MEMO

To: Dr. Jonathan Arnett

From: Kendria Miller, Natalia Navaroli, Joi Palmore, and Shania Reese

Date: April 19, 2023

Re: Usability Test Project Plan

Hello Dr. Arnett, we are writing this memo to discuss our plans for our usability project involving our app of choice, TransLoc.

To begin, we are testing the app TransLoc as a companion to Kennesaw State University (KSU)'s Big Owl bus system. We believe that testing the interface and functionality of the app instead of accuracy may be a better approach considering the time constraints. The usability test will focus on the overall usability for both new and returning users. Then, focusing on any improvements that could be made.

Additionally, we would like to investigate how simple it may be for the participants to complete tasks such as choosing a route, tracking a bus, and finding the next scheduled bus. As they do these tasks, we would like the participants to implement the Think Aloud Protocol (TAP) during the process then complete the System Usability System (SUS) questionnaire after the testing is done.

By using these tasks and tests to experiment on TransLoc, these main points will highlight any issues the participants will encounter with the program. As the data will include real data from prior, current, or new users who use iPhones or Androids, the developers would be interested in knowing what improvements can be made to better serve their busy clientele.

Scheduling

Our schedules align nicely for us so doing the questionnaires, testing, and analyzing data can be accomplished in a timely manner. As planned, if two members cannot participate during testing day then two will be fine as a moderator and data logger are necessary.

Since there is a bit to get done, we estimate that the project will be done within two weeks. Along with the usability testing, we will also need to compile the results into an IMRaD report after we have received all of the data. It will be simpler to compare and contrast the data between participants with differing opinions on the app. Including their moods could also help diversify the results as well since mood can skew the data just a bit.

Of course, using that time to create a decent PowerPoint to show our results and audio or visual representations for the testing sessions.

Testing

To ensure that everything goes accordingly, we have decided to find participants by recruiting students through various methods such as KSU club servers, classmates, and such on the Marietta and Kennesaw campuses. For our test questionnaires we plan to do the following:

- First, a participant screening test and consent form will be sent out to ensure the participant is a good candidate.
- Second, on the day of testing, we will provide a pre-test to gauge the participant's mood, inform them of the consent then following up with TAP during the testing session.
- Third, we will provide the participants with an SUS form so they can detail their experience with using the app and its functionality.
- Fourth, we will provide a post questionnaire to assess the usability test as a whole.

Surely, there are quite a few questionnaires, but they will be brief so they aren't overwhelming.

For better flexibility, the testing location will be a room so all possible testing can be conducted without any interruptions or unexpected circumstances. The participants could also find that it will fit their individual schedules since the testing is estimated to be between 20 to 30 minutes. This will also allow us to see if a participant will have availability overlapping with at least two group members so the data isn't skewed.

Utilizing our phones as recording devices for both data and participants will be useful since they are well equipped for our simple usability test. Furthermore, the participants will need to use their phones to download the TransLoc app so they can perform the testing. No complex equipment is required.

At the end of the test, we will provide cookies (or possibly another option) as an incentive to thank the participants for their time.

Conclusion

In overview, conducting our usability test on TransLoc with various KSU students will allow us to observe the app's interface and overall functionality. We plan to issue the participants roughly four questionnaires so we can gather as much vital data as possible. During the testing, we plan on utilizing SUS and TAP for more detailed perspectives on their experiences. After we gather the data, we will analyze then compare the results so we can develop some sort of conclusion in the form of an IMRaD report for the developers of TransLoc.

Furthermore, considering the simple nature of the project, we believe it will be simple to accomplish despite the time constraints. There are still changes that could be made to the plan but for now the roles and testing dates are still to be determined.

Moreover, we appreciate you taking the time to read our brief memo about our plans for our usability test on TransLoc. If you have any questions, please contact us at our dedicated line ###-###-####. We look forward to hearing any feedback from you, thank you.

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