

Individual Project: Interface redesign

Final due date: 12/13 (30% of final grade. 30 total points)

Intermediate due dates:

- **10/24** Project selection, task descriptions, and reviews that you will use for needfinding analysis
- **10/31** Needfinding complete and information organized/analyzed. Tasks may be updated.
 - **11/7** Graduate student feedback
- **11/15** Prototype and Evaluation Plan
 - **11/28** Graduate student feedback
- **12/5** Implementation
- **12/12** Final

Rubric:

Score for a deliverable will drop a rating per day late.

Deliverable	Total points	100%	80%	60%	40%	20%	0%
1	3	Selection of a project with 3 goal tasks. Correct description of tasks. Reviews needed for affinity diagram are included.	One of those is missing or	Two of those are missing	Three of those are missing	Four of those are missing	Missing or 5 or more days late
2	3	Affinity diagram is submitted with specific themes and sufficient content to find directions for interface redesign (NOT themes like 'user interface', user issues, etc). Tasks are submitted again.	Affinity diagram has specific themes but they do not give information for redesign, missing tasks	Affinity diagram themes are not specific and tasks do not match diagram	Affinity diagram is missing facts or has a combination of issues	Affinity diagram themes do not make sense, missing data, missing	
3	10	Prototype that follows usability (affordances, mappings, etc) and visual design guidelines (proximity, relatedness, contrast, alignment), enables user to complete all tasks. User test plan that effectively captures usability through tasks.	Prototype has some issues with usability and/or visual design but mostly follows guidelines OR user testing plan does not evaluate all tasks.	Prototype has some issues with usability and/or visual design AND user testing plan does not evaluate all tasks.	Prototype has major issues with usability and/or visual design or testing plan does not evaluate any tasks.	Prototype has major issues with usability and/or visual design AND testing plan does not evaluate any tasks.	
4	4	Implementation enables user to step through each of the tasks and has data filled in to support realistic user testing.	Implementation enables user to step through all tasks, but is not realistic with data or has issues that prevent user testing.	Implementation is missing tasks or has small bugs that make user testing more difficult.	Implementation is missing tasks and data and has bugs that harm user testing.	Implementation is so buggy that user testing is impossible.	
5	10	TBA	TBA	TBA	TBA	TBA	

Deliverable 1 (10/245):

Name of app or extension that you are going to evaluate and redesign.

3 task scenario descriptions for your tool that you are going to evaluate and redesign.

Data for needfinding.

Details:

Select a phone app or chrome extension that tries to solve a problem in one of the topic areas below. The reason we are going to work with phone apps or chrome extensions is that they have available user reviews that we can use for our initial needfinding to make the size/scope of this project manageable.

Requirement: You should choose an app or extension that has reviews that indicate a problematic interface so there is something for you to improve.

Requirement: The app or chrome extension must have at least 3 tasks that users need to accomplish that you will evaluate during your user study. (For example, you cannot choose to redesign a chrome extension that changes your home browser tab to have a landscape on it.)

Requirement: Chose an app or extension that aims to solve a problem in an acceptable topic area.

Topic areas:

Acceptable:

- Health
- Environment
- Internet of Things
- Transportation/ navigation
- Learning/programming/productivity/research support

Not acceptable:

- Social media
- Games

Evaluation/Feedback: By teaching staff

3 points, see rubric on pg. 2.

Deliverable 2 (11/1)

Photographed or digital affinity diagram.

Tasks- they may be the same or updated if they were incorrect or needed updating based on the affinity diagramming or contextual inquiry.

Details:

Requirement: Use the reviews from your selected app or extension as if they were interview data. Complete an affinity diagram for the data to discover the needs of your users.

Optional/extra credit (5pts): If you would like more data, complete a contextual inquiry for your selected app or extension. Submit your interview questions and the data you collect.

Evaluation/feedback.

3 points. Graded at the end with the entire project. In-class peer feedback, more focused feedback by request. You must submit a version by the deadline, but can updated it after peer feedback before the final deadline (12/13) and the last version will be graded.

Deliverable 3 (11/15) Prototype and first evaluation.

Prototype: Take pictures or screenshots of each possible screen of the paper or digital prototype.

Evaluation: Typed description of your evaluation plan and report of evaluation results, any design changes you decided to make based on the first evaluation.

Details:

Requirement: Based on the needs of your users and the problems they have, create a prototype, either in paper or digital form. The prototype MUST enable a user to complete each of the three tasks you have defined.

Requirement for Undergraduate students:

You are required to complete a preliminary user test. For this deliverable, you should write out the script for your user study of exactly what you plan to say and ask participants to do. You need to document the data that you will collect and how you will evaluate whether your redesign has worked. You should complete your user test with 3 people in order to determine any design flaws that you may want to improve before your implementation.

Requirement for Graduate students: You will use two forms of evaluation for your system.

1. One will be a user test. For this deliverable, you should write out the script for your user study of exactly what you plan to say and ask participants to do. You need to document the data that you will collect and how you will evaluate whether your redesign has worked.
2. Your second evaluation should be one of the other evaluations we talk about in class that does not include finding users. You should write out the plan for why you chose this evaluation method, how you will complete it.
3. You should complete your user test with 3 people and your second evaluation in order to determine any design flaws that you may want to improve before your implementation. Feel free to have more users test at this point if you feel you need more input, but it is not required.

Evaluation/feedback.

10 points. Graded at the end with the entire project. In-class peer feedback, more focused feedback by request. You must submit a version by the deadline, but can update it after peer feedback before the final deadline (12/13) and the last version will be graded.

Deliverable 4 (12/6) Implementation.

You must submit your implementation accessible so that it can be viewed on a phone or computer by the teaching staff.

You should also take screenshots of each view of your implementation and submit them with descriptions of each part in the form of powerpoint slides or google presentation slides.

Details:

You have several options for implementation.

If you are redesigning an app, you may create a reasonable implementation of the design in whatever way you are most capable. This could mean creating an android or iphone app, using Applinventor, or mocking it up on a webpage that when opened on a phone appears like a phone app.

If you are redesigning a chrome extension, you will need to mock it up using html, css, and javascript. There are many tutorials for the basics of creating a browser extension.

Either way, it does need a fully functional back end, as long as it enables you to evaluate each of your three tasks.

Evaluation/feedback.

4 points. In-class presentation/demo along with peer feedback. If you cannot be present in class, please still submit your slides along with either text of what you would say in your demo or an audio recording to go along with your slides (say next slide in your recording so I know when to switch it). You must submit a version by the deadline but can update it after peer feedback before the final deadline (12/13) and the last version will be graded.

Deliverable 5 (12/13) Final Evaluation

Details:

Final evaluation.

You should update your user study if there were any problems with it.

Test with 10 people:

- 5 should use the original app or extension
- 5 should use your redesigned app or extension

Collect the data from both and compare.

Write up data, results, and thoughts about any ways your design could be further improved.

Evaluation/feedback.

10 points. Deliverables 2-5 graded after all have been submitted.