Research & Development 1: Expert Review

April 14, 2016

In this assignment you will create an expert review to determine the usability of an Android app, similar to the assignment you have completed for the course "Wat is informatica?". However, this expert review will be more extensive and precise. The review will consist of two components: personas and a heuristic evaluation. You will then draw a conclusion based on these two components.

1 Instructions

- 1. Choose a suitable Android app to create an expert review for, preferably one that you are yet unfamiliar with.
- 2. Construct personas for the different user types:
 - 1. Determine which user types are likely to use the app. You can do this by looking up information on user demographics, comparing it to other apps, or by providing solid reasoning (e.g. a stock-market app will be used by stockbrokers).
 - 2. Create thorough persona profiles, but do not get lost in details. It is important that the personas have a basis in reality. They are here to provide an easy way to talk about your target audience, not to serve as a tester.

3. Conduct a heuristic evaluation:

- 1. Read the article on heuristic evaluations by Jakob Nielsen¹.
- 2. Determine a few scenarios that the evaluators will be reporting on.
- 3. Have each evaluator inspect the interface alone.
- 4. Have each evaluator go through the interface twice and inspect the various elements, comparing them with a list of recognized usability principles (the heuristics)². Keep the personas in mind when inspecting the app and state which problems are relevant to which personas.

 $^{^1{\}rm Nielsen},$ J. (1995, January 1). Nielsen Norman Group. Retrieved April 14, 2016, from http://www.nngroup.com/articles/how-to-conduct-a-heuristic-evaluation/

 $^{^2\}rm Nielsen,$ J. (1995, January 1). Nielsen Norman Group. Retrieved April 14, 2016, from http://www.nngroup.com/articles/ten-usability-heuristics/

- 5. Classify problems by their severity³.
- 6. After all individual evaluations are completed, aggregate findings.
- 4. Draw a definitive conclusion on the app's usability based on the combined results from 3.
- 5. Optional: make suggestions on how to improve the app's usability.

2 Product

Hand in a report with the following structure:

- Title (for example: Expert review of app by group)
- Authors
- Introduction (to both chosen app and report itself)
- Personas
 - Brief explanation/motivation for target audience choice
 - Persona profiles
- Heuristic Evaluation
 - Setup (how many evaluators, scenarios, etc)
 - Aggregate findings
 - Problem classification
- Conclusion
- Optional: suggestions for further development

Also hand in the individual findings from the evaluators as an appendix. These will not be graded, they serve as background for the combined findings of 3.5.

3 Hints

- See lecture slides from "Wat is Informatica", available on the wiki.
- Read the articles by Nielsen for a better understanding on conducting a heuristic evaluation and determining problem severity.
- Read up on interface guidelines and design guidelines for the heuristic evaluation. Examples:

 $^{^3}$ Nielsen, J. (1995, January 1). Nielsen Norman Group. Retrieved April 14, 2016, from http://www.nngroup.com/articles/how-to-rate-the-severity-of-usability-problems/

- Principles of Interaction Design by Bruce Tognazzini⁴
- Android Material Design⁵
- Similarly, you can read up on creating and using personas.
- Be sure to include sources when used.
- Do not hesitate to ask questions! Email: daniel@roeven.com.

4 Submitting your report

- Include group name, author names and student numbers.
- Create one PDF file, with the appendices at the end.
- Upload it to the wiki.

Deadline: Friday, April 29, 11:59 p.m.

4.1 Uploading your work

Hand in your report by uploading it to the werkplaats.

- 1. Upload your PDF to the wiki using the button Bestand Uploaden in the left sidebar.
- 2. Navigate to your group's project page, where GROUPNAME is your group's name: https://lab.cs.ru.nl/algemeen/Research_and_Development_ 1/2015-16/projecten/GROUPNAME
- 3. Add /Expert_Review/ to the link: https://lab.cs.ru.nl/algemeen/Research_and_Development_1/2015-16/projecten/GROUPNAME/Expert_Review
- 4. This page does not exist. Click aanmaken at the top.
- 5. Place the text [[Bestand:FILENAME]] in this page, where FILENAME is the filename of your uploaded PDF.
- 6. All done! Your project now contains an extra link "Expert Review" in the right sidebar (under 2015-16 -> Projecten -> GROUPNAME -> Expert Review)

 $^{^4\}mathrm{Tognazzini},$ B. (2014, March 5). First Principles of Interaction Design (Revised & Expanded). Retrieved April 14, 2016, from http://asktog.com/atc/principles-of-interaction-design/

 $^{^5\}mathrm{Material}$ Design. (n.d.). Retrieved April 14, 2016, from https://developer.android.com/design/material/index.html