

# **Design Assignment (40%)**

Objectives: Assesses objectives A, B, 2, 3, 4 as per the Course Outline

#### **Deliverables and Due Dates:**

Deliverables	<b>Due Dates</b>
Background research to identify and understand needs and establish	Week 7
requirements. Deliverables: Personas and scenarios	
Generate ideas for alternate design, 1 <sup>st</sup> iteration:	Week 10
Deliverables: concepts, storyboards, wireframes, subsequent prototypes	
Evaluation to improve concept and design, 2 <sup>nd</sup> and 3 <sup>rd</sup> iteration:	Week
Deliverables: Semi functioning prototypes demonstrated, acted out, filmed,	12/14
documentation	
Final Presentations of Projects and Prototype	Week 15
Submission of Design Documentation and Peer Assessment	

### 1. Overview

For this assignment students will work in groups of 4-5 to complete the requirements gathering, analysis, concept and prototype development, and evaluation of an interactive product (a website, device etc) using a user-centered development process. The process should include background research, the development of personas, user scenarios, specification and design of the system's functionality, the interaction design of the prototype (interface, input, output, interaction dialogue etc), and several rounds of usability evaluations. If it is appropriate for your project you can also design the site to support access via hand-held/mobile devices.

The project provides opportunities to practice user-centered design methods that combine a range of research, design and evaluation activities including theory, exploratory and experimental studies, prototyping and user testing.

Remember! Using the technology you design is not the work that your users do. They are using your the system you build to serve a customer, buy a ticket in order to travel, accomplish a task in their job and so on. Your solution should blend into existing practices and not require any explicit extra effort to use. Anything that demands effort, over and above what people would normally expect to do, will almost certainly fail in use.

#### Process as outline in the textbook

- 1. Identifying needs and establishing requirements
- 2. Developing alternative designs
- 3. Building interactive versions of the designs
- 4. Evaluating usability and user experience of your design throughout the process

This is an iterative cycle.

## 2. Project options. More info: https://wiki.mozilla.org/Labs/Course/topics2011

- i. Mobile Intersections between potential user needs and evolving technologies.
- ii. Tablet Multitouch interaction, gestural interface design for controlling web activities.
- iii. Apps Apps for mobile is a well-known way to interact with the Web; anything bigger than that?
- iv. HomeDash Are people buried among all tabs, pages, histories and notifications? How can a browser help people manage that?
- v. Do It For Me Make your favorite web activity easy to do, across all websites!

# 3. Deliverables and Grading criteria

## Wk 15 Peer assessment, with Design Documentation

Pass/Fail, but a condition of passing the assignment

Each student will be required to evaluate the contribution of all members of their project groups, including themselves, and to make a signed declaration detailing their contribution to the group project. Evaluation forms will be made available.

The form should be filled in individually and handed in with each deliverable. The different evaluations from group members will be averaged and individual points will be adjusted and redistributed if clear and consistent differences in contribution are identified. These evaluations will be treated confidentially. Their purpose is to ensure that individuals do not exploit the efforts and good will of the other members of their group.

## Week 7 Presentation of Project-in-Progress:

5 points

This presentation is intended to provide your group with an opportunity to have your lecturer, colleagues and industry partner engage with your project as it develops. Use your time well! The more material you have prepared the more and better feedback we can provide. All team members are expected to be present. Each group has 15 minutes at their disposal.

You should also hand in a 2 page written report documenting your project to date.

Your presentations should focus on:

- Background research, to show your understanding of the design problem
- User research present your personas and scenarios and overall design process to date
- Your requirements what should the system do and why
- Outline the next steps in your project

Your presentation will be assessed collectively on:

- Depth and breadth of research as evident in your understanding of the design problem
- User research as evident in the quality of personas and scenarios
- User evaluation and incorporation of findings
- The group's recognition of key tasks to pursue as evident in a high level project plan
- Quality of the presentation

## Week 10, 12 and 14 Presentations/ progress meeting with lecturer and industry partner

Each group will show evidence of progress by presenting to the class, and discuss their progress with the lecturer and industry partner. This stage involves generating ideas for alternate design (1<sup>st</sup> iteration), and evaluation to improve concept and design (2<sup>nd</sup> and 3<sup>rd</sup> iteration).

#### Deliverables:

- Concepts, storyboards, wireframes, prototypes to date
- Demonstration of prototype (e.g. acted out, filmed)
- Documentation
- Present how user evaluation were carried out to arrive at above prototypes
- Show how findings from user evaluations have been incorporated
- Questions for colleagues, lecturer and industry partner

# Week 15 Presentations of Final Design

5 points

In week 15 you will present your final design. Your presentation should be about 15 minutes.

This presentation should include:

- A concise description of the proposed solution including a demo of the prototype
- Design process followed, i.e. descriptions and justification of iterations and evaluations
- Reference to design principles and theory (where appropriate)

Your will be assessed collectively on:

- Quality (usability and appropriateness for project) of prototypes
- Summary and justification of the design process that was followed
- Reference to design principles and theory (where appropriate)
- Preparedness and quality of the presentation

#### Week 15 Submission of Design Documentation

30 points

In week 15 you will submit documentation of your design process, this is not a traditional document to be handed over to the developers, but rather a documentation of the process you have used. The documentation should make explicit the design choices made at each stage of the process (and the reasons why they were made). Max **twenty-five page** written design document

The design documentation and prototype will be assessed according to the following criteria:

Structure, clarity, quality of writing, referencing, presentation and focus on topic	5 points
Thoroughness of research	5 points
Quality of user representation	5 points
Quality and thoroughness of usability evaluation	5 points
Quality of design/prototype (especially usability)	10 points
Total points	30 points

Feedback from interactions with your industry partners will also be taken into consideration in the evaluation of the project.