



ENGL 421

STEAM USABILITY REPORT

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Executive Summary

The Steam website (<http://store.steampowered.com>) is an online shopping website that delivers a variety of games directly to one's desktop. The Steam website offers tag filtering system that narrows game searches based on user-defined tags. The website also offers a powerful search tool and also has an easy process of purchasing. Our group wanted to determine if these features work easily and effectively. Therefore, the group conducted a usability test on the Steam website to find the performance of these features and procure feedback on the general layout and accessibility of the website. We conducted the usability test on five participants. All of these participants were students under the age of 23. We assigned specific tasks for the participants to complete that would provide the group with feedback on the abovementioned features.

The feedback we received was mostly positive. All the participants liked the visual aesthetic of the website and how well partitioned the sections and subsections were. The participants were able to perform the task relating to the search tool effectively, and commented that the search tool does a good job sorting the key words. The task assigned to find the effectiveness of the tag filtering system had mixed reviews. While some participants were able to locate the game through the use of the tag filters, others struggled to become accustomed to them and were not be able to find the game without the help of the testers. Purchasing the game was an easy task and everyone was able to perform the task quickly. The participants also added that purchasing a game in the Steam website was as easy as purchasing in online shopping stores like Amazon, eBay, etc.

Towards the end of the usability test, the participants provided suggestions about improving the user experience of the website. Most of the participants suggested improving the tag filtering system as they had a tough time finding games using this tool. Another recommendation was making design changes to the homepage to keep similar content together. While the suggestions provided by the test participants could be helpful to make improvements to the website, the general consensus regarding the layout and the usability of the Steam website was positive.

Introduction

Steam is a digital distribution platform created by Valve Corporation. It functions as an online storefront, offering digital rights management and multiplayer capabilities for games, while selling other products such as hardware, movies, and other non-gaming software. Steam is accessible by any internet browser, and as a client [1]. Steam's interface has a myriad of searching and filtering options to help the consumer find the product that they are looking to purchase. The layout of Steam is divided into several sections to categorize their search tools, new releases, discounts, and other site resources.

Corporations like Amazon, iTunes, and eBay, that primarily generate their revenue from online storefront interfaces, strive to provide a pleasant and easy user experience such that the user needs are fulfilled quickly, and satisfactorily. The objective of our usability evaluation is to determine the quality of user experience using the current iteration of the Steam storefront to browse for and purchase a product. We intend to test the search engine, tag filtering system, and the entire purchasing process as a whole to see how effective these tools are to users in achieving their objective. We also developed three different scenarios to encompass the range of different user needs such as searching for games and purchasing them. We deliberately avoided creating scenarios that required intimate knowledge or extensive experience with the website like the community forums or the workshop. Through this evaluation, we want to be able to identify the strengths and weaknesses of the interface tools. In the following sections, we will be describing our testing methods and scenarios in more detail.

Methods

For the usability test of the Steam website, we adapted two different methods of determining the user experience. The first method we applied was testing, where we assigned specific tasks within the website for the user to complete. The tasks assigned would help the group determine the performance of features like the search tool, the tag filtering tool and the process of making a purchase in the website. The second usability test method we applied was interviews, where we asked questions to the participants on their experiences using the website. We also asked questions regarding the performance of the features we asked them to use. Before conducting the usability test, we gave the participants two-three minutes to get familiarized with the website if they were not familiar with it already.

The group conducted the usability test on a total of five participants. These participants were Purdue students and were under the age of 23. Among the five participants, four participants were not accustomed to the Steam website, while one of the participants was an active Steam user. We performed the usability test on new Steam users to find the performance of the website and its sophisticated features, like tag filtering system, among the new users. We needed an active Steam user as a benchmark to the new users and also get feedback of the features from a user who has had previous experience.

Testing

We provided three different scenarios for the testing method. Each scenario challenges users to access different features of the website. After the user attempts to utilize the different features, we will have a better understanding of the usability of the website.

- Scenario #1: The tester provides a brief description of a game without providing any other information about the game to the user. Participants will use the search tool to find the game. The effectiveness of the search tool is a key resource we will be doing our usability test on.
- Scenario #2: The tester provides the name and description of the game. Using the information provided, the user will have to search for the game without using the search

tool. Steam has a feature to narrow down searches by filtering tags. The user-based tags are provided in the description of the game. Each game has its own page that allows the customer to see related tags associated with the game (See Appendix A). We will be looking into the effectiveness of this 'tag-filtering' feature.

- Scenario #3: We allow the user to make an attempt to purchase a game of their choice without giving hints. The steps leading into buying a game can be confusing and this will allow us to see if this is true. We used the feedback provided to compare the purchasing experience to that of other online shopping websites. To actually make a purchase, the user required Steam login credentials. We provided the participants with our own Steam login credentials so they did not have to make their own account to proceed with the process.

Interview

After the user completed all the assigned tasks, the group conducted an interview to ask the participants on their experience. The first set of questions the group asked pertained to the layout of the page and the accessibility of information on the website. After receiving the feedback on the layout and accessibility of information, the group asked questions regarding the features they used to complete the tasks assigned. At the end of the interview, we asked the participants to give comments and make suggestions on the website's user experience. The data collected throughout the interview as well as the task-specific tests were recorded and discussed among the group. The results observed throughout the test are presented in the results and discussion section below.

Usability test time stamp

Pre-test: Informed Consent Form

(0:00 - 3:00): Subject has time to explore and get comfortable with the interface.

(3:00 - 4:00): Scenario #1 is given

(4:00 - 6:00): Scenario #2 is given

(6:00 - 8:00): Scenario #3 is given

(8:00 - end of interview): Interview questions

Results and Discussion

Our interviews suggest that Steam is an excellent platform. The participants expressed this verbally through the survey and interviews. Though our new users needed a little guidance during the scenarios, they felt more comfortable using Steam in the end. The only participant who did not need any assistance throughout the survey was the experienced user. It took him six minutes to complete the entire survey when it took at least twelve minutes for the rest of the participants. This gives us the assumption that experienced users have no difficulty using the website and that the problems we faced only affect inexperienced ones.

User Feedback

The participants were raving about the effectiveness and the ease of using the search tool as well as the process of making purchases in the website. The participants hailed the term 'user-friendly' when talking about the performance of the search tool. The group only provided the participants with a vague description of the game (See Appendix B) and the participants were able to perform with ease using the search tool. The participants also found the process of making a purchase a very easy task. The Steam website requires Steam login credentials to checkout. We provided the participants with our Steam accounts so that they didn't need to create a new one. The participants looked through the payment options and compared their overall purchasing experience to that of other online shopping websites like Amazon, eBay, etc.

However, majority of the participants struggled to find the game using the tag filtering system. The game's page in Steam provides the user with user-defined tags that can be referred to search the game or find similar games. The experienced user was able to find all the tags (See Appendix A) required to search the game in less than a minute. One of the participants, who was a new user, was able to find the tags after looking at the page extensively. However, the rest of the participants struggled to find the tags without the help of the testers. When the participants were looking at the tags, they observed inconsistencies with the tag filtering system on the homepage and the games section. Even the experienced user noticed these inconsistencies.

Some participants also observed some irregular flow of information on the Steam homepage. They observed a break between games subsections and showed Steam hardware, Steam curators, etc. before going back to other games subsections. The participants thought that was the end of the page before noticing the rest of the subsections for games. The participants added that it could confuse any user. While there were aspects to the website that the participants were not enthusiastic about, they did provide positive feedback during the interview. The results that the group observed during the interview can be found in the section below.

Interview Results

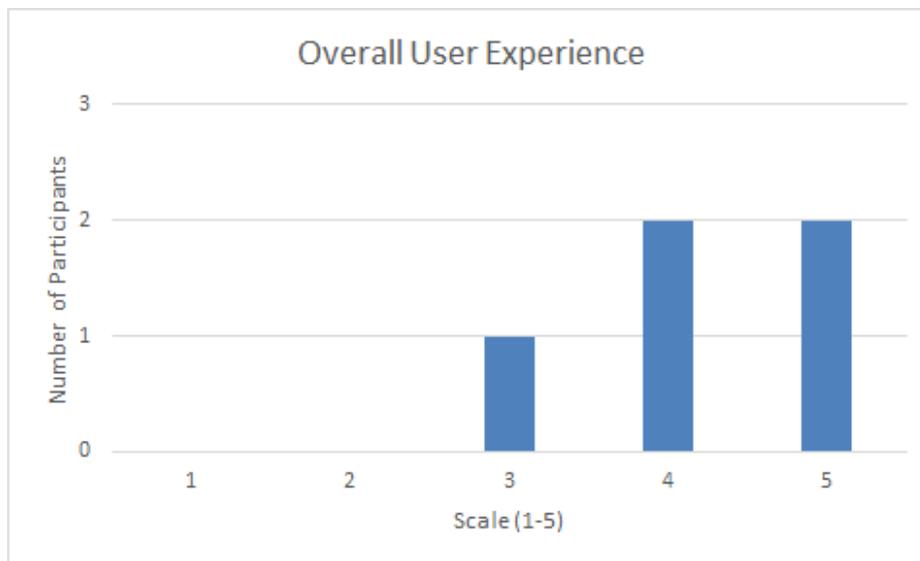
When asked about their experience with their brief session with Steam, the reviews were rather unanimous regarding its organization of its voluminous content. The new users did not feel overwhelmed by the layout or position of the various menus and tools. There were comparisons to the more identifiable online storefronts like Amazon. Most of the suggestions for change involved the tag filtering system or the restructuring of similar content on the home page.

All of the users utilized the search engine well, but there was a split of opinion with the tag filtering system, with the experienced user being the only one that did not struggle initially. What this indicates to us is that it seems to be a tool that needs time invested to be able to properly utilize the tool.

The purchasing process echoed similar opinions across all of the participants whom all said that it was incredibly easy to purchase the game, because the few necessary steps were easy to

identify and we assume that subconscious knowledge of the more ubiquitous storefronts aided them in this process. This was reflected in the interview as every participant gave a 5 on ease of purchase. (See Appendix B)

The overall navigation scores of the website hung around the upper end on a scale of 1-5. Despite some difficulty with the tools, none of the participants experienced any form of disorientation or lack of clarity to their navigation through the website.



The graph refers to the question asked to participants during the interview part of the test. The question was, “On a scale from 1-5, with 5 being the highest, how easy was it to go through the website?” (See Appendix B)

Conclusion

Most of the participants found the Steam platform to be well-organized, comprehensive, and easy to use. Having a centralized website to access thousands of games is key to many computer gamers, if not all of them. Even though there were only five people interviewed, we received very valuable responses. The feedback we got suggested that the main concerns with the Steam website were the search filters and the layout.

While experienced participants had little to no trouble completing the tasks assigned, several new users needed a little guidance from the interviewer to highlight hidden or obscure features of the tools that they were provided. New users either sought help or tried to exhaust its capabilities when the scenario required for them to use the tool. The tag filtering system had varying degrees of difficulty when it was being tested by the users. We recommend that the browse by genre tab on the left side of the website should be persistent through the entire game section of the website. By doing this, it allows swift transition of genres without resetting tags.

Multiple people that we surveyed also had some comments about the layout of the initial Steam webpage. Though comments were very positive about website when it opens up, there were some problems once users scrolled down. The sections “Steam Hardware” and “Steam curators” seemed very out of place. Our team suggested shifting the sections below the rest of the content. This would help with the flow of the website as people who view the website are mainly customers.

Limitations

The results of the usability test should not be taken with absolute confidence in its objectivity. The limited sample size does not allow us to draw a strong conclusion from the study. We cannot justify that the opinions and suggestions gathered from the participants are similar to actual users of the Steam website. In addition, majority of our users are new to the website so difficulties that they faced would only happen to a small percentage of regular Steam users. Although participants appeared interested in completing the survey, we cannot guarantee that they were invested in their task.

Appendix

APPENDIX A: References to the tag filtering system



The image on the left is a portion of a page when a customer clicks on a specific game. It lists the user-defined tag and other tags associated with the game. The right image is the tag filtering section used in Steam to narrow the searches.

APPENDIX B: Test Instructions

1. Give user the Informed Consent Form to sign
2. Tell participant to open the link: <http://store.steampowered.com>
 - a. Provide 2-3 minutes for the user to look around the website.
 - b. Inform the user to express and communicate every thought
3. After observation, give Scenario #1
 - a. Instruction: Give a brief description of a unique game to user
 - i. "Find a game that includes soccer and cars"
 - b. If stuck, tell the user that you can click on the game and you can find videos and photos of the game
 - c. Feedback from Scenario #1
4. Start Scenario #2
 - a. Show them the page: <http://store.steampowered.com/app/262120>
 - b. Instruction: Without using the search tool or scrolling to the next page, the user must be able to find the requested page shown in section 4a.
 - c. Interviewer may provide hints to the user if he feels necessary
 - d. Feedback from Scenario #2
5. Start Scenario #3
 - a. Instruction: The user will now be asked to attempt to buy a game of his/her choice
 - b. Feedback from Scenario #3
6. Interview:
 - a. Describe your experience.
 - b. Describe the layout of the website, would you change anything.
 - c. How accessible was the information?
 - d. How effective was the search tool and was the other way of searching also useful?
 - e. On a scale from 1-5, 5 being the highest, how easy was it to purchase the game?
 - f. On a scale from 1-5, how easy was it to go through the website?

References

- [1] "Steam (software)." Wikipedia. Wikimedia Foundation, 7 June 2016. Web. 08 June 2016.
- [2] "Welcome to Steam." Welcome to Steam. Valve Corporation, n.d. Web. 08 June 2016.
- [3] "Rocket League." Rocket League. Valve Corporation, n.d. Web. 09 June 2016.
- [4] "Toy Soldiers: Complete." Toy Soldiers: Complete. Valve Corporation, n.d. Web. 08 June 2016.
- [5] Steam. Steam Logo. 2003. Steam. Web. 10 June 2016.