CptS 443/543—Human-Computer Interaction Spring, 2017

Overview of Team Project

*Last modified:* 17 Feb. 2017

During the last nine weeks of the semester, **teams of two to three students** will engage in a capstone team design project that spans two iterations of the user-centered design process. The project, which is worth 40% of your course grade, will proceed in five phases, as summarized in the following table:

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| --- | --- | --- | --- |
| Deliverable | Worth | Due | Description |
| *Team-building and design problem identification* | 0% | 2/21 in class | In “team matchmaking session” in class 2/21, students form teams and choose a problem that is of interest to them, and that can be addressed through technology design. Teams need to make sure that they have access to people (besides their own team members) who actually have the problem that their technology design will address. Teams make case that the problem they have chosen is actually a problem. Instructor ensures each team’s design problem is appropriate for the course. Teams that having trouble identifying a design problem are encouraged to pair up with another team and learn about a problem of one of the other team members that could be addressed through technology design. |
| *Early data gathering report* | 10% | 3/23 | To lay an empirical foundation for the design of your technology, teams conduct an early data gathering study. They research related designs and conduct contextual inquiries of at least three prospective users of proposed technology. Results provide a basis for developing user personas, formulating key scenarios, and establishing requirements. |
| *Low fidelity prototype video, critique, and iterative refinement* | 8% (video) and 2% (critique) | 4/4 &  4/6 | Based on the results of early data gathering, teams construct a low fidelity prototype of proposed technology design, and get early feedback on the design from prospective users and students in the class. They demonstrate low fidelity prototype by creating a video that illustrates the manner in which a user can interact with the prototype to complete at least five core tasks. They post the demo video to YouTube Each project team critiques the prototypes of two other teams using a structured rubric.  Teams are encouraged, but not required, to evaluate their low fidelity prototypes outside of class by having prospective users interact with them to complete tasks. Teams are encouraged to iterate through multiple versions of their prototypes as they refine their designs based on feedback |
| *High fidelity prototype implementation and usability study* | 10% | 4/27 | Based on feedback from their low fidelity prototypes, teams implement a high fidelity (computer-based) prototype using an implementation technology of your choice. Teams recruit three to five participants to participate in a usability study of your technology. Teams analyze the data and write an industry-standard usability report that presents the findings. |
| *Final presentation* | 10% | 4/20, 4/25, or 4/27 | Teams give a 15-minute in-class presentation of their projects. Presentations include (a) an introduction to the design problem and user population; (b) a brief presentation of key early data gathering study results; (c) a live demo of high fidelity prototype (this is when prototype is graded by instructor); (d) a presentation of key results of usability study (with video clips) and proposed design changes, and (e) a Q & A session with the audience. |

## *Assessing Team Members' Contributions to Project Deliverables*

All team members are expected to contribute equally to all project deliverables. Early in the process of completing each deliverable, I recommend that your team devise and agree upon a plan that equally distributes the work across team members, and that your team leader take the initiative to ensure that each team member performs the work that was assigned to him or her. To ensure that all team members get credit for the work that they do and that team members do not "free load," I require that team members assess each other's (and their own) contributions toward each project deliverable. You are required to submit this assessment through OSBLE within 24 hours of each project deliverable submission deadline. For further details on how to do this, please carefully read the Team member Assessment document available in OSBLE in the Project folder.