



## Overview

For our final project, we propose to create a replacement system for the current WebCT system. We believe that we can create a more user-friendly, centralized system containing all the information and resources needed for instructors, T.A.s, and more importantly, the students. The end result is that the user should not need to use any external resources for main course-related issues and the user should be able to quickly learn to use the new system effectively. For most students at SFU, WebCT handles tasks such as retrieving lecture notes, seeing grades or submitting assignments. As current SFU students, our team has had three years of extensive firsthand user experience using WebCT, and from it we understand the benefits and drawbacks. We plan to take the best aspects of the current system, redesign the parts we feel could be more effectively implemented and integrate new features that are essential to create a better, more efficient system.

## The Problem

The primary drawbacks of WebCT that we hope to resolve with our new system are the incompatibilities between systems (browsers and mobile devices) and a more effective implementation of important pre-existing and future features (e.g. calendar, notifications, better layout, etc).

## Our Solution

To resolve these problems, we hope to make our system consistent and compatible across all the major platforms. Furthermore, we will design all features so that they are intuitive and easy for the users to use.

## Technologies Used

- Django 1.3.1 Web Framework
- MySQL 5.1.54
- Apache 2.2.17
- Ubuntu 11.04
- Google (Maps, Calendar, Charts) API
- JavaScript/JQuery

## Implementation List

Features that we plan to implement in our system that may or may not be pre-existing features:

- Compatibility:
  - Cross-browser compatibility (i.e. no need for browser check)
  - Mobile web support (e.g. iOS and Android)
  - More multimedia support (e.g. visual, audio learning)
- Calendar:
  - Include all assignment and test due dates from all courses automatically.
  - Synchronize calendar with Google calendar and/or SFU connect.

- Notifications (opt-in/out-out):
  - Email when mark is posted
  - Email before due dates for assignments and tests
  - Email instructor and T.A. announcements to students
  - Notify of any updates or messages when student logs in
- Gradebook:
  - Persistent grades for past semesters
  - Ability for more feedback on marked assignments
  - Generate statistics for list of students and grades (e.g. see who is failing, who is doing good, assignment grades, etc)
  - Easier for marker to input grades for a class
  - Calculate mark needed on assignment/exams to get overall grade
- Miscellaneous:
  - Split up views for student, instructor and T.A., as well as a general overall view of all classes besides separate modules for each class
  - A project area for group communication so external communication is needed
  - Creating a more user-friendly, convenient and accessible design that is easy to learn (better placement, better navigation, and less clicking)
  - Student should be able to add notes for overall view of classes, as well as inside separate modules for class
  - Quizzes, and other features (i.e. a course module should be able to work as a distance education course if needed)
  - Automatic saving of data in case of accidents