SENG 310 - Assignment 7
Evaluation Plan Proposal for Good Money

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1 Objectives of the study

The basis of this evaluation plan will be focused on investigating efficiency and ease of use of the Good Money app with participants in the app's target audience. Specifically, we will be looking at these cases while the user is working alone, as the app will mainly be used individually. Some examples of these cases will include observing how easy it is for the user to set up and adjust an existing budget plan, whether users understand what the graphs and pictures in the app represent, and if checking expenses and available funds is efficient and easy.

2 Participants

The types of participants that we will involve will mainly be Good Money's target audience. Our participants will include any student who is currently studying at the University of Victoria in any year and faculty. With these types of participants we hope to have a variety of responses. The participants will be working alone on the given tasks (see Measures for more details and why), and each researcher will have one participant they will be studying for this evaluation, giving a total of 4 participants.

3 Setting

This study will take place on campus in a controlled environment, and it each session is expected to take 45 minutes or less. This setting was chosen for its ease of access, and it is where students spend a majority of their time.

4 Tasks

Each participant will perform the following tasks:

1. Set up a profile
2. Set up the first budget plan
3. Adjust a currently existing budget plan
4. View
    (a) The amount of money left in the "Food" category for the week
    (b) The amount of money left in the "Gas" category for the week
    (c) The proportion of budget allocated to the "Other" category
    (d) The net balance for the month in full screen
    (e) The expense breakdown by category in full screen
5. Sign in and logout
6. Go to settings and back to Main page

These tasks were chosen to give a full walkthrough of the main functionality of the app. Tasks 1) and 2) are pre-requisites to use of the app, and 3), 4) and 5) are tasks most users will be performing on a regular basis.

5 Data

5.1 Quantitative Data

For quantitative data, we will be observing

1. the time it takes to complete each task (by comparing the time it takes for an experienced user to a new user),
2. the number of unnecessary taps to complete each task, and
3. the participants' response on the System Usability Scale (SUS).

5.1.1 System Usability Scale (SUS)

The SUS (Brooke 1986) is a standard questionnaire tool for measuring the usability of a system using 10 items on a Likert scale ranging from strongly agree to strongly disagree. The 10 items on the SUS we will be using are:

1. I think that I would like to use this system frequently.
2. I found the system unnecessarily complex.
3. I thought the system was easy to use.
4. I think that I would need the support of a technical person to be able to use this system.

5. I found the various functions in this system were well integrated.
6. I thought there was too much inconsistency in this system.
7. I would imagine that most people would learn to use this system very quickly.
8. I found the system very cumbersome to use.
9. I felt very confident using the system.
10. I needed to learn a lot of things before I could get going with this system.

A recent empirical evaluation of the SUS offered the following recommendations for interpreting SUS scores: "products which are at least passable have SUS scores above 70, with better products scoring in the high 70s to upper 80s. Truly superior products score better than 90. Products with scores of less than 70 should be considered candidates for increased scrutiny and continued improvement and should be judged to be marginal at best" (Bangor et al., 2008). The averaged SUS scores will be evaluated according to these guidelines.

5.2 Qualitative Data

For qualitative data, we would like to expand on some of the responses on the SUS by having a more open discussion on a few of the points. In particular, we would like to discuss with the user

1. what were the things that made it easy (or difficult) to set up an account and budget plan,
2. what made them feel confident (or not) about setting up an account and budget plan,
3. what parts of the graphs and pictures in the app made sense (or not)

As this is more of a natural discussion about the usability app, we hope that both the researcher and participant have more spontaneous questions and feedback that will be recorded during the evaluation.

6 Measures

Users will be instructed to complete the tasks listed in section 4. The verbal protocol to be used will be natural observation. This measure was chosen because Good Money is an individual financial planning app intended to be used solely by one user. Although we will not have insight into the users' thoughts at the time of the task, the post discussion will allow us to probe users' thoughts in a way that is sensitive to their performance in a natural context. Allowing the user to complete each task without assistance in the way an ordinary naive user would will tell us about the efficiency and ease of learning in the app's intended

context of use.

As participants complete tasks, the researcher will record the time it takes to complete each task and the number of unnecessary taps. After completing all the tasks, the participant will fill out the SUS questionnaire regarding various tasks (this is done after all tasks so as to not interrupt the user for each task). Lastly, the researcher and participant will have a "post interview" open discussion about general usability performance using the questions in the Qualitative Data section.

References

References

[1] Brooke, J. (1986). "SUS: a "quick and dirty" usability scale". In P. W. Jordan, B. Thomas, B. A. Weerdmeester, & A. L. McClelland. Usability Evaluation in Industry. London: Taylor and Francis.

[2] Bangor, A., Kortum P., Miller J. (2008). An Empirical Evaluation of the System Usability Scale. International Journal of Human-Computer Interaction, 24(6), 574-594. DOI: 10.1080/10447310802205776