

Final Presentation & Design Specification

INFO 360 User-Centered Design

For this deliverable, you are to submit a final design specification that covers your entire project and prepare a presentation for the class. This report should be comprehensive, professional, and something you can include in your portfolios. The presentation will be given in class, and should cover the entire quarter's project.

What to do?

- 1) Conduct informal user testing on your prototype. Now that you've developed an interactive prototype, find 2-3 potential users of your system and conduct an informal evaluation. You do not need to develop a full usability testing plan, but you should plan to prepare some tasks and have the user attempt to conduct them with your prototype. Take notes and use the results to improve your design.
- 2) Prepare an oral presentation. During the last week of class (on May 31 and June 2), each team will present a 10 minute presentation on their overall project. The presentation should be clear, professional, and briefly cover the elements of your design process. You should also plan to show your final prototypes during the presentation. The presentation can be presented as a group or by one or more people, but all team members must be present to answer questions at the end. See [Oral Presentation Tips](#) for ideas on how to make your presentations good!
- 3) Prepare a final written design specification, which contains details of your design and justifications for your design choices. The goal of specifying a design is to give enough detail about a design idea such that the work remaining is largely implementation. For example, imagine you designed a website and wanted to provide a document to a web developer to create it. What would need to be in that document to ensure that the web developer has everything necessary to create the site, without the developer having to ask for clarifications? You might include a site map, details about page layout, the content for the whole site, a database schema, any algorithms used to generate or process information, all forms included on the site, details about how to validate input provided by users, and so on.

Specifications can take whatever form necessary to clearly communicate a design. Usually they are documents, but sometimes they are functional prototypes that engineers or manufacturers can use as a reference design. Below are links to two examples of design specifications, with a discussion of the strengths and weaknesses.

- First is a design for a Firefox plug-in that enables people to summarize people's YouTube comments. This was designed by Travis Kriplean, a Ph.D. student in CSE. This document does a great job articulating rationale for each of its design decisions and clearly delineating the content provided in each section.
 - <http://courses.washington.edu/info360/project/specificationexample1.pdf>

- The second example has many of the same strengths as the previous one: it contains good rationale for its design decisions; it uses diagrams appropriately; it is detailed in its discussion of the interactive state of the watch. However, notice that the structure of the document is less clear than in the previous example. Also, read the document as if you were going to build this watch. There's a lot of detail missing, right?
 - <http://courses.washington.edu/info360/project/specificationexample2.pdf>

You will prepare a design specification for a design that answers your design question. The specification has the following requirements.

- *Who the intended audience for the document is.* Who will be manufacturing or engineering your design? They are your audience. Make sure this is clear (perhaps by indicating this on the front page).
- *A clear description of the design problem.* What problem did you set out to solve?
- *A clear description of the project scope.* What parts of the design did you focus on specifying? What parts of the design are left unspecified? This will help the reader (and the grader) know how well you achieved your specification goals.
- *Details about every major design decision within your project scope.* What counts as major is up to you, but you should think carefully about this from the perspective of someone implementing your design. What would they need to know to do their job?
- *Rationale for every design decision that may influence your solution's effectiveness.* Justify your choices with evidence from your user research, the results of user tests, references to design principles, or using a variety of other forms of evidence.

Your specification should also comply with the following constraints:

- It must be formatted on 8.5" x 11" paper, but the orientation is up to you
- It must be submitted digitally to CollectIt as a MS Word doc (.doc or .docx)
- Text in the document must be at least 10 pts
- The document must include the names of all students in your group on the 1st page
- The document must include "INFO 360, Spring 2011" on the 1st page
- All other details are up to you

You should use the following Word file as a template for all of your specification drafts. This will ensure that when grading your specifications, we focus on the content and not the visual design of your documents. It includes Word paragraph styles called "Title", "Heading 1", "Heading 2", "Normal" (for paragraphs), "Block Quote" (for quoting users) and "Caption" (for figure captions). Use these to ensure that your specifications are similarly styled as other teams. If you use Google Docs to collaborate, ensure that the documents you produce are the same style as in this Word template.

Template: <http://courses.washington.edu/info360/project/specificationtemplate.docx>

If you want to see samples from previous INFO 360 classes, please check out the following:

- <http://courses.washington.edu/info360/project/specificationexample3.pdf>
- <http://courses.washington.edu/info360/project/specificationexample4.pdf>
- <http://courses.washington.edu/info360/project/specificationexample5.pdf>

What to hand in?

You will do your presentations during the last week of class on Tuesday, May 31st and Thursday, June 2nd. Presentation days will be randomly assigned.

Your final report is due Wednesday, June 8th by 10:00 A.M. (the class's final exam slot, though there is no physical meeting time). To submit, have one member of your team upload the document to CollectIt. <https://catalyst.uw.edu/collectit/dropbox/jkientz/15617>

How will it be graded?

A good specification (one that would receive a 3.5-4.0) will have the following characteristics:

- **All elements of the design (within scope) are specified to a level that engineers or manufacturers would know what to build** (and would only have to then decide how). We will look at the scope you define in your document and compare every part of the document to that scope. If we find elements that are lacking detail, the document will be considered incomplete. If we were trying to implement your design, would we know what to implement? Any part of your specification that leaves something unspecified is a problem. You do not need to specify how anything will be implemented. That's the job of the engineers or manufacturers implementing your design.
- **All design decisions significant to the effectiveness of your design are justified.** For example, if you decide to use a certain font, why did you choose that font? If you designed an interface element, why that element? If you chose particular information, why that information? A good specification provides detailed rationale for its choices. A great specification will have evidence to justify each choice; a spectacular specification will have rationale that is consistent across all aspects of the design.
- **Match between information content and information presentation.** If part of the document is explaining the layout of the web page, it should be specified by showing the layout (not by a paragraph describing the design). If part of the document is explaining a process, it should be specified through some sort of diagram (not with a paragraph, which would lead to more ambiguity). Think carefully about what information you are trying to convey and choose appropriate representations to convey it.
- **The visual design and writing doesn't distract from the communication of design details.** Illegible diagrams, pointless whitespace, inconsistent formatting, incoherent structure: all of these things make it difficult for someone to understand your design. We will take the perspective of someone implementing your design and if we can't understand what you mean, the specification is poor.
- **It complies with all of the constraints listed above.** Specifications that violate the constraints will not be accepted for credit, so be sure to follow all of them.

Remember: you are designing this document. That means you should use the same skills you've learned in class to ensure its quality. Sketch out the structure of the document; make sure you know what content you want. Test it with your group or other readers before you make the final thing. Get as much feedback as you possibly can. If you fail to do these things, these issues will come up when we read your documents and your grade will suffer for it.