Medium Fidelity Prototype #2 (Group)

Due: Tuesday, February 3, 2009

Goals

The goal of this assignment is to learn how to incorporate feedback from an evaluation of a user interface into the next iteration of a prototype.

Prototypes

You must modify your project's existing prototype based on the heuristic evaluation feedback and other issues you know about the design. 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.

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 that are easy to do. In addition, if there are other design issues that you are aware of, please list those and explain what needs to be fixed.

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 easy task, 1 medium task, and 1 difficult task and the tasks should be **real** tasks (not partial, incomplete "feature testers"). If your tasks don't meet these criteria, you must change them (talk to the teaching staff if unsure).

Deliverables

1. **Prototype**
   Your prototype must be accessible from a web browser and must be on your team website. It must be accompanied by a README file that describes any operating instructions, including any limitations in the implementation.
2. **Report**
   You will submit two copies of a printed report in class. You must also put a copy of the report online on your web site.

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 as **TWO (2)** copies on paper and 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):

1. Title - project name (1 line)
2. Tasks (1/4 page)
   o 3 representative tasks to test your interface (easy, medium, hard)
3. Overview of UI design changes (1-2 pages + sketches/screen shots/storyboards for entire UI)
4. Major usability problems addressed (2-3 pages)
   o 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
   o also list any other changes you made and the reasoning behind it (e.g., for usability test)

Grading

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

Design (40 Points)

- Tasks (10)
    - 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 (30)
    - Were appropriate changes made to address the important problems discovered?
    - Are these changes well illustrated with screenshots?

Prototype (30 pts)

- Is the prototype accessible and working?
- Can users complete the three tasks with the prototype?
- Were appropriate tradeoffs made between functionality and completeness?
- Does the README file summarize the 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?
    - 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? [*]
    - Do figures have appropriate annotations linking them to the text?

* Use Relevance-Enhanced Image Reduction to create effective thumbnail images.