Title: CS Tutoring App

## Background:

With students majoring in CS, many of these students have either weak or no programming background, and often struggle when trying to work on their programming assignments for the first time. This frustration can lead to extra stress and can discourage students from continuing their studies. For now, students primarily seek help through office hours and TA sessions, which may not be adequate for students that would benefit from 1:1 assistance. Therefore, I want to create an iOS app that would become the primary method for UC Davis students to seek tutoring assistance or homework help.

# Objective:

Create a user friendly app that can connect students and tutors based on class experience, grade received, professor taken, and previous rating from professors/students. Team would be responsible and have full control over designing the iOS app, and will collaborate with us to design and connect to the backend. Decisions on the app layout, app functionality, etc, up to the team.

## Take aways:

- 1. Learn agile engineering
- 2. Learn and implement fundamental design and UX principles
- 3. Coordinating larger projects with version control tools (git/github)
- 4. Collaborate and get connected with engineers working in Fortune 500 companies

## What is the differentiating factor?

- 1. No other tutoring apps tailored to school specific courses. Focusing on UC Davis allows us to better match tutors with students based on their coursework, grades, and general tutoring interests.
- 2. Organizing tutoring sessions via an app would allow us to keep track of tutoring performance (ratings), and be able to help students find the best tutors for the course, through time available, tutor reputation, and tutor ratings.
- 3. Simple/friendly UI to start "connecting" to tutors

## **Desired coursework/experience:**

- 1. Experience with development in Objective-C/Swift
- 2. Experience with developing apps
- 3. Experience with working in teams

#### Deliverables:

- 1. Design document, including the determination of the technology and associated benefit analysis
- 2. Prototype of the running app, with some or all of the proposed functionalities and any additional features, including all source code
- 3. Unit test plan and result

**Contact:** Expect to meet with the client once a week for around an hour, but flexible depending on students' progress.

Special Details: Client will retain full ownership of the application upon student handover of code.