Task Refinement, Storyboarding, and Video Prototyping

Write-up Due: Monday, April 2\textsuperscript{nd}, 12PM (noon)
Videos Due: Sunday, April 1\textsuperscript{st}, 11:59PM
Videos Presented in Class: Monday, April 2\textsuperscript{nd}, 2PM (classtime)

Assignment Overview
In this assignment you will:
1. Iterate on the tasks and sketches from the last assignment
2. Create a storyboard for each task along with a written narrative
3. Create paper or otherwise lo-fi prototypes to support each storyboard
4. Create a short video of these storyboards using the techniques described in class
5. Write a short report on the creation of said video

Note: you will not be user testing these lo-fi prototypes for this assignment (that's the next assignment) but rather focusing on the use-cases of these prototypes. You will very likely learn a lot about the usability, quality, and feasibility of the interface sketches from the last assignment simply by refining the narrative, creating storyboards, and implementing these storyboards as paper prototypes. In the next assignment, we will again iterate on the paper prototypes and run actual user studies.

What to Do

1. Task and Sketch Iteration
Look at the Task Analysis Questions (end of assignment) to help refine and iterate the three proposed tasks from the last assignment (one easy, one moderate, and one difficult task). If you did not answer the Task Analysis Questions in your last assignment (or even if you did), you must include answers to them here. Examine the interface sketches from the last assignment. If you produced similar designs for all three sketches, try to think of and sketch three independent designs. You need three very different interface design sketches such that you can vote, as a team, on the most promising design and use that for the storyboarding phase (below).

2. Three Scenarios: Storyboard with Written Narrative
Choose the best of your three interface designs. This is what you will be using as your primary interface for the storyboards and lo-fi prototypes. Explain the proposed interface by describing it in text (referencing the included sketches). Explain the rationale for your choice (e.g., data, platform constraints, or design reasoning and intuition).
Now, develop a written scenario for each of the three tasks that details how the task will be performed with the selected interface. Each scenario is one to two paragraphs. A scenario provides a description not just of the task and the use of the interface but also a story (a narrative) behind it. Use this narrative to generate three storyboards (one for each task). Each storyboard should have a minimum of six panes. Note: you should write the scenarios first, then create the storyboards based on the scenarios. The storyboard panes themselves can have a textual description (at the bottom or top) and include talk bubbles (like in comics). The text used here (in the storyboard panels) is not meant to replace the written narrative; you need to do both.

3. Lo-Fi Prototypes
Build lo-fi prototypes using the methods described in Lecture 8 to support each task.

4. Short Video Prototype and Write-Up
Create a short video for each storyboard using the lo-fi prototypes. Remember, here you should focus not just on the interface but also the narrative around its use. That is, be sure you both set up the story and show the interaction with your design. Refer to the examples provided in lecture and videos from prior classes for more information on how to create a video prototype. If your group does not have access to a video camera, we can loan you an inexpensive camera (please email us as soon as possible if you need us to work with you to arrange this). The video should be a maximum of 4 minutes long. This is super important because we will be playing the videos in class on Monday, April 2nd. When I insert the videos into my PowerPoint deck, I will manually trim the end of any video over length down to 4 minutes.

You will also provide a short report regarding your video-making process (no more than 1 page of text). This should include answers to questions like how you made the video, any interesting techniques that were used, what worked well, what was difficult, how was the video edited, what sort of materials were used for the lo-fi prototypes, etc?

What to Hand In
You will submit a report of no more than 5 pages of text, approximately 2500 words. Images are strongly encouraged, do not count against the page limit, and are thus effectively free (the limit applies to the approximate amount of text you would have if all images were removed). As usual, you will not be docked for turning in less than 5 pages if you sufficiently covered all required sections (i.e., 5 pages is the upper bound).

The written part of the submission must be in PDF format and linked to on your team wiki. The video prototype must also be uploaded and linked to on the wiki.

Your report should follow this outline, and will be graded using the guidelines discussed at the end of this document. The provided page allocations are rough estimates, to help convey how to divide up the space.

1. Project title
2. Each team member’s name and their role on this assignment
3. Problem and solution overview (short, 1 paragraph, iterated on since the last group assignment)
4. Describe the three refined tasks (make sure to include what’s changed and why from the last assignment and to answer all of the task analysis questions) (1 – 2 pages)
5. Refined interface sketches (mostly images but describe what has changed, if anything) (mostly images)
6. Describe selected interface design with rationale on why it was selected.
7. The three storyboards (one for each task) along with a written narrative for each (1 – 2 pages plus images).
8. Provide a short report on how you made the lo-fi prototypes and the video (0.5 - 1 page)
9. The video prototype
Writing Guidelines and Grading

Overall Writing Quality (10 pts)
Make sure your writing is easy to read: ensure it is clear and concise, use section headings, make liberal use of whitespace, include images in the body of the write-up with appropriate figure numbers and captions, refer to the figures in the body of your text, and check for grammatical errors.

Overview of Problem and Solution (10 pts)
This overview should be a concise statement of the problem you are tackling and a brief synopsis of your proposed solution. This should be a refinement of the problem/solution portion from your last assignment (we iterate nearly everything in this class!).

Task Updates/Description and Interface Sketches (10 pts)
The tasks should be a refinement of the three tasks from the last assignment. This section must include a description of what’s changed for each task and why, in addition to answering the task analysis questions.

You need to include three different ways of rendering your interface. These can be refinements over the last assignment or simply the same sketches with some additional annotations. Regardless, you must describe what has changed. The interfaces must also be clear (in the past assignment, some were hard to read) with a figure caption.

Description of Selected Interface Design (10 pts)
Your team should discuss and then select the best interface design from the three sketches. Here, you should describe the selected interface design in detail and include justification for why it was selected. This section should clearly indicate the functionality of your artifact and what the interface will be like (described and sketched, explicitly referencing the figures in your text). Add more sketches or annotate them in multiple colors if that helps.

Three Storyboards and Written Narrative (15 pts)
Generate three storyboards (one for each task) that include the steps a person will go through to accomplish the task as well as a motivating story/narrative. Your storyboards do not have to detail every little step, but they should be dependent upon the design you have chosen. You will be graded on how realistic your storyboards are, whether they show a proper balance with respect to referencing interface elements, and how well they are written to communicate how a person will accomplish the task.

Video Prototype Report (10 pts)
Your report should discuss and reflect on your video prototyping process. Include both aspects that worked well and aspects that were difficult or could still be improved. Your report should be easy to read and free of grammatical errors.

Video Prototype (50 pts)
You will be graded on how well your video illustrates your design. It should present three scenarios, giving a flavor for your interface design and how it will be used. It should properly show the context for interaction (the backstory for the scenarios). It should be appropriately edited and paced (neither too slow to keep a viewer’s interest nor too fast to follow).

Submission
Post your deliverable to your team website here: http://cmsgc434-s12.wikispaces.com/project+teams. This write-up is due: Monday, April 2nd, 12PM (noon) and the video must be uploaded by Sunday, April 1st at 11:59PM. The videos will be presented on Monday, April 2nd, 2PM during class again using a single PowerPoint deck. This is why I
want you to upload the video the night before so that I can test it on my laptop on the morning of April 2\textsuperscript{nd} and work out any issues before class.

**Task Analysis Questions**
Remember the task analysis questions from lecture:

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?