Research & Development 1: Usability Research

June 8, 2016

In this assignment you will be conducting a usability test of an app developed by your fellow students.

1 Instructions

1.1 Test Objectives

You will not be able to test thoroughly *every* aspect of the app. You should therefore create a few test objectives.

These objectives pertain to certain aspects of the app. For example:

- How well is the user able to navigate through the app?
- How quickly does the user learn to use the app's main functionality?
- How quickly does the user understand the app's purpose?
- How helpful is the tutorial?
- How useful is the search function?

Derive the test objectives from the description the developers supplied to you. If this description falls short and you are not able to extract several suitable test objectives from it, look to Whitney Quesenberry's 5Es[1] or Nielsen's ten heuristics[2] for inspiration. Describe your chosen objectives clearly, and describe *why* these objectives are important for the app.

1.2 Scenarios

Once you have established the test objectives, it is time to describe the scenarios a tester will go through to put these objectives to the test. Make sure your scenarios are relevant, described in detail, and formulated in terms that a tester unfamiliar with the app can understand.

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[1] Quesenberry, W. (n.d.). Using the 5Es to Understand Users - Whitney Interactive Design. Retrieved June 3, 2015, from http://www.wqusability.com/articles/getting-started.html

[2] Nielsen, J. (1995, January 1). Nielsen Norman Group. Retrieved April 22, 2015, from http://www.nngroup.com/articles/ten-usability-heuristics/

1.3 Role Distribution

Make sure, before you get to the actual testing, the roles each person in your group will fulfill are clear. For example, one person will talk to the tester, explaining how the test will work and what is expected of them. Another will observe the tester and the app, taking notes on how and where the tester runs into problems. Yet another will record the tester (at least audio, but video is possible too).

1.4 Thinking Aloud Testing

When everything is set up, you conduct the thinking aloud test.

> **Definition:** In a thinking aloud test, you ask test participants to use the system while continuously thinking out loud — that is, simply verbalizing their thoughts as they move through the user interface.[3]

A thinking aloud testing session is rather straightforward. Once the tester is given the tasks to perform, you simply let them (try to) fulfill these tasks. Note where the tester runs into problems. If they stop talking, politely remind them of this.

Record the testing session. You can do this with your cellphone.

When writing the report, use fitting quotes to illustrate the session. When the tester is having problems, (or the opposite: if the tester is having fun), describe this and provide suitable quotes from the recording.

1.5 Stimulated Recall Interview

After the thinking aloud session, discuss in private with your group members which issues have surfaced. You will then discuss these issues with the test person, and have them recall why they ran into a problem and what they did to recover from it.

Again, record the interview. This can assist you in finding and describing the issues formally afterwards.

1.6 Conclusion

Answer the research question (in terms of test objectives). The conclusion should clearly and logically follow from the collected data.

1.7 Future development

Once you have determined the usability issues in the app, you should be able to make suggestions for improvements. Apply your knowledge of usability aspects here to solve the problems!

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[3]Nielsen, J. (2012, January 16). Nielsen Norman Group. Retrieved June 1, 2015, from http://www.nngroup.com/articles/thinking-aloud-the-1-usability-tool/

2 Product

Hand in a report of the following structure:

- Title & Authors (groupname)
- Introduction (to both app and report)
- Method
- Results
- Conclusion
- Discussion
    - Future development

3 Hints

- See lecture slides.
- Read the article by Nielsen for a more in-depth explanation of thinking aloud testing.
- Do not hesitate to ask questions! Email: `daniel@roeven.com`.

4 Submitting your report

- Include group name and author names.
- Create one PDF file.
- Upload it to the wiki in the same manner as the previous assignment.
- Deadline: Friday, June 17, 11:59 p.m.