

Hi-Fidelity Prototype (Group)

Due: Tuesday, April 23, 2013

Goals

The goals of this assignment are to learn how to incorporate feedback from a usability evaluation into the next iteration of a prototype and to move the prototype closer to the fidelity required by the target platform.

Prototypes

You must modify your project's existing medium-fidelity prototype based on the heuristic evaluation feedback and other issues you know about the design (from your own knowledge or the feedback of the teaching staff). We recommend you use the same prototyping tool that the previous team used and modify their existing design (if possible). Again, all of the underlying functionality does not have to work, so you can fake much of the output, but keep in mind you will be doing a usability test next so it should work at a level to support that. Unlike the last prototype, we want your application to **look and feel like what a final application running on your target platform (e.g., iPhone or Android) would look like.**

Using Heuristic Evaluation Summary

You previously received a list of heuristic violations that an "outside" group of evaluators found in your prototype. You will use this list to focus your redesign work.

You must first fix all heuristic violations of **level 3 or higher** in your design. You do not need to fix any violations you cannot reasonably fix in this short period or those whose severity rankings your group disagrees with the evaluators on, but you must give a written justification for both of these cases (speak with the teaching staff if unsure).

If you are able, please fix any other violations (level 1 and 2) that are easy to do. In addition, if there are other design issues that you are aware of (from your own knowledge or the teaching staff's comments), please list those, fix what you can, and justify what needs to be fixed later.

Preview of Usability Test

In addition to fixing major usability problems, you must make sure your prototype will work better for a usability test. You will be performing this test for the next assignment using the online prototype you produce from this assignment. This means that a participant (who is **not** in your group) should be able to use your interface to perform the three tasks that you outlined in the write-ups from last quarter.

Note: the tasks should include 1 simple task, 1 medium task, and 1 complex task and the tasks should be **real** tasks (not partial, incomplete "feature testers"). If your tasks do not meet these criteria, you must change them (talk to the teaching staff if unsure).

Deliverables

1. Prototype

Your prototype must be runnable by the teaching staff and anyone else who would like to try it. **A version must be put on your project web page along with instructions** to make it run. Make sure this works well in advance of the due date by testing on multiple devices (note: it cannot be run from the CSE 440 web site).

2. Report

You must put a copy of the report online on your class project web page.

Report

Your write-up should include a description of the UI design changes and prototype overview (**plus sketches, storyboards, & high resolution screen shots – link thumbnails to larger images**). Addressing the HE usability problems can take as much space as is necessary. It should be turned in on your project web page. The working prototype should also be available off the web page along with a README on how to use it while explaining anything that is missing or limited. The write-up should follow this outline with *separate sections* for the top-level items (number of pages/section are approximate). Much of the first 4 sections can be reused from CSE 440 – make sure to improve where necessary:

1. **Header** - project name (1 line) & team members names (w/ roles if appropriate)
2. **Problem description (1 paragraph)**
 - The need your team is trying to solve with this application.
3. **Solution Overview (1 paragraph)**
 - The basic approach of your solution to the above problem.
4. **Tasks (1/2 page)**
 - List and describe the 3 tasks (ranked by complexity) and tell us **why** you chose them.
5. **Overview of UI design changes (1-2 pages + sketches/screen shots/storyboards for entire UI)**
 - How did your UI change from medium-fidelity prototype to this high-fidelity prototype?
6. **Major usability problems addressed (2-3 pages)**
 - separately list each level 3 or higher violation along with fix or reason for not fixing
 - be sure to include a rationale for the changes and **compare & contrast the changes visually**
 - reference sketches/screen shots in descriptions
 - also list any other changes you made and the reasoning behind it (e.g., for upcoming usability test)

Grading (100 Points)

The report and the prototype will be graded together. Here is the grading for the report and the prototype (100 pts total):

Design (30 Points)

- Tasks (5)
 - Do the tasks cover the interesting features of the project?
 - Do the tasks have an appropriate difficulty/complexity specified?
 - Do the tasks altogether form a compelling story for the project?
- Changes (25)
 - Were **appropriate changes made** to address the important problems discovered?
 - Were these changes **justified**?
 - Are the **limitations and tradeoffs described** and justified in the report?

Prototype (40 Points)

- Is the prototype **accessible and working**?
- Can users **complete the three tasks** with the prototype?
- Is the prototype **easy to use**?
- Is the prototype interface **aesthetic and pleasing**?
- Does the prototype fit the target platform's UI style? (**very important for this**)
- Were **appropriate tradeoffs** made between functionality and completeness?
- Does the README file summarize these limitations and any other details needed?

Report (30 pts)

- Writing
 - Does the report cover all the topics in the outline?
 - Does the organization follow the outline?
 - Is the writing grammatical and understandable?
 - Are the limitations and tradeoffs described and justified in the report?
 - Are sub-sections used for easy scanning of important parts?
- Screenshots
 - Are important figures referenced and placed inline with the text?
 - Is there a complete set of screenshots in the body or in an appendix?
 - Do figures have appropriate annotations linking them to the text?