**SWE 5063 Mobile Web Development Project Guide**

## Overview

The project allows students to explore their own interests and learn from their unique experiences. The project is customized to satisfy student needs and learn or apply knowledge in greater depth. Term project requires significant more time and effort, but in return you get experience. Please meet with the instructor to discuss your project. You need to work closely with the instructor and regularly report your progress.

There are two basic types of projects you can choose from:

1. A development project.
2. A research project.

### Development project

The development project focuses on the development of a mobile friendly website, mobile web or hybrid application, for various purposes. The development project emphasizes on a more complete and working application that requires some analysis and design. It addresses a real-world problem in a more practical context with fewer assumptions. Additional learning may be needed beyond the class, but it is rather limited. The functionalities and scope of the project can be negotiated, but generally it is at least equivalent to three class assignments.

The development project gives students a chance to apply their knowledge and skills in a real-world web site or application project. The project may be different from semester to semester.

There are four choices of development project:

1. Redesign a mobile friendly website for an existing live website which is not mobile optimized.
2. Develop a mobile friendly website for a real organization which has no website.
3. Replicate or even improve an existing web or mobile app using mobile web technologies.
4. Proposed and develop a completely new web or hybrid app.

### Research project

The research project focuses on concepts, practices, tool, and implementations of the latest and most popular web technologies and applications. You have a chance to expand your learning of the vast web world and get something you are interested in. The project is not focus on a complete working solution, but an in-depth study and understanding. Development work may be needed to demonstrate your learning, but no complete work is needed. The following list provides some topic examples (you may suggest a topic not in this list but please discuss it with the instructor first):

* iUI
* Chrome WebView
* Sencha Touch
* The M Project

## Student Project Presentation Guide

All or selected presentations and demonstrations are scheduled in Module 12. Each presentation will last about 10 to 15 minutes.

For development projects:

* Introduce your application and give a conceptual architecture view.
* Demonstrate and explain each major functionality; demonstrate that it works and explain how it works.
* Demonstrate and explain how each functionality is implemented (by going through the source code and the programming techniques applied).
* Demonstrate and explain other interesting things in your application which are not covered in our regular class topics, assignments and exercises.

For research projects:

* Use the PowerPoint slides to guide your presentation – 15 pages minimal.
* Introduce your topic and explain concepts as needed. Go through other topics laid out in your slides, such as general practices, technological and business context, reviews and evaluations, history, future trends, etc.
* Report your research work and demonstrate live sample applications or processes done by you to illustrate your points.

## Final project package submission

For development projects:

* Make sure your project webpage is up and running correctly before the due date and keep it for the rest of the semester.
* Create an "About this project" page and put a link in the main menu. In the "About" page:
  + Introduce and describe this application.
  + A final list of implemented functionalities.
  + A list of development and programming features or techniques applied in this application.
  + A list of web resources you find useful.
  + Other things you want to showcase.
* Submit the following to D2L
  + Compress all source files into a .zip file.
  + A project report to describe how your redesign is mobile friendly. Use screenshots + callouts to document all features.

For research project, make a homepage which include the following content and links

* Project title and abstract (description).
* A link to the final presentation file.
  + Report your learning and key knowledge points; logically organize your findings and live examples.
  + The presentation file should also cover concepts, practices, technological and business context, reviews and evaluations, history, future trends, etc.
* Links to live examples (if any).
* Links of the web resources in your references.

## Project evaluation

There are 100 points allocated for the project.

* Final development or research quality – 60 points
  + At least 10 web pages with varied types of information and applications. Consult with the instructor about web page selection if the target site is too big.
* Progress – 20 points
  + Make good progress along the semester. Please communicate about any question and ideas with the instructor.
* Presentation/Report – 20 points
  + Good presentation/demonstration.
  + Professionally compiled report.

**Note: this guide tries to provide as much information as possible. But there are always unexpected issues. Please try to communicate with the instructor if there’s any question or concern. Thank you.**