Project phase #3 (due 5/29/2018)

Implementation

Overview

During phase #3, you will focus on the "Implementation" step of the design process that we learned in class. Using the results of phase #1 and #2, your team will implement a moderately robust system with a convincing set of functionalities.

What to do

Improving your prototype

Given the feedback gathered while showing your prototype to persona representatives, modify your prototype to address the main problems. To be sure that your modifications are compatible with the rest of your design, you should debug your final design by having members of the group using the interface.

Implementing your prototype

Implement a substantial part of the vertical functionality of your interface. 'Substantial part' means that examples of the more interesting features (screens, error messages, handling of unexpected input, defaults, robustness, ...) should be demonstrable. You may program in 'stubs' (e.g., certain actions may return some kind of 'Under development' message) or horizontal prototypes for sub-tasks you are not implementing at this time. The balance between horizontal and vertical prototyping will depend on your design but your prototype should contain enough 'meat' to show what it would be like to interact with the real thing. Grades will **not** be based on the complexity of underlying application codes that have little to do with the interface.

You are emphatically cautioned against biting off more than you can chew! A modest carefully implemented project often scores much higher than an ambitious project that is not well done. Start immediately! The best groups start early, plan activities, divide the work logically, and communicate well.

Platform: Since you might demonstrate your program in class or we might want to run it during grading, all projects must be able to run under an appropriate platform. Specify the platform in your report.

Software: You are free to pick any programming languages (C++, Virtual Basic, C#, Java, Flash...) and development environment you wish as long as the resulting program runs on the configuration described under the Platform section.

Validating your implementation

Once your prototype is correctly debugged, you should validate it by having at least one representative of your primary persona try it. During this phase, it is important that group members avoid influencing users' reaction. Instead they should focus on taking notes while observing user' reactions. If you have questions you would like to ask a user, just write them down and wait until the user is done before asking them.

Deliverables

Your report will include the following sections.

Section 1 (20 points): Improvements

1. Describe how your new design address problems observed during the evaluation phase of your low-fidelity prototype. It might be useful to use a Before/After structure so that changes you made are easy to understand. For each change, do not forget to explain why your change will address the problem at hand (~1 pages including figures).

Section 2 (60 points): Implementation

1. Present the key features of your final implementation including screen snapshots showing how they relate to your prototype. Explain all major differences (~2 pages including figures)
2. The executable code in running order (see above for the hardware/software requirements). We should be able to run the application out of the box. The code should be submitted through ***eTL*** as a zip archive. **Your program should be able to run in front of your TA the day the project is due**. In particular the zip archive should contain all required items such as libraries, pictures, and etc.

Section 3 (20 points): Validation

1. Persona specific findings. For *the primary* persona (~ 1 page):
    - Explain why the user you picked is a good representative of the persona,
    - Describe the user test settings (where the test took place, which member of the team did what, what was the general layout...),
    - Describe what went well, and what did not go so well with your interface,
    - Write a summary of what you should change in your interface to serve this persona better.
2. Overall findings. Write a synthesis of your findings describing the strong points of your interface and what should be improved in the next design cycle (~ 0.5 page).