Overview of Team Design Project
Last modified: 19 February 2018

During the last nine weeks of the semester, **teams of four to five students** will engage in a team design project that spans two iterations of the user-centered design process. The project, which is worth 50% of your course grade, will proceed in five phases, as summarized in the following table:

Deliverable	Worth	Due	Description
TDP0: Team-building and design problem identification	0%	2/20 in class	In a "team matchmaking session" in class on 2/20, students will form teams and choose a technology/interface of interest to them, and that their team believes can be improved through technology design. Teams need to make sure that they have access to users (besides their own team members) who actually use the technology/interface. Teams will need to make a case that the interface they have chosen can be improved on. The Instructor needs to approve each team's proposed interface to make sure it is appropriate for the course and is of sufficient complexity. Teams are that having trouble identifying an interface are encouraged to pair up with another team (temporarily) to discuss possible interfaces that may be appropriate. Technology/interfaces must be unique to each team and will be approved on a first-come first-serve basis.
TDP1: Early data gathering report	8%	3/22	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.
TDP2: Low fidelity prototype video, critique, and iterative refinement	8% (video) and 4% (critique)	4/3 & 4/5	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 (private listing is fine as long as instructors can access). 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
TDP3: Analytic Evaluation	5%	4/11	Teams will conduct either a cognitive walkthrough or a heuristic evaluation on their chosen technology/interface in order to uncover and prioritize potential usability problems (and determine their scope and severity). Completing an analytic evaluation will be a vital step in completing the usability study report in TDP4.
TDP4: Usability study report	17%	4/27	Teams recruit three to five participants to participate in a usability study of your technology. Teams will need to make use of feedback/analysis from their low fidelity prototypes to aid in detecting usability issues during a usability. Teams analyze the usability study observed data and write an industry-standard usability report that presents the findings.
TDP5: Final presentation	8%	4/19, 4/24, or 4/26	Teams give a 15-minute in-class presentation of their projects. Presentations include (a) an introduction to the technology design and user population; (b) a brief presentation of key early data gathering study results; (c) a brief overview of the technology/interface (either live demo or a visual overview depending on the viability of live demo); (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.

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.