

Remote Unmoderated Usability Testing for LingsCars.com

Stephen Zhu, Max Anderson, Chairul Karim, Dana Zhu, Taylor Denby
28 April 2020

Word Count: 3146

Link to Google Docs:

https://docs.google.com/document/d/1HbY0pD8kEkm9uJRUY-fW-ulOwHKcHteJAE-_viWLv-0/edit?usp=sharing

Introduction

Lings Cars is a website that sells and leases cars online in the United Kingdom. While the business is pretty successful overall, the website could be improved significantly. Many users find it difficult to navigate the website due to the distracting and outdated UI. The UI contradicts many of Nielsen's Heuristics as it has flashing colors and a very clunky design. Because of this, users might find it hard to search for different car models. On top of this, users might also find it hard when analyzing the search results because the results are presented in small text with no images with confusing abbreviations. Overall, the website is extremely confusing, which could deter a potential customer from leasing a car.

The main objectives of this study are to understand how easy it is for users to find cars that meet a specific search criteria and to find out how satisfied users are when looking for a new car to lease. Resulting from this are two research questions:

- How easy is it for users to find a car that meets their search criteria?
- How can we improve satisfaction of users when looking for car options?

Answering these research questions would help us by giving us a better idea of how to attract more customers and make more people want to use this site. The first question helps determine whether or not users find the site easy to use, so that we can keep customers from abandoning their search or going elsewhere to lease a car. The second question helps determine whether or not customers are happy with their overall experience, and therefore whether they are likely to recommend the site to others or use it again in the future.

Methods

Data collection

Recruitment Criteria

For recruitment, we mostly went with the basic filters provided from the User Testing website.

The recruitment criteria for our targeted audience are:

- The users must be between the ages of 18 to 65
- The user must live in the United Kingdom
- Participants must have average to advanced web expertise
- There should be an even mix of both male/female participants
- The users must own a driver's license/have basic knowledge on driving cars

Screener Questions

1. *Please indicate your age range:*

- 18 and below
- 19 - 29

- 30 - 49
 - 50 - 65
 - 66 or older
2. *Do you live in the United Kingdom?*
- Yes
 - No
3. *Do you have a driver's permit or any form of documentation that licenses you to drive a car?*
- Yes
 - No

The purpose of these screener questions is to make sure that the users are from the United Kingdom and that they know how to drive. This is because LingsCars is a website for leasing and buying cars that is solely based in the United Kingdom. We are trying to make the participant as close to a real user as possible and a typical user is most likely living in the UK and knows how to drive.

Test Plan

For our test plan, we first wanted to introduce the user to the hypothetical situation that we were going to test. We informed them that they would be testing the process of leasing a car, and then gave them five separate tasks to complete in order to test different aspects of the site and its usability. The tasks focused mainly on the different ways to search for vehicles on the site, but we also tested the process of beginning to lease a car as well as looking at reviews and feedback from other customers. Finally, we concluded the study with four survey questions, asking them about the search process, site navigation, and their overall impression of the site, and whether or not they would recommend the site to others.

The reasoning for these specific tasks is to observe and judge how a user navigates through the site and uses the features to find and lease cars. Each task allows the user to use the different features of the website to search for cars. For example, an easy way to search for a specific type of car would be to use the list of all the models on the side of a page while an easy way to search for a car that meets a certain criteria would be to use the search filter. After observing the results, it should be clear which features of the website a typical user might find useful are harder to find.

Because there's an age restriction for those who can drive, we decided to screen for users who are above the age of 18 and are licensed to drive.

Data analysis

There are several ways we analyzed the data. After all the participants finished the usability test, we shared quantitative data such as: time taken to complete each task, basic demographic information, number of tasks failed, and post-test questionnaire results. After watching the videos of the usability tests, we then shared some qualitative information such as: common themes across each participant and responses from the post-test questionnaire. From the

common themes across each participant, we counted the number of participants that shared similar opinions and then rated the severity based on the issue and the number of participants.

Findings

Summary Results

Our study reveals severe flaws in the usability of LingsCars' website, with 9 out of all 15 users failing to complete at least 2 of the 5 assigned tasks. The LingsCars potential user base seems to prioritise clarity of information over all else, a quality that the website needs substantial improvement on. Our users generally shared that a more straightforward and less convoluted interface would be much more effective in enabling them to complete the tasks they set out to do. Particular flaws of key aspects of the interface will be outlined in the section below.

Key Findings

KF 1: Unable to Find Search Function

Our first task required users to find an SUV for a particular period of lease within a specific price range. Many users struggled with this task, specifically because there was an expectation of some form of category or tag which would lead them to a full listing of SUVs through which they could narrow their search. Without which they had to identify cars by the names of their model and their own pre-existing knowledge of which models were SUVs. 1 of the 15 users in our test did not have that knowledge and as such were unable to complete the task.

This search function actually does exist; the problem lies in the lack of a clear indication on the landing page where one might find this function.

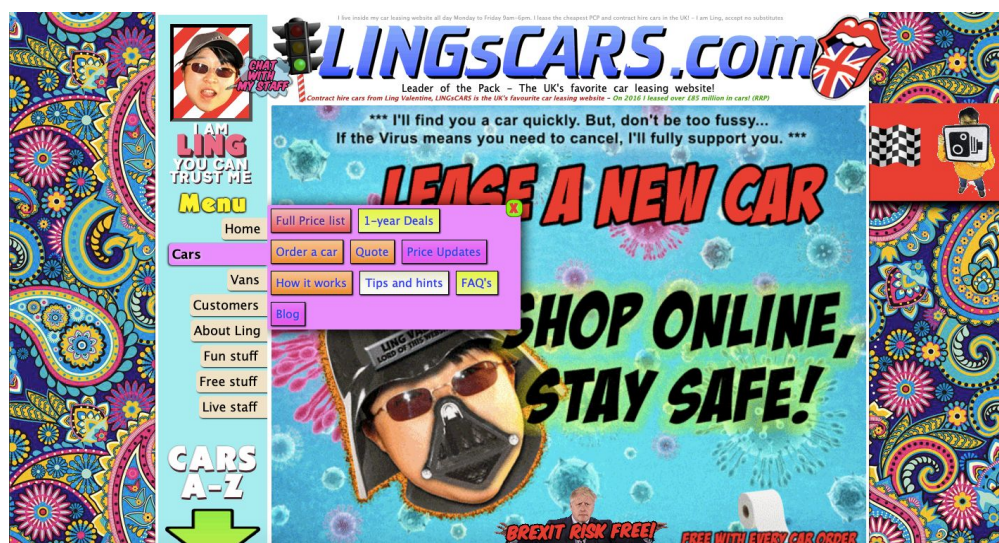


Fig 1. Main landing page

From the landing page (Fig 1.), users would have to click on the Cars tab, and from there figure out that the Search function was found in the Full Price List, the page shown below (Fig 2.) where searching and filtering functions can be found. The tab names are extremely vague and unclear, hence leading to at least 7 of our 15 users being unable to navigate to this page below to make a search.



Fig 2. Full price list page

It is a problem of moderate to high severity, given that users have expressed frustration in not being able to perform fundamental tasks that a search function would allow for. The poor labelling of information and tabs have given rise to usability issues, but the upside is that the functionalities are all there, and that users are simply not led to them as they should be. The solution to this problem should be fairly low-cost and simple, for example by changing Full Price List to Search Cars, or even adding a search bar to the landing page.

KF 2: Distracting Colors and Animations

One of the main complaints amongst users concerning the overall design of the site was that it was very overwhelming. Almost all users (11 of 15) described the layout as distracting, with too many flashing colors and animations that made the site seem much more cluttered than it needed to be. Most users sounded frustrated with the layout upon entering the site (Fig. 3 shows the lower part of the home page, one of the first things that users see upon entering) and almost all of them addressed it during at least one point while taking the test. One user said “this is really overwhelming” and another user described it as “stressful”, saying that it’s “really tough to use this site, it’s stressful, even if they do have all the best deals”. This complaint was consistent throughout all pages of the site, given that small, flashing animations were present everywhere, making it hard for some users to find even basic information on the page. After searching for a car, one user said: “there’s a lot of text and buttons, I’m not sure where the list is or where to look”.



Fig 3. Screenshot of lower part of home page

This problem is of high severity, as almost all of our users seemed immediately frustrated or overwhelmed with the overly flashy design of the site and the unnecessary confusion that it caused them. This could cause many users to immediately abandon the site without even getting started, or get frustrated and leave as they try to begin the lease process and find that the flashing animations continue to clutter the page. One user even mentioned that this layout makes the site seem incredible, citing that he had seen reviews of the site in a major newspaper, otherwise he would have thought it was a scam. This problem could be easily fixed, as it is not impossible to make the site slightly less overwhelming, while still keeping the unique and colorful layout that makes it different from other sites.

KF 3: Input Payment Details Before Revealing Full Cost

Before users can see the price of their lease in the cart, they are forced to provide payment details. This is overwhelming for the user and could lead users to choose other sites or providers for their car leasing needs, since inputting payment information before seeing the price of an item makes users feel like they are committing before they get to see the price.

3+ years bank history



[More info](#)

**Finally (phew!), I need
your **BANK** details, please...**



Your Bank Info...

Your Bank Name

Branch Address (Line 1)

(Line 2)

Town / City

Bank Postcode

Account No

Sort Code

Account Name

Years at bank

Choose...



Security

I take your bank account security very seriously.

I am only asking for the information that will be found on a cheque book.

This is fairly public info, but I never disclose outside the finance provider.

UK Data Protection Number: Z1098490



Validate

(Don't have 3 years bank history? [Skip](#) this section.)

Proposal Summary

Finish

Fig 4. Bank Info is required before proposal summary is shown.

2 out of 15 users noticed this problem. Despite a low amount of users having found the problem, the problem is of high importance since it is extremely likely to turn users away from purchasing. Many users didn't fill out much of the purchase form, so given more users attempting, more users would likely notice the problem.

KF 4: Unintuitive Navigation

The creator of the website had publicly proclaimed that her philosophy for her website is to continuously add to it rather than redesign the entire site, as most companies do every few years. As a result, features are continuously added without any intuitive high level path intended for the user to take; features are listed one after the other and it is up to the user to figure out where the needed information and feature is. According to the users who participated in our study, this is both overwhelming and deterring, especially as most users are accustomed to the user friendly interface of most websites that have moved beyond the 2000's design.

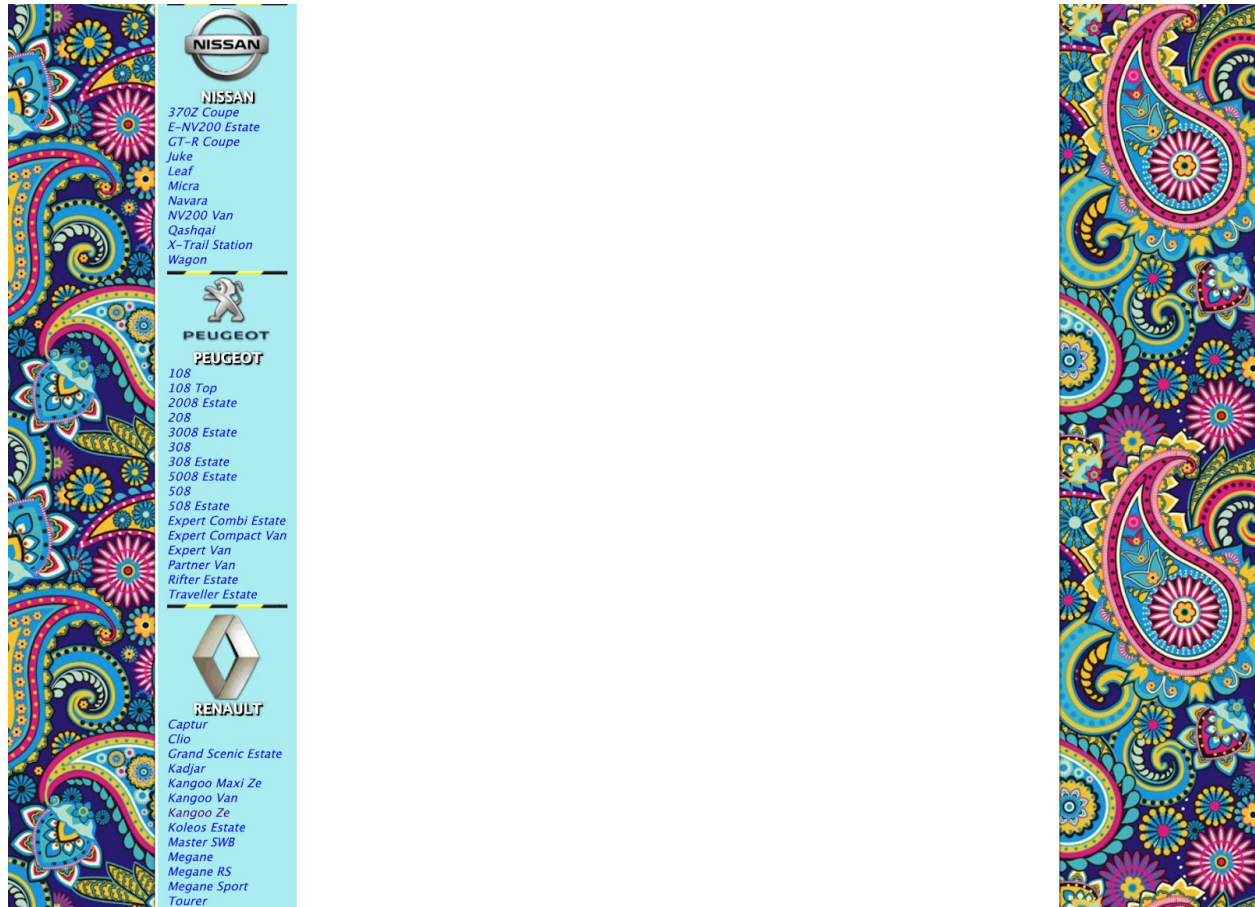


Fig 5. List of car brands on the left continues down (for a while) even while the contents of the main page ends.

As shown in the image above, the creator had opted to list all of the brands rather than have a drop down tab take care of listing all of the brands available. While there was actually a drop down menu with all of the car brands, it was contained in a primitive “filter page” hidden a few pages deep. Many of our user participants immediately tried looking for either a filter page or some search functionality to quickly navigate the information in the page. However, they were confused when they couldn’t find any search functionality and either resorted to 1) clicking through all of the menu buttons or 2) giving up. Those who were lucky found the filter page by clicking on a button called “Full-price list,” which seemed intimidating at first but ended up giving them the functionality they needed to complete most of the tasks assigned with less frustration. Others who were not able to find the filter page early on continuously scrolled up and down, waded through the small text and flashing colors on every page, and clicked all of the buttons until they finally found the filter page, with which they were able to complete their tasks with varied success.

This problem is of high severity, as the unintuitive and overwhelming nature of the site would deter most potential customers who are either confused or uncertain of the credibility of the site. While the uniqueness of the site shows personality, which many of the users had appreciated, the frustration and confusion quickly surmounted any desire to pursue services from Ling’s despite its uniqueness.

Recommendations

From our research, we have uncovered certain aspects of LingsCars that should be changed to improve the user experience, thus not only attracting new customers, but also retaining existing customers.

Ling's current emphasis seems to be on 1) advertising all of the models that she offers and 2) showing her uniqueness. This can be accomplished in the landing page by using all of the titles and colors in moderation. By minimizing the moving parts (GIFS), different titles, and images trying to catch our attention (Electronique!, Rent Now!, Car Leasing Online Service Response Times, etc) and segmenting the landing page into multiple clear sections with different purposes, such as "Popular Cars for Lease," "Mission Statement," "Customer Promise," etc, customer can quickly identify Ling's brand and browse the popular options available before diving deeper into what Ling offers through a robust search functionality.

While Ling has a menu with buttons that help customers navigate the site (Cars, Vans, Customers, etc.), there is no way to search the entire site using only keywords. In other words, customers need to know exactly what they want to search for, or research elsewhere on the differences between different models and options before they can successfully interpret all of the information that Ling gives them. It is unintuitive where customers can find the search functionality or how they can navigate the site quickly. As such, Ling should add two features to resolve this issue: 1) Ling can add a search bar on the landing page for customers who want to quickly search the site using keywords, and 2) add a filter page that may be a standalone menu button, tab, or directly available on the landing page, rather than have it hidden behind multiple buttons. As such, even if the overall design of the website may be slightly overwhelming for most users, they will know how to quickly navigate the site to the options they want.

But even if they are able to successfully navigate around the website, the small text, and non-standardized use of embedded links, drop down menus, and tabs, etc forces users to spend time figuring out what they are being shown rather than just intuitively knowing what it is. For example, one of the tasks was to pick a car from the "Business List." However, the default list (the "Full-price List") that was shown was the "Personal List," which the user wouldn't know unless they read the third bolded title under all of the other titles. They wouldn't know how to navigate to the "Business List" unless they read the sentence "Switch to BUSINESS car leasing prices!" in regular 12 size Times New Romans font underneath the title. The different list should be offered within a drop down menu before the entire page loads, thus indicating to the user that there are multiple versions of the list available. This slight design change can replace all of the small text and contents of the page, thus making it less overwhelming and clearer for the user.

Additionally, the personal proposal form requires an overhaul. Currently there are joke answers that the website will chastise the user for selecting, and the user needs to be able to see the price of their lease before they input payment information. The rest of the personal proposal form's design would benefit from the previous recommendations as well, however the most important recommendation given the personal proposal form would be to enable the user to see their price before they are forced to input payment information.

All in all, it is clear that Ling's brand ties closely with the novelty of her website. However, this trades usability and thus dampens the trajectory her brand can take her. After the necessary functionalities and user flows are designed and set in stone, Ling can go in with moderate uses of her animation, flashy titles, and wacky animation to make it her own.

Discussion

For the most part, the main limitation of our study was our small sample size of 15 users combined with a large range of ages spanning from 20 years old to 46 years old. This sample size did not give us enough information to determine whether or not there was a significant difference in results between younger and older users, and whether this site appealed more to one or the other. Based on the site design, it could be hypothesized that younger people would be more willing and able to use this site given its overly flashy design and somewhat unintuitive navigation, however our results showed that the overall feelings towards the site varied in the small sample size of younger users, making it unclear whether or not there was a significant difference in results between the age groups. In future studies, it could be recommended that we test more people, and divide them into two or three groups beforehand based on age (this could be done using the screener questions) so that we can determine whether or not the site appeals more to different age groups or whether age is not a major factor in determining overall satisfaction with using the site.

Conclusion

Overall, we found that users find the website to be very difficult and confusing to use. Once users found the filters, they found it easier to find the cars that they were looking for, however users in general found the website difficult and confusing based on the layout being unideal and having an abundance of confusing colors and animations. Users also found themselves not very satisfied with their experience based on how much time they had spent looking for what they were looking for given the lack of a search function and confusing layout. Given a design overhaul and fewer distracting colors and animations, the website could be taken more seriously and be easier to navigate.

Appendices

Appendix 1. Team Collaboration

Name	ANALYSIS Each group member's individual analysis
Stephen Zhu	Wrote Introduction Wrote 3 of the 5 Tasks and the Post-Test questions Fixed up the Methods section based on feedback
Max Anderson	Helped Finalize Introduction Summarized Test Plan in Methods Completed KF 2 Wrote Discussion Section
Chairul Karim	Wrote Screener Questions Assembled the Test Findings Spreadsheet Completed the Full Summary for Findings Completed KF 1
Dana Zhu	Wrote 2 of the 5 Tasks Completed KF 4 Completed Recommendation Section
Taylor Denby	Wrote Conclusion Completed KF 3 Assisted with Recommendations

Appendix 2. Full Usability Test Plan

Introduction:

You are in the market for a car, and you have decided that you want to lease instead of buy.
You have just heard about a leasing website called LingsCars.com.

Task 1

You are interested in leasing a car to drive when you go on road trips over the next 3 years and want to get a feel for the typical prices of the current prices (in the UK). Use lingscars.com to find a SUV you can rent/lease for 3 years in the price range of 200-300 pounds. Make sure the car has warranty.

Task 2:

You are interested in leasing a car and have done the research so that you have a specific car in mind (Nissan X-Trail Station Wagon). Use lingscars.com to find that car and begin the process of leasing it.

Task 3:

You recently realized the effects of CO2 emissions and want to start doing your part to help reduce pollution. Because of this, you decided to purchase a new electric car to use for business purposes. Use lingscars.com to find an electric car with the lowest CO2 emissions in the business list.

Task 4:

You're unsure of the quality of either the cars or the reliability of the service that Ling's Car could offer you. Navigate to the Customer Review page(s) and determine an overall accurate sentiment that customers have of Ling's Cars overall as well as the Renault Kangoo Ze cars.

Task 5:

You're on a budget and would like to rent the cheapest car. Find the cheapest car on the site and begin the process of leasing it.

Post-Test Questions:

1. I could easily use the filters to find the cars specified (Likert Scale, strongly disagree, disagree, neutral, agree, strongly agree)
2. How likely are you to use this website if you are looking to lease a car? (1 to 10 scale)
3. It was easy to navigate the websites to perform the tasks (Likert Scale, strongly disagree, disagree, neutral, agree, strongly agree)
4. What was your overall impression of Lingscars.com? (Written response)

Appendix 3. Usability Test Recordings

Test	Video File link (Google drive)
User Test 1	https://app.usertesting.com/v/664f2b15-9095-4a13-bee0-9fb6e9250812?encrypted_video_handle=186e2d90-611d-4940-85ec-6d643501628c&shared_via=link
User Test 2	https://app.usertesting.com/v/3d706529-04e3-4df3-8ca0-98e824ba09a8?encrypted_video_handle=3c9ca1b9-9893-4576-bcc2-cbbc00815784&shared_via=link
User Test 3	https://app.usertesting.com/v/354c58bc-6b80-4754-97b2-f193b2ca8b0f?encrypted_video_handle=6fd2d349-a75d-40f2-b27e-27fe8d3d338

	1&shared_via=link
User Test 4	https://drive.google.com/file/d/1A-fDXSpUs_R5VJsHCK2MjNFgryfjUs8H/view?usp=sharing
User Test 5	https://drive.google.com/file/d/1DV2-HHTdp3H1trkfz5m5809J1ljDW PQW/view?usp=sharing
User Test 6	https://drive.google.com/file/d/1mtAEVSUyhr9c0XzFuJJ_PrrDtqjdO6sO/view?usp=sharing
User Test 7	https://app.usertesting.com/v/afa9b4cb-2cb9-4ac3-8788-e5b14ae190c8?encrypted_video_handle=20dbe06a-afaf-472f-b6f1-f094fd029d2a&shared_via=link
User Test 8	https://app.usertesting.com/v/7de80fc2-8b29-4f0a-a6e4-f859198c216f?encrypted_video_handle=23536837-c2e9-4228-bf22-b90846361498&shared_via=link
User Test 9	https://app.usertesting.com/v/e355ee51-0499-4e8c-a288-2cd4610cbc38?encrypted_video_handle=5c98ebab-9a0e-4b7f-861a-bb9c915fbf7a&shared_via=link
User Test 10	https://app.usertesting.com/v/ec721ec5-728c-4a2a-a3d7-e892228a496a?encrypted_video_handle=cda9feea-7ecc-4805-b925-c1b0e2a720cf&shared_via=link
User Test 11	https://app.usertesting.com/v/0df5100b-0454-4cdb-925e-35079ff0290d?encrypted_video_handle=555ada31-08f9-4b01-a25c-5c0da7d396be&shared_via=link
User Test 12	https://app.usertesting.com/v/bf6c466a-6b86-440a-8e4e-68c5aa6f4d71?encrypted_video_handle=26ffa637-e4c5-4602-8ad7-06c876b32edf&shared_via=link
User Test 13	https://drive.google.com/file/d/1rTI5MSfBzTjAN4gJuBAUDWyAH7Fg6Mcx/view?usp=sharing
User Test 14	https://drive.google.com/file/d/1wzWPQAXUn3JnSkeIoZm-cwQhK2uH7Lmu/view?usp=sharing
User Test 15	https://drive.google.com/file/d/1q4UIQjJfuYhIL42Z10yPv25mm81cmbg4/view?usp=sharing

Appendix 4. Questionnaire Responses

Question	Q1: I could easily use the filters to find the cars specified.	Q2: How likely are you to use this website if you are looking to lease a car?	Q3: It was easy to navigate the websites to perform the tasks.	Q4: What was your overall impression of Lingscars.com?
User 1	Disagree, It was difficult to find the filters initially, They were not in an intuitive place. Once i found them, all of the searches were easy to navigate	I struggled with the reviews, I couldn't find anything about the company or the cars. It would have made sense to put reviews of cars on the respective cars pages	Difficult to navigate	4 out of 10
User 2	Strongly disagree	Terribly unlikely	Unreasonably difficult	Would not recommend
User 3	Disagree	Unlikely. Looks gimmicky and not trustworthy at all. Very confusing site too	Difficult	Did not like it very much. Would not use it again
User 4	5/5 (Strongly Agree)	4/9 (Maybe, but probably not)	2/5 (Disagree)	It's a funny looking website and it's clearly got charm and character. Seeing it has reviews in the Guardian and other respected newspapers is reassuring, as well as the reviews but generally the site is too difficult to use.
User 5	3/5 (Neutral)	7/9 (Probably)	2/5 (Disagree)	Interested. Colorful. Reminds me of websites from when the internet just started.

User 6	3/5 (Neutral)	5/9 (Neutral)	3/5 (Neutral)	The positive aspects of the website that I enjoyed were the originality, uniqueness and personality. The things that I thought could be improved somewhat were the navigation of the menu and filters, as well as very small text in places and sometimes an overwhelming amount of information which made it easy to lose focus.
User 7	disagree	2/10	disagree	more of an artwork than a functioning website.
User 8	Neutral as it didn't feel as easy as it could have been. I occasionally missed a filter (like order by price, so maybe more focus on those)	I would definitely come back to do a proper search! 7	Disagree, it felt hard to find a lot of things and there was no search bar.	Fun, honest, interesting!
User 9	strongly disagree	Not at all (1/10)	strongly disagree	Overall impression was that it is not a very reliable and professional website. Seems fake and it is very hard to use
User 10	Agree	1/9	Strongly disagree	"It comes across as some sort of parody website"
User 11	Agree	4/9	Disagree	"Overall found it was a quite humorous website. I quite liked that aspect of it. I've never visited a site like this before, ever. And I'm a web developer. With this background and graphics, I'm a person who likes minimalistic designs, so I find it quite overwhelming with so many different colors and titles and a little bit confusing. Obviously the

				prices seem quite reasonable and there's quite a bit of options of cars. I'd like to read the testimonials and reviews, but I couldn't find them. I'd like to know more about the site before ordering a car."
User 12	Neutral	2/9	Disagree	"Very gimmicky, not sure if I can trust this website. Very confusing to the eyes as to where the important information was in regards to the actual process of leasing the car."
User 13	1/5	1/5 Not at all likely. Would actively avoid because it was frustrating to use. Came across like the service might be unprofessional	1/5	It was an absolute mess visually - too many gifs and pointless images, flashing images/text, too busy for me to properly navigate the pages and locate the important parts
User 14	1/5	1/5 very unlikely. the site comes across as being quite jokey.	1/5	Colour scheme was too crazy. The graphics were too overpowering. came across as unprofessional..
User 15	1/5	3/5 reviews are good just needs the search facility to be improved further.	2/5	It was a bit busy on the front page and the main search facility wasn't on there.

Appendix 5. UserTesting Findings

Collated spreadsheet of our key findings and other information:

<https://docs.google.com/spreadsheets/d/15kx9P2M9iFoi3DC59YdoVVJ9SlC2O9XEB4zz89IqRUs/edit#gid=0>