

CS 242 Final Project Proposal Template

Integrated Class Environment
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1. Abstract

1.1. Project Purpose

This project is to create an integrated class page, which includes information, assignments, discussions, grading, etc.

1.2. Background/Motivation

If you look at just CS242, we have Compass for grades, Piazza for discussions, the wiki for assignments and subversion for submissions. Except for subversion, keeping up with multiple sites for different parts of administration of the same course can get tedious. The intent of this project is to create a skeleton example of a way to organize all these features in one site.

2. Technical Specifications

2.1. **Platform:** Website

2.2. **Programming Languages:** Python, MongoDB, JavaScript

2.3. **Stylistic Conventions:** Python style guide

2.4. **SDK:** Flask, jQuery

2.5. **IDE:** PyCharm

2.6. **Tools/Interfaces:** Chrome, Robomongo, Postman

2.7. **Target Audience:** University students and professors

3. Functional Specifications

3.1. Features

Several bullet points of what kind of functionality your project will feature. What should the user be able to do?

3.2. Scope of project

What are some of the limitations of this product?

4. Timeline:

4.1. Week 1

- **Create database schemas**
- **Add user functionality**
- **Setup Flask-login and OAuth to login users**
- **Create sign-in page template**

4.2. Week 2

- **Create Class page template**
- **Create Assignment page template**
- **Create professor user profile**
- **Add ability to create assignments as professor**

4.3. Week 3

- **Create discussion forums for classes(Piazza style)**
- **Create search engine to search in a class**

4.4. Week 4

- **Add support for email notifications**
- **UI work, update Bootstrap styling and add custom CSS and JQuery animations**

5. Future Enhancements

Add support for language classes and other languages, add proper search functionality and options, add subversion integration to view submissions (such as with the portfolio), give grading access to TA accounts, etc.