

Barter King



USER STORIES AND USER STUDY PROPOSAL

Barter inc.

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1 Introduction

This document mainly consists of three parts, which are user stories, user study proposal, and expected results. The user stories define a set of goals of how our application “Barter King” will be used and provide insight into the implementation stage such as the function of reverse image search, the application of coupons from different APIs, etc. It presents a set of design requirements of the system to help verify if we are on track. The user study part involves three parts that are user study implementation schedule, user study validation and testing procedure, and division of labor and responsibilities. It provides a feasible schedule for implementing the user study and also breaks down the implementation into pre-study questionnaires, in-study tasks, and after-study questionnaires so that we can get feedback from the participants and make improvements on our application. Finally, the expected results include the collection of quantitative and qualitative data and provide the plan on how we will implement changes to the product base on the test results.

2 User Stories

2.1 Complete User Stories

- As a customer, I want to choose my favorite online retailer so that I can buy the product from my favorite retailer.
- As a customer, I want to search for an item by using images search so that I can find the item I want simply by taking a photo.
- As a customer, I want to view the item’s photo and its specifications so that I can have a basic understanding of the product.
- As a customer, I want an application that can search through the website and find the best deal for me, so I can save time and money.
- As a customer, I want to find and use the available coupons so that it can lower the price of the product and thus saving money.
- As a customer, I want to know the related products that the customers would choose from so that I can choose the most suitable option.
- As a customer, I want to know all the delivery options a product has so that I can choose the most suitable one that fits my schedule.
- As an online retailer, I want my products to be found on price comparison websites so that I can promote the sale of products.

3 User Study

3.1 User study implementation schedule

- How many participants and how long do you expect the evaluation to take? In determining times, be realistic about the time available to conduct these studies, noting that you will also have to participate in others' studies.
 - Including four of us, we need four more participants to conduct the study for a more unbiased study result. Overall, we will need eight participants for our user study and the study will take no longer than three hours in total.
- Where and when will you conduct the studies? The expectations are that most will be in the lab, but you may propose additional locations/times.
 - The study will be conducted in Zoom during the lab hours. If we have additional participants to conduct the studies, we will have the study after the lab.
- What pre-study questions will you ask the user?
 - Do you usually go online shopping or in-store shopping?
 - Have you ever used google shopping or similar price comparison websites?
 - What kind of eCommerce websites do you usually use?
 - While doing online shopping, do you search for the product from a particular retailer or search for the product at its best price?
 - What is your favorite online store?
 - What kind of web browsers do you use in your daily life?
- What tasks will you have the user do? How much time will they take?
 - Task 1: We will ask the users to choose a web browser they prefer to start our program.
 - Task 2: We will ask the users to search the item they are willing to purchase by entering the text in the search box.
 - Task 3: We will ask the users to search the item they are willing to purchase by inputting an image to the search box.
 - Task 4: We will ask the users to filter the products by checking the seller and price checkbox in a way they prefer.
 - Task 5: We will ask the users to sort the products in a way they prefer, either sorting by review score or by price.
 - The tasks will take five to ten minutes in total.
- What will you measure from the user during the tasks? How will this information be collected?

- During the tasks, we will measure the preference of users choosing the web browser, their inclination to search the item either by text or by image, their preference in the sellers, their acceptance of the price range, and their decisions on how the products will be sorted.
- The information will be collected by saving their choices in our program so that we can load the data later. It can also be collected by doing a questionnaire on how they perform all the tasks during the study.
- What after-study questions will you ask the user?
 - Is our program easy to use?
 - How is the overall look and appearance of our program?
 - Do you find all the information you want for the product?
 - Is there anything missing in our program?
 - What can we do better? Any suggestions?

3.2 User study validation and testing procedures

The user study will basically consist of three parts, which are respectively the prestudy questionnaire, the in-study user tasks, and the after-study questionnaire. The prestudy questionnaire includes six questions, aiming at having a basic understanding of users' shopping preferences, past online shopping experience and choices of the web browsers to use. With this information, we will perform the in-study user tasks which will last no longer than ten minutes. There are five in-study user tasks, each of which asks the users to test different functions of our program such as inverse image search, ranking algorithm, and sorting function. At the same time, we will record the users' responses and save them in our program for the later collection of data. The after-study questionnaire will mainly focus on the user experience with our program and seek suggestions for improvement. The five after-study questions aim at collecting opinions about our program convenience, program appearance, program functionality, and program completeness.

3.3 Division of labor and responsibilities

User Study Proposal due on Friday, April 10 - Siyuan Yang
 Surveys/questionnaires due on Sunday, April 12 - Jessica Lefkowitz
 Testing instructions due on Sunday, April 12 - Jessica Lefkowitz
 Determine test subjects due on Sunday, April 12 - Sunil Babu
 Conduct test on Tuesday, April 14 - Entire team
 Data collection and organization due on Thursday, April 16 - Humza Jaffri

Meeting to discuss data due on Thursday, April 16 - Entire team

4 Expected Results

For the quantitative data, we are expecting the preference of users choosing the web browser, their inclination to search the item either by text or by image, their preference in the sellers, their acceptance of the price range, and their decisions on how the products will be sorted. For the qualitative data, we are expecting the user feedback on our program convenience, program appearance, program functionality, and program completeness. Based on the feedback from eight participants in our user study, we will implement the changes to our application such as changing the general appearance, adding more seller options, and applying more APIs to our application.

5 References

No documents were used for this part of the project that needs to be referenced. Some possible websites that will be used for assistance in the development will include <https://stackoverflow.com/> and <https://www.atlassian.com/agile/project-management/user-stories>. All references will be cited in the location that they are being used.