

# CSCI 443/576, Spring 2012

## Project 1 — Preliminary Design

**Due date:** The **beginning** of class on Thursday, Feb. 9.

**Design crits:** Thursday, Feb. 9 & Tuesday, Feb. 14.

### Project Goals

- To generate initial ideas about the design of your chosen system
- To understand **low-fidelity** design
- To begin thinking about the users of the system you are designing for, and what system qualities are most important to them
- To consider the context of where, when, and how your system will be used
- To understand and apply common principles of design
- To become familiar with the expectations for this course, the studio critique process, typical deliverables, etc.

### Project Description

This assignment is an individually based assignment. Your job is to start thinking about the design of the system you will create this semester, and to create a number of low-fidelity sketches to illustrate your ideas.

1. Start by thinking about the users of your system. Who are they? What is their background, age, experience, etc.? Why will they be using your system? Etc. Write up/describe the attributes of your users.
2. Decide what usability requirements (non-functional) are most important for your system and describe them. For example, I would suspect that usability requirements for a game would include that it is fun, easy to learn without reading a manual, etc. What else?
3. Start enumerating the functional requirements for your system. For example, if you were designing an interface for an ATM machine, two likely functional requirements would be:
  - Users should be able to check the balance of all their accounts.
  - Users should be able to withdraw money (up to \$300/day) from any of their accounts.

What are the functional requirements for the system you are designing?

4. Start sketching out a preliminary design for the interactive software components of your system. Include as much major functionality as you can in your sketches, including how users would complete representative tasks or functions. This implies that you will need to generate multiple sketches to show various aspects of your system.

### Requirements for Sketches

For the design sketches you create, you must use poster sized paper to display your final drawings. During the design crit session beginning Feb. 9<sup>th</sup>, you will be taping your sketches to the wall for others to look at. This means that your drawings must be clear and large, and they may include some annotations/explanations.

### Project Deliverables

On the due date (Feb. 9<sup>th</sup>), hand in your design sketches along with a report that contains the items described below. Each section of the report must be clearly labeled.

1. A cover page with your name, project #, date, and a (preliminary) name for your system.

2. A description of the product you chose to design.
3. A description of the intended users of your system, any special features or attributes of these users we should know about, where the system will be located, how it will be used, how frequently it will be used, etc.
4. A description of the usability requirements for your system (see details provided above).
5. A bulleted list of the functional requirements for your system. All functional requirements should begin with the words “*Users should be able to ...*” Clearly indicate on this list which requirements are illustrated via your design sketches.
6. Any special notes that accompany your design sketches. It should be clear, for example, what each drawing depicts and how it ties back to the functional requirements you defined. Make sure that all of your drawings are clearly labeled and that they have your name on them.

Please note that you have been given two weeks for this project. Your grade will largely reflect the amount of time and effort you put into this project, along with how well you followed these instructions.

### **Design Crits**

For the design crits that will be held during class on Feb. 9<sup>th</sup> and the 14<sup>th</sup>, come prepared to tape your designs to the wall and explain them to your peers and the instructor. Make sure that you record notes on the feedback you receive as this will be something you incorporate in Project 2.