Assignment 4: Task Analysis and Design Sketches

Due: Tuesday, October 27, 2008

Overview

In this assignment you will use the data from your prior contextual inquiry to perform a task analysis of your project, and you will also brainstorm and develop design ideas. This assignment will help you to learn how to ideate and to better present your design ideas and the context of your project to an audience outside of your immediate team.

Requirements

1. Answer the task analysis questions (attached).

2. Present revised versions of your three tasks based on these new results. Note that many of the examples from prior years do not necessarily do this, but you should. Separate from your answering of the task analysis questions, you should list your three updated tasks.

3. Based on your task analysis, storyboard three very different interface designs for your project. The entire interface does not need to be fleshed out, but a few key screens should be there (e.g., 3 to 5 screens for each of the three design ideas). You should also include the key transitions between them (i.e., arrows showing relationships between interaction on one screen and movement to another screen or change in state of the first screen). These should be rough sketches.

4. Pick the best of the three design ideas for continued design. Please explain this proposed interface by describing it in text (reference the sketches). Please give any reasoning for your choice from data, platform constraints, or design reasoning and intuition.

5. Given your three tasks, develop a scenario for each (for a total of three scenarios) that describes how they will be performed using your proposed interface.

Deliverables

Essay
You will submit an essay of no more than 6 pages of text (12 pt. Times font or equivalent). Your essay should follow the outline below and will be graded using the guidelines on the next page. Remember, figures do not count in the page count.

1. Each member's name and role
2. Problem and Solution Overview (short, 1 paragraph)
    a. Task analysis questions and revised versions of tasks (1.5 pages)
3. Storyboards for 3 interface designs (as many pages as needed)
4. Selected Interface Design (2 pages)
    a. Which design & reasoning for choice
    b. Functionality summary (what you can do with it)
    c. User interface description (how you use it, reference sketches & add more if needed)
5. Three (3) Scenarios of example tasks (1 page)
    a. How did you make them?
    b. Any interesting new techniques you came up with?
    c. What was difficult?
    d. What worked well?

Your submission must be in PDF format.

When finished, upload it to the catalyst drop box here:

https://catalysttools.washington.edu/collectit/dropbox/summary/jaf1978/7152

Presentation
One member of your team will present your results from assignments 2 and 3 in class during a five minute PowerPoint-based presentation. Practice in advance!

Website
You will also begin to develop and upload your project website. More details will be provided.

Writing Guidelines

Problem and solution overview & overall writing quality (10 pts)

This overview should be a concise statement of the problem you are tackling and a brief synopsis of your proposed solution. Check your essay for grammar errors and make sure it is easy to read. This means making sure your writing is clear and concise, using bolded section headings, liberally adding whitespace, and including images in the body of the write-up with appropriate figure numbers and captions. Refer to the figures (e.g., "(see Figure 2)") in the body of your text.

Make sure to include which team members are responsible for which roles (Group Manager, Design, Documentation, User Testing).

Task analysis questions (15 pts)

Answer the task analysis questions. Use examples from your contextual inquiry interview data when applicable. Revise your three tasks you described on the Contextual Inquiry assignment based on this new data and any new thinking you have on these results.

Storyboards (15 pts)

We are looking for three different interface designs that seem plausible, but that each take a very different approach. We will be grading on the quality and diversity of these ideas, as well as on the execution (sketches are rough, arrows showing transitions are clear, and that there are enough screens for each to get the idea across).

Selected interface design (15 pts)

We want to have a good understanding of the interface you have chosen to detail further and your rationale for choosing it. Why did you choose it? Any reasoning from data or constraints of the target platform? Given this idea, we need a good description of what it is. This section should clearly indicate the *functionality* of your artifact and what the *interface* will be like (described and sketched – explicitly reference the figures in your text). What can you do with it? How do you use it? Add more sketches if necessary and annotate them in multiple colors if that helps.

Scenarios (15 pts)

We want to see that you know how to turn tasks into written scenarios by adding the proper references to the use of a particular interface. Scenarios include the steps customers will go through to accomplish the task. Your scenarios do not have to detail every little step, but they should be dependent on the design you have chosen. You will be graded on how realistic your scenarios are, if they show a proper balance with respect to reference to the interface, and how well they are written to communicate how a user will accomplish the task.

Presentation (30 pts)

The presentation grading will be broken into two components: the individual grade of each of the presenters and a group grade for the presentation of the study results & task analysis. Note that you should use images liberally and try to keep the text on the slides relatively brief (and use large fonts – no less than 20 pt anywhere). The grades for each of these components are explained in more detail below. See last year's final presentations.

Presenter's grades (NAME: _____)

- Organization
  - o ___ Title (1 slide)
  - o ___ Presentation overview (1 slide)
  - o ___ Overall problem & solution (1 slide)
  - o ___ Contextual inquiry description & results (2 slides, include images)
  - o ___ 3 representative tasks (1 slide)
  - o ___ Early design sketches (1-3 slides)
  - o ___ Summary (1 slide)
- Presentation
  - o ___ Use slides. Ensure that the presentation shows appropriate preparation, and that visual aids are effective, properly prepared, and properly employed. Make sure that people at the back of the room can see your slides.
  - o ___ Cover the required scope within the 5 minute time period (there will be 2 extra minutes for questions). **Practice and time your presentation in advance as we will cut you off if you go over and you will not be able to gain points for the material you could not cover.**
  - o ___ Ensure the presenter makes eye contact.
  - o ___ Ensure the presenter projects their voice well.

Group grade (GROUP NAME: _____)

- Contextual inquiry
  - o ___ Was the procedure carried out in a sound manner?
  - o ___ Were the results illuminating in terms of the problem being attacked?
- Representative Tasks
  - o ___ Did they provide coverage of the functionality?
  - o ___ Were the tasks too easy or too hard?
  - o ___ Did they come out of the CI?
- User Interface Sketches
  - o ___ Did the UI ideas have a strong connection to the results of the CI?
  - o ___ Were the ideas presented appropriate for the supported tasks?
  - o ___ Were the ideas presented at the proper level of fidelity? (i.e., rough sketches?)

Task Analysis Questions

1. Who is going to use the system?

2. What tasks do they now perform?

3. What tasks are desired?

4. How are the tasks learned?

5. Where are the tasks performed?

6. What's the relationship between customer & data?

7. What other tools does the customer have?

8. How do customers communicate with each other?

9. How often are the tasks performed?

10. What are the time constraints on the tasks?

11. What happens when things go wrong?