CS 242 Final Project Proposal Template

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1. Abstract

1.1. Project Purpose
What is the purpose of this project? What problems do you want to solve?

The purpose of this project is to give students the means to a course organizer that is more specific to organizing towards assignments. We hope to allow students to stay on top of their assignments as well as be able to seek help regarding them. Students will be able to ask for feedback related to their assignments from other students and the teacher. Using this system, there will be a more systematic approach to finishing assignments and will hopefully lead to more developed homework from the students.

1.2. Background/Motivation
Why are you interested in doing this project? Have you worked on something similar before?

We are interested in doing this project because we have all had trouble finishing our homework at one point or another. Using this system, we would be able to seek out help much more easily than trying to communicate with just your friends that may or may not know what exactly your problem is.

2. Technical Specifications

2.1. Platform: (i.e. Website, iOS App, Arduino hack)

We plan to create a web application

2.2. Programming Languages: (i.e. PHP, Python, Lisp)

We plan to use Python and Flask for the web application as well as Javascript for UI work

2.3. Stylistic Conventions: (i.e. commenting, naming conventions, camelCase)

Plan to comment every method in Python code using docstrings as well as use underscores for our naming convention

2.4. SDK: (i.e. Pebble SDK, LAMP Stack, Android SDK)

Python and Flask

2.5. IDE: (i.e. Eclipse, Visual Studio)

Pycharm

2.6. Tools/Interfaces: (i.e. Android phone, Bluetooth tag, Google Chrome)

Google Chrome

2.7. **Target Audience:** (i.e. Botanists, iPhone users)

Students

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?

- Anyone can make an account as a student or instructor, admin would have to approve instructor registration requests

- Students will be able to view current tasks and due dates as well as completed tasks and mark a task as completed

- Instructors will be able to view progress of tasks completed as well as statistics related to the class

- Instructors can create new assignment where they can enter which students to send the assignment to

- Students will be able to upload files to ensure that a task is actually completed

- Instructors will be able to view completed assignments for each of the student in their class

- Students and teachers should be able to have a conversation about individual assignments that the student is currently working on

3.2. Scope of project
What are some of the limitations of this product?

- May not be able to handle large amounts of file data

- Might not scale to hundreds of users depending on database constraints

4. Timeline:

4.1. Week 1

- Kushal

  o Created admin page where admin can view all approved and unapproved professors and can also approve the professors

  o Created logic to direct professor to the appropriate webpage (not approved, approved and need to create class, approved after creating class)

  o Created database scheme for userTable and classTable and handled post requests for a professor creating a new class

- Nimit

  - Created home page with template and allowed users to sign in and create accounts

  - Created sessions for each of the user so we have the username as they navigate through webpages

  - Created professor page that displays course information

- Keshav

  - Create student page that displays all possible courses that one can register for

  - Display currently enrolled classes for each of the students

  - Pull tasks from the database associated with each student so it can be displayed on their respective pages

4.2. Week 2

- Kushal

  - Be able to mark tasks as completed, allow deadline extension, and show overdue assignments

  - Display a progress bar for each of the tasks on the student page

- Nimit

  - Create visual for professor where they can track the progress for each of the students on each assignment

  - Create post request for form to create new assignments

- Keshav

  - Create search menu for students to be able to find classes they want to sign up for

  - Allow students to register for classes and add assignments associated with those classes

4.3. Week 3

- Kushal

  - Implement discussion board for teachers and students for each assignment

- Nimit

  - Integrate with cloud storage system such as Google Drive or Dropbox to upload/view files online

- Keshav

  - Create statistics page with visualizations for getting data about student and class progression

4.4. Week 4

- Kushal

  - Create automated and manual tests to ensure instructors cannot have accounts until approved by admin and ensure that discussion board is displayed in order

  - Add Jquery animation for better user effects on login/admin/comment pages

- Nimit

  - Create automated and manual tests to ensure students can view all the correct and completed assignments that they have

  - Add Jquery animation for better user effects on student pages

- Keshav

  - Create automated and manual tests to ensure instructors can view the correct progress of assignments and that creating a new assignment pushes out new assignments on the student pages

  - Add Jquery animation for better user effects on instructor pages

5. Future Enhancements

What are some cool tweaks you'd want to make to your product after the core functionality is done? Are you planning to work on it in the future?

We would want to expand on this application to possibly include it to be used in agile type development teams. We believe that agile teams can similarly use a storyboard approach with assigning tasks to developers instead of just having an instructor to student relationship. Based on the popularity of the beginning stages of this application, we will decide whether or not to move forward with this project in the future.