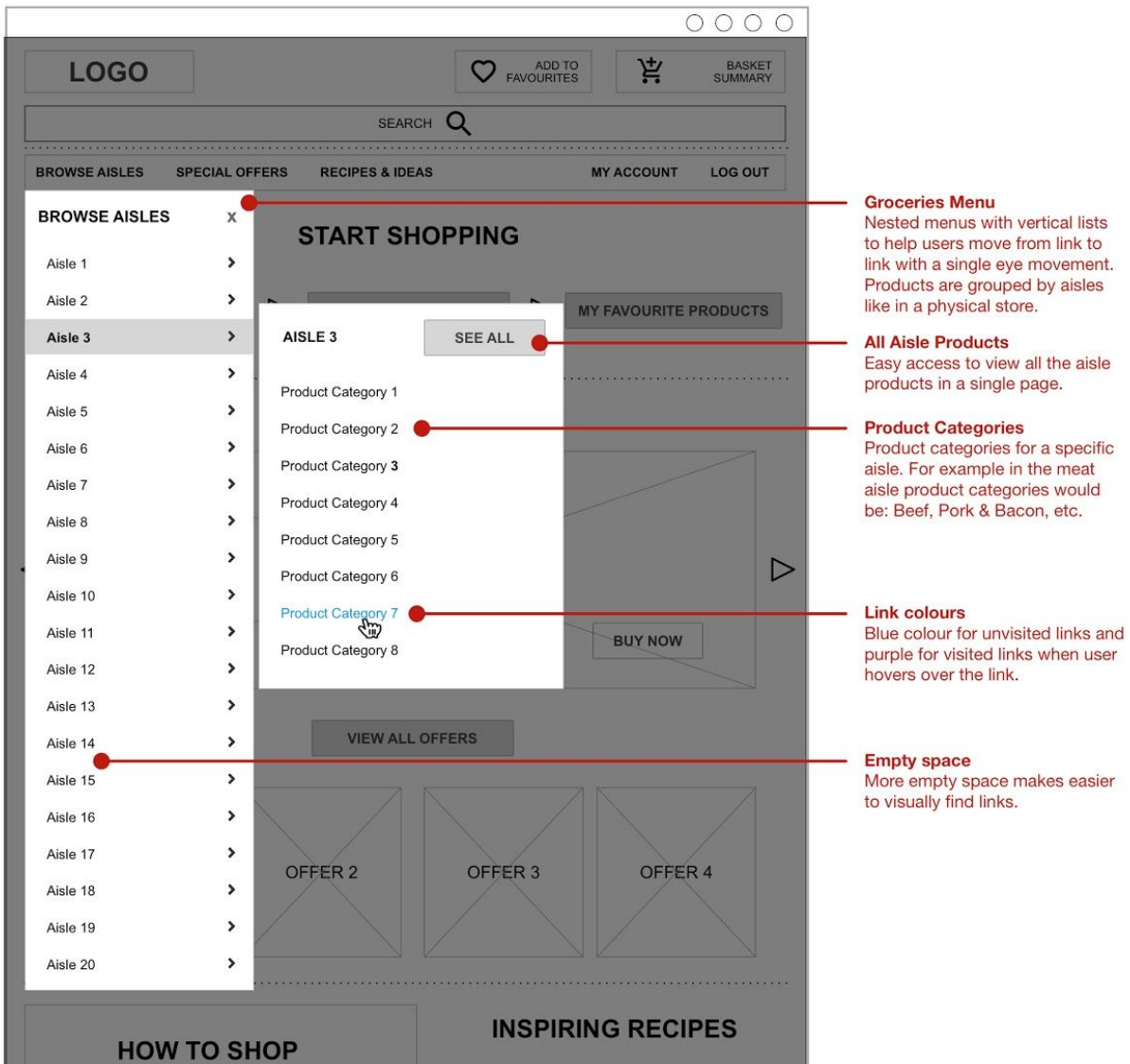
Figure 20: Mega Menu wireframe.

Basket Total
Basket Total and number of items added to basket. It is visible on all pages.

Basket Preview
Users can quickly add and preview items in the basket without leaving the page.

Size and Contrast
Increased size and contrast of the basket navigation and labels.

Cost
Total, all additional charges and savings are shown in this panel.

Checkout
Easy access to check out.

View Basket
Opens Basket Page with more detailed informations about products, delivery, etc.

Empty Basket
Removes all the items from the basket.

Figure 21: Shopping Basket Preview wireframe.

After "hiding" the basket, a basket summary was designed in the top right corner of the page (Philips, 2016). To help users keep track of how much they spend and what they buy without leaving the page, the Mini Basket is proposed (DeGeyter, 2018). It shows up when the user hovers over the icon (Figure 21) and it provides an easy access to the full cart (Figure 22).

Figure 22: Shopping Basket Page wireframe.

5.5 "Multisearch" Widget and List of Results

Users were confused when asked to use the "Multisearch". Reactions such as "I don't know what Multisearch is", "I'm hoping I'm not doing anything wrong" or trying the single Search were common. However, as soon as they found out its purpose and how to use it, they seem to think the tool was useful. It was clear, after analysing test data, that 'Multisearch' fails at findability and discoverability (Cardello, 2014).

To provide users with instant multiple products search, the Search Box was redesigned. Users can enter comma separated products to find all of them at once.

The Search Box was increased in size and moved to the centre of the page. The Next and Previous are replaced by tabs with the listed products/items. Filter By and Browse By are next to each other, under the tab results.
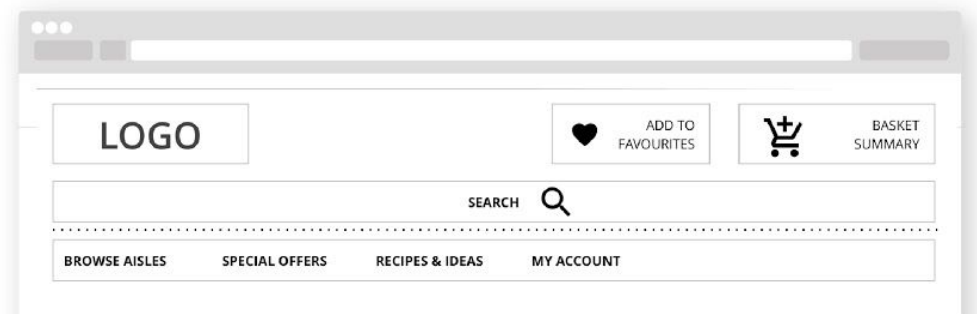
Figure 23: Multisearch - Step 1 wireframe.
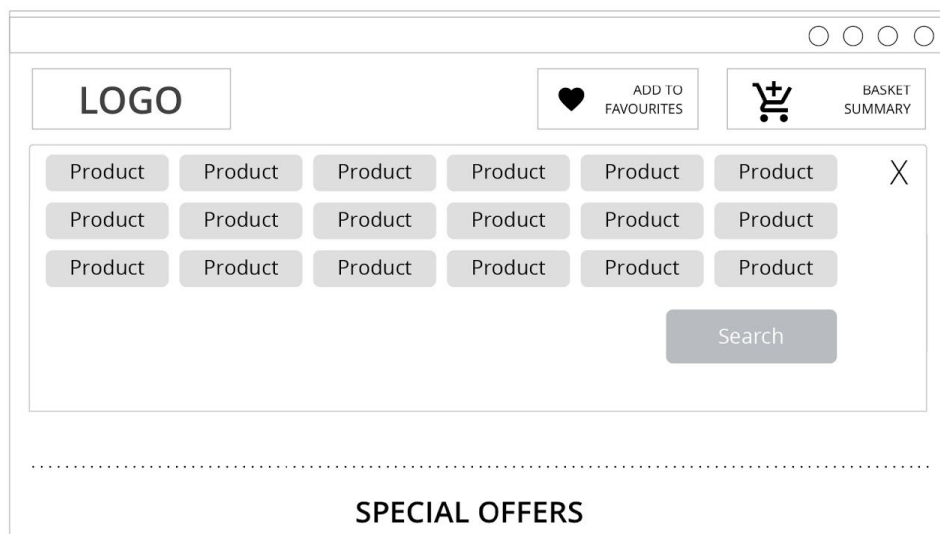
Figure 24: Multisearch - Step 2 wireframe.
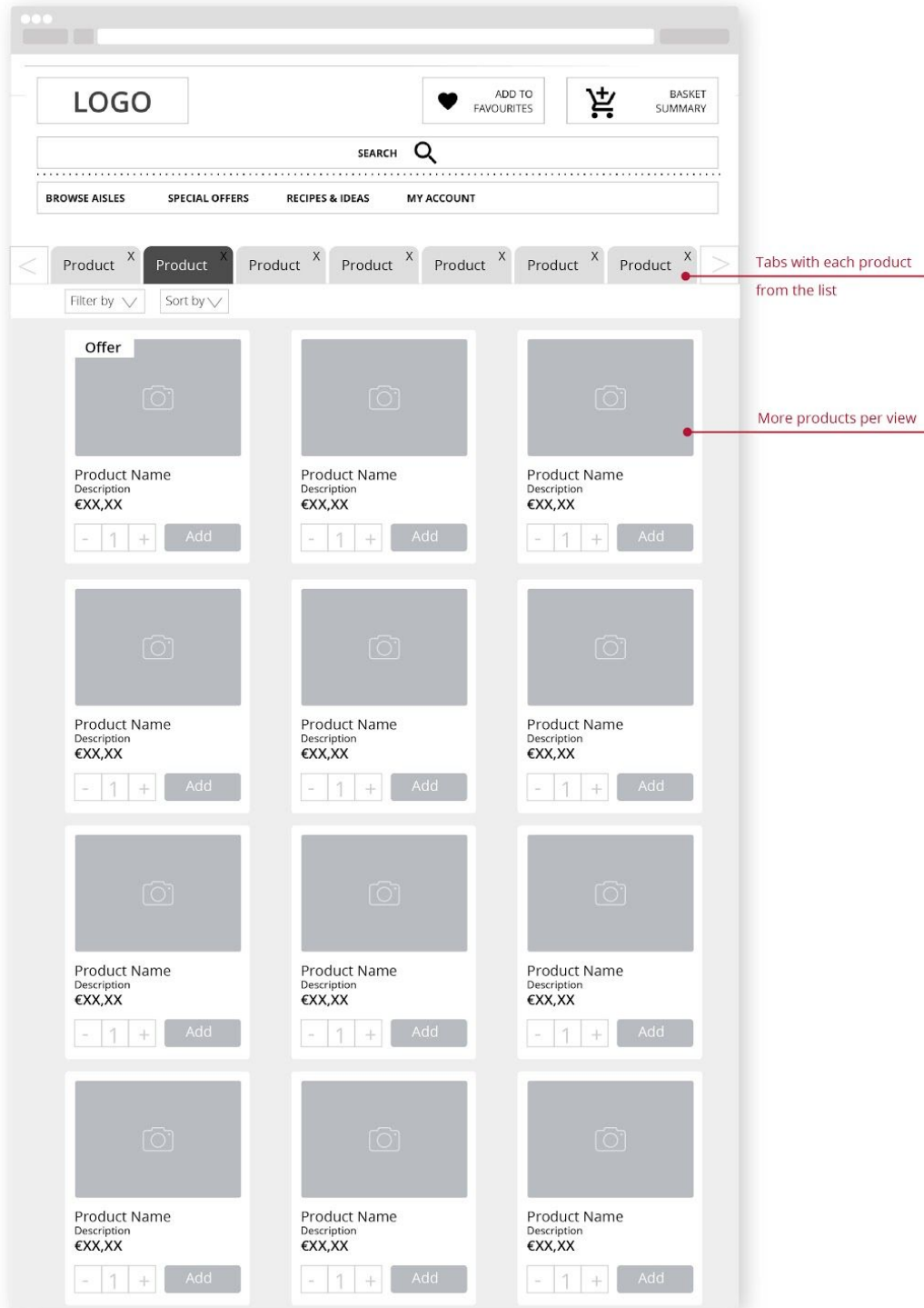
Figure 25: Search Results wireframe.

Hopefully, proposed design changes can help Tesco.ie earn customers trust and loyalty while making the user's ability to navigate the site and shop groceries more quick and natural.

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Appendix A - Project Plan

CA2 - Timeline			2018		
Deliverables	**Owner**	**Duration**	FEBRUARY		MARCH

Calendar columns: FEBRUARY 5, 6, 7, 8, **9**, **10**, 11, 12, 13, 14, 15, **16**, **17**, 18, 19, 20, 21, 22, **23**, **24**, 25, 26, 27, 28 / MARCH 1, **2**, **3**, 4, 5, 6, 7, 8, **9**, **10**, 11, 12, 13, 14, 15, **16**, **17**, 18, 19, 20, 21

Deliverables	Owner	Duration
Heuristic Evaluation		**19/02/2018**
Make List of Heuristics	owner	
Brief for Evaluators	owner	
Decide on elements to be evaluated	owner	
Make Evaluation Checklist	owner	
Run evaluation and record problems	owner	
Establish complete list of problems	owner	
Prioritise issues with scorecard	owner	
Provide solutions for identified issues	owner	
Comparative Usability Study		**04/03/2018**
Decide on task to be tested	owner	
Decide on the goals of the study	owner	
What are we going to measure?	owner	
Decide on success criteria for tasks	owner	
Write Pre-Test Questionnaire	owner	
Write Brief for Participants	owner	
Write Post-Test Questionnaire	owner	
Recruit 14 Participants	owner	
Run testing session and record results	owner	
Describe participants characteristics	owner	
Analyse task testing results	owner	
Analys Post-Test Questionnaire results	owner	
Put together results for all metrics	owner	
Put team results together	owner	
Report Writting		**16/03/2018**
Put together paper structure and list of appendices	owner	
Describe Website	owner	
HCI Goals to be evaluated	owner	
Procedure - Heuristic Evaluation	owner	
Procedure - Usability Testing	owner	
Results - Heuristic Evaluation	owner	
Results - Usability Testing	owner	
Appendices - Heuristic Evaluation	owner	
Appendices - Usability Testing	owner	
References	owner	
Conclusion	owner	
Closure phase		**16/03/2018**
Check References	owner	16/03/2018
Proofreading	owner	17/03/2018
Submitt to check for plagiarism	owner	17/03/2018
SUBMISSION DEADLINE	owner	21/03/2018

Annotations

1	Team meeting
2	External dependency
3	Critical

Appendix B1 - Heuristic Evaluation Plan

HEURISTIC EVALUATION PLAN

STUDY OBJECTIVES

1	Identify usability problems and make recommendations for how to fix those problems.
2	Identify and incorporate the Catastrophic and Major issues into formal usability testing.

RESEARCH QUESTIONS

1	What are the Catastrophic and Major issues related to the UI design?
2	Which one from the evaluated parts of the website requires major improvement?

TO DO

ID	Date	Task
1	02/02/2018	Select evaluators.
2	02/02/2018	Establish an appropriate list of heuristics (Norman + own heuristics). (Put it into Evaluation Checklist)
3	02/02/2018	Write brief for the evaluators (they need to know what to do)
4	02/02/2018	Decide on the elements to be evaluated.
5	08/03/2018	Run evaluation and look for problems. Record all the issues in detail. Use Evaluation Checklist
6	09/03/2018	Run debriefing session - all evaluators collaborate to establish complete list of problems.
7	09/03/2018	Use scorecard to prioritise issues.
8	13/03/2018	Suggest potential solutions for these problems on the basis of the heuristics. (mark them on the web screenshots)
9	14/03/2018	Put together evaluation summary. (associate with recommendations)

EVALUATORS

ID	Name
E1	Agnieszka
E2	Jordana
E3	Gabi
E4	Elias

ELEMENTS TO BE EVALUATED - Relevant system areas, modules and elements that are being evaluated

	Importance 1, 3, 5 or 8 (Fibonacci's scale)	Name
1	5	**Home Page**
2	8	**Recipes Search Page**
3	8	**Recipe Page**
4	8	**Groceries Tab**
5	8	**Shopping Basket**
6	8	**Mega Menu**
7	8	**Multisearch Widget**
8	8	**Search Results List**

GOALS OF THE SYSTEM

ID	Importance 1, 3, 5 or 8 (Fibonacci's scale)	Goal
1	8	User should be able to find Recipes Page.
2	8	User should be able to find Stuffed Chicken, Turkey meatballs, Chickpea stew, Roasted Pepper or Chorizo Salad recipes.
3	8	User should be able to add ingredients from the recipes list to basket.
4	8	User should be able to find a bottle of Rioja, Merlot, Sauvignon or Pinot Grigio and add it to basket.
5	8	User should be able to find Ice Cream, Frozen Desserts, Pie or Cake and add it to baket.
6	8	User should be able to find 250G box of Jacob's Italian Cracker Lightly Salt and add ot to basket.
7	8	User should be able to remove bottle of wine from the basket.
8	8	User should be able to find Half Price wine and add ot to basket.
9	8	User should be able to find Multi-search tool and add to basket a list of products: - a 780 ml bottle of Fairy Original Washing Up Liquid - 1 Medium box of Marigold Extra Life Kitchen Gloves - a 9 pack of Cushelle Quilted Toilet Rolls
10	8	User should be able to refine search.
11	8	User should be able to find out how much all the products in the basket cost.
12	8	User should be able to increase number of single product in the basket.

SEVERITY RANKING

Rating	
0	Violates a heuristic but doesn't seem to be a usability problem.
1	Superficial usability problem: may be easily overcome by user or occurs extremely infrequently. Does not need to be fixed for next release unless extra time is available.
2	Minor usability problem: may occur more frequently or be more difficult to overcome. Fixing this should be given low priority for next release.
3	Major usability problem: occurs frequently and persistently or users may be unable or unaware of how to fix the problem. Important to fix, so should be given high priority.
4	Usability catastrophe: Seriously impairs use of product and cannot be overcome by users. Imperative to fix this before product can be released.

EASE OF FIXING RANKING

Rating	
0	Problem would be extremely easy to fix. Could be completed by one team member before next release.
1	Problem would be easy to fix. Involves specific interface elements and solution is clear.
2	Problem would require some effort to fix. Involves multiple aspects of the interface or would require team of developers to implement changes before next release or solution is not clear.
3	Usability problem would be difficult to fix. Requires concentrated development effort to finish before next release, involves multiple aspects of interface. Solution may not be immediately obvious or may be disputed.

HEURISTICS SOURCES

1	LIGHTNER	N. J. Lightner, "Evaluating e-commerce functionality with a focus on customer service", in Communications of the ACM, 47 (1), pp. 88-92.
2	RBWG	Researched Based Web Guidelines (http://www.usability.gov/guidelines/)
3	Redish	Ginny Redish's Questions for Evaluating your Website (recommendations from a usability expert)
4	AT	Anthro-Tech Best Practices and Guidelines for Usable Web Sites (recommendations from usability experts)
6	IMDS	M. Cao, Q. Zhang, and J. Seydel, "B2C E-commerce web site quality: An empirical examination", in Industrial Management & Data Systems, 105 (5), pp. 645-661.
7	LIANG	T. P. Liang, and H. J. Lai, "Effect of store design on consumer purchases: An empirical study of on-line bookstores", in Information & Management, 39 (6), pp. 431-444.
8	NIELSEN	10 Usability Heuristics for User Interface Design (https://www.nngroup.com/articles/ten-usability-heuristics/)

Appendix B2 - Evaluators' Brief

EVALUATORS BRIEF

Welcome!
We are going to evaluate tesco.ie website against chosen heuristics (guidelines). The goal of this evaluation is to identify usability problems.
As an expert you will be asked to follow evaluation steps and use your knowledge and experience to find usability issues.
Please get familiar with the evaluation steps, goals, elements to be evaluated and heuristics, before you proceed.
This is individual evaluation, so please review the website on your own.

The evaluation process:

1	Read list of goals and elements of the website we are going to focus on (see EVALUATION PLAN tab)
2	Read the list of heuristics in the HEURISTICS tab. You will assess tesco.ie website against these heuristics.
3	Print evaluation checklist (see tab CHECKLIST TO PRINT)
4	Open tesco.ie and sign in. Go to the Home Page.
5	Go through the interface a number of times and examine and assess the efficacy of the chosen elements of the website. Focus on the goals of the system and elements to be evaluated . You can then break goals down into appropriate tasks, and test each in turn.
6	Check appriopriate box - complies, kind of complies, doesn't comply. If a guideline isn't relevant, leave the rating blank.
7	You can add a comments.
8	Check your number in the EVALUATION PLAN and enter your findings in the EVALUATION RESULTS tab in the column with your number.
9	Enter your results to the EVALUATION RESULTS tab. For each checklist item enter a rating of **-1** (doesn't comply with the guideline), **0** (kind of complies), **1** (complies). If a guideline isn't relevant, leave the rating blank.

The goals of the system:

1	User should be able to find Recipes Page.
2	User should be able to find Stuffed Chicken, Turkey meatballs, Chickpea stew, Roasted Pepper or Chorizo Salad recipes.
3	User should be able to add ingredients from the recipes list to basket.
4	User should be able to find a bottle of Rioja, Merlot, Sauvignon or Pinot Grigio and add it to basket.
5	User should be able to find Ice Cream, Frozen Desserts, Pie or Cake and add it to baket.
6	User should be able to find 250G box of Jacob's Italian Cracker Lightly Salt and add ot to basket.
7	User should be able to remove bottle of wine from the basket.
8	User should be able to find Half Price wine and add ot to basket.
9	User should be able to find Multi-search tool and add to basket a list of products: - a 780 ml bottle of Fairy Original Washing Up Liquid - 1 Medium box of Marigold Extra Life Kitchen Gloves - a 9 pack of Cushelle Quilted Toilet Rolls
10	User should be able to refine search.
11	User should be able to find out how much all the products in the basket cost.
12	User should be able to increase number of single product in the basket.

We will evaluate the following elements of the website:

1	Home Page
2	Recipes Search Page
3	Recipe Page
4	Groceries Tab
5	Shopping Basket
6	Mega Menu
7	Multisearch Widget
8	Search Results List

Note

Appendix B3 - Selected Heuristics

LIST OF HEURISTIC

#	Heuristics (Guideline)	Description	Source (See Test Plan)	Importance (1,2,3,4,5)
1	**Home Page**			
1.1	Present all major options on the home page	Users should not be required to click down to the second or third level to discover the full breadth of options on a Web site. Be selective about what is placed on the homepage, and make sure the options and links presented there are the most important ones on the site.	RBWG (5:2)	5
1.2	Provide content and choices that are meaningful for users and their top tasks		AT	
1.3	Use meaningful graphics and images		AT	
2	**Navigation**			
2.1	Provide navigational options	Do not create or direct users into pages that have no navigational options. When creating links that open new browser windows, ensure that the 'Back' button is still available, and that the new window is setup to return the user to the original browser window. Disabling navigation is confusing and frustrating to users, and can negatively impact user satisfaction and task completion.	RBWG (7:1)	4
2.2	Differentiate and group navigation elements	Clearly differentiate navigation elements from one another, but group and place them in a consistent and easy to find place on each page. Group and place navigational elements (e.g., group of links) consistently throughout the website. Maintain expected conventions, such as left or right hand navigations. Use vertical lists to help users move from link to link with a single eye movement.	RBWG (7:2)	4
2.3	Provide feedback on users' location	Provide feedback to let users know where they are in the Web site. Feedback provides users with the information they need to understand where they are within the Web site, and for proceeding to the next activity. Examples of feedback include providing path and hierarchy information (i.e., 'breadcrumbs'), matching link text to the destination page's heading, and creating URLs that relate to the user's location on the site. Other forms of feedback include changing the color of a link that has been clicked (suggesting that destination has been visited), and using other visual cues to indicate the active portion of the screen.	RBWG (7:4)	4
2.4	Place primary navigation menus in the left panel	Place the primary navigation menus in the left panel, and the secondary and tertiary menus together. One study found that navigation times were faster when the primary menu was located in the left panel. Placing a navigation menu in the right panel was supported as a viable design option by both performance and preference measures. AlsoOne study showed that, navigation performance was best when the secondary and tertiary menus were placed together. Placing a navigation menu in the right panel was supported as a viable design option by both performance and preference measures. Users preferred having the primary menu in the left panel, and grouping secondary and tertiary menus together, or grouping all three menu levels together. The best performance and preference was achieved when all three menus were placed in the left panel (placing them all in the right panel achieved close to the same performance level).	RBWG (7:5)	4
2.5	Use descriptive tab labels	Ensure that tab labels are clearly descriptive of their function or destination. Users like tabs when they have labels that are descriptive enough to allow error-free selections. When tab labels cannot be made clear because of the lack of space, do not use tabs.	RBWG (7:6)	3
2.6	Present tabs effectively	Ensure that navigation tabs are located at the top of the page, and look like clickable versions of real-world tabs. Users can be confused about the use of tabs when they do not look like real-world tabs. Real-world tabs are those that resemble the ones found in a file drawer. One study showed that users are more likely to find and click appropriately on tabs that look like real-world tabs.	RBWG (7:7)	3
2.7	Use appropriate menu types	Use 'sequential' menus for simple forward-moving tasks, and use 'simultaneous' menus for tasks that would otherwise require numerous uses of the Back button. Most Web sites use familiar 'sequential' menus that require items to be selected from a series of menus in some predetermined order. After each selection is made, another menu opens. The final choice is constrained by the sum total of all previous choices. Simultaneous menus display choices from multiple levels in the menu hierarchy, providing users with the ability to make choices from the menu in any order. Simultaneous menus are often presented in frames, and are best employed in situations where users would have to	RBWG (7:9)	2
2.8	Breadcrumb navigation	Do not expect users to use breadcrumbs effectively. Breadcrumbs can increase navigation efficiency for experienced users and provide orientation for visitors parachuting into the site. One study reported no difference in task completion times and total pages visited between groups that had breadcrumbs and those that did not. Participants could have used breadcrumbs thirty-two percent of the time, but only did so six percent of the time. It is probably not worth the effort to include breadcrumbs unless you can show that your Web sites users use them frequently, either to navigate the site, or to understand the sites hierarchySome studies suggest that breadcrumbs can lead to more efficient site navigation and improved user satisfaction. Studies also suggest that breadcrumbs are more useful for experienced Web users than novice users. One study found that test participantsAlthough one study showed that users only used breadcrumbs for navigation infrequently, and that breadcrumbs had no impact on task completion times, another study found that test participants who received instruction on the use of breadcrumbs completed tasks much faster than those who did not. This time savings could result in increased productivity for users that search Web sites on a daily basis.	RBWG (7:12)	1
2.9	Be consistent with navigational elements		AT	
2.10	Is the navigation obvious enough throughout the related sections?	Customer should be able to move easily through the different sections. For instance, between the shopping cart, the detailed description of the products and the shipping information.	IMDS	
2.11	Does the website use a clear user-logical hierarchy of categories to classify products and to find them?	The categories should be easy to identify and differentiate by the customer.	IMDS	
2.12	Does the website clearly display the "call to action buttons"?	This means that the buttons like "Add to Cart" or "Buy now" are easy to see and click. They should be located away from other buttons to avoid being clicked by mistake.	IMDS	
3	**Links**			
3.1	Use meaningful link labels	Use link labels and concepts that are meaningful, understandable, and easily differentiated by users rather than designers. To avoid user confusion, use link labels that clearly differentiate one link from another. Users should be able to look at each link and learn something about the link's destination. Using terms like 'Click Here' can be counterproductive. Clear labeling is especially important as users navigate down through the available links. The more decisions that users are required to make concerning links, the more opportunities they have to make a wrong decision.	RBWG (10:1)	5
3.2	Link to related content	Provide links to other pages in the Web site with related content. Users expect designers to know their Web sites well enough to provide a full list of options to related content.	RBWG (10:2)	4
3.3	Match link names with their destination pages	Make the link text consistent with the title or headings on the destination (i.e., target) page. Closely matched links and destination targets help provide the necessary feedback to users that they have reached the intended page. If users will have to click more than once to get to a specific target destination, avoid repeating the exact same link wording over and over because users can be confused if the links at each level are identical or even very similar. In one study, after users clicked on a link entitled 'First Aid', the next page had three options. One of them was again titled 'First Aid'. The two 'First Aid' links went to different places. Users tended to click on another option on the second page because they thought that they had already reached 'First Aid'.	RBWG (10:3)	4
3.4	Avoid misleading cues to click	Ensure that items that are not clickable do not have characteristics that suggest that they are clickable. Symbols usually must be combined with at least one other cue that suggests clickability. In one study, users were observed to click on a major heading with some link characteristics, but the heading was not actually a link. However, to some users bullets and arrows may suggest clickability, even when they contain no other clickability cues (underlining, blue coloration, etc.). This slows users as they debate whether the items are links.	RBWG (10:4)	4
3.5	Use text for links	Use text links rather than image links. Text links are more easily recognized as clickable, download faster, and are preferred by users. It is easier to convey a link's destination in text, rather than with the use of an image. Text links allow users with deactivated graphics, or text-only browsers to see navigation options.	RBWG (10:6)	4
3.6	Designate used links	Use color changes to indicate to users when a link has been visited. Link colors help users understand which parts of a website they have visited, and can increase users' ability to find information. Use default text link colors such as blue for unvisited links, and purple for visited links. Ensure that all links sharing the same target (e.g., external websites) change colors as well.	RBWG (10:7)	4
3.7	Use appropriate text link lengths	Make text links long enough to be understood, but short enough to minimize wrapping. A single word text link may not give enough information about the link's destination. A link that is several words may be difficult to read quickly, particularly if it wraps to another line. Generally, it is best if text links do not extend more than one line. However, one study found that when users scan prose text, links of nine to ten words elicit better performance than shorter or longer links. Keep in mind that it is not always possible to control how links will look to all users because browser settings and screen resolutions can vary.	RBWG (10:11)	3
3.8	Are links clear and easily distinguished from each other?		Redish	
4	**Information architecture**			

LIST OF HEURISTIC

#	Heuristics (Guideline)	Description	Source (See Test Plan)	Importance (1,2,3,4,5)
4.1	Does the structure of the site reflect users' mental models, not the organizational structure of the agency?		AT	
4.2	Is the information grouped and labeled meaningfully for users?		AT	
4.3	Does the architecture of the site provide a balance of breadth and depth dependent on the needs of the users and the content?		AT	
5	**Design and layout**			
5.1	Avoid cluttered displays	Create pages that are not considered cluttered by users. Clutter is when excess items on a page lead to a degradation of performance when trying to find certain information. Studies have shown that users can find what they are looking for more quickly in a sparse and uncluttered display than in a dense display. On an uncluttered display, all important search targets are highly salient, i.e., clearly available. One study found that test participants tended to agree on which displays were least cluttered and those that were most cluttered.	RBWG (6:1)	5
5.2	Place important items at top center	Put the most important items at the top center of the Web page to facilitate users' finding the information Users generally look at the top center of a page first, scanning from left to right, and then begin systematically moving down the page. All critical content and navigation options should be toward the top of the page. Particularly on navigation pages, most major choices should be visible with no, or a minimum of, scrolling.	RBWG (6:3)	5
5.3	Establish level of importance	Establish a high-to-low level of importance for information and infuse this approach throughout each page on the Web site. The page layout should help users find and use the most important information. Important information should appear higher on the page so users can locate it quickly. The least used information should appear toward the bottom of the page. Information should be presented in the order that is most useful to users. People prefer hierarchies, and tend to focus their attention on one level of the hierarchy at a time. This enables them to adopt a more systematic strategy when scanning a page, which results in fewer revisits.	RBWG (6:5)	4
5.4	Align items on a page	Visually align page elements, either vertically or horizontally. Users prefer consistent alignments for items such as text blocks, rows, columns, checkboxes, radio buttons, data entry fields, etc . Use consistent alignments across all webpages.	RBWG (6:7)	4
5.6	Use fluid layouts	Use a fluid layout that automatically adjusts the page size to monitor resolution settings that are 1024x768 pixels or higher. When web page layouts are fixed either to the left or centered, much of the available screen space is not used. It is best to take advantage of as much of the screen space as possible because this will help move more information above the fold. There has been no degradation in user performance when using the non-fluid layouts. However, most users prefer the fluid layout. One 2003 study reported a compliance rate for this guideline of twenty-eight percent, and a 2001 study found that only twenty-three percent of top Web sites used a fluid layout. Keep in mind that large monitors and higher pixel resolutions allow viewing of more than one window at a time.	RBWG (6:8)	3
6	**Heading, titles and labels**			
6.1	Use clear category labels	Ensure that category labels, including links, clearly reflect the information and items contained within the category. Category titles must be understood by typical users. Users will likely have difficulty understanding vague, generalized link labels, but will find specific, detailed links, and descriptors easier to use.	RBWG (9:1)	5
6.2	Provide descriptive page titles	Create a descriptive, unique, and concise title for each webpage. Title refers to the text that is in the browser title bar (this is the bar found at the very top of the browser screen). Titles are used by search engines to identify pages. If two or more pages have the same title, they cannot be differentiated by users or the 'Favorites' feature of the browser. If users bookmark a page, they should not have to edit the title to meet the characteristics mentioned above. Remember that some search engines only list the titles in their search results page. Use concise and meaningful titles on all pages to help orient users as they browse a page, or scan for specific URLs. To avoid confusing users, make the title that appears in the heading of the browser consistent with the title in the content area of the pages.	RBWG (9:2)	4
6.3	Use unique and descriptive headings	Use headings that are unique from one another and conceptually related to the content they describe. Ensure that headings are descriptive and relate to the content they introduce. If headings are too similar to one another, users may have to hesitate and re-read to decipher the difference. Identifying the best headings may require extensive usability testing and other methods.	RBWG (9:4)	4
6.4	Ensure visual consistency	Ensure visual consistency of website elements within and between webpages. Visual consistency is the consistent use of design elements such as typography, layout, colors, icons, navigation, images, and backgrounds. While users can overcome certain inconsistencies (e.g., entry fields, pushbuttons), consistent interfaces can reduce errors and task completion times. It can also reduce learning curves, and increase user satisfaction.	RBWG (11:4)	4
6.5	Limit the use of images	Use images only when they are critical to the success of a Web site. Ensure that a Web site's graphics add value and increase the clarity of the information on the site. Certain graphics can make some Web sites much more interesting for users, and users may be willing to wait a few extra seconds for them to load. Users tend to be most frustrated if they wait several seconds for a graphic to download, and then find that the image does not add any value. Some decorative graphics are acceptable when they do not distract the user.	RBWG (14:9)	3
7	**Content / Information Search**			
7.1	Make action sequences clear	When describing an action or task that has a natural order or sequence (assembly instructions, troubleshooting, etc.), structure the content so that the sequence is obvious and consistent Time-based sequences are easily understood by users. Do not force users to perform or learn tasks in a sequence that is unusual or awkward.	RBWG (15:1)	5
7.2	Use familiar words	Use words that are frequently seen and heard. Use words that are familiar to, and used frequently by, typical users. Words that are more frequently seen and heard are better and more quickly recognized. There are several sources of commonly used words (see Kucera and Francis, 1967 and Leech et al., 2001 in the Sources section). Familiar words can be collected using open-ended surveys, by viewing search terms entered by users on your site or related sites, and through other forms of market research.	RBWG (15:3)	4
7.3	Organize information clearly	Organize information at each level of the Web site so that it shows a clear and logical structure to typical users. Designers should present information in a structure that reflects user needs and the site's goals. Information should be well-organized at the Web site level, page level, and paragraph or list level. Good Web site and page design enables users to understand the nature of the site's organizational relationships and will support users in locating information efficiently. A clear, logical structure will reduce the chances of users becoming bored, disinterested, or frustrated.	RBWG (16:1)	5
7.4	Ensure that necessary information is displayed	Ensure that all needed information is available and displayed on the page where and when it is needed. Users should not have to remember data from one page to the next or when scrolling from one screenful to the next. Heading information should be retained when users scroll data tables, or repeated often enough so that header information can be seen on each screenful.	RBWG (16:3)	5
7.5	Does the site answer users' questions?		Redish	
7.6	Is the information about the products accurate, informative and convincing?	It must include specifications and features with a nontechnical and persuasive vocabulary.	IMDS	
7.7	Does the website provides value-added information and services?	For instance, lists of best sellers, compiled trends, link news related to the products and services, etc.	IMDS	
7.8	Is the content based on the users' needs?	The content should be based on the customers needs instead of being based around the product description.	IMDS	
8	**Stimulating the desire to purchase**			
8.1	Does the website use elements to draw customer's attention?	It can use banners, sounds and animations to focus customer attention on certain items or events.	LIANG	
8.2	Are the new products or special offers prominently advertised?	For instance, adding next to them "New!" or "On Sale."	LIANG	
8.3	Does the website shows the number of current visitors?	This is an index of the current shopping atmosphere that gives the customers a sense of store popularity.	LIANG	
9	**Search**			
9.1	Ensure usable search results	Ensure that the results of user searches provide the precise information being sought, and in a format that matches users' expectations. Users want to be able to use the results of a search to continue solving their problem. When users are confused by the search results, or do not immediately find what they are searching for, they become frustrated.	RBWG (17:1)	5

LIST OF HEURISTIC

#	Heuristics (Guideline)	Description	Source (See Test Plan)	Importance (1,2,3,4,5)
9.2	Provide a search option on each page	Provide a search option in a standard place on each page of a content-rich website.A search option should be provided on all pages where it may be useful–users should not have to return to the homepage to conduct a search. Search engines can be helpful on content-rich websites, but do not add value on other types of sites. Designers should be careful not to rely too heavily on search engines. They are not a substitute for good content organization, and do not always improve users' search performance. Designers should carefully consider the advantages and disadvantages of including a search engine, and whether their website lends itself to automated searches	RBWG (17:4)	4
9.3	Design search around users' terms	Construct a website's search engine to respond to users' terminology. Users seem to rely on certain preferred keywords when searching. They will generally conduct one or two searches before trying another site or search engine (or abandoning the search altogether). Determining the keywords users are using may require considerable data collection. Designers should make use of search engine logs, surveys, and other techniques to determine the preferred search words for their site, and make information relevant to those terms easy to find through the site's search engine. Keep in mind that designers' preferred keywords may not match users' preferred keywords, and content writers may overestimate the specialized vocabulary of their audience. For the most common searches, provide a 'best bets' set of results. Ensure that the 'best bets' do not appear as advertising or paid links. In addition to responding to users' keywords, design the site's search engine to accommodate common misspellings, extra spaces, alternative punctuation, misused plurals, and other common user search errors.	RBWG (17:5)	5
9.4	Does the search provide meaningful results and answer the questions that users have?		AT	
9.5	In search, does the site suggest alternative spellings or choices when the user comes close?		Redish	
9.6	If the search yields zero results, does the search give users options on what to do next?		AT	
9.7	Does the website provides a search box to locate products and information?	It must be visible at the top right of the page and it must continue throughout the whole site.	IMDS	
9.8	Does the search have advanced features that allow for a limit to a great variety of criteria (features, categories, etc.)?	The advanced features have to correspond customers' needs This helps to retrieve the most relevant results.	IMDS	
9.9	Does the search engine provide the customer's expected results?	An analysis of customer searches must be made as a means to optimize search results.	LIANG	
9.10	Notify Users when Multiple Search Options Exist	If more than one type of search option is provided, ensure that users are aware of all the different types of search options and how each is best used. Most users assume that a Web site has only one type of search. In one study, when there were multiple search types available, users tended to miss some of the search capabilities.	RBWG (17:7)	5
10	**Purchase decision making**			
10.1	Are there tools to ease the comparison between different products?	For instance, it can assist the customer by providing a summary of the most important features - according to customers' needs - and costs of each product within a category. Alternatively, it can provide a tool to add products to a comparative table.	LIANG	
10.2	Are the order charges, such as taxes and shipping costs specified as soon as possible in the purchasing process?	If this information is hidden it causes distrust and shopping cart abandonment.	LIGHTNER	
10.3	Does the website provide recommended products?	This can assist in finding products which might interest the customer, because they are similar to the products he purchased before or to products in which they expressed an interest. The related products can be inserted at the bottom of the product page, shopping cart or both.	LIANG	
10.4	Does the website provides products related to the selected product?	It should show accessories for the product which customer may want to purchase. This section can include between 2 and 6 related products and it is normally located at the product page or the shopping cart.	LIGHTNER	
10.5	Does the website has a shopping cart which is accessible from all the pages?	It must contain everything selected by the customer and the content should be accessible at anytime.	LIANG	
10.6	Does the website incorporates a Wishlist?	It is a useful tool to manage products. For many users adding products to a wishlist is less committed than to a shopping cart.	LIGHTNER	
11	**Branding**			
11.1	Does the design effectively communicate what the organization offers to users of its web site?		AT	
11.2	Can users tell at a glance whose web site it is?		Redish	
12	**Help**			
12.1	Does the site provide easy to find and easy to use help?		Redish	
12.2	Are there alternative ways to get information that are clear and easy to find on the site?		Redish	
13	**Technical considerations**			
13.1	Does the site consistently employ styles and follow web standards?		AT	
13.2	Do links work? Are they functional?		AT	
13.3	Is the response time of the website reasonable?	Customers do not tolerate long waiting times. If the time to download a page is not reasonable for them they may leave the site.	IMDS	
13.4	Is the waiting time for the search results reasonable?	This depends on the size of the database. If the waiting time is going to be long, it would be wise to include small illustrations and animations to keep the customers waiting.	IMDS	
14	**10 Usability Heuristics for User Interface Design by Jakob Nielsen**			
14.1	**Visibility of system status**	The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.	NIELSEN	
14.2	**Match between system and the real world**	The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.	NIELSEN	
14.3	**User control and freedom**	Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.	NIELSEN	
14.4	**Consistency and standards**	Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.	NIELSEN	
14.5	**Error prevention**	Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.	NIELSEN	
14.6	**Recognition rather than recall**	Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.	NIELSEN	
14.7	**Flexibility and efficiency of use**	Accelerators — unseen by the novice user — may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.	NIELSEN	
14.8	**Aesthetic and minimalist design**	Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.	NIELSEN	
14.9	**Help users recognize, diagnose, and recover from errors**	Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.	NIELSEN	
14.1	**Help and documentation**	Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.	NIELSEN	

Appendix B4 - Heuristic Evaluation Checklist

HEURISTIC EVALUATION CHECKLIST				
Evaluation of Tesco.ie website				
Date:				
Evaluator:				

#	Review Checklist	complies	kind of complies	doesn't comply	Comments
1	**Home Page**				
1.1	Present all major options on the home page	☐	☐	☐	
1.2	Provide content and choices that are meaningful for users and their top tasks	☐	☐	☐	
1.3	Use meaningful graphics and images	☐	☐	☐	
2	**Navigation**				
2.1	Provide navigational options	☐	☐	☐	
2.2	Differentiate and group navigation elements	☐	☐	☐	
2.3	Provide feedback on users' location	☐	☐	☐	
2.4	Place primary navigation menus in the left panel	☐	☐	☐	
2.5	Use descriptive tab labels	☐	☐	☐	
2.6	Present tabs effectively	☐	☐	☐	
2.7	Use appropriate menu types	☐	☐	☐	
2.8	Breadcrumb navigation	☐	☐	☐	
2.9	Be consistent with navigational elements	☐	☐	☐	
2.10	Is the navigation obvious enough throughout the related sections?	☐	☐	☐	
2.11	Does the website use a clear user-logical hierarchy of categories to classify products and to find them?	☐	☐	☐	
2.12	Does the website clearly display the "call to action buttons"?	☐	☐	☐	
3	**Links**				
3.1	Use meaningful link labels	☐	☐	☐	
3.2	Link to related content	☐	☐	☐	
3.3	Match link names with their destination pages	☐	☐	☐	
3.4	Avoid misleading cues to click	☐	☐	☐	
3.5	Use text for links	☐	☐	☐	
3.6	Designate used links	☐	☐	☐	
3.7	Use appropriate text link lengths	☐	☐	☐	
3.8	Are links clear and easily distinguished from each other?	☐	☐	☐	
4	**Information architecture**				
4.1	Does the structure of the site reflect users' mental models, not the organizational structure of the agency?	☐	☐	☐	
4.2	Is the information grouped and labeled meaningfully for users?	☐	☐	☐	
4.3	Does the architecture of the site provide a balance of breadth and depth dependent on the needs of the users and the content?	☐	☐	☐	
5	**Design and layout**				
5.1	Avoid cluttered displays	☐	☐	☐	
5.2	Place important items at top center	☐	☐	☐	
5.3	Establish level of importance	☐	☐	☐	
5.4	Align items on a page	☐	☐	☐	
5.6	Use fluid layouts	☐	☐	☐	
6	**Heading, titles and labels**				
6.1	Use clear category labels	☐	☐	☐	
6.2	Provide descriptive page titles	☐	☐	☐	
6.3	Use unique and descriptive headings	☐	☐	☐	
6.4	Ensure visual consistency	☐	☐	☐	
6.5	Limit the use of images	☐	☐	☐	
7	**Content / Information Search**				
7.1	Make action sequences clear	☐	☐	☐	
7.2	Use familiar words	☐	☐	☐	
7.3	Organize information clearly	☐	☐	☐	
7.4	Ensure that necessary information is displayed	☐	☐	☐	
7.5	Does the site answer users' questions?	☐	☐	☐	
7.6	Is the information about the products accurate, informative and convincing?	☐	☐	☐	
7.7	Does the website provides value-added information and services?	☐	☐	☐	
7.8	Is the content based on the users' needs?	☐	☐	☐	
8	**Stimulating the desire to purchase**				
8.1	Does the website use elements to draw customer's attention?	☐	☐	☐	
8.2	Are the new products or special offers prominently advertised?	☐	☐	☐	
8.3	Does the website shows the number of current visitors?	☐	☐	☐	
9	**Search**				
9.1	Ensure usable search results	☐	☐	☐	
9.2	Provide a search option on each page	☐	☐	☐	
9.3	Design search around users' terms	☐	☐	☐	
9.4	Does the search provide meaningful results and answer the questions that users have?	☐	☐	☐	
9.5	In search, does the site suggest alternative spellings or choices when the user comes close?	☐	☐	☐	
9.6	If the search yields zero results, does the search give users options on what to do next?	☐	☐	☐	
9.7	Does the website provides a search box to locate products and information?	☐	☐	☐	
9.8	Does the search have advanced features that allow for a limit to a great variety of criteria (features, categories, etc.)?	☐	☐	☐	
9.9	Does the search engine provide the customer's expected results?	☐	☐	☐	
9.10	Notify Users when Multiple Search Options Exist	☐	☐	☐	
10	**Purchase decision making**				
10.1	Are there tools to ease the comparison between different products?	☐	☐	☐	
10.2	Are the order charges, such as taxes and shipping costs specified as soon as possible in the purchasing process?	☐	☐	☐	
10.3	Does the website provide recommended products?	☐	☐	☐	
10.4	Does the website provides products related to the selected product?	☐	☐	☐	
10.5	Does the website has a shopping cart which is accessible from all the pages?	☐	☐	☐	
10.6	Does the website incorporates a Wishlist?	☐	☐	☐	
11	**Branding**				
11.1	Does the design effectively communicate what the organization offers to users of its web site?	☐	☐	☐	
11.2	Can users tell at a glance whose web site it is?	☐	☐	☐	
12	**Help**				
12.1	Does the site provide easy to find and easy to use help?	☐	☐	☐	
12.2	Are there alternative ways to get information that are clear and easy to find on the site?	☐	☐	☐	
13	**Technical considerations**				
13.1	Does the site consistently employ styles and follow web standards?	☐	☐	☐	
13.2	Do links work? Are they functional?	☐	☐	☐	
13.3	Is the response time of the website reasonable?	☐	☐	☐	
13.4	Is the waiting time for the search results reasonable?	☐	☐	☐	
14	**10 Usability Heuristics for User Interface Design by Jakob Nielsen**				
14.1	**Visibility of system status**	☐	☐	☐	
14.2	**Match between system and the real world**	☐	☐	☐	
14.3	**User control and freedom**	☐	☐	☐	
14.4	**Consistency and standards**	☐	☐	☐	
14.5	**Error prevention**	☐	☐	☐	
14.6	**Recognition rather than recall**	☐	☐	☐	
14.7	**Flexibility and efficiency of use**	☐	☐	☐	
14.8	**Aesthetic and minimalist design**	☐	☐	☐	
14.9	**Help users recognize, diagnose, and recover from errors**	☐	☐	☐	
14.1	**Help and documentation**	☐	☐	☐	

Appendix B5 - Heuristic Evaluation Results

HEURISTIC EVALUATION RESULTS

RATING: -1 - doesn't comply with the guideline, 0 - kind of complies, 1 - complies

#	Review Checklist	E1 Rating	E1 Comments	E2 Rating	E2 Comments	E3 Rating	E3 Comments	E4 Rating	E4 Comments
1	**Home Page**								
1.1	Present all major options on the home page	0		1	There are too many options, major and minor ones	1		1	
1.2	Provide content and choices that are meaningful for users and their top tasks	0		1		0	However there an excessive amount of information, w	1	
1.3	Use meaningful graphics and images	0		0		0		0	
2	**Navigation**								
2.1	Provide navigational options	1		1		1		1	
2.2	Differentiate and group navigation elements	-1	Mega menu has too many links which look the same	-1		-1		-1	
2.3	Provide feedback on users' location	-1	There is no clear path where the user is on the website, for example breadcrumbs.	-1	Really inconsistant. Sometimes users don't know where they are in the site	0	not always	-1	
2.4	Place primary navigation menus in the left panel	-1	They are only at the top of the page.	-1	Primary menus are center in space	-1		-1	
2.5	Use descriptive tab labels	-1	Euro shop' not clear what it means.	0		0		0	
2.6	Present tabs effectively	1		0		-1		0	
2.7	Use appropriate menu types	-1	Mega Menu has too many options, it would be easier to use it with nested menus.	0		0		0	
2.8	Breadcrumb navigation	-1	No breadcrumb navigation.	-1		-1		-1	
2.9	Be consistent with navigational elements	-1	The navigation isn't consistent, many different types of buttons and links are overwhelming for the user.	0		0		0	
2.10	Is the navigation obvious enough throughout the related sections?	-1	For example clicking 'Buy ingredients' on Recipe Page doesn't take the user to the page where he can shop.	0		-1		-1	
2.11	Does the website use a clear user-logical hierarchy of categories to classify products and to find them?	-1		-1		-1		-1	
2.12	Does the website clearly display the "call to action buttons"?	-1	CTAs are not in the right places of the content. They are duplicated.	0		0		0	
3	**Links**								
3.1	Use meaningful link labels	-1	Guide price' and other labels might be hard to understand	0		0		0	
3.2	Link to related content	-1	There are no links to similar products	0		0		0	
3.3	Match link names with their destination pages	-1		-1		-1		-1	
3.4	Avoid misleading cues to click	-1	Arrow under Search is confusing	0		0		0	
3.5	Use text for links	-1	Buttons are not text but images	0		1		0	
3.6	Designate used links	-1	After clicking on link its color doesn't change (for example Mega Menu)	-1		-1		-1	
3.7	Use appropriate text link lengths	0		-1		-1		-1	
3.8	Are links clear and easily distinguished from each other?	-1	A lot of text is blue - same color as links.	-1		-1		-1	
4	**Information architecture**								
4.1	Does the structure of the site reflect users' mental models, not the organizational structure of the agency?	-1		-1	Really old website. Users' mental models have changed	-1		-1	
4.2	Is the information grouped and labeled meaningfully for users?	0		0		0		0	
4.3	Does the architecture of the site provide a balance of breadth and depth dependent on the needs of the users and the content?	-1	Too much information at once. There are no clear paths for different personas.	-1		-1		-1	
5	**Design and layout**								
5.1	Avoid cluttered displays	-1	Groceries tab has too much confusing information and duplicated content.	-1		-1		-1	
5.2	Place important items at top center	0		0		0		0	
5.3	Establish level of importance	-1		-1		-1		-1	
5.4	Align items on a page	0		0		0		0	
5.6	Use fluid layouts	-1	Page has low resolution and it doesn't adjust to monitor resolution settings. It doesn't take advantage of screen size.	-1		-1		-1	
6	**Heading, titles and labels**								
6.1	Use clear category labels	0		0		0		0	
6.2	Provide descriptive page titles	0		0		0		0	
6.3	Use unique and descriptive headings	0		0		-1		0	
6.4	Ensure visual consistency	-1		-1		-1		-1	
6.5	Limit the use of images	-1	Unneccessary images for buttons	0		0		0	
7	**Content / Information Search**								
7.1	Make action sequences clear	-1	There is no clear sequence to add recipe ingredients to basket. User has to memorise ingredients and use search.	0		-1		-1	
7.2	Use familiar words	0		0		0		0	
7.3	Organize information clearly	-1		-1		-1		-1	
7.4	Ensure that necessary information is displayed	-1	Users have to remember data from one page to another - buying ingredients	0		0		0	
7.5	Does the site answer users' questions?	0		0		-1		-1	
7.6	Is the information about the products accurate, informative and convincing?	0		0		0		0	
7.7	Does the website provides value-added information and services?	0		-1		-1		-1	
7.8	Is the content based on the users' needs?	0		0		0		0	
8	**Stimulating the desire to purchase**								
8.1	Does the website use elements to draw customer's attention?	1	Adds on Home Page and Grocceries Tab	0		1		0	
8.2	Are the new products or special offers prominently advertised?	1		0		0		0	
8.3	Does the website shows the number of current visitors?	-1		-1		-1		-1	
9	**Search**								
9.1	Ensure usable search results	-1	Search didn't show 'Half Price' offers, despite they were listed on the website.	0		0		0	
9.2	Provide a search option on each page	0		-1	There is no search option on Tesco.ie home page	-1		-1	
9.3	Design search around users' terms	0		0		0		0	
9.4	Does the search provide meaningful results and answer the questions that users have?	0		0		0		0	
9.5	In search, does the site suggest alternative spellings or choices when the user comes close?	1		1		0		1	
9.6	If the search yields zero results, does the search give users options on what to do next?	1	We did not find any products to match 'ttttt' Try searching again using a different phrase or name or browse our store under tab 'Groceries'	-1		0		0	
9.7	Does the website provides a search box to locate products and information?	0		0	Not on home page	0		0	
9.8	Does the search have advanced features that allow for a limit to a great variety of criteria (features, categories, etc.)?	-1	It only filters by area, favourites, new products and special offers	-1		-1		-1	
9.9	Does the search engine provide the customer's expected results?	-1	It's difficult to find for example fresh onions.	0		0		0	
9.10	Notify Users when Multiple Search Options Exist	-1		-1		0		-1	
10	**Purchase decision making**								
10.1	Are there tools to ease the comparison between different products?	-1		-1		-1		-1	
10.2	Are the order charges, such as taxes and shipping costs specified as soon as possible in the purchasing process?	-1	Total Clubcard points Total MultiBuy savings	-1		-1		-1	
10.3	Does the website provide recommended products?	-1		-1		-1		-1	
10.4	Does the website provides products related to the selected product?	-1		-1		0		0	
10.5	Does the website has a shopping cart which is accessible from all the pages?	-1		0	It's shown all the time on the Grocery site of the web but just there, it's not visible from other parts of the web	-1		-1	
10.6	Does the website incorporates a Wishlist?	-1		-1		-1		-1	
11	**Branding**								
11.1	Does the design effectively communicate what the organization offers to users of its web site?	1		1		0		0	
11.2	Can users tell at a glance whose web site it is?	1		1		1		1	
12	**Help**								
12.1	Does the site provide easy to find and easy to use help?	1		1		1		1	
12.2	Are there alternative ways to get information that are clear and easy to find on the site?	0		0		0		0	
13	**Technical considerations**								
13.1	Does the site consistently employ styles and follow web standards?	-1		-1		-1		-1	
13.2	Do links work? Are they functional?	0		0		0		0	
13.3	Is the response time of the website reasonable?	-1	Performance grade is C78.(https://tools.pingdom.com) It takes 8.16s to load. 52% requests are for images.	-1		-1		-1	
13.4	Is the waiting time for the search results reasonable?	0		0		0		0	
14	**10 Usability Heuristics for User Interface Design by Jakob Nielsen**								
14.1	Visibility of system status	-1	TESCO GROCERIES: Multisearch: Not really visible, it doesn't stand up and it's quite useful and works well. TESCO GROCERIES: Menu: selected tab and hover tab look the same	-1	RECIPES site: when clicking any of the checkbox item the window of the submenu where they are disappears. RECIPES site: "Done" button in any of the submenus of the "Browse by" options doesn't work. Limited search is not possible. SHOPPING BASKET: Substitution option: it's not really visible which is the one picked. SHOPPING BASKET: even after the user chooses a slot, the delivery price is only added at the end, in the payment page.	-1	RECIPES site: when a tag has been selected loading icon appears. SING IN: it's not very clear whether you're logged in or not	-1	Finding collection point, the user has to click the hyperlink. I would expect the entire location field to be clickable.
14.2	Match between system and the real world	0		-1	RECIPES site: list of recipes: time only in minutes, a bit confusing	-1	RECIPES site: SEARCH option: brings you to a list of recipes titles and url links, no photos or description	0	
14.3	User control and freedom	-1							
14.4	Consistency and standards	-1	Design Inconsistency between different offering pages (Recipes,Tesco Groceries, Tesco Baby Club, Club Card)	-1	HOME PAGE: New tabs sometimes open for links and sometimes they don't. For exemple: Community Fund, Recipe Inspiring are opened in a new tab, but Baby Club and mobile not. INSIDE A RECIPE: when clicking "Shop ingredients" new tab will be opened. And if "sign in" hasn't been done it will be a really clutter site where all the steps needed will be shown but after two menus and two blocks of additional information	-1	RECIPES site: New just opened tab is name just "Recipes"	-1	INSIDE A RECIPE: In some recipes "Preparation" is before "Ingredients" when the screen is small, if the screen is big "Ingredients" are on the left side of the screen and "Preparation" on the right
14.5	Error prevention	0		0		0		0	
14.6	Recognition rather than recall	-1	User has to remember ingredients to add them to basket	-1	TESCO GROCERIES: Multisearch: When a product is misspelled it will suggest possible products			0	
14.7	Flexibility and efficiency of use	-1	TESCO GROCERIES: Non added ingredients have to be added manually by coming back to the recipe. TESCO GROCERIES: Every time an ingredient is clicked a new tab will be opened SHOPPING BASKET: if you want to change the delivery day you have to click on 'Switch to Colletion' and then 'Change Delivery Day' instead of click in straight away on 'Switch Collection'	-1	RECIPES site: "Popular tags" any tag that is selected is going to remain selected unless it's unclicked, when clicking a second one RECIPES site: there are duplicated "Popular tags"	-1	HOME PAGE: When clicking "Inspiring Recipes" a new tab is opened SHOPPING BASKET: "Empty Basket" and "Product Terms & Conditions" look like are all one only link, not visual division	-1	Shopping item search can requires very specific wording, rosmary sprigs does not show results, the user has to enter "rosmary" and searching "tortilla wrap"s give you 4 results. "wraps" gives 106 results and a much bigger selection of tortilla wraps. Moving from the recipe tab to the shopping tab User has to scroll to start viewing search results
14.8	Aesthetic and minimalist design	-1	Information clutter	-1	HOME PAGE: Home page too clutter	-1	SING IN AND REGISTER site: input boxes too small	-1	Sometimes a filepath is included in the search result heading section, which is of no use to the user Book a colection slot: two rows of tabs on the menu, one on the top and one on the bottom, why? Overall lack of visual heirarchy to giude the user
14.9	Help users recognize, diagnose, and recover from errors	0		-1		0		0	
14.1	Help and documentation	0		0		0		0	"Unavailable slot" legend resembles a check-box

Appendix B6 - Heuristic Evaluation Summary of Results

RESULTS SUMMARY

#	Review Checklist	Raw score				# Questions	# Answers					Score				Average Score
		E1	E2	E3	E4		E1	E2	E3	E4		E1	E2	E3	E4	
1	Home page	0	2	1	2	3	3	3	3	3		50%	83%	67%	83%	71%
2	Navigation	-8	-4	-5	-5	12	12	12	12	12		17%	33%	29%	29%	27%
3	Links	-7	-4	-3	-4	8	8	8	8	8		6%	25%	31%	25%	22%
4	Information architecture	-2	-2	-2	-2	3	3	3	3	3		17%	17%	17%	17%	17%
5	Design and layout	-3	-3	-3	-3	5	5	5	5	5		20%	20%	20%	20%	20%
6	Heading, titles and labels	-2	-1	-2	-1	5	5	5	5	5		30%	40%	30%	40%	35%
7	Content / Information Search	-3	-2	-4	-4	8	8	8	8	8		31%	38%	25%	25%	30%
8	Stimulating the desire to purchase	1	-1	0	-1	3	3	3	3	3		67%	33%	50%	33%	46%
9	Search	-2	-2	-2	-2	10	10	10	10	10		40%	40%	40%	40%	40%
10	Purchase decision making	-6	-6	-5	-5	6	6	6	6	6		0%	0%	8%	8%	4%
11	Branding	2	2	1	1	2	2	2	2	2		100%	100%	75%	75%	88%
12	Help	1	1	1	1	2	2	2	2	2		75%	75%	75%	75%	75%
13	Technical considerations	-2	-2	-2	-2	4	4	4	4	4		25%	25%	25%	25%	25%
14	General principles for interaction design	-6	-7	-7	-5	10	10	10	10	10		20%	15%	15%	25%	19%
						81	81	81	81	81		36%	39%	36%	37%	

Average Score vs Review Checklist
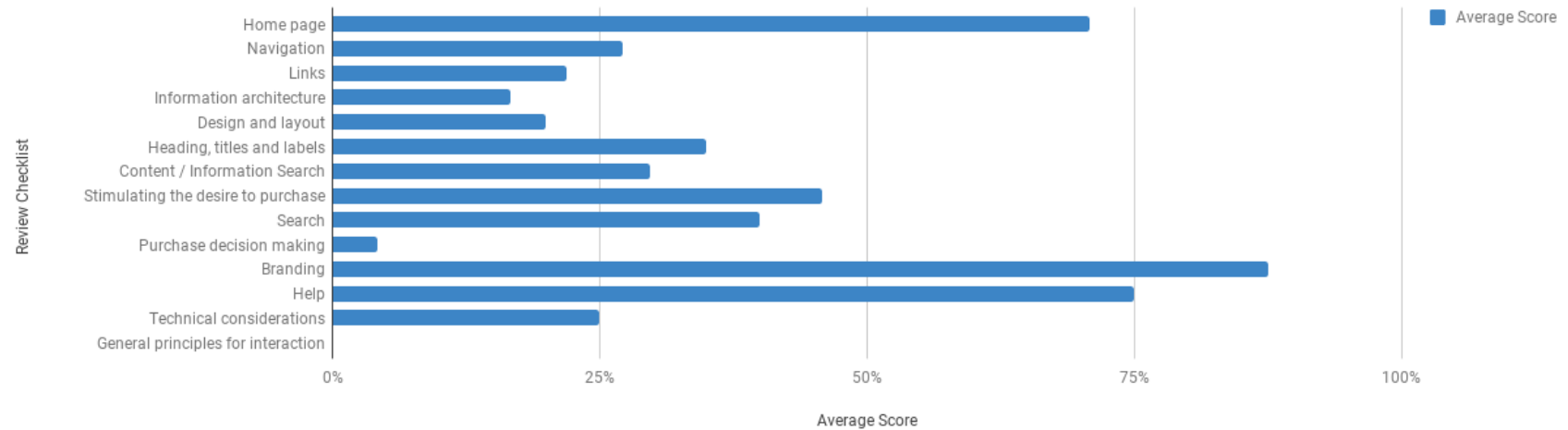
Appendix B7 - Heuristic Evaluation - Positive Findings

POSITIVE FINDINGS

0 - don't agree that this is a usability problem, 1 - cosmetic problem, 2 - minor usability problem, 3 - major usability problem; important to fix, 4 - usability catastrophe; imperative to fix

ID	Where	Task #	Category	Positive Finding	Occurrences within evaluators (value 1 if it occured)				Heuristics #
					E1	E2	E3	E4	
1	Home Page		Find Recipes	Website provides navigational options	1	1	1	1	2.1
2	Home Page		Find Recipes	Website uses elements to draw customer's attention like banners on the Home Page and Groceries Tab	1		1		8.1
3	Groceries Tab		Groceries Tab	New products or special offers are prominently advertised.	1				8.2
4	Search Results List		Search	Site suggests alternative spellings or choices when the user comes close.	1	1		1	9.5
5	Search Results List		Search	If the search yields zero results, the search give users options on what to do next.	1				9.6
6	Home Page		Find Recipes	The design effectively communicates what the organization offers to users of its web site.	1	1	1		11.1
7	Home Page		Find Recipes	Users can tell at a glance whose web site it is.	1	1	1	1	11.2
8	Groceries Tab		Groceries Tab	The site provides easy to find and easy to use help.	1	1	1	1	12.1

ASSIGNED TO:
Find Recipes - Gabi
Find Ingredients - Elias
Groceries Tab - Aga
Search - Jordana

Appendix B8 - Heuristic Evaluation - List of Issues

IDENTIFIED ISSUES

Severity Ranking: 0 - don't agree that this is a usability problem, 1 - cosmetic problem, 2 - minor usability problem, 3 - major usability problem; important to fix, 4 - usability catastrophe; imperative to fix

ID	Where	Task #	Category	Issues	Severity Ranking (0, 1 ,2, 3, 4)				Final Rating	Heuristics Violated #	Ease of Fixing (0,1,2,3)
					E1	E2	E3	E4			
1	Home Page		Find Recipes	Design Inconsistency between different offering pages (Recipes,Tesco Groceries, Tesco Baby Club, Club Card).	4	4	4	4	4	6.4 | 14.4	3
2	Home Page		Find Recipes	Home page too clutter.	3	4	4	3	4	14.8 | 5.1	2
3	Home Page		Find Recipes	New tabs sometimes open for links and sometimes they don't. For exemple: Community Fund, Recipe Inspiring are opened in a new tab, but Baby Club and mobile not.	3	3	3	3	3	14.8	3
4	Home Page		Find Recipes	When clicking "Inspiring Recipes" a new tab is opened.	2	2	2	2	2	14.7	1
5	Recipes Search Page		Find Recipes	New just opened tab is named just "Recipes".	2	1	1	1	2	14.4 | 6.3	0
6	Recipes Search Page		Find Recipes	When clicking any of the checkbox item of the "Browse by" the window of the submenu where they are disappears.	3	4	4	4	4	14.1	2
7	Recipes Search Page		Find Recipes	"Done" button in any of the submenus of the "Browse by" options doesn't work. Limited search is not possible.	4	4	4	4	4	14.1	3
8	Recipes Search Page		Find Recipes	"Popular tags" any tag that is selected is going to remain selected unless it's unclicked, when clicking a second one.	3	3	3	3	3	14.7	1
9	Recipes Search Page		Find Recipes	There are duplicated "Popular tags".	1	1	1	1	1	14.7	0
10	Recipes Search Page		Find Recipes	List of recipes: time only in minutes, a bit confusing.	2	1	1	1	2	6.1 | 14.2	1
11	Recipes Search Page		Find Recipes	SEARCH option: brings you to a list of recipes titles and url links, no photos or description.	3	4	3	4	4	7.6 | 14.2	1
12	Recipe Page		Find Ingredients	Some recipes don't have hyperlinks to the ingredients, so they cannot be added to the shopping basket. And if hyperlinks exist, just few items may have it.	3	3	3	3	3	3.2	1
13	Recipe Page		Find Ingredients	In some recipes "Preparation" is before "Ingredients" when the screen is small, if the screen in big "Ingredients" are on the right side of the screen and "Preparation" on the left	3	3	3	3	3	14.4	1
14	Recipe Page		Find Ingredients	When clicking "Shop ingredients" new tab will be opened	3	2	2	2	3	14.4	1
15	Recipe Page		Find Ingredients	Non added ingredients have to be added manually by coming back to the recipe.	4	4	4	4	4	14.7	3
16	Recipe Page		Find Ingredients	Have to scroll to start seeing the ingredients and preparation of the recipe	3	3	2	3	3	14.1	0
17	Groceries Tab		Groceries Tab	When landing for first time in Groceries site, if "sign in" hasn't been done the page will be a really clutter site where all the steps needed will be shown, after two menus and two blocks of additional information	4	4	4	4	4	14.1	1
18	Groceries Tab		Groceries Tab	Menu: selected tab and hover tab look the same	4	4	4	4	4	14.6	1
19	Multisearch Widget		Search	Multisearch: Not really visible, it doesn't stand up and it's quite useful and works well	4	4	4	4	4	14.1	3
20	Multisearch Widget		Search	Multisearch: When a product is misspelled it will suggest possible products	0	0	0	0	0	14.7	3
21	Search Results List		Search	User has to scroll to start viewing search results	2	2	3	3	3	14.1	2
22	Groceries Tab		Groceries Tab	Buttons are made of images not text.	2	2	3	3	3	6.5	1
23	Mega Menu		Groceries Tab	Mega menu has too many links which look the same	3	2	2	3	3	2.2	3
24	Groceries Tab		Groceries Tab	There is no clear path where the user is on the website, for example breadcrumbs.	3	3	2	2	3	2.3	1
25	Groceries Tab		Groceries Tab	Some tab labels might be not clear, for example "Euro shop"	2	2	3	2	3	2.5	0
26	Mega Menu		Groceries Tab	The website doesn't use a clear user-logical hierarchy of categories to classify products and to find them.	4	4	3	4	4	2.11	2
27	Groceries Tab		Groceries Tab	CTAs are not in the right places of the content. They are duplicated.	4	4	4	4	4	2.12	1
28	Groceries Tab		Groceries Tab	Some labels might be difficult to understand. (Guide price)	4	4	4	4	4	3.1	0
29	Multisearch Widget		Search	Arrow under Search Bar is confusing.	3	3	3	3	3	3.4	1
30	Mega Menu		Groceries Tab	After clicking on link it is not designated (color doesn't change)	3	3	2	2	3	3.6	0
31	Groceries Tab		Groceries Tab	Hard to know what is a link because of blue color for the plain text.	4	4	4	4	4	3.8	1
32	Home Page		Find Ingredients	Page has low resolution and it doesn't adjust to monitor resolution settings. It doesn't take advantage of screen size.	3	3	3	2	3	5.6	2
33	Recipe Page		Recipes Page	There is no clear sequence to add recipe ingredients to basket. User has to memorise ingredients and use search.	4	4	4	4	4	7.1	3
34	Groceries Tab		Groceries Tab	Information isn't clearly organised to help user with shopping.	4	4	4	4	4	7.3	2
35	Groceries Tab		Groceries Tab	Website doesn't show the number of current visitors to stimulate the desire to purchase.	2	1	2	2	2	8.3	1
36	Search Results List		Search	Search didn't show 'Half Price' offers, despite they were listed on the website.	4	4	4	4	4	9.1	3
37	Home Page		Search	There is no search option on Tesco.ie Home Page	4	4	4	4	4	9.7	3
38	Search Results List		Search	Search doesn't have advanced features that allow for a limit to a great variety of criteria (features, categories, etc.)	4	4	4	4	4	9.8	3
39	Multisearch Widget		Search	Users are not notified when multi-search option exists.	4	4	3	4	4	9.10	3
40	Groceries Tab		Groceries Tab	There are no tools to ease the comparison between different products.	3	3	2	2	3	10.1	3
41	Shopping Basket		Groceries Tab	There are no order charges, such as taxes and shipping costs specified as soon as possible in the purchasing process.	4	4	4	4	4	10.2	3
42	Groceries Tab		Groceries Tab	Website doesn't provide personalised recommendations.	3	3	3	3	3	10.3	3
43	Groceries Tab		Groceries Tab	Website doesn't provide products related to the selected product.	4	3	3	4	4	10.4	3
44	Shopping Basket		Groceries Tab	Shopping basket is visible only on Groceries Tab.	4	4	4	3	4	10.5	1
45	Groceries Tab		Groceries Tab	Website doesn't incorporate wishlist.	2	2	3	1	3	10.6	3
46	Home Page		Find Recipes	Site does not consistently employ styles and follow web standards.	4	4	4	3	4	13.1	3
47	Home Page		Find Recipes	Too many images makes the website load slower.	4	4	3	4	4	13.4	2

ASSIGNED TO:
Find Recipes - Gabi
Find Ingredients - Elias
Groceries Tab - Aga
Search - Jordana

Appendix C1 - Test Plan (Rainbow Spreadsheet)

TEST PLAN

STUDY OBJECTIVES

1	Identify weaknesses and strengths of the general UI navigation and structure.
2	Identify whether the users can easily find a recipe and buy ingredients.
3	Identify whether the users can easily find deals on the website.
4	Identify weaknesses and strengths of the multisearch tool.
5	Identify how satisfied users are with the website.
6	Identify if users can perform tasks in a more efficient way than on the competitors website.

RESEARCH QUESTIONS

1	What are the most common errors related to the general UI?
2	What are the completion rate of the tasks?
3	What is the time users need to complete the tasks?
4	How easily do users understand what is clickable?
5	How user navigate to complete tasks?
6	How users navigate between different sections and pages?
7	What are the mistakes?
8	How easily and successfully do users find the products or information they are looking for?
9	How well do users understand the symbols and icons? Which ones are problematic? Why?
10	Where in the site do users go to find Search? Why?
11	How easily can users return to the home page?

PARTICIPANTS

Participant ID	Participant Name	Researcher	Method	Test location	Device	Equipment / tool		Profile / Persona	Notes
P1	Lucas	Gabi	Think Aloud	Home (in person)	Macbook	Quicktime		Profile / Persona (outside of the scope of this project)	
P2	Tammy	Gabi	Conventional Usability Test	Home (in person)	Macbook	Quicktime			
P3	Thawana	Gabi	Conventional Usability Test	Home (in person)	Macbook	Quicktime			
P4	Rodrigo	Jordana	Conventional Usability Test	Home (in person)	Macbook	Quicktime			
P5	Hugo	Jordana	Conventional Usability Test	Home (in person)	Macbook	Quicktime			
P6	Maribel	Jordana	Think Aloud	Home (in person)	Macbook	Quicktime			
P7	Arnold	Agnieszka	Think Aloud	Home (in person)	iMac	ScreenFlow			
P8	Ciara	Agnieszka	Conventional Usability Test	Office (in person)	iMac	ScreenFlow			
P9	Ania	Agnieszka	Conventional Usability Test	Home (in person)	iMac	ScreenFlow			
P10	Manuel	Agnieszka	Conventional Usability Test	Home (in person)	iMac	ScreenFlow			
P11	Audrey	Elias	Conventional Usability Test	Home (in person)	Macbook	Quicktime			
P12	Ciaran	Elias	Conventional Usability Test	Office (in person)	Macbook	Quicktime			
P13	Amanda	Elias	Think Aloud	Home (in person)	Macbook	Quicktime			
P14	Lauren	Agnieszka	Conventional Usability Test	Office (in person)	iMac	ScreenFlow			

SCENARIO - The details that the moderator tells before starting the test, so that the participant has a better understanding of the context of use

Scenario 1

"If you were to have your friend over for dinner this weekend, from the menu below, what main course would you most like to cook for them, what bottle of wine would you choose to have, and what would you serve as a desert?

Main Course	Wine	Dessert
☐ Stuffed Chicken	☐ Rioja	☐ Ice Cream
☐ Turkey meatballs	☐ Merlot	☐ Frozen Desserts
☐ Chickpea bean stew	☐ Sauvignon	☐ Pie
☐ Roasted Pepper and Chorizo Salad	☐ Pinot Grigio	☐ Cake

TASKS - The tasks assessed in this test

ID	Importance 1, 3, 5 or 8 (Fibonacci's scale)	Task	Expected Behavior
1	8	Find a recipe similar to the one you would like to make for your friend.	User clicks 'Inspiring Recipes' on the Home Page and goes to the Recipes Page. User finds the chosen recipe, and clicks recipe link.
2	8	Add the first 3 ingredients into your shopping basket.	User scrolls down to the ingredients list. Adds three products to Basket.
3	8	Get a bottle of wine similar to the one you decided on.	User finds the chosen wine, and adds it to the Basket
4	8	How about dessert? Get the dessert you decided on.	User finds the chosen dessert, and adds it to the Basket
5	8	For snacks get a 250G box of Jacob's Italian Cracker Lightly Salt.	User finds specific poduct, and adds it to the Basket
6	8	Swap the bottle of wine for something similar but at half price offer at the moment.	User removes bottle of wine from basket and find new wine with "Half price" label and add to basket
7	8	For the cleanup after, buy the following cleaning products: - a 780 ml bottle of Fairy Original Washing Up Liquid - 1 Medium box of Marigold Extra Life Kitchen Gloves - a 9 pack of Cushelle Quilted Toilet Rolls	User goes to the Multi-Search and clicks 'Edit' and adds all ingredients to the field, then clicks Go button. Finds all four products and adds them to the Basket.
8	8	Check how much it cost?	User reads the total of the items in the shopping basket.
9	8	Why not add another bottle of that wine you got on offer	User clicks + button next to the wine bottle in the shopping basket.
10	8	Please find the Multi Search box and buy the following items: - 1 L carton of Avonmore Milk - 100g Kenco Smooth Instant Coffee - A 12 pack of free-range eggs - A pancake ready-mix	User finds Multi Search when asked for it. User goes to the Multi-Search and clicks 'Edit' and adds all ingredients to the field, then clicks Go button. Finds all four products and adds them to the Basket.

SCOPE - Relevant system areas, modules and elements that are being tested (i.e.: screens, flows, UI elements, etc)

Name	Importance 1, 3, 5 or 8 (Fibonacci's scale)
Home Page	5
Recipes Search Page	8
Recipe Page	8
Groceries Tab	8
Shopping Basket	8
Mega Menu	8
Multisearch Widget	8
Search Results List	8

ISSUE IMPACT LEVELS

Item	Value	Description
Suggestion	1	Just a comment, usually a suggestion
Minor	2	Participant stops to think, but proceeds
Major	3	Participant faces a significant delay or starts doing try-and-error
Blocker	5	Participant gets stuck or gives up, only proceeds with help

SUCCESS CRITERIA for Scoring Scenarios (Effectiveness)

Item	Value	Description
Success	1	• Completes the task with minimal effort • Reaches destination within 2 attempts • Does not receive hints from the facilitator • Does not encounter error messages • Does not mention frustration • Does not have suggestions for improvement
Partial Success	2	• Completes the task with moderate effort • Reaches destination within 3 attempts • Receives 1 hint from the facilitator • Encounters 1 or 2 error messages • Has to back up or reenter information • Has minor suggestions for improvement • Mentions minor frustration or expresses minor confusion
Failure	3	• Completes with considerable effort • Reaches destination in 4 or more attempts • Receives 2 or more hints from the facilitator • Encounters more than 2 error messages or the same error message more than once • Has to back up or re-enter information several times • Has major suggestions for improvement • Mentions frustration or confusion • Mentions they would have to call or speak with someone to complete the task • Concludes the task is complete, when it is not • Does not complete the task
Skip	4	• Gives up while trying to complete the task and concludes they cannot successfully complete it. • Task skipped due to time
N/A		• Not applicable - task not scored

Effectiveness

As a rule, the optimum respondent number for product effectiveness test is 11-15. This number of respondents is enough to reveal 90-95% of all major user errors in the product, statistical error of the result calculation being about 10%, so the overall product Effectiveness can be determined with sufficient degree of confidence:

http://ui-designer.net/usability/effectiveness.htm

good	90-100%
normal	75-90%
bad	50-75%
awful	0-50%

SUS Scores - Descriptive Statistics of SUS Scores for Adjective Ratings

SUS yields a single number representing a composite measure of the overall usability of the system being studied.
Note that scores for individual items are not meaningful on their own.

http://uxpajournal.org/wp-content/uploads/pdf/JUS_Bangor_May2009.pdf
https://uiuxtrend.com/measuring-system-usability-scale-sus/

Adjective	Grade Scale	SUS Score	
Excellent	A	> 80.3	
Good	B	68 - 80.3	
OK	C	68	67 - average score for a large web application
Poor	D	51 - 68	(Quantifying the User Experience: Practical Statistics
Awful	F	< 51	

BENCHMARKS (time on task)

Competitor	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7	Task 8	Task 9	Task 10
SuperValu										

QUANTITATIVE DATA TO BE COLLECTED

Type of data	Methods	Metrics	Notes
Task success rate	Conventional Usability Test		
Task completion rate	Conventional Usability Test	Effectiveness	Number of tasks completed successfuly / Total number of tasks undertaken * 100%
Error rates	Conventional Usability Test	Effectiveness	Average number of errors per task
Time on task	Conventional Usability Test	Efficiency	Task Time = End Time – Start Time
Satisfaction questionnaire ratings	SUS (System Usability Scale) Questionnaire	Satisfaction	

QUALITATIVE DATA TO BE COLLECTED

Type of data	Methods	Metrics	Notes
Observations about pathways participants took	Conventional Usability Test, Think Aloud		
Problems experienced	Conventional Usability Test, Think Aloud, Interview		
Comments/recommendations	Think Aloud, Interview		
Answers to open-ended questions	Interview		

USABILITY METRICS (The ISO/IEC 9126-4 approach to Usability Metrics)

https://usabilitygeek.com/usability-metrics-a-guide-to-quantify-system-usability/
http://ui-designer.net/usability/efficiency.htm

Example

Effectiveness	$E = ((3*1 + 1*0)/(4*1))*100\% = 75\%$	4 users work with a product according to 1 scenario. Three users complete the scenario successfully and one user fails.
Time-Based Efficiency	$Pt = (1/1 + 1/2 + 1/3 + 0/6) / (1*4) = 11/24$ (goals/sec)	"4 users work with a product according to 1 scenario.
Overall Relative Efficiency	$P = ((1*1 + 1*2 + 1*3 + 0*10)/(1 + 2 + 3 + 10))*100\% = 37.5\%$	Three users complete the scenario successfully and one user fails.
Expert Relative Efficiency	$Pe = 75\% * (4*1)/(1 + 2 + 3 + 10) = 18.75\%$	Scenario completion time with the first user is 1 sec, 2 sec with the second user, 3 sec with the third
Task Level Satisfaction		
Test Level Satisfaction	SUS Calculator	

WE MIGHT NEED IT AT SOME POINT:

COMMENT TYPES - The way comments are categorized

Item	
Positive	Praise, joy comment, etc
Negative	Complaint, reaction of annoyance etc
Neutral	Generic, indifferent comment (i.e.: Participant make a reinforcement of something trivial that happen during the test)

Appendix C2 - Success Criteria for Scoring Scenarios (Effectiveness)

Item	Value	Description
SUCCESS CRITERIA for Scoring Scenarios (Effectiveness)		
Success	1	• Completes the task with minimal effort • Reaches destination within 2 attempts • Does not receive hints from the facilitator • Does not encounter error messages • Does not mention frustration • Does not have suggestions for improvement
Partial Success	2	• Completes the task with moderate effort • Reaches destination within 3 attempts • Receives 1 hint from the facilitator • Encounters 1 or 2 error messages • Has to back up or reenter information • Has minor suggestions for improvement • Mentions minor frustration or expresses minor confusion
Failure	3	• Completes with considerable effort • Reaches destination in 4 or more attempts • Receives 2 or more hints from the facilitator • Encounters more than 2 error messages or the same error message more than once • Has to back up or re-enter information several times • Has major suggestions for improvement • Mentions frustration or confusion • Mentions they would have to call or speak with someone to complete the task • Concludes the task is complete, when it is not
Skip	4	• Does not complete the task • Gives up while trying to complete the task and concludes they cannot successfully complete it. • Task skipped due to time
N/A		• Not applicable - task not scored

Recruitment Email

SUBJECT LINE: Team Clio invites you to participate in a e-commerce website study!

Hello,

My name is _____ from IADT, and I'm running usability study of the Tesco.ie as a part of the continuous assessment. In an effort to improve the website, together with my colleagues we're looking for people who may be interested in trying out tesco.ie and giving feedback after using it. If you qualify, you will receive [$XX] to participate.

What will I be doing in a usability study?

You will be asked to do several short activities on the website. You will also be asked questions about your experience and perceptions of the website.

How long is a session? One hour

When and where?
The study will be held [DAYS, DATES].   You will be asked to participate [in person at our office in XX.] OR [by phone. No traveling is required as this is a remote study that will be performed online. You may participate using your office or home computer.]

Interested in participating?
Please reply to this email with your contact information or call me at [ADD PHONE]. I'll give you a call to ask you some questions to help us determine if you qualify for the study.

If you have any questions, please contact me at [EMAIL].

Thank you for interest,

[NAME AND TITLE]

Confirmation Email (In Person Study)

[NOTE: This can be sent as an email or in an Outlook meeting notice.]

SUBJECT LINE: Confirmation: Your participation in our usability study

Dear [PARTICIPANT NAME]:

Thank you for agreeing to participate to test the Tesco.ie website. As I mentioned, you will be asked to try out the website and give us your thoughts about your experience. Please answer the Pre-test questionnaire before the session. [LINK]

You are scheduled to participate as follows:

DATE: [DAY, DATE]
TIME: [TIME]
PLACE: [ADDRESS, LINK TO MAP]

A few key reminders:

· You will be given [$XX] in exchange for your participation.
· During the study, we will ask you to complete some tasks using the website. You'll talk out loud as you work so the facilitator can follow along.
· With your permission, the session will be recorded. We will only use the recording to decide how to improve the website. Your name will not be used for any purpose beyond this session.

Also, we have only one person scheduled at a time for these sessions so if you find that you cannot participate on your scheduled day, please contact me as soon as possible so I can reschedule your session.

Thanks again!

[NAME OF FACILITATOR AND CONTACT INFORMATION]

Study Questionnaire

*Required

1. **Email address** *

   _____

2. **01. Would you be interested in participating?** *
   Mark only one oval.

   ◯ Yes

   ◯ No

3. **02. Please pick the option better represents you** *
   Mark only one oval.

   ◯ Under 18

   ◯ Over 18

4. **03. Do you do your grocery shopping?** *
   Mark only one oval.

   ◯ Yes

   ◯ No

5. **04. Do you use the Internet?** *
   Mark only one oval.

   ◯ Yes

   ◯ No

6. **05. Have you ever used Tesco.ie to do your grocery shopping?** *
   Mark only one oval.

   ◯ Yes

   ◯ No

☐ Send me a copy of my responses.

Powered by

Google Forms

Pre-test Questionnaire

1. **Email address** *

   _____

2. **02. What age range do you fall into?**
   Mark only one oval.

   ( ) 18-24

   ( ) 25-34

   ( ) 35-44

   ( ) 45-54

   ( ) 55 or over

3. **03. Please indicate your gender.**
   Mark only one oval.

   ( ) Female

   ( ) Male

   ( ) Other: _____

4. **04. How often do you use the Internet?**
   Mark only one oval.

   ( ) Never

   ( ) Less than once a month

   ( ) At least once a week

   ( ) Several times a week

   ( ) Once a day or more

5. **05. In a day to day bases, please indicate if you use any of the following on the Internet. [You can pick more than one option]**
   Tick all that apply.

   [ ] Browsing

   [ ] Online shopping

   [ ] Internet Banking

   [ ] Forums

   [ ] Social Media

6. **06. Have you ever done any shopping online?**
   Mark only one oval.

   ( ) Yes

   ( ) No

7. **07. If apply, how often do you shop online?**
   Mark only one oval.

   ( ) Once a week

   ( ) Once every two weeks

   ( ) Once a month

   ( ) Once in a while

8. **08. Have you ever done your grocery shopping online?**
   Mark only one oval.

   ( ) Yes

   ( ) No

9. **09. If apply, how often do you do your grocery shopping online?**
   Mark only one oval.

   - ( ) Once a week
   - ( ) Once every two weeks
   - ( ) Once a month
   - ( ) Once in a while

10. **10. Have you ever visited Tesco.ie?**
    Mark only one oval.

    - ( ) Yes
    - ( ) No
    - ( ) Do not remember

11. **11. If apply, when was the last time you visited Tesco.ie?**
    Mark only one oval.

    - ( ) This week
    - ( ) Within the past week
    - ( ) Within the past month
    - ( ) 1–3 months ago
    - ( ) Over 3 months ago

12. **12. Have you ever done your grocery shopping online from Tesco.ie?**
    Mark only one oval.

    - ( ) Yes
    - ( ) No

13. **13. If you were to have your friend over for dinner this weekend, from the menu below, what main course would you most like to cook for them?**
    Mark only one oval.

    - ( ) Stuffed Chicken
    - ( ) Turkey meatballs
    - ( ) Chickpea bean stew
    - ( ) Roasted Pepper and Chorizo Salad

14. **14. What kind of wine would you choose to have?**
    Mark only one oval.

    - ( ) Rioja
    - ( ) Merlot
    - ( ) Sauvignon
    - ( ) Pinot Grigio

15. **15. And, what would you serve as a desert?**
    Mark only one oval.

    - ( ) Ice Cream
    - ( ) Frozen Desserts
    - ( ) Pie
    - ( ) Cake

☐ Send me a copy of my responses.

Usability Testing Guide

Introduction

Web browser should be open showing Google.com tab.
Have a second hidden tab open with Tesco.ie.
Ensure you are logged in and have a delivery day chosen.

Hi [*participant name*],

Thank you for participating in today's session. My name is [*facilitator name*], and I will be walking you through this session today. Before we begin, I have some information for you, and I'm going to read it to make sure that I cover everything.

We would like to improve users experience on tesco.ie website, make the website more intuitive and pleasant to use.

One important point I'd like to make is that we are evaluating this website, but not testing you in any way. If you run into problems, those reflect the design of the website, not your skills or abilities. Your comments are very important to us. So, we ask you, to give us your honest opinions (both good and bad) of what you see. Don't be shy. Because we are not responsible for the design of this website, we won't take any of your feedback personally, either positive or negative.

Consent Form

With your permission, I'm going to record what happens on the screen and our conversation. The recordings will only be used for this project. The data from this study will not be used for any other purpose. Your full name will not be associated with the recordings or any other data collected during the session.

Please read and sign this consent form, which states that you give us permission to record your screen activity and your voice.

Hand user consent form. Allow user ample time to fill out completely
Turn on screen recorder

Priming Activity

Can you tell me a bit about yourself. What do you do for living? What are your hobbies? Do you like to cook?	
In the pre-questionnaire, we asked you to imagine that: *"Your friend is coming over this weekend, and you are going to prepare a dinner. What main course would you like most to cook for them, what bottle of wine would you choose to have, and what would you serve as a desert?* Do you remember your choices?	

Main Course

- Stuffed Chicken
- Turkey meatballs
- Chickpea bean stew
- Roasted Pepper and Chorizo Salad

Wine

- Rioja
- Merlot
- Sauvignon
- Pinot Grigio

Dessert

- Ice Cream
- Frozen Desserts
- Pie
- Cake

Homepage Tour

We will now begin the test. Please open the tesco.ie tab, and have a look at the homepage. You can scroll if you want, but please don't click on anything yet. Can you tell me your first impressions: ● What can you do on this site? ● What products or services are offered on this site? ● Who is this site intended for? ● Are there particular things which catch your eye?	

Introducing Activities

There are a number of activities to be completed on the site which I will ask you to do one at a time. I'm going to read each of them out loud and give you a printed copy. Again I would like to stress that we're testing the site, not you. You can't do anything wrong here.

Activities

Read the first activity aloud and give them its print version

Answers if Participant asks for help:
"Where would you click in this case?"
"How do you think that would work?"
"How might you get assistance to figure this out?"

So you are having your friend over for this weekend and you need to buy some things for the dinner. Please attempt the following tasks:

1 *Find a recipe similar to the one you would like to make for your friend*	
2 *Add the first 3 ingredients into your shopping basket*	
3 *Get a bottle of wine similar to the one you decided on*	
4 *How about dessert? Get the dessert you decided on*	
5 *For snacks get a 250G box of Jacob's Italian Cracker Lightly Salt*	

6 *Swap the bottle of wine for something similar but at half price offer at the moment*	
7 *For the cleanup after, buy the following cleaning products:* ● *a 780 ml bottle of Fairy Original Washing Up Liquid* ● *1 Medium box of Marigold Extra Life Kitchen Gloves* ● *a 9 pack of Cushelle Quilted Toilet Rolls*	
8 *Check how much it cost?*	
9 *Why not add another bottle of that wine you got on offer*	

Additional Activity

10 *Please find the Multi Search box and buy the following items:* ● *1 L carton of Avonmore Milk* ● *100g Kenco Smooth Instant Coffee* ● *A 12 pack of free-range eggs* ● *A pancake ready-mix*	

Questionnaire

Please complete the post-test questionnaire. This questionnaire will help us gain some value information regarding your overall thoughts on the usability of this website.

Open SUS questionnaire *https://docs.google.com/forms/d/e/1FAIpQLSeWMi2tLOBxqHomTQ94IyvhRD7PxdSoq-S6C4s8kSVj23iyVQ/viewform*
Stop the screen recorder and save the file

Thank you. The test is now complete.

Post-Session Interview

1. So to wrap up could you tell me your overall impression of the website?

2. What did you find most useful about this website?

3. What did you find least useful about this website?

4. Do you have any final comments or suggestions or questions for me?

Activities (Participant's Copy)

So you are having your friend over for this weekend and you need to buy some things for the dinner. Please attempt the following tasks:

#1 *Find a recipe similar to the one you would like to make for your friend*

#2 *Add the first 3 ingredients into your shopping basket*

#3 *Get a bottle of wine similar to the one you decided on*

#4 *How about dessert? Get the dessert you decided on*

#5 *For snacks get a 250G box of Jacob's Italian Cracker Lightly Salt*

#6 *Swap the bottle of wine for something similar but at half price offer at the moment*

#7 *For the cleanup after, buy the following cleaning products:*
- *a 780 ml bottle of Fairy Original Washing Up Liquid*
- *1 Medium box of Marigold Extra Life Kitchen Gloves*
- *a 9 pack of Cushelle Quilted Toilet Rolls*

#8 *Check how much it cost?*

#9 *Why not add another bottle of that wine you got on offer*

You're sorted! Go to check out and wait for the facilitator directions.

Additional Activity

#10 *Please find the Multi Search box and buy the following items:*

- *1 L carton of Avonmore Milk*
- *100g Kenco Smooth Instant Coffee*
- *A 12 pack of free-range eggs*
- *A pancake ready-mix*

Satisfaction Questionnaire

1. **Email address** *

   _____

2. **Please check the box that reflects your immediate response to each statement. Don't think too long about each statement. Please make sure you respond to every statement. If you don't know how to respond, simply check box "Neutral"**

   Mark only one oval per row.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I think that I would like to use this website frequently.	◯	◯	◯	◯	◯
I found the website unnecessarily complex.	◯	◯	◯	◯	◯
I thought the website was easy to use.	◯	◯	◯	◯	◯
I think that I would need the support of a technical person to be able to use this website.	◯	◯	◯	◯	◯
I found various functions in this website were well integrated.	◯	◯	◯	◯	◯
I thought there was too much inconsistency in this website.	◯	◯	◯	◯	◯
I would imagine that most people would learn to use this website very quickly.	◯	◯	◯	◯	◯
I found the website very cumbersome to use.	◯	◯	◯	◯	◯
I felt very confident using the website.	◯	◯	◯	◯	◯
I needed to learn a lot of things before I could get going with this website.	◯	◯	◯	◯	◯

☐ Send me a copy of my response.

Appendix D1 - Screening Questionnaire Results

19 Responses

01. Would you be interested in participating?
19 responses

- Yes
- No

100%
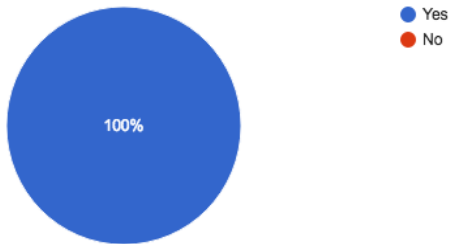
02. Please pick the option better represents you
19 responses

- Under 18
- Over 18

100%

03. Do you do your grocery shopping?
19 responses

- Yes
- No

94.7%
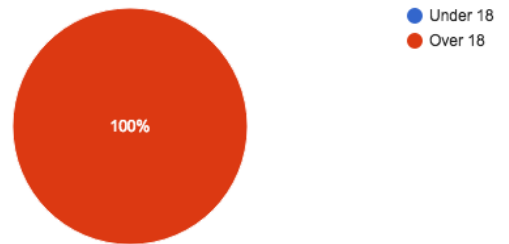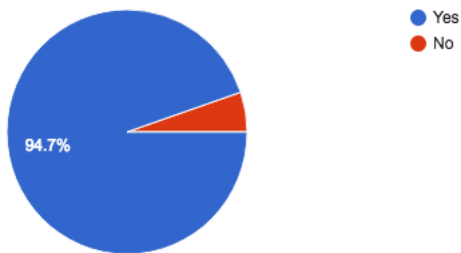
04. Do you use the Internet?
19 responses

- Yes
- No

94.7%

05. Have you ever used Tesco.ie to do your grocery shopping?
19 responses

- Yes
- No

89.5%

10.5%
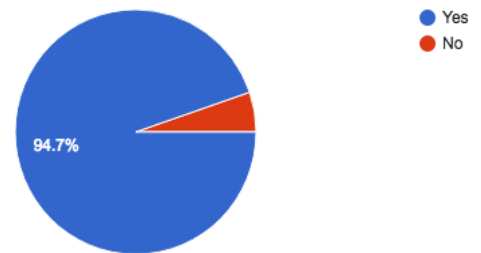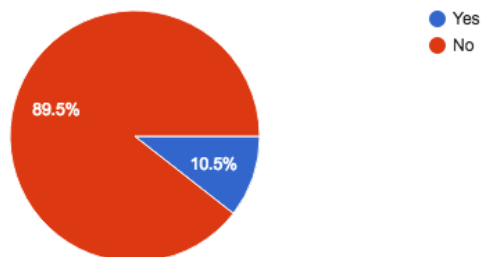
Appendix D2 - Pre-Test Questionnaire Results

14 Responses

02. What age range do you fall into?
14 responses

- 18-24
- 25-34
- 35-44
- 45-54
- 55 or over

28.6%
7.1%
7.1%
57.1%
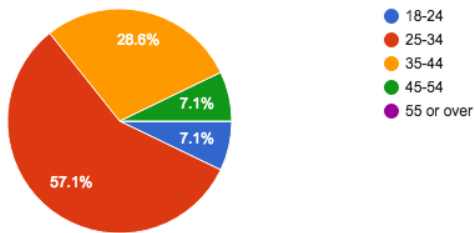
03. Please indicate your gender.
14 responses

- Female
- Male

42.9%
57.1%
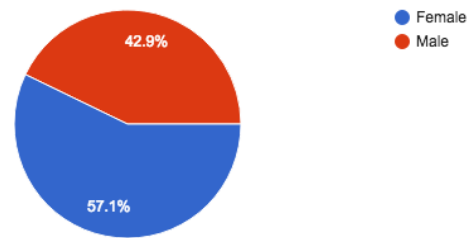
04. How often do you use the Internet?
14 responses
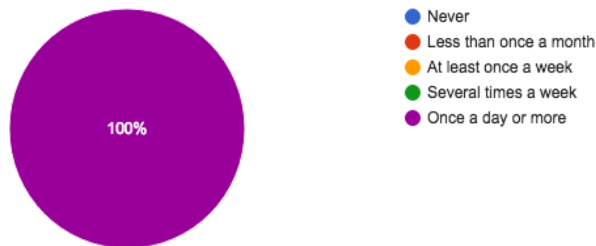
- Never
- Less than once a month
- At least once a week
- Several times a week
- Once a day or more

100%

05. In a day to day bases, please indicate if you use any of the following on the Internet. [You can pick more than one option]
14 responses
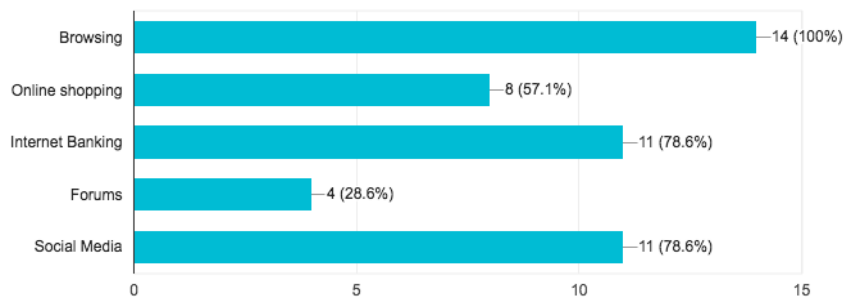
Option	Count
Browsing	14 (100%)
Online shopping	8 (57.1%)
Internet Banking	11 (78.6%)
Forums	4 (28.6%)
Social Media	11 (78.6%)

06. Have you ever done any shopping online?
14 responses

- Yes
- No

100%
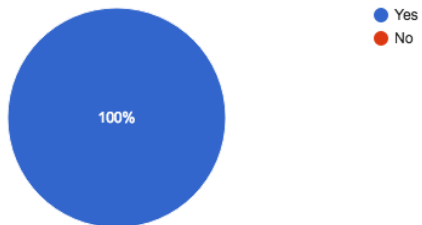
07. If apply, how often do you shop online?
14 responses
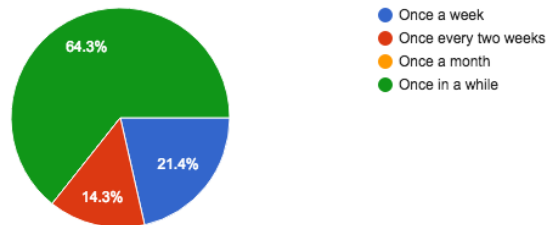
- Once a week
- Once every two weeks
- Once a month
- Once in a while

64.3%
21.4%
14.3%

08. Have you ever done your grocery shopping online?
14 responses

- Yes
- No

71.4%
28.6%
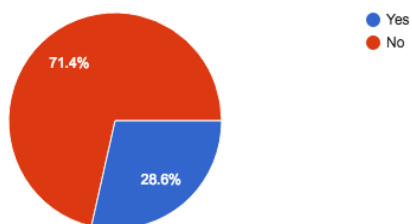
09. If apply, how often do you do your grocery shopping online?
4 responses

- Once a week
- Once every two weeks
- Once a month
- Once in a while

100%
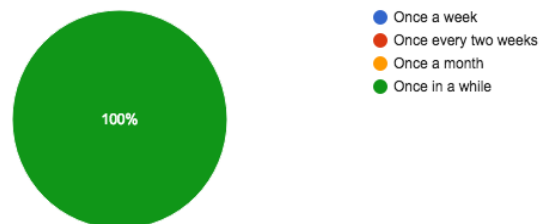
10. Have you ever visited Tesco.ie?
14 responses

- Yes
- No
- Do not remember

35.7%
7.1%
57.1%
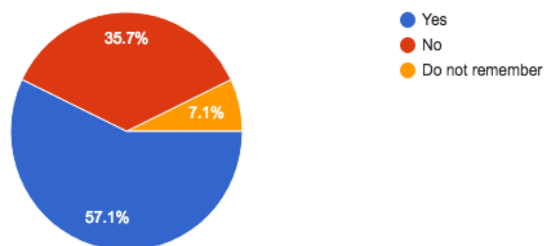
11. If apply, when was the last time you visited Tesco.ie?
9 responses

- This week
- Within the past week
- Within the past month
- 1–3 months ago
- Over 3 months ago

66.7%
22.2%
11.1%
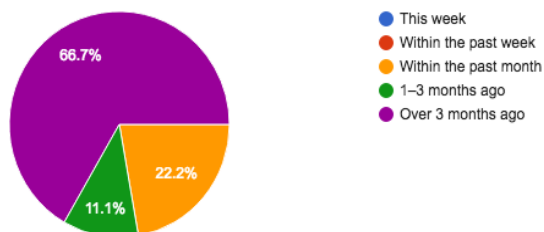
12. Have you ever done your grocery shopping online from Tesco.ie?

14 responses
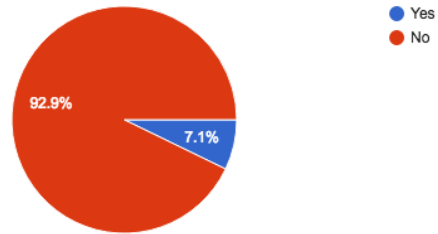
- Yes
- No

92.9%
7.1%

13. If you were to have your friend over for dinner this weekend, from the menu below, what main course would you most like to cook for them?

14 responses

- Stuffed Chicken
- Turkey meatballs
- Chickpea bean stew
- Roasted Pepper and Chorizo Salad

28.6%
7.1%
21.4%
42.9%
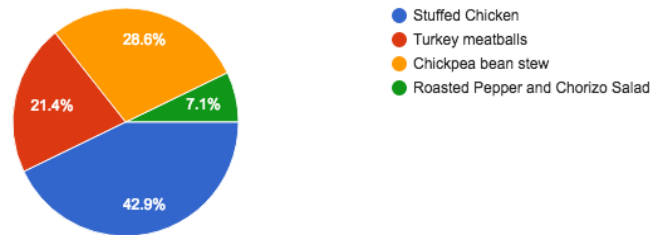
14. What kind of wine would you choose to have?

13 responses

- Rioja
- Merlot
- Sauvignon
- Pinot Grigio

23.1%
23.1%
23.1%
30.8%
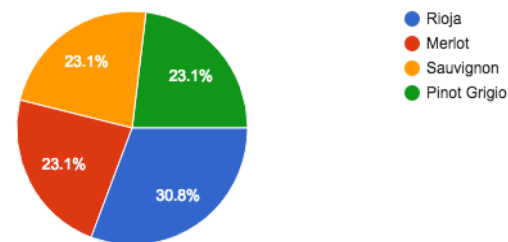
15. And, what would you serve as a desert?

14 responses

- Ice Cream
- Frozen Desserts
- Pie
- Cake

42.9%
14.3%
42.9%
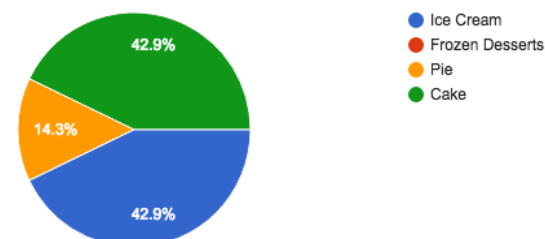
Appendix D3 - SUS Questionnaire Results
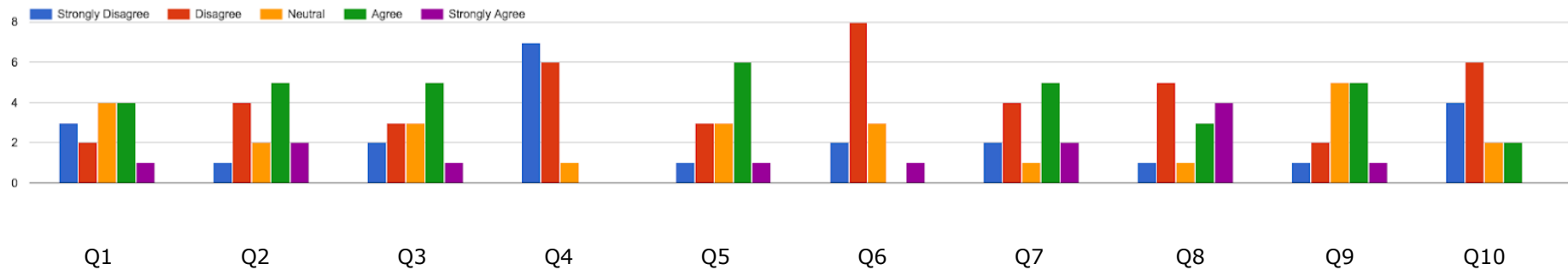
Q1 - I think that I would like to use this website frequently.
Q2 - I found the website unnecessarily complex.
Q3 - I thought the website was easy to use.
Q4 - I think that I would need the support of a technical person to be able to use this website.
Q5 - I found various functions in this website were well integrated.
Q6 - I thought there was too much inconsistency in this website.
Q7 - I would imagine that most people would learn to use this website very quickly.
Q8 - I found the website very cumbersome to use.
Q9 - I felt very confident using the website.
Q10 - I needed to learn a lot of things before I could get going with this website.

Consent & Recording Release Form

I agree to participate in the study conducted and recorded by the IADT student for the needs of the Fundamentals in UX Design course assignment.

I understand and consent to the use and release of the recording by IADT. I understand that the information and recording is for research purposes only and that my name and image will not be used for any other purpose. I relinquish any rights to the recording and understand the recording may be copied and used by IADT without further permission.

I understand that participation in this usability study is voluntary and I agree to immediately raise any concerns or areas of discomfort during the session with the study administrator.

I understand that disguised extracts from my interview may be quoted in the Report Paper submitted for Fundamentals in UX Design course assignment.

I understand that during this study I might be asked to:

- Work with the site to do a set of tasks
- Talk out loud while doing this task
- Answer interview questions
- Take an online survey

Please sign below to indicate that you have read and you understand the information on this form and that any questions you might have about the session have been answered.

Date:_____

Signature of research participant:
_____

I believe the participant is giving informed consent to participate in this study.

Date:_____

Signature of researcher:
_____

Usability Test Scores & Notes for Tesco.ie

Date: 23/02/18   Participant: Maria Isabel Rivas   Tester: Jordana Gomez

Think Out Loud testing

Home Page Tour:

Notes:
- Too many thing going on
- It seems you can do a lot of things on this website
- The big yellow offer sing calls my attention

Task:

#1 *Find a recipe similar to the one you would like to make for your friend*

▢ Success   ▢ Partial Success   ▢ Failure   ▢ Skip   ▢ N/A

Time:
Notes:
- She went straight forward to "Inspiring Recipes" to search for the one she picked, but she wasn't 100% sure that it was the right way to go.
- There wasn't tag for the main ingredient she was looking for so she was about to pick the one she thought it could be under
- She scrolled down but she wasn't confident it was going to give her anything good.
- She made a point about not scrolling down, she prefers to have everything on the first part of the site, just one screen

#2 *Add the first 3 ingredients into your shopping basket*

▢ Success   ▢ Partial Success   ▢ Failure   ▢ Skip   ▢ N/A

Time:
Notes:
- She saw the big blue "Shop Ingredients" button understanding that through clicking it she was going to get to the grocery shopping site of the web.
- She felt overwhelmed when the Grocery site opened.
- She wanted to leave.
- Too many things going on and she doesn't really know where to start.
- She was expecting to be able to click to step 3 of the explanation of how Tesco.ie works, but it is not a clickable item. She didn't realize it only is an explanatory board.
- Eventually she found Multisearch box, read the explanation of how it works but she decided on not using it yet.
- She had one more look around moving over the tabs under Groceries menu.
- Finally she decided on using the Multisearch box
- She saw, since the beginning, the "Next search option", but was expecting the site would have changed to the next item on the list by itself once she added the first one to the basket
- She was surprised to get products that contain onion instead fresh onions as first results

- After scrolling the whole way down and coming back, she realized she can filter her search

#3 *Get a bottle of wine similar to the one you decided on*

☐ Success ☐ Partial Success ☐ Failure ☐ Skip ☐ N/A

Time:
Notes:
- She found the product through "Groceries" sub tabs

#4 *How about dessert? Get the dessert you decided on*

☐ Success ☐ Partial Success ☐ Failure ☐ Skip ☐ N/A

Time:
Notes:

- She used again the same method than before to find the range of products
- She decided to filter her search to get less products
- She didn't like the fact that the calories information is at the very beginning
- It took get a while to find the flavour of the ice cream she picked mixed with all the rest information about the product

#5 *For snacks get a 250G box of Jacob's Italian Cracker Lightly Salt*

☐ Success ☐ Partial Success ☐ Failure ☐ Skip ☐ N/A

Time:
Notes:
- She typed the whole information given
- After that she realized the "Single search box"

#6 *Swap the bottle of wine for something similar but at half price offer at the moment*

☐ Success ☐ Partial Success ☐ Failure ☐ Skip ☐ N/A

Time:
Notes:
- She thought that offers about a product could have been shown anyhow closer to the products in the basket or get suggestions

#7 *For the cleanup after, buy the following cleaning products:*
- *a 780 ml bottle of Fairy Original Washing Up Liquid*
- *1 Medium box of Marigold Extra Life Kitchen Gloves*
- *a 9 pack of Cushelle Quilted Toilet Rolls*

☐ Success ☐ Partial Success ☐ Failure ☐ Skip ☐ N/A

Time:
Notes:
- She already knew what to expect
- She really liked the Multisearch box, it's handy and make things easier

Exploratory Tasks

#8 *Check how much it cost?*

☐ Success ☐ Partial Success ☐ Failure ☐ Skip ☐ N/A

Time:
Notes:
- She just looked at the preview of the shopping basket

#9 Why not add another bottle of that wine you got on offer

▮Success ▮ Partial Success ▮ Failure ▮ Skip ▮ N/A

Time:

Notes:

- She saw the Plus button on the shopping list and knew what it does
- Checking out: She didn't like much the be reminded of the offer she was missing

Short Interview:

1. So to wrap up could you tell me your overall impression of the website?
   - Lot of things and information on the homepage
   - It could be better having less words and more pictures or big buttons
   - It is not need to see everything they do on the home page
   - Recipe site: like having the option of sharing on social media
   - Liked the "Shop ingredients" button
   - Overall looks more modern and new
   - Home page recipe site could be more colourful, perhaps having even videos
   - Search box is not really clear. She didn't know if it was going to search on recipes or the whole site
   - Check out is overwhelming too many information
2. What did you find most useful about this website?
   - The Multisearch box, time saver, easy to use and understand how it works
3. What did you find least useful about this website?
   - Descriptions
   - Results given after a search doesn't give you the main object, instead you get items that include that ingredient or object
4. Do you have any final comments or suggestions or questions for me?
   - No further comments

Success Level Criteria

🟢	Success	- Completes the task with minimal effort - Reaches destination within 2 attempts - Does not receive hints from the facilitator - Does not encounter error messages - Does not mention frustration - Does not have suggestions for improvement
🟡	Partial Success	- Completes the task with moderate effort - Reaches destination within 3 attempts - Receives 1 hint from the facilitator - Encounters 1 or 2 error messages - Has to back up or reenter information - Has minor suggestions for improvement - Mentions minor frustration or expresses minor confusion
🟠	Failure	- Completes with considerable effort - Reaches destination in 4 or more attempts - Receives 2 or more hints from the facilitator - Encounters more than 2 error messages or the same error message more than once - Has to back up or re-enter information several times - Has major suggestions for improvement - Mentions frustration or confusion - Mentions they would have to call or speak with someone to complete the task - Concludes the task is complete, when it is not
🔴	Skip	- Does not complete the task - Gives up while trying to complete the task and concludes they cannot successfully complete it. - Task skipped due to time
⚪	N/A	Not applicable - task not scored

Appendix E1 - Participants Characteristics (Rainbow Spreadsheet)

PARTICIPANTS CHARACTERISTICS (PRE-TEST QUESTIONNAIRE)

Participant	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14
Researcher	Gabi	Gabi	Gabi	Jordana	Jordana	Jordana	Agnieszka	Agnieszka	Agnieszka	Agnieszka	Elias	Elias	Elias	Agnieszka
Scheduled session <Day>, <Date>, <Time>	Fri, 24/02/2018 20:00	Fri, 24/02/2018 22:00	Fri, 24/02/2018 23:00	Sat, 24/02/2018 17:00	Tue, 20/02/18 20:00	Fri, 23/02/18 17:00	Wed, 21/02/2018 21:00	Thu, 22/02/2018 18:00	Wed, 21/02/2018 19:00	Thu, 01/03/2018 16:00	28/02/18	26/02/18	23/02/18	Thu, 01/03/2018 12:30
Profession (optional)	Project Manager/ Developer	Graphic Designer	Graphic Designer	Web developer	Musician	Student	Project Architect	Translator	Accountant	IT Support Analyst	Youth worker	Copywriter	Graphic Designer	Translations Project Manager
Age range	25-34	25-34	25-34	25-34	25-34	35-44	35-44	18-24	35-44	25-34	25-34	45-54	25-34	35-44
Gender	Male	Female	Female	Male	Male	Female	Male	Female	Female	Male	Female	Male	Female	Female
Internet Usage Frequency	Once a day or more	Once a day or more	Once a day or more	Once a day or more	Once a day or more	Once a day or more	Once a day or more	Once a day or more	Once a day or more	Once a day or more	Once a day or more	Once a day or more	Once a day or more	Once a day or more
Browsing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Online Shopping	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Internet Banking	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No
Forums	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
Social Media	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No	No
Online Shopping Ever Done	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Online Shopping Frequency	Once in a while	Once in a while	Once in a while	Once every two weeks	Once in a while	Once in a while	Once a week	Once in a while	Once every two weeks	Once a week	Once in a while	Once in a while	Once a week	Once in a while
Online Grocery Shopping	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No	No
Online Grocery Shopping Frequency	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Once in a while	Once in a while	Once in a while	N/A	N/A
Visited Tesco.ie	Yes	No	Do not remeber	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No
Last Tesco.ie visit	Within the past month	N/A	N/A	Within the past month	N/A	Over 3 months ago	Over 3 months ago	N/A	Over 3 months ago	Over 3 months ago	1-3 months ago	Over 3 months ago	N/A	N/A
Done Grocery Shopping on Tesco.ie	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Main course choice	Turkey meatballs	Stuffed Chicken	Roasted Pepper and Chorizo Salad	Stuffed Chicken	Turkey meatballs	Chickpea bean stew	Turkey meatballs	Stuffed Chicken	Stuffed Chicken	Stuffed Chicken	Chickpea bean stew	Stuffed chicken	Chickpea bean stew	Chickpea bean stew
Wine choice	Pinot Grigio	Pinot Grigio	Pinot Grigio	Rioja	Rioja	Rioja	Pinot Grigio	Sauvignon	Sauvignon	Merlot	Merlot	Rioja	Sauvignon	Merlot
Desert choice	Ice cream	Ice Cream	Pie	Ice cream	Cake	Ice cream	Cake	Cake	Cake	Cake	Pie	Ice cream	Ice cream	Cake
Screening Questionnaire URL				https://docs.google.com/	https://docs.google.com/	https://docs.google.com/	https://docs.google.com/	https://docs.google.com/	https://docs.google.com/	https://docs.google.com/	https://docs.google.com/	https://docs.google.com/	https://docs.google.com/	https://docs.google.com/
Pre-test URL				https://docs.google.com/	https://docs.google.com/	https://docs.google.com/	https://docs.google.com/	https://docs.google.com/	https://docs.google.com/	https://docs.google.com/	https://docs.google.com/	https://docs.google.com/	https://docs.google.com/	https://docs.google.com/
Video URL				https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/
Collected Data (Folder) URL	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/	https://drive.google.com/
Notes									video has no sound, but notes were taken					

Appendix E2 - Metrics (Rainbow Spreadsheet)

METRICS

PARTICIPANT	Task 1 Success (1-4)	Task 1 Time (MM:SS)*	Task 2 Success (1-4)	Task 2 Time (MM:SS)*	Task 3 Success (1-4)	Task 3 Time (MM:SS)*	Task 4 Success (1-4)	Task 4 Time (MM:SS)*	Task 5 Success (1-4)	Task 5 Time (MM:SS)*	Task 6 Success (1-4)	Task 6 Time (MM:SS)*	Task 7 Success (1-4)	Task 7 Time (MM:SS)*	Task 8 Success (1-4)	Task 8 Time (MM:SS)*	Task 9 Success (1-4)	Task 9 Time (MM:SS)*	Task 10 Success (1-4)	Task 10 Time (MM:SS)*	Completion Rate %	Success	Partial Success	Failure	Skip	Total Time (MM:SS)	NOTES
P1	2	N/A [1]	1	N/A	1	N/A	1	N/A	1	N/A	1	N/A	3	N/A	1	N/A	1	N/A	1	N/A	90%	8	1	1	0	N/A	Think Aloud
P2	3	03:22	1	01:20	1	00:54	1	00:24	1	00:46	2	01:23	3	01:32	1	00:05	2	00:29	3	03:13	70%	5	2	3	0	13:28	
P3	3	03:46	3	03:48	1	00:32	1	02:43	1	00:36	1	00:48	3	01:26	1	00:08	1	00:08	3	03:16	70%	6	1	3	0	17:11	
P4	2	02:00	1	02:03	1	00:17	1	00:38	1	00:11	1	01:18	3	01:03	1	00:06	1	00:03	1	02:05	90%	8	1	1	0	09:44	
P5	3	04:07	1	01:00	1	00:25	1	00:54	1	00:26	3	05:38	3	03:05	1	00:08	1	00:11	1	02:04	70%	7	0	3	0	17:58	
P6	1	N/A [2]	1	N/A	1	N/A	1	N/A	1	N/A	1	N/A	1	N/A	1	N/A	1	N/A	4	N/A	90%	9	0	0	1	N/A	Think Aloud
P7	3	N/A [3]	3	N/A	2	N/A	1	N/A	1	N/A	1	N/A	1	N/A	1	N/A	1	N/A	1	N/A	70%	6	1	3	0	N/A	Think Aloud
P8	2	01:13	3	01:22	1	00:15	1	00:16	1	00:48	3	01:21	3	01:38	1	00:06	3	00:16	1	N/A [4]	60%	5	1	4	0	N/A	
P9	3	00:56	2	01:57	1	00:19	2	01:25	1	00:26	2	02:03	3	01:19	1	00:04	1	00:06	2	N/A [5]	80%	4	4	2	0	N/A	
P10	1	00:41	3	01:31	1	00:23	1	00:25	1	00:17	1	00:48	3	01:03	1	00:09	1	00:16	2	N/A [6]	80%	7	1	2	0	N/A	
P11	3	N/A	3	N/A	2	01:01	1	00:38	1	N/A [7]	1	00:48	3	N/A [8]	1	00:02	1	00:05	3	N/A	60%	5	1	4	0	N/A	
P12	3	N/A [9]	1	N/A [10]	1	00:43	1	00:27	1	00:17	1	00:26	3	N/A	1	00:02	1	00:06	3	N/A	70%	7	0	3	0	N/A	
P13	2	N/A [11]	3	N/A	1	N/A	1	N/A	2	N/A	1	N/A	3	N/A	1	N/A	1	N/A	3	N/A	70%	5	2	3	0	N/A	Think Aloud
P14	1	00:42	3	01:57	1	00:18	1	00:31	1	00:27	2	01:46	3	01:32	1	00:06	3	00:15	1	N/A [12]	70%	6	1	3	0	N/A	
Average Time		02:06		01:52		00:31		00:50		00:28		01:38		01:35		00:06		00:12		02:40						14:35	
Success	3		6		12		13		13		9		1		14		11		6								
Partial Success	4		1		2		1		1		3		0		0		1		3								
Failure	7		7		0		0		0		2		13		0		2		4								
Skip	0		0		0		0		0		0		0		0		0		1								
Completion Rate*	50%		50%		100%		100%		100%		86%		7%		100%		86%		64%								

SUCCESS CRITERIA

1	Success
2	Partial Success
3	Failure
4	Skip

NOTE:
* To add time type it in format: 00:00:00 (hh:mm:SS)
* For Think Aloud we don't measure time (N/A): P1, P6, P7, P13
* Completion Rate: tasks with success rate 1 and 2 / number of tasks

	Task 1		Task 2		Task 3		Task 4		Task 5		Task 6		Task 7		Task 8		Task 9		Task 10	
Mean	2.3	02:06	2.1	01:52	1.1	00:31	1.1	00:50	1.1	00:28	1.5	01:38	2.9	01:35	1.0	00:06	1.4	00:12	2.0	02:40
Count	14	8	14	8	14	10	14	10	14	9	14	10	14	8	14	10	14	10	14	4
Standard deviation	0.8	01:27	1.0	00:52	0.4	00:16	0.3	00:44	0.3	00:13	0.8	01:29	0.5	00:39	0.0	00:02	0.7	00:08	1.0	00:40
95% confidence	0.4	01:00	0.5	00:36	0.2	00:10	0.1	00:27	0.1	00:08	0.4	00:55	0.3	00:27	0.0	00:01	0.4	00:05	0.5	00:40

Appendix E3 - Post-Session Interview Results (Rainbow Spreadsheet)

POST-SESSION INTERVIEW

	Question 1	Question 2	Question 3	Question 4
	So to wrap up could you tell me your overall impression of the website?	**What did you find most useful about this website?**	**What did you find least useful about this website?**	**Do you have any final comments or suggestions or questions for me?**
P1	Very inconsistent and complicated Liked the recipes site	Recipes Links	Red highlights in the basket	Very confusing website
P2	Didn't find any advantage in buying online (price wise) Suggested that deals should be featured Homepage menu is inconsistent, because the buttons on the bottom look the same	Single search box	Homepage menu	Website is not attractive at all
P3	Inconsistent design After clicking an recipe ingredient link, expected to see options of that product, which doesn't happen	Multisearch (liked after finding out how to use it)	Missing links on Recipe's ingredients	No further comment
P4	* A lot of information going on and very tight up * Too many things to read * He felt overwhelmed with information * Too many different options to do one thing and you don't know which one is the right one or if there is a wrong one even * Too much text, small and close * Inconsistency between the menus: the one above the offers have drop down menus, that he realized once the moved over them; and the one below the offers have no drop down menu * The option for shopping groceries online is not clear * The home page looks more like an information site * Recipe site,inside a recipe: very clean, more space and more straight forward * The link on the ingredients are very useful but took him a while to realize they were links * He didn't like the fact that a new tab opens every time a link is clicked * Recipe site, home page: it took him time to find the search box on the page. He was expecting to have it above the "Browse by" options * Once he found the Search box he wasn't sure about where he was going to search, just on the recipe site or on the whole web * Grocery site: too much information * Multisearch is not really clear, specially the option of moving to the next item. * "Next search item" option is not clear enough	Single search box	Multisearch box. It's confusing and it's not clear how it works. Really uncertain	Related products list below "Product Details" on each product site
P5	* Prefered Single search and Multisearch to find product rather than try to find them by aisles * Multisearch box is really handy for searching for a list of product but it's not really easy to understand how it works * Offers are hidden away and weird layout * Overall bad layout * Recipes Site: Tags don't work	Multisearch and searching by list	Offer section. Too many options for finding what you want	Different layout, it does take a lot of time to find what you want
P6	* Lot of things and information on the homepage * It could be better having less words and more pictures or big buttons * It is not need to see everything they do on the home page * Recipe site: like having the option of sharing on social media * Liked the "Shop ingredients" button * Overall looks more modern and new * Home page recipe site could be more colourful, perhaps having even videos * Search box is not really clear. She didn't know if it was going to search on recipes or the whole site * Check out is overwhelming too many information	The Multisearch box, time saver, easy to use and understand how it works	* Descriptions * Results given after a search doesn't give you the main object, instead you get	No further comments
P7	The website is uncategorised graphically. Not pleasing to look at. Very useful, but at the same time feels like a draft of the website.	Multi-search is brilliant, it was easy to figure out how to use it. There is too many cheap looking adds which makes it difficult to find what you are looking for. Top offers destroy visually the website. Groceries site is a disaster, it doesn't show what I was looking for. It's very confusing, because it shows steps how to use website. The mega menu could be more visual and have icons. After using search bar suddenly everything is at the bottom of the page.	Maybe the algorithm for search should be fixed and list top products first.	It will be very useful website. Brilliant, if some issues are going to be addressed. "Queues are sometimes very long in Tesco"
P8	The web was good in general. Tabs have too much information and it's hard to find something you are looking for. "It was too much reading even for an avid reader."	Adds with offers are very good. You can spot them easily and find good deals.	I didn't understand the concept of the multi-search tool.	Good website to do shopping. I didn't like the way it was organised.
P9	There are few unnecessary things repeating themselves like Book a Slot button. "What do they mean by "book a slot", what for is it?" It was difficult to find recipes. Likes colours, they are nice and bright. Would prefer red button to check out.	Prefers search box over the multi-search. It is quicker to find what you are looking for. It would be useful to be able to reorder products. Tesco.pl wasn't better. Tesco.ie has a better menu.	Book a Slot button.	"I'm sure that if I was using it regularly I would get used to it and it would be easier to use it."
P10	There is too much information on the website. I know already the website, so it's easier for me to navigate. When I was using it for the first time it was a bit confusing. I didn't know what are differences between different offers. I search for deals and offers and I believe regular customer would look for them. I was never using recipes section, but if there were good recipes I would use it.	If you know what to buy Multi-search can be very useful. I never use it. I just scroll to find if there is something I want to get.	There are too many options for the same thing in the Groceries Tab. You don't know where to click. I don't know what's the difference between All Offers and Top Offers.	Overall it's a complete website. It's not intuitive if you are using it for the first time.
P11	*"I think it's a little busy and a bit cheap." *"It makes me feel cold." *Loads happening *Tesco store is a little bit easier to understand *Why are the search filters not located with the search bar?	*Search bar *Shopping basket; "it's very straightforward"	*The landing page; "I don't really know what's it's purpose was" *The "Multisearch" was confusing, poor search results; "then the avonmore milk I was supposed to buy didn't actually come up"	*Participant uses greenearthorganics.ie *"You buy veg boxes...there's a really nice picture of the veg box, and then there is a title and what's in the veg box, which is kind of nice because it's graphic, and by colours, looks good, whereas here I'm looking at an Odlums Pancake Mix which I can barely see the picture of... looks kind of sad!" *Tesco feels"practical" *Greenearth; "your buying organics so it looks good"Items on the site look "sad", in store they look "better"
P12	*First impression was that the activity was going to be complicated and daunting *"After that I found it relatively simple to use through the simple search" *Overcomplicated page, lots of redundant areas	*Search button; "clear and evident at the top of the page, worked quickly and gave you what you wanted" *Shopping basket	*"The multisearch is confusing and useless"	*Would not see himself using a recipe section on a supermarket website *Clustering special offers together would be helpful (indicates that participant did not notice the "Special Offers" filter tag
P13	*Visually dated *Search engine does not give relevant results *Search engine does not give suggestions if you have typed something badly *Participant suggests being able to see the shopping list as you shop	*Basket feature was most useful *Liked the fact that she saw what promotions she missed, which is highlighted in the basket *The buttons feel like "Microsoft from the 90s"	*The "Shop Ingredients" botton on the recipes page was useless and frustrating	*The site is not an immersive experience *It is lacking the product centric feeling of being in a store, you are always aware of Tesco's brand but cant involve yourself with the products on offer, "I'm not going to make impulse purchases, because it would feel tedious to do so" *The search results are frustrating and are lacking contextual, learning capabilities to provide you with relevant alternative suggestions and results
P14	Website is easy to follow, clear and bright, very useful. It is very handy to buy products online.	Multi-search	Don't know	I did like recipes idea, deals coming up. Recipes can be inspiring what to get for dinner.

Appendix E4 - SUS Results (Rainbow Spreadsheet)

SYSTEM USABILITY SCALE

Use the table below to help you calculate the SUS score for each participant. A line has been filled out as an example.

Reference: http://www.measuringusability.com/sus.php

Participant	1 — I think that I would like to use this website frequently.	2 — I found the website unnecessarily complex.	3 — I thought the website was easy to use.	4 — I think that I would need the support of a technical person to be able to use this website.	5 — I found various functions in this website were well integrated.	6 — I thought there was too much inconsistency in this website.	7 — I would imagine that most people would learn to use this website very quickly.	8 — I found the website very cumbersome to use.	9 — I felt very confident using the website.	10 — I needed to learn a lot of things before I could get going with this website.	SUS Score	Link to the Questionnaire Results
P1	1	5	1	1	2	5	1	5	1	4	15.00	
P2	3	2	4	3	3	2	3	1	4	2	67.50	
P3	1	4	2	2	2	5	1	5	2	3	22.50	
P4	4	4	2	2	3	2	4	2	4	2	62.50	
P5	3	2	4	1	4	2	5	3	4	1	77.50	
P6	2	4	3	2	3	2	4	4	3	2	52.50	
P7	4	2	3	1	4	2	2	2	4	1	72.50	https://docs.google.com/form
P8	4	2	4	1	4	2	4	2	3	1	77.50	https://docs.google.com/form
P9	4	4	4	2	4	3	4	2	3	2	65.00	https://docs.google.com/form
P10	5	3	4	1	4	2	4	2	4	2	77.50	https://docs.google.com/form
P11	3	3	3	2	4	3	2	4	3	2	52.50	
P12	2	4	2	1	2	3	2	4	2	3	37.50	
P13	1	5	1	2	1	2	2	5	3	4	25.00	
P14	3	1	5	1	5	1	5	5	5	1	85.00	https://docs.google.com/form

Value	Key
1	strongly disagree
2	disagree
3	neutral
4	agree
5	strongly agree

Result: 56.43

Poor

ADDITIONAL NOTES (VIDEOS, HOME PAGE TOUR)

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14
Researcher	Gabi	Gabi	Gabi	Jordana	Jordana	Jordana	Agnieszka	Agnieszka	Agnieszka	Agnieszka	Elias	Elias	Elias	Agnieszka
Method	Think Aloud	Conventional Usability Test	Conventional Usability Test	Conventional Usability Test	Conventional Usability Test	Think Aloud	Conventional Usability Test	Conventional Usability Test	Conventional Usability Test	Conventional Usability Test	Conventional Usability Test	Conventional Usability Test	Think Aloud	Conventional Usability Test
Home page tour	Old-fashioned look and feel, looks like a 2001 website	Menu doesn't look like a menu	Too much information, didn't know where to look	"Store Locator" calls attention	Well organized / easy display	Too many thing going on	Graphics in general are low quality, low resolution. I can buy fresh groceries, use my Club Card, buy sim cards and mobiles. I can locate stores. It looks like they do deliveries.	Site, has everything: groceries, the club card, you can find stores and make tesco banking. It has flashing different types of offers that are currently on. I think it's quite good.	Was using Tesco.pl in the past.	Knows the website already and did some shopping on it. Has no problem finding menu around the main banner and hovers over them pointing some of the services and products offered.	Notices phone offers, adds and store locator	"I'm immediately confused	Busy and bright	Notices Start Shopping. It's bright and colourful. Colours are nice.
	Too cluttered		Unable to find online shopping right away	Top offers, but they are more distracting than other thing	Ads call attention	It seems you can do a lot of things on this website	They have mobile apps. Never heard of Tesco Bank. Notices Recipes link, waste collection service	Would be intended for home owners who need to do big shopping, who has a household to shop for.	There is too much information on the page.	Start shopping will bring me to buying food. Notices electronics, toys, stationary.	Busy- "a lot on it"	Participant goes to "start shopping" and gets lost	Feels Corporate	The advertisements are visible.
				Attention drawn to the middle part of the site (Community Fund, Inspiring Recipes, Baby Club and No Time For Waste buttons)		The big yellow offer sing calls her attention	Site is for general public to do Tesco related things.	Flashing banner is the first thing that will catch your eye, also images.		Notices Club Card - I can manage my account. Notices Tesco Mobile Services.	Cold colours, "feels kind of cold, blue white and grey"	Overwhelming in terms of what's being offered	You can shop, get a club card.
				Top buttons have drop down menu and the ones below the offers don't			Interested in Recipes link.	Notices the image of a man with groceries below the fold of the website.		It's a groceries website and you can pick some recipes.			Eye drawn to offers	Catches attention: Helpful Hints, Top Tips, Recipes
				The main things called attention: Store Locator, Inspiring Recipes, Start Shopping, even though it was under "Fresh Food and Groceries" button, Clubcard and Mobile			Curious about delivery options and how much they charge for them. "Sometimes queues are very long in Tesco?"			It's a website which gathers all Tesco services.		Uses "chicken" tag to find recipe	Centre stage banner feels like filler content	
Task 1	Took him a while to find the search field (he thought it was a general search, not one for recipes)	Unable to understand that tags are cumulatives.	Took her a lot of time to find the search box	Quick look at some of the "Browse by" options but shortly noticed "Popular tags" and moved to them	Took him a while to find the recipes from the home page. He first tried to find them inside of the submenus of the top tabs.	She went straight forward to to the Recipes Search Page.	Clicks Recipes link and goes on the Home Page.	Clicks 'Inspiring Recipes' link on the Home Page.	Clicks Inspiring Recipes link without problems.	Clicks straight away 'Inspiring Recipes' link.	Found recipe link immediately	Goes to "shop online" link on the top of the page	Annoyed by the new tab being opened	Clicks on Inspiring Recipes
	Refreshed the page because she couldn't find what she was looking for	She couldn't find the recipe of her choice and choose another one	Unable to reconise wanted recipe, looking by picture instead by name	He selected "Turkey" on the "Popular tabs" and because just one recipe was shown he presumed there was no Turkey Meatballs recipe	There wasn't tag for the main ingredient she was looking for so she was about to pick the one she thought it could be under	Clicks 'Browse by diets' dropdown, doesn't find what is looking for. Clicks 'Browse by courses' dropdown and checks 'Main' checkbox. Comments 'Nothing is done' and then notices 'Done' button and clicks on it.	Clicks Popular Tag 'Chicken'.	Goes to the second and third page with results looking for recipe. Goes back to the second. Is not sure which recipe to choose. Looks at the image with a whole roasted chicken on it.	Clicks Popular Tag 'Chicken'. Doesn't find a recipe and goes to the search page. Chooses recipe with roasted chicken image in it. (not stuffed chicken)	Clicks on Popular Tag 'Chicken'. Has no problem with finding stuffed chicken recipe.	Then was lost, unsure how to continue	Goes straight for search bar	Tries the "dinner" tag button and browses recipe list	Clicks 'Browse by diets' dropdown but doesn't find what is looking for.
			thinking about leaving the site and searching for the recipe on Google, when unable to find it	He looked inside "Browse by..." options but didn't click anything	She scrolled down but she wasn't confident it was going to give her anything good.	Notices spinning wheel and waits for the page to load.	Has difficulties finding specific - "stuffed" chicken.			Unsuccessfully attempted to filter with "Main" filter			Ditches that and uses the search bar to type in "Chickpea and Bean Stew"	Clicks Popular Tag - 'Vegetarian' and finds a recipe.
			Searching by picture instead name. Picture not similar to mental model of the recipe	He clicked "Recipes" and nothing happened	She made a point about not scrolling down, she prefers to have everything on the first part of the site, just one screen	Clicks Popular Tag 'Turkey'. Doesn't find recipe is looking for. Clicks again on the 'Turkey' tag to clear the search. Cannot find 'Meatballs' tag.	Mistake: Facilitator should ensure participant what choice to make.			Clicked on 'Main' checkbox label, which did not check the box but did retract the drop-down menu	Method Note: time not measured as cookies resulted in bad set-up.			Goes to the recipe page.
			After being said that he cannot leave the site he went to the Search box on top of the site and he found what he was looking for	The selected recipe came under "Dinner" tab but he didn't realize it.		Clicks on the second pagination link and then third. Can see mainly cakes. Checks if the 'Main' checkbox in the dropdown is still checked. Clicks 'Done' button again. Clicks again on the 'Turkey' tag to find a recipe. There is only burger recipe in the results.				3 attempts to filter by "Main", no feedback to indicate anything changed.				
					Finally she ask for a "Search" option on the site, but she found it herself	Decides to check all the main courses listed. Goes to the dropdown again check and unchecks 'Main' checkbox. Clicks 'Done' button.				Serendipitously found the menu at the bottom of the page, whilst scrolling out of being lost				
						Comments: "I don't really like the system at the moment because when I select 'Main' course then click 'Turkey' then unlock it it goes back showing all the recipes, all 55 tabs, despite 'Main' is selected. I think there is logical problem." Wants to scan all main courses and clicks on the pagination links. Chooses 'Chicken curry meatballs' recipe instead of turkey.								
Task 2	Noted that 'ingredients' should come before 'preparation'	She didn't notice the 'Shop ingredients now' button, so she went back to the homepage	Clicked 'Shop ingredients now' button	Use of 'Shop ingredients' button to go to the shopping site of the web	He added the ingredients with a link to the basket using the links. For the one that didn't have link, he went straight to Multisearch, just for one item	She saw the big blue 'Shop Ingredients' button understanding that through clicking it she was going to get to the grocery shopping site of the web.	Finds Preparation and ingredients section without problem. Likes the image quality.	Doesn't check recipes ingredients at all, doesn't scroll to the bottom of recipes page. (Maybe task should be worded differently)	Scrolls down to the ingredients list and memorises three ingredients	Scrolls down the Recipe Page, but doesn't stop to read ingredients. Clicks 'Shop Ingredients' link.	Land on tesco.ie/grocieries	Goes to "shop online" link on the top of the page	Clicks "Shop Ingredients" button	During task reading clicks Back Button and goes back to the Recipes Search Page.
	Clicked on one of the ingredients link but found odd that not all of them have links	Expected recipe product page to open	Straight to use "Grocery Search box" but because he got too many options he went back to the recipe and used the link given to the first ingredient.		She felt overwhelmed when the Grocery site opened.	Memorises three ingredients from the list.	Clicks 'Shop Online' in the Top Menu of the Recipes Page. Goes to the Groceries Tab.	There is no 'Shop Online' button under ingredients list. Scrolls to the top of the page and clicks 'Shop Online' in the Menu.	Goes to the Search Bar and types 'CHICKEN'. Scrolls down the results list, but cannot find what is looking for.	Gets confused, "book a slot... what?", "so do I have to register?"	Goes straight for search bar	Frustrated... "I thought it was going to take me to those specific ingredients."	Didn't go at all, to the ingredients list on the Recipe Page.
	After clicking on a ingredient link, he realised that Tesco's suggestion was the most expensive one and there wasn't other suggestions even though there were other options of the same product	Clicked link for the second product	The product was out of stock and he went back to the results given the first time		She wanted to leave.	Clicks previous tab - Tesco Home Page and clicks 'Start shopping' in the Groceries Menu. Goes to the Groceries Tab. Comments: 'So where is the food now' Clicks first link in the top menu 'Fresh Food' and notices Mega Menu with food categories.	Basket and Search field is already populated with the results. Clicks 'Book a slot' button. Is not sure what is for. Clicks 'Empty Basket' link under the Shopping List.	I'm confused with the tab. Clicks 'Book a slot' button. Is not sure what it is for.	Goes back to the Search Bar and types 'CHICKEN BREST'. The results list shows chicken breast despite the typo. Scrolls down the list and adds product to the basket.	Finds the search bar, 50 seconds in	Frustrated at the number of tabs opening up.		Is not sure how to add ingredients. Asks for help - Answer: "You have the recipe, now I want you to add three ingredients form that recipe into the shopping basket" Click on the Browser tab with tesco.ie Home Page Hovers over 'Fresh Food & Groceries' and clicks 'Start shopping'. Goes to the Groceries Tab.
	Liked button 'Shop ingredients', but didn't click it (used links)	Had difficulties finding an specific product, she didn't now she could use 'search' after clicking an product link because the product was unavailable	Even though there are links to the rest of ingredients he kept using the Single Search and looked for each item individually, going back to the recipe to check if he is making the right decision	Too many things going on and she doesn't really know where to start.	Because it's a very long list, goes for the Search Bar. Doesn't like reading, it would be easier if there were "groups with images". Types 'OLIVES' in the Search Bar.	Hovers over the Groceries Menu and looks for the item, takes few moments to read the links. Clicks 'Fresh Chicken' link in the Mega Menu.	Basket is empty.	Basket was populated already but user didn't empty it.	The search results are poor, disappointed that the search indicates that no organic onions are available, because participant knows tesco has them in store	Method Note: time not measured as cookies resulted in bad set-up.	When searching for white onions, did not initially see the white onions at the top of the list, I guess because it had no picture	Basket is empty.
					She was expecting to be able to click to step 3 of the explanation of how Tesco.ie works, but it is not a clickable item. She didn't realize it only is an explanatory board.	Shopping Basket is already populated. Clicks 'Add' to add Tesco Olive Oil to basket. Clicks second time and comments 'Nothing Happened'. Had difficulties noticing that item was added to the basket. Notices that there are multiple bottles in the basket. Comments 'I get the system, it doesn't refresh, it doesn't go away'	Goes to the Search Bar and types 'lemon'. Finds the product to add it to the basket.	Goes to the Search Bar and types 'RICOTTA'. Clicks 'Add' and adds product to the basket. Repeats that step for 'SPINACH'	Has to refine search 3 times to find garlic	Begins to use the "Shop Ingredients" button to navigate from recipe tab back to a tesco shopping tab	Looks confused - Help Tip: "How would you find ingredients for the recipe?"
						Eventually she found Multisearch box, read the explanation of how it works but decided on not using it yet.	Goes to the Search Bar and types 'ONION'. Scrolls down the list, there is no fresh onion in the results list.	Goes back to the Mega Menu and adds onion in the same way as chicken. Repeats step for oil of olive.	Goes to the Search Bar and types 'chicken'. Adds chicken to the basket. Repeats step for oil of olive.	Uses search refine filters to find garlic			Hovers over Multi-search field. Clicks Search Bar and types "spinach" Clicks 'Add' to add Tesco Spinach to basket.
						She had one more look around moving over the tabs under Groceries menu.	Types 'RED ONION' in the Search Bar. Comments 'Some expressions should be more relevant' Adds red onions to the Basket.	Realises that lemons are not in the basket. Goes to the Search Bar and types 'lemon'. Clicks 'Add' next to 'Tesco Lemon Each'. This time they land in the Basket.		Overall participant has to work hard at refining search, to get desired results			Types 'onions' into Search Bar and checks search results. Types 'crusty bread' and adds Crusty Brown Bread from the results to the basket. Types 'mushrooms' into Search Bar and clicks 'Add' net to the listed 'Tesco Baby Button Mushrooms'
						Finally she decided on using the Multisearch box	Goes to the Search Bar and types 'FRESCH GINGER' Adds ginger to the basket.							Added ingredients which remembers from the past, but not the ones listed on the page.
						She saw, since the beginning, the "Next search option", but was expecting the site would have changed to the next item on the list by itself once she added the first one to the basket								
						She was surprised to get products that contain onion instead fresh onions as first results								
						After scrolling the whole way down and coming back, she realized she can filter her search								
Task 3	Annoyed by small and low-res images	Found product through 'Search'	Found product through 'Search'	He didn't use aisles	Again, he used Multisearch box for finding just one item	She found the product through 'Groceries' sub tabs	Is not sure where to look for the wine, hovers over 'Refine your search' and asks if should go to the next tab.	Goes to the Mega Menu and clicks 'White Wine'	Goes to the Search Bar and types 'wine sauvignon'. Adds bottle to the basket.	Filters search results by country	Straight to search bar	Whilst browsing she was not convinced of finding value for money	Types 'Merlot' into Search Bar.
	Annoyed that product details like 'ingredients' were listed before the manufacturer address					Decides to type in the Search Bar 'PINOT'. Finds it in the list and adds to basket.		Finds it in the results list and adds to basket.		Scrolls down the results list. Adds 'Tesco Italian Merlot' to the basket.	Lack of feedback from buttons and filter load delay results in having to back up		The special offers did not appeal to her "classy" wants	Comments: "I don't know what that offer means really"
										Method Note: time to task includes decision process.				
Task 4	He missed an 'Refine Search' to find the size of ice cream he wanted or allergies	Found product through 'Search'	Found product through 'Search'	He moved briefly over the different tabs of the menu but he went at the end to Single Search again	Again, he used Multisearch for a single product.	She used again the same method than before to find the product	Goes to the Mega Menu and types 'CAKE'.	Goes to the Mega Menu and clicks 'Large Cakes and Swiss Rolls'	Goes to the 'Fresh Food' Mega Menu. Click 'Fresh Cream Desserts'.	Goes to Search Bar and types in 'CAKE'.	Uses search filters	Straight to search bar, enters "ice cream"	Types 'cake' into Search Bar.
	He figured could change 'search' by for 'high price'		She took some time to make up her mind on what she wanted to buy		Once the research results were shown he scrolled down the whole first page and click to the next one, where he realized that 'Filter by area' section and clicked on the option he thought was the one closer to what he wanted.	She decided to filter her search to get less products	Adds 'Rice Cake' from the list to the basket.	Scrolls down the results list. Adds 'Tesco Finest Chocolate Cake' to the basket. (not on offer)	Goes to the Groceries Tab. Clicks 'Fresh Food' link and then 'Chilled Desserts'. Goes again to the Mega Menu and clicks 'Sponges, Pies & Puddings'. Goes back to the Mega Menu and clicks 'Indulgent Desserts'.	Scrolls down the results list. Adds 'Tesco Finest Chocolate Cake to the basket.	Then filters results with "ice cream" link		Scrolls down the list and adds 'Tesco Finest Chocolate Cake' to the basket.
	Likes 'sort by'					She didn't like the fact that the calories information is at the very beginning			Finally adds 'Tesco Finest Strawberries Tart' to the basket.				
	Likes half price/ savings highlighted badge					It took quite a while to find the flavour of the ice cream she picked mixed with all the rest information about the product							
Task 5	Noted an 'i' that doesn't show any new information	Typed only the first name of the product and was happy to find it	Found product through 'Search'	Single search using just one key word and looked for the asked one on the result list	Again, he used Multisearch box for finding just one item	She typed the whole information given	Goes to the Search Bar and types '250 ITALIAN CRAKER'. There are no products in the search results.	Goes to the 'Mega Menu' and clicks 'Savoury Biscuits' link. Lists doesn't show Italian biscuits.	Goes to the Search Bar and types 'jacob's italian cracker lightly salt'. Adds product to the basket.	Once again clicks on product image, if participant intended to view more details		On finding the crackers in the search results list, out of trying to point to it, she clicked on the item name. This brought her to another page where she did not want to be and had to return from it.	Types '250g jacobs cracker' into Search Bar. Clicks 'Add' not to the listed crackers to add them to the basket.
	He was confused by 'rest of shelf', but liked it after finding what the feature's purpose	Realised there was a typo		Even knowing the specific information of the product that he was looking for he just used one key word and scrolled down to find the product	After that she realized the "Single search box"	Goes back to the Search Bar and types 'JACOBS'. Adds product to the list.	Goes to the Search Bar an types 'jacob's'. Finds it in the results list and adds to basket		Method Note: unclear cookies results in participant using previous search suggestions		Uses the search bar again	
Task 6	He did not click on 'Special Offers' tab	First, clicked on 'Special Offers' tab but then decided to use the search	Did not click on 'Special Offers' tab	He clicked on the wine he picked earlier expecting to see a list of related suggestions	He couldn't find the offer he was told to get so, after a long while looking for it, he picked the closer one.	She thought that offers about a product could have been shown anyhow closer to the products in the basket or get suggestions	Looks for few seconds for the wine on the list. Removes wine from the basket with - button. Clicks 'Wine Wine.	Hovers over Special Offers Menu. Clicks 'Half Price' button and goes to the Drinks Mega Menu. There are no products listed under this tab.	Goes to the Groceries Tab. Has to look closer at the 'Half Price' button at the bottom of the page.	Uses "special offers" filter	Decides against the rioja and searches for a bordeaux	Commented that the multisearch was distracting to her	Removed wine from the basket list with x button. Types 'Merlot' into Search Bar.
	He was annoyed by the red warn in some product in the basket box saying he saved money 'Looks like I did something wrong'			Before checking for any suggestion but already on the wine page he asked if the wine page can be deleted it from his basket		Goes to the Search Bar and types 'PINOT'. Finds wine with HALF PRICE label in the results and adds it to the list	Scrolls down to find product with 'Half Price' label in the basket. Removes bottle of wine from the basket anyhow closer to the product. Is confused with if 'Half Price' offer is the same as 'Save'. Cannot find 'Half Price' in the list (possible that there were no 'Half Price' offers that day)	Clicks on Groceries Tab and clicks 'Wine' button at the bottom of the page. Goes to the 'Refine your search' section and clicks 'Spirits' link. Clicks on Groceries Tab and then 'Half Price' but no products are available.	Clicks 'x' to remove it from the basket.	Swaps by adding new bottle and deleting bottle from basket		Thought the multisearch was the recipe list	Task wasn't clear, looks for something for half of the money not for the 'Half Price' offer with yellow label. Ignores Merlot listed with 'Half Price' label in the search results. Comments: 'Something else half price' answer: 'Look for something similar half price' is it? Answer: 'Similar wine but just half price'

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14
Participant	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14
Researcher	Gabi	Gabi	Gabi	Jordana	Jordana	Jordana	Agnieszka	Agnieszka	Agnieszka	Agnieszka	Elias	Elias	Elias	Agnieszka
Method	Think Aloud	Conventional Usability Test	Conventional Usability Test	Conventional Usability Test	Conventional Usability Test	Think Aloud	Think Aloud	Conventional Usability Test	Conventional Usability Test	Conventional Usability Test	Conventional Usability Test	Conventional Usability Test	Think Aloud	Conventional Usability Test
				He used again the Single Search and searched for "Red Wine"				Gets help: 'How do you look for information?' Clicks 'Special Offers' tab. Adds 'Dark Horse Merlot' with yellow label 'Save' to the basket.	Goes to the Search Bar and types 'wine'. Goes to the Search Bar and types 'red wine'. Adds bottle of 'Merlot' with yellow label 'HALF PRICE' to the basket.	Goes to the Search Bar and types 'MERLOT'. Scrolls down the list. Notices yellow label 'Half Price' offer but doesn't add it because it's more expensive than the one which he had previously. Goes to the second page with results.			Swapped the bottle by searching, adding a new bottle, and deleting the old one from the side-panel basket	Clicks on the 'Red Wine (1)' link in 'Refine your search' section. Goes to the Search Bar and types 'red wine'. Scrolls up and down the results list. Types 'merlot small' into Search Bar. No search results found. Types 'wine' into search bar.
				Scrolled down and came back to the top to click on "Special Offers"					Clicks x button and removes previous bottle from the basket.	Facilitator: 'It's still on the Half Price offer' He goes back to the product he was considering and adds it to the basket.				Help: 'It's just have to be a bottle similar to the one you have chosen before, but a half price deal' Scrolls up and down the results list. Types 'Merlot' into Search Bar. Clicks 'Add' and adds to basket Merlot with yellow label 'Half Price'
				He picked the only one shown at half price without looking any further										
Task 7	He didn't use the Multisearch	She didn't use the Multisearch	She didn't use the Multisearch	He didn't use the Multisearch box	Instead of using the Multisearch box, he used the tabs under "Groceries" menu,	She already knew what to expect	Goes to the Search Bar find product and adds it to the basket.	Goes to the Household Mega Menu. Reads links to find the right one, jumping all over the menu.	Goes to the Search Bar and types 'fairy original' washing up liquid. Adds it to the basket.	Goes to the Search Bar and types 'FAIRY WASHING UP LIQUID'.	Uses "household" drop-down menu	Straight for search bar	Did not use multisearch	Finds washing up liquid with Search Bar and adds it to the basket. Finds washing up gloves with Search Bar
		She used mega menu to find first product		He used single key words to search for the items and scrolled down to find them	He picked "Kitchen and Oven Cleaner" option.	She really liked the Multisearch box, it's handy and make things easier	Same for all three products.	Finally clicks 'Washing Up Liquid' link. Scrolls down to find the right liquid and adds it to the basket.	Does the same with two other cleaning products.	Adds washing up liquid to the basket. Does the same with two other products.	Notices 2 for 1 offer; 'Oh look at that. 2 for 1!'	Uses the search bar	Filters results by 'washing up liquid'	Clicks twice on 'Add' when adding Gloves to the basket. Removes it completely from the basket and adds it again by clicking blue 'Add' button.
				Once he realized this is not what he wanted he went to the Multisearch box				Goes back to the menu and clicks 'Rubber Gloves' link. Adds listed gloves to the basket.		Adds washing up liquid to the basket. Does the same with two other products.	Uses pointer to concentrate on product name		Method Note: participant typed the product names straight from the list, unsure of how well that would reflect real life situation, maybe "in the wild" methodology might help us here.	Types 'cushelle toilet rolls' into Search Bar. Adds 'Toilet Rolls 9 Pack' to the basket with 'Add' button.
				He search the products one at the time using key words again.				Hovers over the links under Groceries tab to find the right menu. Gives up and uses search bar instead. Types in 'cushelle'. Adds the listed 9 pack of towels to the basket.			Method Note: the site did not have 9 pack Cushelle Quilted Toilet Rolls, unable to measure time to task			
				He used the filter to get to the list he thought closer to what he was looking for.										
Task 8	He asked tester what 'Guide price' means, he was worried that the final price would be mre expensive	She simply looked at the final price	She simply looked at the final price	He scrolled down to the end of the shopping basket	He just looked at the end of his shopping basket	She just looked at the preview of the shopping basket	Finds the total instantly.	Answers instantly.	Has no problems finding total.	No problem finding total.	Got it immediately	Got it immediately	Got it immediately	No problems
					He didn't go to "View full basket"									
Task 9	Clicked on the plus button	She didn't understand the question initially, then clicked on the plus button	Clicked on the plus button	He used the plus button	He used the "Plus" button displayed on the Shopping basket section.	She saw the Plus button on the shopping list and knew what it does	Clicks on the Plus button next to the wine in the basket.	Goes to the Drinks Mega Menu and clicks 'Wine' link. This time faster than in the Task 3.	Clicks + button to add one more bottle to the basket.	Hovers up and down over the items in the basket to find bottle of wine he previously added.	Got it immediately	Got it immediately	Got it immediately	Types 'red wine' into Search Bar.
				Check out: he looked for this option at the bottom of the shopping basket, after the		Checking out: She didn't like much the preview of the offer she was missing		Clicks 'Special Offers' in the 'Refine your search' section. Adds 'Dark Horse Merlot' to the basket. Doesn't use for that + button in the shopping basket.		Clicks + in the Shopping List to add one more bottle.	Uses the + button in the basket to add another bottle	Uses the + button in the basket to add another bottle	Uses the + button in the basket to add another bottle	Adds 'Eagle Hawk Cabernet Sauvignon' with 'Save' label to the basket.
Task 10	He didn't understand the feature initially	She didn't know how to use it. Facilitator had to give some hints, and even after using it, she didn't quite understand the feature	She didn't know how to use it. Facilitator had to give some hints	He went straight away to Single Search and facilitator had to emphasize on the Multisearch fact, he hasn't realized it before	Once he found the first product on his list he kept scrolling down hoping to find the rest of products he searched for		Finds Multi Search box. Clicks on Edit List box and removes what is already there.	Multi-search field is already populated	Multi-search list was populated already.	Is not sure what Multi-search is. Didn't see Multi-search widget at first.	hinks the search bar is the Multisearch box	Thinks the search bar is the "multisearch" box	Did read the multisearch instructions	Multi-search field was populated already with the products for that task.
	He didn't see previous and next, so he clicked on each product in the list	She didn't see previous and next, so he clicked on each product in the list	Used previous and next to go to the next product	He did a more specific search this time	He went up and realized the list had links when he hover over the products by mistake		Facilitator reminds about thinking aloud.	Doesn't find it straight away goes first to the Search Bar.	Clicks 'Edit List' button. Checks if listed items are correct. Clicks 'Go'.	Asks for help. Answer: "What do you think where would you look for the Multi-search box?" Finds it.	Maps "Multisearch" title to the search bar	The ▲ icon beside the "multisearch" title indicates the feature to be the input above	Multiple "no results" searches	Finds Multi-search without any problems.
				He hesitated for a second on where the link to the next product was and he used the links given on the Multisearch Box				Thinks that has to type in the keywords. Facilitator reminds items to buy.	Clicks on the links in the box and is surprised that it shows list of products.	Multi-search list was populated already.	Finds the Multisearch box after 21 sec.	"The benefit of the multisearch completely eludes me."	Has to retype list items twice	Facilitator reads products. Comments on populated list 'Thats there already'
				The last product wasn't available so he edited the search, making a more vague one				Not sure if he is doing it the right way. Types all four products into the Multi-search field. Clicks 'Go' button.	Adds milk to basket. Repeats step for other products.	Clicking Pancake ready-mix in the Multi Search doesn't bring any results. Goes to the Search Bar and types 'pancake'. Adds pancake mix to the shopping basket.	Has to work hard to define search terms to get desired results	Ditches the "multisearch" and goes back to using search bar	Ditches the tool and uses the search bar above	Clicks on 'Pancake mix' link in the multi-search field Clicks 'Add' next to Pancake Mix in the results list and adds it to basket. Does the same with three other products.
								Likes a lot multi search idea. Thinks it is very handy if you have a shopping list.			"1 L avonmare milk" search does not show the desired milk, participant has to edit search to "avonmore"		Method Note: participant notes that she would never have such a specific shopping list, which includes details such as item weight.	
								Clicks each link and adds product to the basket. Pancake link doesn't show results.			Once adding the first item to the basket, unsure where the next items are			
								Edits list and changes to 'Pancake Mix'. Finds Pancake Mix and adds it to the Basket.			Participant learns to click on "Multisearch" list item to view search results for that item			

Appendix F1 - Observations - Good Things (Rainbow Spreadsheet)

GOOD THINGS (OBSERVATIONS)

ID	Where	Task #	Group	Observations	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	Count	Frequency No. of Participants: 14
1	Multisearch Widget	4	Search	Prefferes to use single search box over menu.	1	1	1	1	1	1	1		1		1	1	1		11	78.57%
2	Multisearch Widget	4	Search	Likes multisearch after finding out how to use it.	1		1		1	1	1								5	35.71%
3	Home Page	5	General UI	Likes existing bright colours.															0	0.00%
4	Groceries Tab	3	Groceries Tab	Users found basket useful and straightforward to use											1	1	1		3	21.43%
5	Home Page	1	General UI	Finds offer banners on the Home Page useful and informative.				1				1		1					3	21.43%
6	Recipe Page	2	Find Recipes	Likes idea to shop ingredients by recipe.	1	1	1			1				1				1	6	42.86%
7	Shopping Basket	8	Groceries Tab	Has no problems finding how much all the items in the basket cost.		1	1				1	1	1	1				1	7	50.00%
8	Recipes Search Page	2	Find Recipes	Notices spinning wheel when the page is loading and waits for the results.								1	1						2	14.29%
9												1							1	7.14%
10																			0	0.00%

Appendix F2 - Observations - Issues (Rainbow Spreadsheet)

ISSUES (OBSERVATIONS)

ID	Where *	Task # *	Group	Observations	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	Count	Frequency	Impact	Severity (task criticality x impact x frequency)	Possible solution
1	Home Page	1	Find Recipes	Couldn't easily find Recipes link.					1							1			2	14.29%	Blocker	28.57	Make it more clear that it's a clickable button. Change label.
2	Recipes Search Page	1	Find Recipes	Had difficulties finding search bar on the Recipes Page.	1	1	1	1	1						1				6	42.86%	Major	82.29	Make it bigger and move it to the center of the page.
3	Recipes Search Page	1	Find Recipes	Couldn't find recipe with 'Browse by' dropdowns.					1		1				1		1		4	28.57%	Minor	36.57	
4	Home Page	1																	0	0.00%			
5	Recipes Search Page	1	Find Recipes	Wasn't able to find specific recipes with 'Popular Tags'.		1	1	1	1		1		1						6	42.86%	Major	82.29	for example 'stuffed chicken'
6	Recipes Search Page	1	Find Recipes	Was focusing more on the images and not reading recipe titles.					1	1			1		1				4	28.57%	Major	54.86	make recipie titles more visable, use more relevant images
7	Home Page	1																	0	0.00%			Ingredients should be listed before preparation description.
8	Recipe Page	2	Find Ingredients	Had to scroll down significantly the page to see the top of recipe and ingredients list.	1	1	1	1	1	1	1								7	50.00%	Minor	64.00	Make top image smaller.
9	Recipe Page	2	Find Ingredients	Wasn't clicking ingredients links to add them to basket.		1		1											2	14.29%	Minor	18.29	Ingredient links should be more visible.
10	Recipe Page	2	Find Ingredients	Was confused with 'Shop Ingredients' button. It wasn't bringing what they were looking for.	1		1								1		1		4	28.57%	Minor	54.86	
11	Recipe Page	2	Find Ingredients	Had to memorise ingredients which had no links to add them to the basket.		1		1		1		1		1	1	1	1		8	57.14%	Major	109.71	
12	Home Page	1																	0	0.00%		0.00	Useless feature - should be removed.
13	Home Page	1																	0	0.00%		0.00	
14	Groceries Tab	3	Groceries Tab	Was confused by the repeated information.								1	1	1					3	21.43%	Major	41.14	Make sure information is not duplicated.
15	Groceries Tab	3	Groceries Tab	Had difficulties to read information because of it's amount.					1	1	1								3	21.43%	Major	41.14	Remove unnecessary content, make it simpler and more visual.
16	Groceries Tab	3	Groceries Tab	Was not clear what the button label means (for example 'Book a slot')	1						1		1		1				4	28.57%	Major	54.86	Change it to for example 'Book a delivery slot'
17	Groceries Tab	3	Groceries Tab	Was confused where he/she cannot do net (after clicking 'Buy Ingredients')					1	1			1		1				4	28.57%	Major	54.86	Breadcrambs, relevant content
18	Mega Menu	3	Groceries Tab	Had difficulties finding the right link in the Mega Menu.					1	1				1					3	21.43%	Minor	27.43	Organise information in a visual way, consider renaming main menu to Aisles (mental model).
19	Home Page	1																	0	0.00%		0.00	Make sure that there is consistency in the content.
20	Shopping Basket	3	Groceries Tab	Thought that something is wrong because of the red labels in shopping basket.	1														1	7.14%	Suggestion	4.57	Redesign offer labels to attract attention but be aware of mental models.
21	Multisearch Widget	4	Search	Wasn't using multisearch to find multiple products. It didn't drag attention at all.	1	1	1	1	1		1	1	1	1	1	1	1	1	13	92.86%	Minor	118.86	
22	Multisearch Widget	4	Search	Wasn't clear what can be done with multisearch tool.		1		1	1		1	1				1			6	42.86%	Minor	54.86	
23	Multisearch Widget	4	Search	Didn't know how to go to the next product in the multisearch tool.			1	1	1	1									5	35.71%	Major	68.57	
24	Home Page	1															1		1	7.14%		0.00	
25	Search Results List	4	Search	Didn't know how to refine the search.	1														1	7.14%	Minor	9.14	
26	Search Results List	4	Search	Didn't know what 'Rest of shelf' means.	1														1	7.14%	Suggestion	4.57	
27	Search Results List	4	Search	Couldn't find relevant products in the search results list.							1		1		1		1		4	28.57%	Major	54.86	
28	Search Results List	4	Search	Wasn't able to find more information about the product by clicking the Information Icon.	1														1	7.14%	Suggestion	4.57	"i" button doesn't show more info
29	Home Page	5	General UI	Didn't like quality of graphics.	1	1	1				1				1		1		6	42.86%	Suggestion	17.14	
30	Groceries Tab	5	General UI	Couldn't see what is on the image because of its size.	1	1					1				1		1		5	35.71%	Minor	45.71	
31	Groceries Tab	5	General UI	Had difficulties to find links because of a blue colour all over the page.					1		1								2	14.29%	Major	27.43	
32	Groceries Tab	5	General UI	Was overwhelmed with the amount of information and needed more time to find information.	1	1	1	1	1					1	1	1	1		9	64.29%	Major	123.43	
33	Recipe Page	2	Find Ingredients	Didn't find list of ingredients at all.								1		1				1	3	21.43%	Major	41.14	
34	Shopping Basket	6	Groceries Tab	Had to look closer at the screen to spot the product listed in the shopping basket.						1	1		1					1	4	28.57%	Major	54.86	
35	Search Results List	6	Search	Didn't understand the difference between different types of offers.					1	1	1	1	1	1				1	7	50.00%	Major	96.00	
36	Recipe Page	2	Find Ingredients	Couldn't go directly to shop ingredietns, had to switch Browser tab to go to Home Page to start shopping.								1		1				1	3	21.43%	Major	41.14	
37	Shopping Basket	7	Groceries Tab	Didn't notice that can change number of products in the basket with plus or minus.								1	1	1	1	1		1	6	42.86%	Minor	54.86	
38	Groceries Tab	5	Groceries Tab	Is not able to find product in the Mega Menu and uses Search Bar instead.		1		1	1	1	1	1	1	1	1	1	1		11	78.57%	Minor	100.57	
39	Multisearch Widget	10	Search	Could't find Multi-search straight away.		1	1	1	1			1							5	35.71%	Minor	45.71	
40	Shopping Basket	2	Groceries Tab	Had difficulties noticing that item was added to the basket.		1	1				1	1				1	1		6	42.86%	Major	82.29	

ASSIGNED TO:	NOTE:
Find Recipes - **Gabi**	Please go through the all issues and check if they occured for the participants.
Find Ingredients - **Elias**	ISSUES LIST UPDATED: 02/03/2018
Groceries Tab - **Aga**	* Where and Task fields cannot be empty (to avoid errors in solution calculation)
Search - **Jordana**	Do not delete or add more rows

Appendix F3 - List of Prioritised Issues (Rainbow Spreadsheet)

ID	Where	Task #	Observations	Severity
32	Groceries Tab	5	Was overwhelmed with the amount of information and needed more time to find information.	123.43
21	Multisearch Widget	4	Wasn't using multisearch to find multiple products. It didn't drag attention at all.	118.86
11	Recipe Page	2	Had to memorise ingredients which had no links to add them to the basket.	109.71
38	Groceries Tab	5	Is not able to find product in the Mega Menu and uses Search Bar instead.	100.57
35	Search Results List	6	Didn't understand the difference between different types of offers.	96.00
2	Recipes Search Page	1	Had difficulties finding search bar on the Recipes Page.	82.29
5	Recipes Search Page	1	Wasn't able to find specific recipes with 'Popular Tags'.	82.29
40	Shopping Basket	2	Had difficulties noticing that item was added to the basket.	82.29
23	Multisearch Widget	4	Didn't know how to go to the next product in the multisearch tool.	68.57
8	Recipe Page	2	Had to scroll down significantly the page to see the top of recipe and ingredients list.	64.00
16	Groceries Tab	3	Was not clear what the button label means (for example 'Book a slot')	54.86
17	Groceries Tab	3	Was confused where he/she is on the page and what to do net (after clicking 'Buy Ingredients')	54.86
22	Multisearch Widget	4	Wasn't clear what can be done with multisearch tool.	54.86
10	Recipe Page	2	Was confused with 'Shop Ingredients' button. It wasn't bringing what they were looking for.	54.86
6	Recipes Search Page	1	Was focusing more on the images and not reading recipe titles.	54.86
27	Search Results List	4	Couldn't find relevant products in the search results list.	54.86
34	Shopping Basket	6	Had to look closer at the screen to spot the product listed in the shopping basket.	54.86
37	Shopping Basket	7	Didn't notice that can change number of products in the basket with plus or minus.	54.86
30	Groceries Tab	5	Couldn't see what is on the image because of its size.	45.71
39	Multisearch Widget	10	Could't find Multi-search straight away.	45.71
14	Groceries Tab	3	Was confused by the repeated information.	41.14
15	Groceries Tab	3	Had difficulties to read information because of it's amount.	41.14
33	Recipe Page	2	Didn't find list of ingredients at all.	41.14
36	Recipe Page	2	Couldn't go directly to shop ingredietns, had to switch Browser tab to go to Home Page to start shopping.	41.14
3	Recipes Search Page	1	Couldn't find recipe with 'Browse by' dropdowns.	36.57
1	Home Page	1	Couldn't easily find Recipes link.	28.57
31	Groceries Tab	5	Had difficulties to find links because of a blue colour all over the page.	27.43
18	Mega Menu	3	Had difficulties finding the right link in the Mega Menu.	27.43
9	Recipe Page	2	Wasn't clicking ingredients links to add them to basket.	18.29
29	Home Page	5	Didn't like quality of graphics.	17.14
25	Search Results List	4	Didn't know how to refine the search.	9.14
26	Search Results List	4	Didn't know what 'Rest of shelf' means.	4.57
28	Search Results List	4	Wasn't able to find more information about the product by clicking the Information Icon.	4.57
20	Shopping Basket	3	Thought that something is wrong because of the red labels in shopping basket.	4.57
24	Home Page	1		0.00
4	Home Page	1		0.00
7	Home Page	1		0.00
12	Home Page	1		0.00
13	Home Page	1		0.00
19	Home Page	1		0.00

Appendix F4 - Affinity Diagram of Issues

FIND RECIPES
- NOT CLEAR HOW TO FIND RECIPES
- MENU ON HOME PAGE DOESN'T LOOK LIKE A MENU
- DIFFICULT TO FIND SEARCH BAR
- BROWSE BY DOESN'T WORK
- DUPLICATED POPULAR TAGS
- DIFFICULT TO FIND SPECIFIC RECIPE WITH POPULAR TAGS
- DIFFICULT TO READ RECIPE TITLES

RECIPE INGREDIENTS
- INGREDIENTS SHOULD BE LISTED BEFORE PREPARATION DESCRIPTION
- YOU HAVE TO SCROLL TO SEE MOST IMPORTANT INFO
- INGREDIENT LINKS NOT VISIBLE ENOUGH
- SHOP INGREDIENTS BUTTON DOESN'T BRING INGREDIENTS
- INCONSISTENCY NO LINKS AT ALL FOR MANY INGREDIENTS
- USELESS FEATURES (MENU)
- NO CLEAR WAY TO GO BACK TO RECIPES SEARCH PAGE

GROCERIES TAB / MEGA MENU
- REPEATED INFORMATION
- PAGE IS DIFFICULT TO READ
- NAVIGATION LABELS ARE NOT CLEAR
- PROMOTIONS USERS DON'T KNOW WHERE THEY ARE
- TOO MUCH READING IN THE MENU
- RED LABELS IN SHOPPING BASKET MAKE USERS THINK THAT STH IS WRONG
- GROCERIES SHOPPING STEPS LOOK DIFFERENT WHEN YOU ARE LOGGED IN / LOGGED OUT

PRODUCT SEARCH / MULTI-SEARCH
- MULTISEARCH DOESN'T CALL ATTENTION (NB USES IT)
- MULTISEARCH FUNCTIONALITY NOT CLEAR HOW IT WORKS
- USERS DON'T KNOW HOW TO GO TO THE NEXT PRODUCT
- USERS HAD TO SCROLL TO SEE SEARCH RESULTS
- 'REFINE YOUR SEARCH' HARD TO FIND
- 'REST OF SHELF' NOT CLEAR WHAT IT MEANS
- (i) doesn't SHOW MORE INFO

GENERAL UI
- GRAPHICS LOW QUALITY
- TOO SMALL IMAGES
- LACK OF COLOUR CONTRAST
- TOO MUCH INFORMATION
- EVERYTHING IS BLUE - HARD TO FIND LINKS

Appendix G1 - List of Solutions and Which Issues Do They Address

SOLUTIONS

Issue severity row (columns 1–40): 28.57 | 82.29 | 36.57 | 0.00 | 82.29 | 54.86 | 0.00 | 64.00 | 18.29 | 54.86 | 109.71 | 0.00 | 0.00 | 41.14 | 41.14 | 54.86 | 54.86 | 27.43 | 0.00 | 4.57 | 118.86 | 54.86 | 68.57 | 0.00 | 9.14 | 4.57 | 54.86 | 4.57 | 17.14 | 45.71 | 27.43 | 123.43 | 41.14 | 54.86 | 96.00 | 41.14 | 54.86 | 100.57 | 45.71 | 82.29

ID	Solution idea	Where	Effectiveness (Sum of all issue severities)	Complexity (1,3,5) (Estimated by team)	Solution ROI (Effectiveness / Complexity)
1	Make Recipes link look like a button and change the label to something more clear.	Recipes Search Page	28.57	1	28.57
2	Make search bar bigger and move it to the center of the page.	Recipes Search Page	82.29	3	27.43
3	Use bigger font for the recipie titles and increase contrast.	Recipes Search Page	54.86	1	54.86
4	Swap ingredients list with preparation description (it should be first).	Recipe Page	41.14	1	41.14
5	Make main image on single recipe page smaller.	Recipe Page	105.14	3	35.05
6	Add check boxes next to the ingredients to add them to the basket. (Pre-basket)	Recipe Page	18.29	3	6.10
7	Change 'Book a slot' label to 'Book a delivery slot'.	Groceries Tab	54.86	1	54.86
8	Rename Grocieries menu 'Aisles' (use mental models)	Groceries Tab	0.00	1	0.00
9	Remove duplicated buttons. (Book a Slot)	Groceries Tab	0.00	1	0.00
10	Add product and automatically go to the next one listed.	Multisearch Widget	54.86	3	18.29
11	Search Bar could have dropdown with recipes list.	Recipes Search Page	54.86	3	18.29
12	Design an automated feature to shop all ingredients; eg. through automation with "Multisearch" feature or a feature which gives search result of all ingredients listed	Recipe Page	150.86	5	30.17
13	Change copy on "Shop Ingredients" button to "Start Shopping", consistent with "Fresh Foods & Groceries" drop down menu on home page	Recipe Page	54.86	1	54.86
14	Ensure recipe image ends above the fold, around 80% vh	Recipe Page	64.00	1	64.00
15	Bring Ingredients closer to fold. Move left of screen and "Preparation" in line with F-scanning pattern	Recipe Page	64.00	3	21.33
16	Remove ingredient list hyperlinks, to keep consistency. Consider a redesign in lign with ingredients shopping automation ID:12	Recipe Page	59.43	1	59.43
17	Group recipe title with recipe description and overlay on image	Recipe Page	0.00	1	0.00
18	Remove second "Food and Community" etc nav-bar, rethink site Information Architecture		0.00	1	0.00
19	Optimize page realestate; eg. move "Share" buttons to a fixed panel on left, reduce tag size and rearrange recipe details, ingredients and preparation divs		64.00	1	64.00
20	Remove all unnecessary information, which is not necessary to complete the task.	Groceries Tab	205.71	1	205.71
21	Make sure that content is not duplicated (for example 'Book a Slot' buttons)	Groceries Tab	164.57	1	164.57
22	Make sure that buttons have easy to understand labels.		187.43	1	187.43
23	Make it clear what are the next steps with progress bar.		178.29	5	35.66
24	Make Mega Menu more visual by adding icons and grouping them by supermarket aisles.	Mega Menu	201.14	5	40.23
25	Don't show all the links at once - use nested menus.	Mega Menu	201.14	3	67.05
26	Make font size bigger	Groceries Tab	306.29	1	306.29
27	Use color for navigation buttons and make them bigger.	Shopping Basket	210.29	1	210.29
28	Add animations to make it clear when product is added to the basket.	Shopping Basket	82.29	3	27.43
29	Make sure that graphics are of a good quality.		62.86	1	62.86
30	Add tooltips to offer labels and other labels which might be not clear to the user.	Groceries Tab	105.14	1	105.14
31	Make Multisearch box more visible	Multisearch Widget	219.43	1	219.43
32	Simplify how Multisearch works	Multisearch Widget	242.29	1	242.29
33	Clearly distinguish what are links and what is plain text.	Groceries Tab	96.00	1	96.00
34	Change "Refine your search" by for "Filter by"	Search Results List	64.00	1	64.00
35	Display more than one item by row	Search Results List	62.86	1	62.86
36	Make Multisearch results list more intuitive	Multisearch Widget	68.57	1	68.57
37	Change position of "Sort by" feature next to "Filter by"	Search Results List	54.86	1	54.86
38			0.00	1	0.00
39			0.00	1	0.00
40			0.00	1	0.00
41			0.00	1	0.00
42			0.00	1	0.00
43			0.00	1	0.00
44			0.00	1	0.00
45			0.00	1	0.00
46			0.00	1	0.00
47			0.00	1	0.00
48			0.00	1	0.00
49			0.00	1	0.00
50			0.00	1	0.00
51			0.00	1	0.00
52			0.00	1	0.00
53			0.00	1	0.00
54			0.00	1	0.00
55			0.00	1	0.00
56			0.00	1	0.00

Appendix G2 - List of Prioritized Solutions (Rainbow Spreadsheet)

ID	Solution Idea	Where	Solution ROI
26	Make font size bigger	Groceries Tab	306.29
32	Simplify how Multisearch works	Multisearch Widget	242.29
31	Make Multisearch box more visible	Multisearch Widget	219.43
27	Use color for navigation buttons and make them bigger.	Shopping Basket	210.29
20	Remove all unnecessary information, which is not necessary to complete the task.	Groceries Tab	205.71
22	Make sure that buttons have easy to understand labels.		187.43
21	Make sure that content is not duplicated (for example 'Book a Slot' buttons)	Groceries Tab	164.57
30	Add tooltips to offer labels and other labels which might be not clear to the user.	Groceries Tab	105.14
33	Clearly distinguish what are links and what is plain text.	Groceries Tab	96.00
36	Make Multisearch results list more intuitive	Multisearch Widget	68.57
25	Don't show all the links at once - use nested menus.	Mega Menu	67.05
14	Ensure recipe image ends above the fold, around 80% vh		64.00
19	Optimize page realestate; eg. move "Share" buttons to a fixed panel on left, reduce tag size and rearrange recipe details, ingredients and preparation divs		64.00
34	Change "Refine your search" by for "Filter by"	Search Results List	64.00
29	Make sure that graphics are of a good quality.		62.86
35	Display more than one item by row	Search Results List	62.86
16	Remove ingredient list hyperlinks, to keep consistency. Consider a redesign in lign with ingredients shopping automation ID:12	Recipe Page	59.43
3	Use bigger font for the recipie titles and increase contrast.	Recipes Search Page	54.86
7	Change 'Book a slot' label to 'Book a delivery slot'.	Groceries Tab	54.86
13	Change copy on "Shop Ingredients" button to "Start Shopping", consistent with "Fresh Foods & Groceries" drop down menu on home page	Recipe Page	54.86
37	Change position of "Sort by" feature next to "Filter by"	Search Results List	54.86
4	Swap ingredients list with preparation description (it should be first).	Recipe Page	41.14
24	Make Mega Menu more visual by adding icons and grouping them by supermarket aisles.	Mega Menu	40.23
23	Make it clear what are the next steps with progress bar.		35.66
5	Make main image on single recipe page smaller.	Recipe Page	35.05
12	Design an automated feature to shop all ingredients; eg. through automation with "Multisearch" feature or a feature which gives search result of all ingredients listed	Recipe Page	30.17
1	Make Recipes link look like a button and change the label to something more clear.	Recipes Search Page	28.57
2	Make search bar bigger and move it to the center of the page.	Recipes Search Page	27.43
28	Add animations to make it clear when product is added to the basket.	Shopping Basket	27.43
15	Bring Ingredients closer to fold. Move left of screen and "Preparation" in line with F-scanning pattern	Recipe Page	21.33
10	Add product and automatically go to the next one listed.	Multisearch Widget	18.29
11	Search Bar could have dropdown with recipes list.	Recipes Search Page	18.29
6	Add check boxes next to the ingredients to add them to the basket. (Pre-basket)	Recipe Page	6.10
8	Rename Grocieries menu 'Aisles' (use mental models)	Groceries Tab	0.00
9	Remove duplicated buttons. (Book a Slot')	Groceries Tab	0.00
17	Group recipe title with recipe description and overlay on image	Recipe Page	0.00
18	Remove second "Food and Community" etc nav-bar, rethink site Information Architecture		0.00
38			0.00
39			0.00
40			0.00
41			0.00
42			0.00
43			0.00
44			0.00
45			0.00
46			0.00
47			0.00
48			0.00
49			0.00
50			0.00
51			0.00
52			0.00
53			0.00
54			0.00

Appendix G3
Recommendations for Recipes Search Page

Home Page

1.	Problem: It is difficult to find Inspiring Recipes button.			
Issue ID	**Issue (Heuristic Evaluation)**	**Violated Heuristic**	**Ease of Fixing Ranking**	**Severity Ranking (0-4)**
#1	Design Inconsistency between different offering pages (Recipes,Tesco Groceries, Tesco Baby Club, Club Card)	6.4 | 14.4	3	4
#2	Home page too clutter.	14.8 | 5.1	2	4
Issue ID	**Issue (Usability Testing)**		**Impact**	**Severity**
#1	Couldn't easily find Recipes link.		Blocker	28.57
Evidence:				
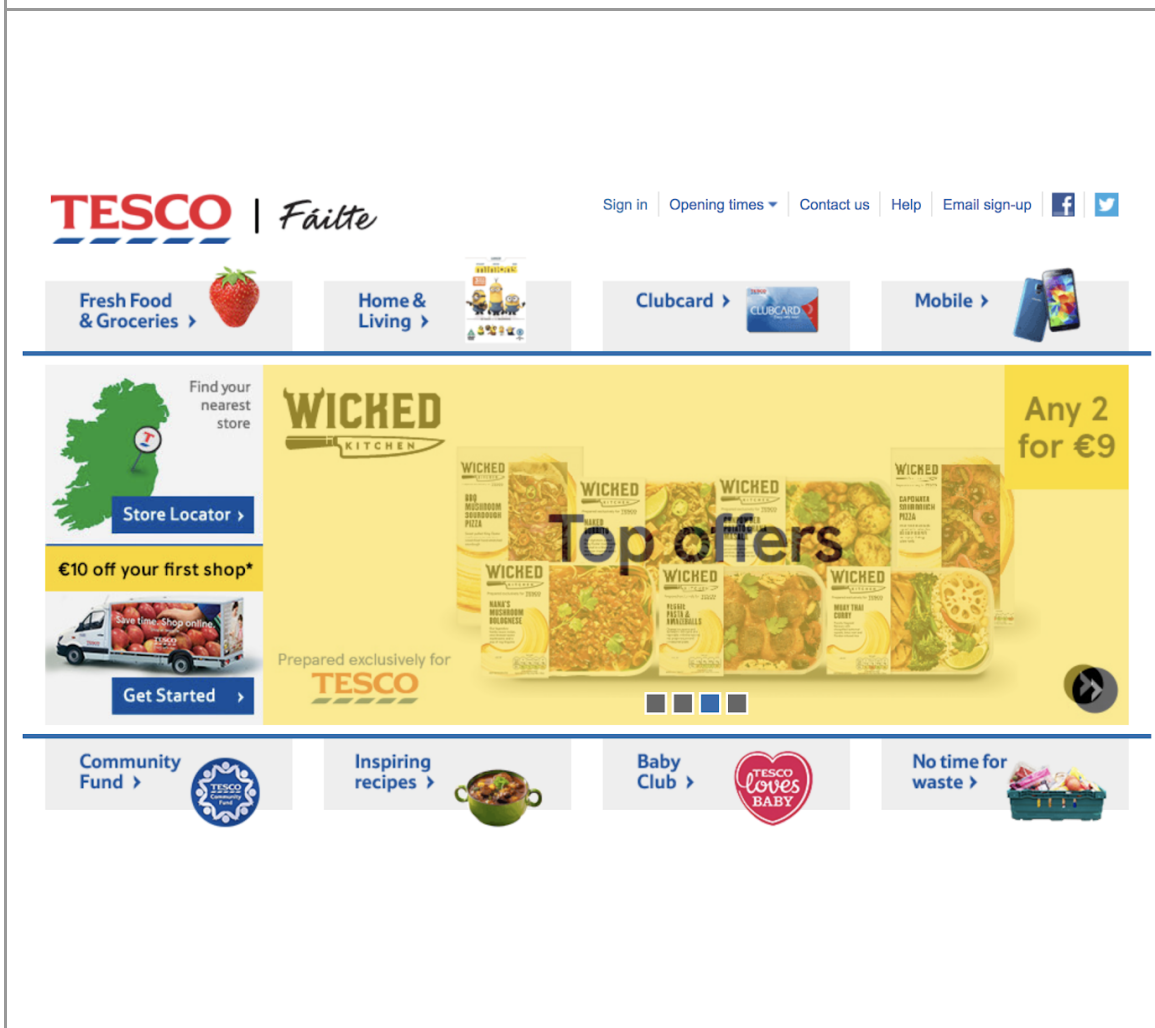
Recommendations:

ID	Solution	Solution ROI
#1	Make Recipes link look like a button and change the label to something more clear.	**28.57**

Tesco uses hoverable dropdown menus to provide a list of subcategories for each category, but they look similar to the buttons under the banner, which are not dropdown menus. In addition, different services have the same importance. Most users took a lot of time to realise where they could find recipes. They looked in the 'Fresh Food & Groceries' category initially.

To solve this problem reorganise all categories, highlighting online shopping, and decluttering home page. The categories under the banner, ClubCard and Mobile could be under 'Other services' and can also be explained with thumbnails across the page when the user scrolls down.

Examples:
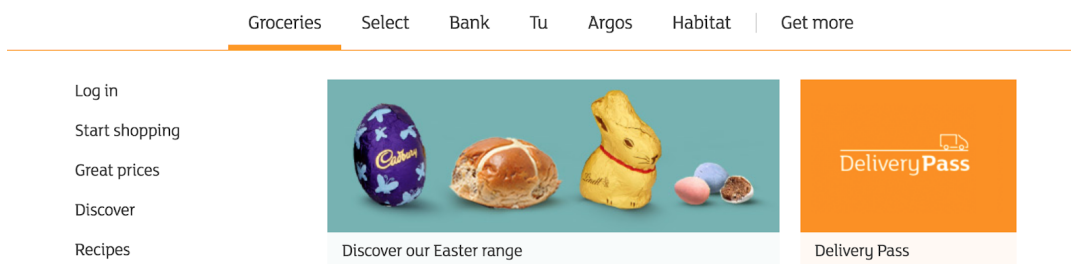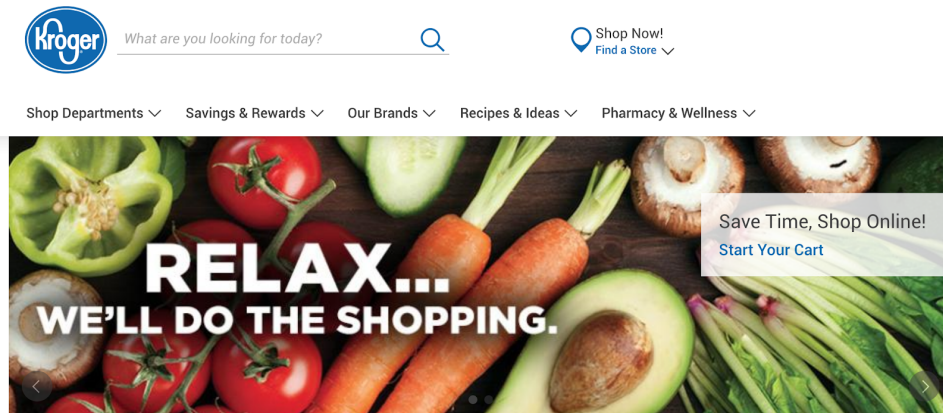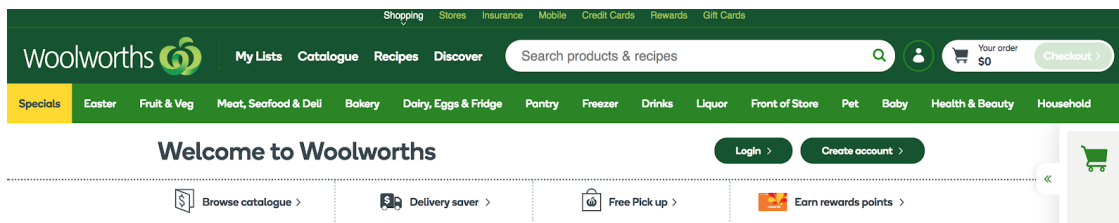
Walmart MoneyCenter

This is your one-stop shop for all your financial needs like the Walmart® Credit Card and money transfers.

Learn More

Product Care Plans
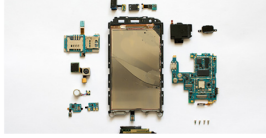
Protect your wallet from unexpected repair bills by covering the cost of product failures with a $0 deductible.

Learn More

Trade-In Program

Enjoy a gift card when you trade in video games, cell phones and more in-store and online.

Get Started

Walmart ☰ Departments   All ▾ Search 🔍   Reorder Items   Sign In ▾   Cart

Shop smart with our app   🗓 Pickup Today   🛒 Grocery Pickup   📰 Weekly Ads   🎁 Gift Cards ▾   💳 Credit Card   🔍 Stores ▾   📍 Set Location   📦 Track Order

THREE DIRECTORS. THREE SHORT FILMS. ONE BOX.   Learn more

Stretch your tax refund
Save $50 on Xbox One S bundles.

500 GB / 500 Go

Free 2-Day Shipping
on millions of items

Free Same-Day Pickup
your must-haves, ready today

Free Grocery Pickup
order online, pick up curbside

Check out our featured products

Clearance   Clearance

---

coles   Search groceries   for keywords, brands or products 🔍

🏠   Catalogues & specials   Shop online   Locations & hours   Recipes & tips   Our Range   Corporate responsibility

The sweetest way to
SAVE THIS EASTER

Shop now

EASTER EGGS   Dairy Milk   25% OFF   Happy EASTER

25% off all Easter confectionery, exclusions apply*

coles   SPECIALS

Inspiring Recipes Page

2.	Problem: It is not clear how to find recipes			
Issue ID	**Issue (Heuristic Evaluation)**	**Violated Heuristic**	**Ease of Fixing Ranking**	**Severity Ranking (0-4)**
#6	When clicking any of the checkbox item of the "Browse by" the window of the submenu where they are disappears.	**14.1**	**2**	**4**
#7	"Done" button in any of the submenus of the "Browse by" options doesn't work. Limited search is not possible.	**14.1**	**3**	**4**
#8	"Popular tags" any tag that is selected is going to remain selected unless it's unclicked, when clicking a second one.	**14.7**	**1**	**3**
#9	There are duplicated "Popular tags".	**14.7**	**0**	**1**
#11	SEARCH option: brings you to a list of recipes titles and url links, no photos or description.	**7.6 | 14.2**	**1**	**4**
Issue ID	**Issue (Usability Testing)**		**Impact**	**Severity**
#5	Wasn't able to find specific recipes with 'Popular Tags'.		Major	**82.29**
#6	Was focusing more on the images and not reading recipe titles.		Major	**54.86**

Evidence:

Recipes

| Browse by diets ▾ | Breakfast ✕ | Browse by cuisines ▾ | Browse by seasons ▾ |

☐ Breakfast   ☐ Dessert   ☐ Lunchbox   ☐ Main
☐ Side dish   ☐ Snack   ☐ Starter

Done

Slow cooker chicken casserole recipe
210 minutes

Sticky chicken and veg couscous recipe
50 minutes

Curried drumsticks
60 minutes

Spinach and Ricotta Stuffed Chicken
45 minutes

Roast Chicken with Spaghetti
50 minutes

Poussin with Lemon Recipe
85 minutes

Recommendations:

ID	Solution	Solution ROI
#2	Make search bar bigger and move it to the center of the page.	27.43
#3	Use bigger font for the recipe titles and increase contrast.	54.86
#11	Search Bar could have dropdown with recipes list.	18.29

There are too many ways of browsing recipes: search field, filters ("Browse by diets", "Browse by courses", "Browse by cuisines", "Browse by seasons" and "Popular tags").

Users were overwhelmed by all the options and didn't know what to use first. To solve that problem get rid of tags and show a list of filters with checkboxes. Change search field position to where tags and filters are. All the filters should be visible at the same time and the search tool should be reviewed. Duplicated tags should be removed. Get rid of popular tags and have more filter options. Also, make the search box more visible so users can type there if they know what they want. Titles should be over images should have more contrast and change colour on mouse over. Images should illustrate better the recipe. Since the search field is positioned on the top right, it looks like a general search, not a recipe search.

Users took a long time to find it and were uncertain if it would work for recipes. It can be solved by changing search field position to where tags and filters are. Most filters don't show any results or show recipes not related the search. Most participants didn't even use browse by. All the filters should be visible at the same time and the search tool should be reviewed.

Some of the popular tags are duplicated, for example, 'Dessert' and 'Fish'. Duplicates should be removed.

It is difficult to find a specific recipe with popular tags. Some tags would list too many recipes.

Participants had to go through many pages to find a specific recipe. Get rid of popular tags and have more filter options. Also, make the search box more visible so users can type there if they know what they want.

Recipe titles were hard to read because of lack of contrast. Images were placed before recipe title and made very prominent. Users were focusing more on the images and not reading recipe titles. Titles should be over images, which should be darkening. Also, images should be more relevant.

Examples

Filter by: All ⌄   Sort by: Relevancy ⌄

Filter (695/695 properties)

Location score
- Excellent location: 9+   222
- Very good location: 8+   459
- Good location: 7+   563
- Pleasant location: 6+   597

Popular filters
- Hotels   205
- Brussels Centre   254
- Free WiFi   682
- Very good: 8+   388
- Apartments   352
- Parking   470
- Guests' favourite area   332

Star rating
- 1 star   10
- 2 stars   30
- 3 stars   94
- 4 stars   65
- 5 stars   15
- Unrated   481

Browse workspaces ▾   Help center

Info: 🔍 Search city for space...   5-10 persons ▾   ☑ Favourites

Workspace: All workspaces | Meeting space | Meeting room | Training room | Work space

Price: $10 /h ▾ ——○——————○—— $50 /h ▾   ▾ MORE FILTERS

Access to clean water transforms lives.
Learn about the crisis and what we can do to fix it.

LEARN ABOUT THE WATER CRISIS
LEARN ABOUT OUR WORK
LEARN ABOUT THE IMPACT OF WATER

800 million people don't have access to clean drinking water. That's 1 in 9 of us.
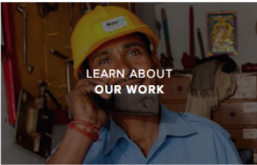
Since 2006 we've been working with local partners in 22 countries.

Bintou received a solar-powered pump and it has impacted every part of her life.

Search   Search

Appendix G4
Recommendations for Recipe Page with List of Ingredients

Recipe Page

3.	Problem: It is difficult to add ingredients of a chosen recipe to the basket.			
Issue ID	**Issue (Heuristic Evaluation)**	**Violated Heuristic**	**Ease of Fixing Ranking**	**Severity Ranking (0-4)**
#12	Some recipes don't have hyperlinks to the ingredients, so they cannot be added to the shopping basket. And if hyperlinks exist, just few items may have it.	3.2	1	3
#13	In some recipes "Preparation" is before "Ingredients" when the screen is small, if the screen in big "Ingredients" are on the right side of the screen and "Preparation" on the left	14.4	1	3
#14	When clicking "Shop ingredients" new tab will be opened	14.4	1	3
#15	None added ingredients have to be added manually by coming back to the recipe.	14.7	3	4
#16	Have to scroll to start seeing the ingredients and preparation of the recipe	14.1	0	3
#33	There is no clear sequence to add recipe ingredients to basket. User has to memorise ingredients and use search.	7.1	3	4
Issue ID	**Issue (Usability Testing)**		**Impact**	**Severity**
#8	Had to scroll down significantly the page to see the top of recipe and ingredients list.		Minor	64.00
#9	Wasn't clicking ingredients links to add them to basket.		Minor	18.29
#10	Was confused with 'Shop Ingredients' button. It wasn't bringing what they were looking for.		Major	54.86
#11	Had to memorise ingredients which had no links to add them to the basket.		Major	109.71
#33	Didn't find list of ingredients at all.		Major	41.14
#36	Couldn't go directly to shop ingredietns, had to switch Browser tab to go to Home Page to start shopping.		Major	41.14
Evidence:				

Preparation

Preheat the oven to gas 6, 200°C, fan 180°C.

Parboil the potatoes in a pan of boiling water for 6-8 minutes. Drain.

Meanwhile, make the stuffing.

Put the spinach into a pan with a splash of water, cover, and cook until wilted.

Squeeze out the excess water, then mix in a bowl with the ricotta and parsley. Season.

Cut a pocket in the side of each chicken breast and stuff with the spinach mixture.

Wrap each in Parma ham, put in a baking dish, then drizzle with the wine and lemon juice.

Cover the dish with foil and bake for 15 minutes.

Remove the foil and cook for a further 15 minutes, or until the chicken is cooked through with no pink meat showing.

Meanwhile, mix the potatoes, onion and oil on a baking tray and season.

Roast alongside the chicken for 20 minutes.

Serve the roast potatoes with the chicken and salad leaves.

Freezing and Defrosting Guidelines

The chicken can be frozen. Cook as instructed and allow to cool completely.

Then transfer to an airtight, freezer-safe container, seal and freeze for up to 1-3 months.

To serve, defrost thoroughly in the fridge overnight before reheating.

Ingredients

800g potatoes, halved
4 chicken breasts
8 slices Parma ham
100ml white wine
1/2 lemon, juiced
1 red onion, sliced
1 tbsp olive oil
85g crispy salad

For the Stuffing
300g baby spinach leaves
4 tbsp ricotta
1 x 50g pack flat-leaf parsley, chopped

Shop ingredients

Problem Area

TESCO

Food and Community   Recipes   Our Food   Supporting Communities   The 800   Food Waste

Food and Community > Spinach and Ricotta Stuffed Chicken

Spinach and Ricotta Stuffed Chicken

Share

View Height

Stuffed with a creamy mixture of ricotta and spinach and wrapped in slices of Parma ham, these 100% Irish chicken breasts are sure to be a huge hit.

Chicken

Prep time: 5 minutes
Cook time: 40 minutes
Servings: 4 people

Preparation

Preheat the oven to gas 6, 200°C, fan 180°C.

Parboil the potatoes in a pan of boiling water for 6-8 minutes. Drain.

Meanwhile, make the stuffing.

Put the spinach into a pan with a splash of water, cover, and cook until wilted.

Squeeze out the excess water, then mix in a bowl with the ricotta and parsley. Season.

Cut a pocket in the side of each chicken breast and stuff with the spinach mixture.

Wrap each in Parma ham, put in a baking dish, then drizzle with the wine and lemon juice.

Cover the dish with foil and bake for 15 minutes.

Remove the foil and cook for a further 15 minutes, or until the chicken is cooked through with no pink meat showing.

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Ingredients

800g potatoes, halved
4 chicken breasts
8 slices Parma ham
100ml white wine
1/2 lemon, juiced
1 red onion, sliced
1 tbsp olive oil
85g crispy salad

For the Stuffing
300g baby spinach leaves
4 tbsp ricotta
1 x 50g pack flat-leaf parsley, chopped

Shop ingredients

Problem Area

Related recipes

Gnocchi with blue cheese, bacon and spinach
20 minutes

Chicken, Pancetta and Mushroom Pie
60 minutes

Lemon and thyme roast chicken with chorizo and ciabatta croutons recipe
100 minutes
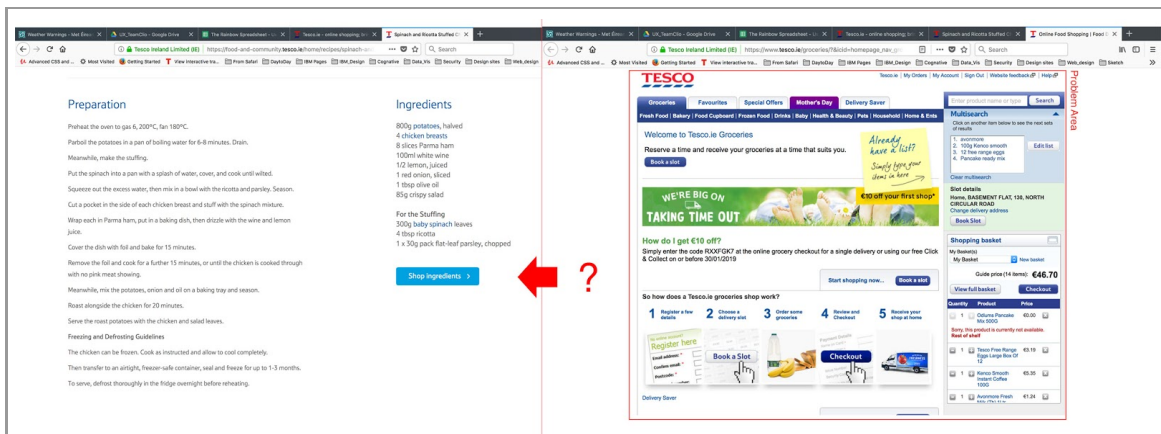
Recommendations:

ID	Solution	Solution ROI
#4	Swap ingredients list with preparation description (it should be first).	**41.14**
#5	Make main image on single recipe page smaller.	**35.05**
#6	Add check boxes next to the ingredients to add them to the basket. (Pre-basket)	**6.10**
#12	Design an automated feature to shop all ingredients; eg. through automation with "Multisearch" feature or a feature which gives search result of all ingredients listed	**30.17**
#13	Change copy on "Shop Ingredients" button to "Start Shopping", consistent with "Fresh Foods & Groceries" drop down menu on home page	**54.86**
#14	Ensure recipe image ends above the fold, around 80% vh	**64.00**
#15	Bring Ingredients closer to fold. Move left of screen and "Preparation" in line with F-scanning pattern	**21.33**
#16	Remove ingredient list hyperlinks, to keep consistency. Consider a redesign in line with ingredients shopping automation ID:12	**59.43**
#17	Group recipe title with recipe description and overlay on image	**0.00**

Group recipe name with description.

Rearrange the content to bring the ingredients list closer to the page fold.

Remove ingredients hyperlinks.

Consider renaming button, or build a relationship between the button and the muti-search feature or a new shopping list feature.

Consider designing the button to drop all of the ingredients into the basket, a shopping list or into the "Multisearch" box.

Consider removal, incorporating with nav bar above or re-thinking the title naming

Appendix G5

Recommendations for Groceries Tab, Mega Menu and Shopping Basket

Groceries Tab

4.	Problem: Groceries Page is overwhelming with content, with no clear indication of what to do next and confusing duplicated buttons and labels.			
Issue ID	**Issue (Heuristic Evaluation)**	**Violated Heuristic**	**Ease of Fixing Ranking**	**Severity Ranking (0-4)**
#17	When landing for first time in Groceries site, if "sign in" hasn't been done the page will be a really clutter site where all the steps needed will be shown, after two menus and two blocks of additional information.	14.1	1	4
#24	There is no clear path where the user is on the website, for example breadcrumbs.	2.3	1	3
#34	Information isn't clearly organised to help user with shopping.	7.3	2	4
#27	CTAs are not in the right places of the content. They are duplicated.	2.12	1	4
#31	Hard to know what is a link because of blue color for the plain text.	3.8	1	4
Issue ID	**Issue (Usability Testing)**		**Impact**	**Severity**
#14	Was confused by the repeated information.		Major	41.14
#32	Was overwhelmed with the amount of information and needed more time to find information.		Major	123.43
#15	Had difficulties to read information because of its amount.		Major	41.14
#16	Was not clear what the button label means (for example 'Book a slot')		Major	54.86
#17	Was confused where he/she is on the page and what to do next. (after clicking 'Buy Ingredients')		Major	54.86
#31	Had difficulties to find links because of a blue colour all over the page.		Major	27.43
Evidence:				
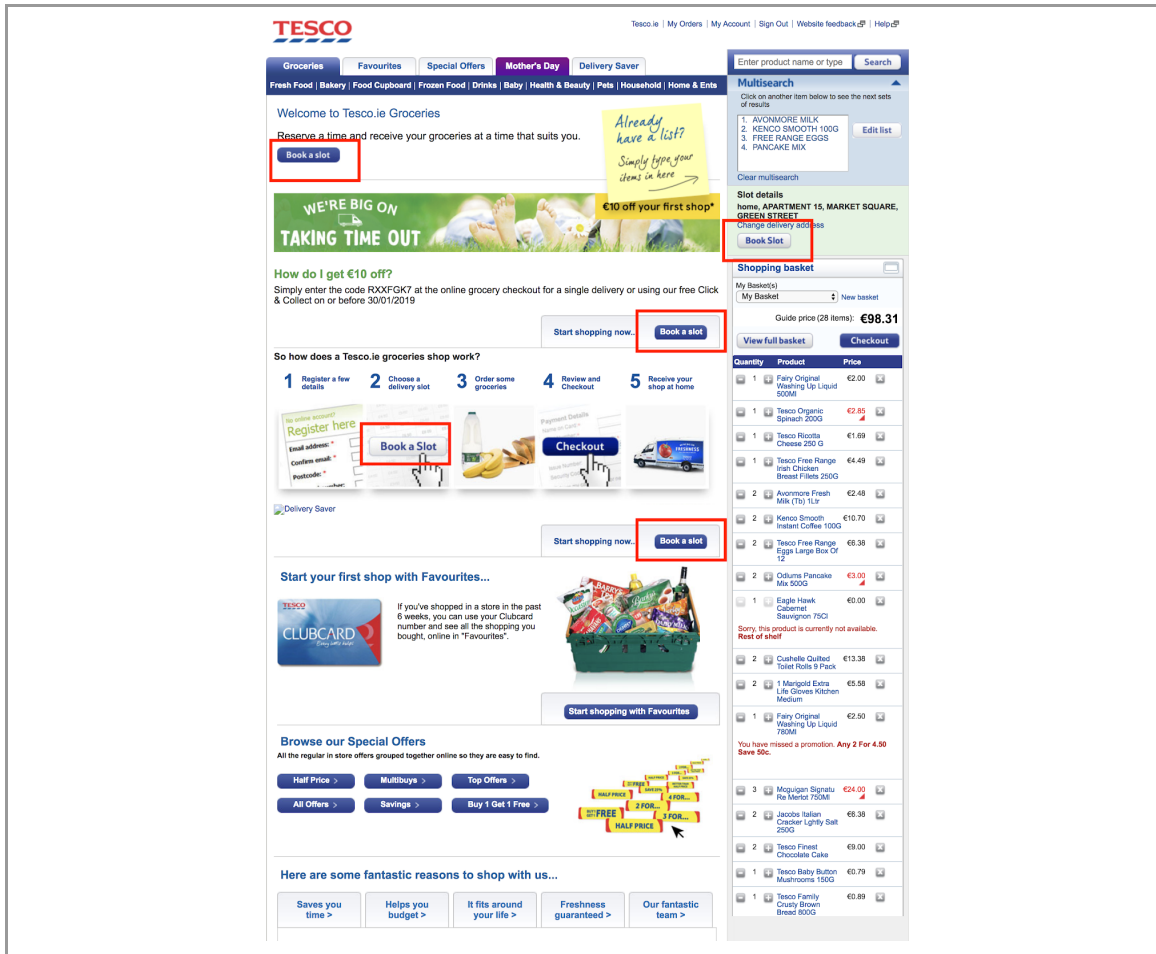
Recommendations:

ID	Solution	Solution ROI
#20	Remove all unnecessary information, which is not necessary to complete the task.	**205.71**
#21	Make sure that content is not duplicated (for example 'Book a Slot' buttons)	**164.57**
#7	Change 'Book a slot' label to 'Book a delivery slot'.	**54.86**
#33	Clearly distinguish what are links and what is plain text.	**96.00**
#23	Make it clear what are the next steps with progress bar.	**35.66**

Remove all unnecessary information and hide basket to make screen less cluttered. Make sure that content is not duplicated and that buttons have easy to understand labels. Change 'Book a slot' to 'Book a delivery slot'.

Make it clear what are the next steps and structure content in a logical way, so it helps users complete their goals - buying groceries. Show progress bar clearly indicating all steps required to buy groceries.

Divide content into clear sections with headings and include in these section Call to Action buttons, so the next steps are easy to understand. These could be: "Add to Cart", "Buy Now".

CTAs have to be located away from other buttons and avoid being clicked by mistake.

Provide path and hierarchy information like breadcrumbs. Make sure that links have a colour different from the rest of text and they are designated after clicking.

Examples:

Kroger

What are you looking for today? 🔍

📍 Shop Now!
Find a Store ⌄

Shop Departments ⌄   Savings & Rewards ⌄   Our Brands ⌄   Recipes & Ideas ⌄   Pharmacy & Wellness ⌄

Welcome!
Sign In ⌄ 👤

USE 5 TIMES

Save More with 5X Digital Coupons
Download Coupons

○ ● ○ ○ ○

ClickList

To create and edit your shopping cart, sign in to your account.

Sign In

Don't have an account?

Create an Account

Start My Cart

Shop All
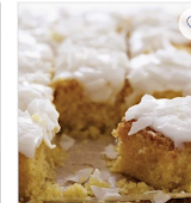
Select a preferred store to view price
Apple - Honeycrisp
1 lb
Sign In to Add

Select a preferred store to view price
Avocado - Large
1 each
Sign In to Add

Select a preferred store to view price
Broccoli
1 lb
Sign In to Add

Select a preferred store to view price
Cauliflower
lb
Sign In to Add

Select a preferred store to view price
Lemons - Large
1 lb
Sign In to Add

See Personalized Suggestions

To easily shop items based on your recent purchases and recommended sale items, please sign in or create an account.

Sign In   **Create an Account**

Suggested Recipes

Lemon-Oregano Salad Dressing
8 Ingredients
10 minutes
View Recipe

Organic Carrot Cake
7 Ingredients
1 hour
View Recipe

Lemon Sheet Cake
8 Ingredients
40 minutes
View Recipe

Easter Coconut Cake
5 Ingredients
8 hours 50 minutes
View Recipe

View All Recipes

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Community
Express HR
Investor Relations
Kroger Real Estate
News Room
Vendors & Suppliers

COMMUNITY
Kroger Community Rewards
Bringing Hope to the Table
Sharing Courage
Honoring Our Heroes
Salvation Army
Sustainability

CUSTOMER SERVICE
FAQs
Account Registration
Contact Us
Customer Comments
Digital Coupons Policy
My Prescriptions FAQs
Recall Alerts
Feedback

ONLINE SERVICES
Deli/Bakery Ordering
Digital Coupons
Gift Card Mall
Join Our Customer Panel
Mobile App
Monthly Newsletter Subscription
Receipt Survey Invitation
Recipes
Request a Donation
Shopping List
Store Locator
Weekly Ad

Earn FREE GROCERIES!
Save More on Fuel

GET THE CARD
Learn More
Save on Fuel
Earn Free Groceries
Manage My Card

Mega Menu

5.	Problem: Mega Menu is too complex, has too many links. This type of structure creates a tedious journey with no quick option to find a product.			
Issue ID	**Issue (Heuristic Evaluation)**	**Violated Heuristic**	**Ease of Fixing Ranking**	**Severity Ranking (0-4)**
#23	Mega menu has too many links which look the same	**2.2**	**3**	**3**
#26	The website doesn't use a clear user-logical hierarchy of categories to classify products and to find them.	**2.11**	**2**	**4**
#30	After clicking on link it is not designated (color doesn't change)	**3.6**	**0**	**3**
#18	Menu: selected tab and hover tab look the same	**14.6**	**1**	**4**
Issue ID	**Issue (Usability Testing)**		**Impact**	**Severity**
#18	Had difficulties finding the right link in the Mega Menu.		Minor	**27.43**
#38	Is not able to find product in the Mega Menu and uses Search Bar instead.		Minor	**100.57**
Evidence:				

Recommendations:

ID	Solution	Solution ROI
#24	Make Mega Menu more visual by adding icons and grouping them by supermarket aisles.	**40.23**
#25	Don't show all the links at once - use nested menus.	**67.05**
#26	Make font size bigger	**306.29**
#33	Clearly distinguish what are links and what is plain text.	**96.00**

Make Mega Menu more visual by adding icons and grouping them by supermarket aisles. The categories should be easy to identify and differentiate by the customer.

Don't show all the information at once - use nested menus. Clearly differentiate navigation elements from one another, but the group and place them in a consistent and easy to find a place like the main menu in the header of the page. Maintain expected conventions, such as left or right-hand navigations. Use vertical lists to help users move from link to link with a single eye movement. Add more space between links.

Use colour changes to indicate to users when a link has been visited. Link colours help users understand which parts of a website they have visited, and can increase users' ability to find information. Use default text link colours such as blue for unvisited links and purple for visited links.

Examples:

Shopping Basket

6.	Problem: Shopping Basket is difficult to read and navigate and some important details are missing.			
Issue ID	Issue (Heuristic Evaluation)	Violated Heuristic	Ease of Fixing Ranking	Severity Ranking (0-4)
#28	Some labels might be difficult to understand. (Guide price)	3.1	0	4
#41	There are no order charges, such as taxes and shipping costs specified as soon as possible in the purchasing process.	10.2	3	4
Issue ID	Issue (Usability Testing)		Impact	Severity
#34	Had to look closer at the screen to spot the bottle of wine listed in the shopping basket.		Major	54.86
#37	Didn't notice that can change number of products in the basket with plus or minus.		Minor	54.86
#40	Had difficulties noticing that item was added to the basket.		Major	82.29
#20	Thought that something is wrong because of the red labels in shopping basket.		Suggestion	4.57

Evidence:

TESCO

Tesco.ie | My Orders | My Account | Sign Out | Website feedback | Help

| Groceries | Favourites | Special Offers | St Patrick's | Delivery Saver |

Fresh Food | Bakery | Food Cupboard | Frozen Food | Drinks | Baby | Health & Beauty | Pets | Household | Home & Ents

Enter product name or type   **Search**

Multisearch

Click on another item below to see the next sets of results

1. AVONMORE MILK
2. KENCO SMOOTH 100G
3. FREE RANGE EGGS
4. PANCAKE MIX

Edit list

Clear multisearch

Slot details

home, APARTMENT 15, MARKET SQUARE, GREEN STREET
Change delivery address

Book Slot

Shopping basket

Overall substitution preferences:

My Basket(s) [My Basket ▾]

New basket

Provide Substitutions

By selecting 'Provide Substitutions' we will:
- Provide a suitable alternative if your selected product is unavailable
- And if you don't want it, just hand it back to your driver for a full refund

Don't Substitute

By selecting 'Don't Substitute' you will not receive an alternative if the product is unavailable

Information about Substitution and Picker notes

Turn images off

Quantity	Product	Substitution notes (click row to edit specific products)	Personal shopper notes (click row to edit)	Price	
Household					
− 1 +	Fairy Original Washing Up Liquid 500Ml	Find a suitable alternative	Enter note to picker	€2.00	☒
Drinks					
− 2 +	Kenco Smooth Instant Coffee 100G	Find a suitable alternative	Enter note to picker	€10.70	☒
− 1 +	Eagle Hawk Cabernet Sauvignon 75Cl	Find a suitable alternative	Enter note to picker	€7.00	☒
Fresh Food					
− 2 +	Tesco Free Range Eggs Large Box Of 12	Find a suitable alternative	Enter note to picker	€6.38	☒
− 1 +	Tesco Spinach 500G	Find a suitable alternative	Enter note to picker	€2.20	☒
Food Cupboard					
− 2 +	Odlums Pancake Mix 500G	Find a suitable alternative	Enter note to picker	€3.00	☒
− 3 +	Jacobs Italian Cracker Lghtly Salt 250G	Find a suitable alternative	Enter note to picker	€9.57	☒
Bakery					
− 2 +	Tesco Finest Chocolate Cake **Sorry, this product is currently not available.** Rest of shelf			€0.00	☒

Information on guide price

Total Clubcard points:	40	Total MultiBuy savings	€0.00
Green Clubcard points	0	Guide price (14 items)	**€40.85**
Promotional Clubcard points	0		
Clubcard points	40		

Empty Basket   Product Terms & Conditions

Continue Shopping   **Checkout**

Recommendations:

ID	Solution	Solution ROI
#26	Make font size bigger.	**306.29**
#27	Use color for navigation buttons and make them bigger.	**210.29**
#28	Add animations to make it clear when product is added to the basket.	**27.43**
#22	Make sure that buttons have easy to understand labels.	**187.43**
#30	Add tooltips to offer labels and other labels which might be not clear to the user.	**105.14**

Make font size bigger. Increase the size and colour contrast of the '+', '-' and 'x' buttons, or use clear to understand labels and icons, for example, trash icon, 'Delete' label.

Improve animations to make it more clear when a product is added to the basket.

Display Costs and Totals Clearly rather than having them explained in an additional modal window. Add tooltip to 'Guide Price' or change it to 'Estimated Price'.

Display basket subtotal and total. For estimated shipping and tax charges (it's OK to say TBD in checkout). Adding a feature that clearly reflects the cost of the shopper's virtual basket helps reduce post-purchase regret - and improves your customer's chance of return. If this information is hidden it causes distrust and shopping cart abandonment.

If the page is too cluttered and full basket preview has to be hidden, keep it as a button with a number of items and total in the top right corner of the page. Allow users to quickly add and preview items in the basket without leaving the page.

Examples:

Scotch Plains (070...
Delivery Times

Hi!
Sign in

freshdirect

Search 🔍

Office delivery?   Help   ⟳ Reorder   **Create Account**

| MEALS | FRUIT | VEGETABLES | MEAT & POULTRY | SEAFOOD | DAIRY | DELI & CHEESE | BAKERY & PASTRY | PARTY PLATTERS | GROCERY | FROZEN | BEER | WINES & SPIRITS |

FRESH DEALS   MEAL KITS   COUPONS   SALE   NEW   TOP-RATED   IDEAS   LOCAL   EASTER   PASSOVER

Your Cart

Please review your cart before checking out.

Delivery Charge: **$0.00**
Order Subtotal: **$38.92**

Checkout →

Dairy

Just FreshDirect Local Nonfat Greek Yogurt, Plain
(5.3oz)

🗑 Delete   − 1 +   **$1.19**
(1.19/ea)

What's Good

Driscoll's Strawberries
(approx. 16oz)

🗑 Delete   − 1 +   **$4.99**
(4.99/ea)

Fuji Apples
(4ct)

🗑 Delete   − 1 +   **$3.99**
(3.99/ea)

Red Seedless Grapes
(approx. 2lbs)

🗑 Delete   − 1 +   **$6.88**
(2.99/lb)

Red Seedless Grapes
(approx. 2lbs)

🗑 Delete   − 1 +   **$6.88**
(2.99/lb)

Sumo Citrus, Box
(6-7ct, approx. 5lb)

🗑 Delete   − 1 +   **$14.99**
(14.99/ea)

🗑 **Empty Cart**

Have a promotional code?

Enter here   apply

Delivery Fee: $0.00
Total Tax: Added during Checkout
Order Subtotal: $38.92 *

You've Saved: $17.59

Checkout →

Find out more about estimated prices,taxes, deposits, and fees,
and other aspects of our customer agreement

Appendix G6
Recommendations for Multi-search Widget and List of Results

'Multisearch' Tool

7.	Problem: Multisearch is hard to see without help and it is not clear how it works			
Issue ID	**Issue (Heuristic Evaluation)**	**Violated Heuristic**	**Ease of Fixing Ranking**	**Severity Ranking (0-4)**
#19	Multisearch: Not really visible, it doesn't stand up and it's quite useful and works well	**14.1**	**3**	**4**
#20	Multisearch: When a product is misspelled it will suggest possible products	**14.7**	**3**	**0**
#29	Arrow under Search Bar is confusing.	**3.4**	**1**	**3**
#39	Users are not notified when multi-search option exists.	**9.10**	**3**	**4**
Issue ID	**Issue (Usability Testing)**		**Impact**	**Severity**
#21	Wasn't using multisearch to find multiple products. It didn't drag attention at all.		Minor	**118.86**
#22	Wasn't clear what can be done with multisearch tool.		Minor	**54.86**
#23	Didn't know how to go to the next product in the multisearch tool.		Major	**68.57**
#39	Could't find Multi-search straight away.		Minor	**45.71**

Evidence:

Recommendations:

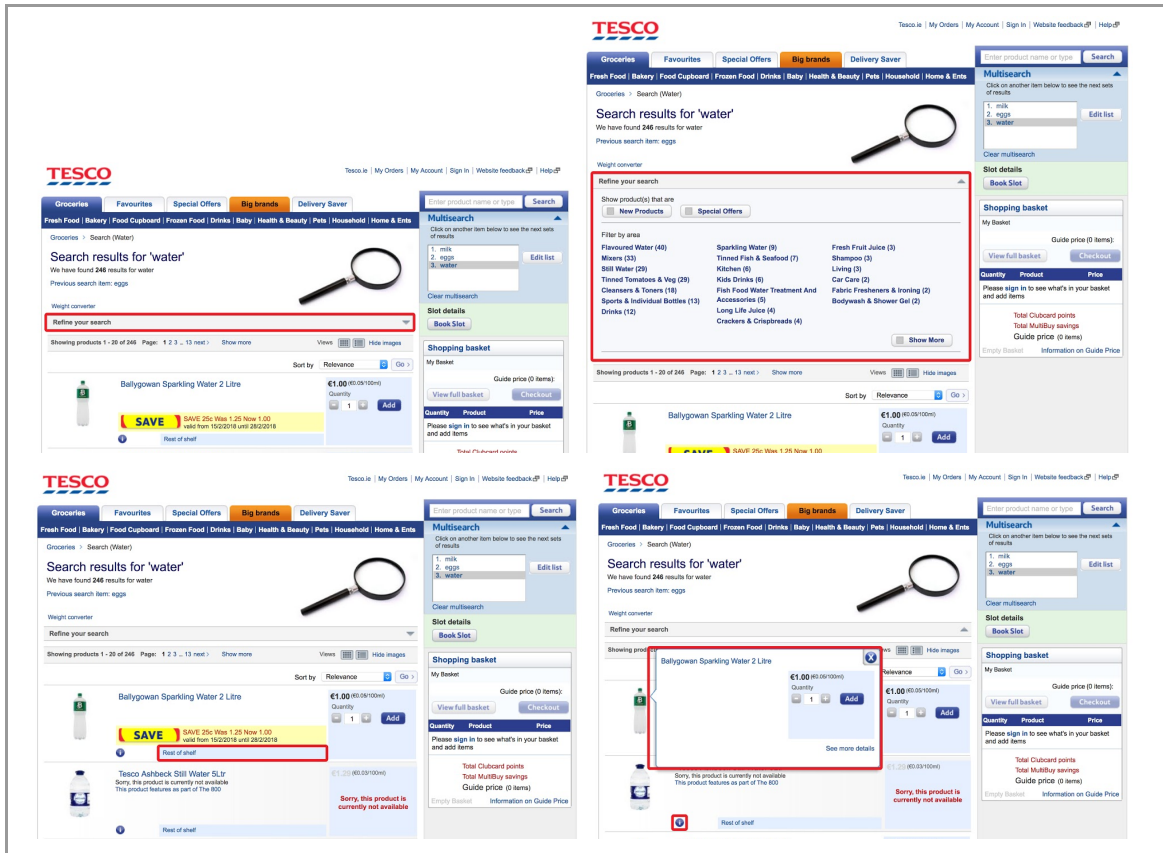| ID	Solution	Solution ROI
#10	Add product and automatically go to the next one listed.	18.29
#31	Make Multisearch box more visible	219.43
#32	Simplify how Multisearch works	242.29
#36	Make Multisearch results list more intuitive	68.57

Replace Search centre in the space and bigger.
Reword the name and explanation of the Multisearch feature. Perhaps even open its own pop-up window.
Use of buttons instead of links and also arrow icons.

Search Results

8.	Problem: Have to scroll down to see search results, it is not clear how to refine the results, and there are some features that are not important.			
Issue ID	**Issue (Heuristic Evaluation)**	**Violated Heuristic**	**Ease of Fixing Ranking**	**Severity Ranking (0-4)**
#21	User has to scroll to start viewing search results	**14.1**	**2**	**3**
#36	Search didn't show 'Half Price' offers, despite they were listed on the website.	**9.1**	**3**	**4**
#38	Search doesn't have advanced features that allow for a limit to a great variety of criteria (features, categories, etc.)	**9.8**	**3**	**4**
Issue ID	**Issue (Usability Testing)**		**Impact**	**Severity**
#25	Didn't know how to refine the search.		Minor	**9.14**
#26	Didn't know what 'Rest of shelf' means.		Suggestion	**4.57**
#27	Couldn't find relevant products in the search results list.		Major	**54.86**
#28	Wasn't able to find more information about the product by clicking the Information Icon.		Suggestion	**4.57**
#35	Didn't understand the difference between different types of offers.		Major	**96.00**
Evidence:				

Recommendations:

ID	Solution	Solution ROI
#10	Add product and automatically go to the next one listed.	**18.29**
#34	Change "Refine your search" by for "Filter by"	**64.00**
#35	Display more than one item by row	**62.86**
#36	Make Multisearch results list more intuitive	**68.57**
#37	Change position of "Sort by" feature next to "Filter by"	**54.86**

Remove "Search results for [X]" section

Change layout of "Refine your search", perhaps create buttons instead of links and have more than three by line

Change the whole layout of the search results, creating buttons instead of links and having more than three items by line.

Remove "Rest of shelf" and add a related product list on every item page.

Remove "Information" icon at all. It does not bring extra information.

Examples:

Search

Browse aisles   Special offers   Recipes & ideas   My usuals

The
Super
SAVE TIME for
your transformation
this year

The
Valu

€15 OFF your
1st online shop
over €75

Start Shopping

Special offers & more below

SuperValu
Real Food, Real People

Sign in   Register

Search

Popular searches

milk

cheese

bread

chicken

Search using a shopping list

your transformation
this year

Start Shopping

over €75

Special offers & more below

Low Everyday Prices

SuperValu
Real Food, Real People

Jordana Your account ⌄   🛒 2 items €7.98 ⌄

Type or paste your list here.
Each item should be on a new line e.g.
Milk
Bread
Eggs

Search   Cancel

SuperValu
Real Food, Real People

Jordana Your account ∨   🛒 2 items €7.98 ∨

☰ Browse aisles   Special offers   Recipes & ideas   My usuals

Search results

Searched for   egg ✕

All   Baby   Chilled Food   Dairy, Milk & Eggs   Food Cupboard

Filter by: All ∨   Sort by: Relevancy ∨

Your list   ✕

1. egg	›
2. milk	›
3. cloves	›
4. chicken	›
5. water	›
6. coke	›

Edit your list

Back to single item search

☆   ☆   ☆   ☆   ☆

Golden Irish Mini Pullet Eggs (12 Piece)

Margaret's Organic Eggs Large 4pce (4 Piece)

Mega Eggs Omega 3 Large (6 Piece)

O'Egg Pasteurised Liquid Free Range Egg (500 Grams)

O'Egg Pasteurised Liquid Free Range Egg Whites (500 Grams)

€2.00 €0.17 each

€2.28 €0.57 each

€2.78 €0.46 each

€3.49 €6.98 per kg

€3.99 €7.98 per kg

1 in trolley