Welcome to CSE 439S
Mobile Application Development II

Course Information

- **Instructor**
  - Todd Sproull
  - todd@wustl.edu
  - Jolley 536
  - Office Hours by Appointment
- **Classroom**
  - Whitaker 316 (Mac Lab)
- **Time**
  - Mondays and Wednesdays 1 – 2:30 PM
- **Course Website**
  - http://research.engineering.wustl.edu/~todd/cse439/
  - Also available on Canvas
- **Head TA**
  - Harry Wei

- **We will use Piazza to answer questions**
  - Please sign up, I emailed everyone an invite
Goals of the course

• Develop an app idea in a team where each member has different responsibilities

• Build a commercial quality app using version control and integrated testing

• Submit an app to the Apple App Store

• Update the app based on feedback

Requirements

• Completion of the iOS Version of CSE 438

• Access to an Intel-based Macintosh
  – Running macOS 10.15 or later
  – iPhone SDK Xcode 11.3 and iOS 13

• Textbook
  – None, we will use lecture slides and the developer.apple.com website

• Owning an iPhone or iPod Touch not required
  – We will use the simulator throughout the semester

• Each group must purchase an Apple Developer account
  – $99 per year
Monthly Outline

• January
  – Logistics and lectures

• February, March and April
  – Mondays - Weekly standups
  – Wednesdays - Lab time for you to work on your app

Group Presentations

• Project Proposal Presentation on Jan 27th

• Update presentation on March 23rd

• Final presentation on April 22nd
Group based work (update)

- Groups of 1-4 people will be formed for the entire semester
- Each group will work on a single app
- All members of the group are expected to work on the app

Group based work

- Each team member will also have one or more of the following role(s) each month:
  - Project Manager
  - Tester
  - Developer
- We will talk more about each role’s responsibilities next lecture and in the project proposal requirement.
Grading

• Your final grade is based on your contributions to the team, the completion of your project, and submitting it to the app store.

Grading breakdown:
  – Project Proposal and Presentation (10%)
  – Monthly project plan (15%)
  – Weekly standup (20%)
  – First submission to app store by 03/16/2020 (10%)
  – Update presentation (10%)
  – Final presentation (35%)
Grading

• Project Proposal and Presentation (10%):
  – Your project proposal consists of two parts:
  – Group formation
    • This is the part where you include your group members’ information. Note that you don’t assign roles to each member at this stage yet.
  – Project description
    • In this part you describe the app, including purposes target users, features, etc.
  – Details available in Project Proposal Assignment
  – Each group will present their proposal on Jan 27th

Grading

• Monthly Project Plan (15%)
  – You will need to make a new plan each month based on the performance last month and your perspectives about the future work. Each month’s plan is worth 5%. This is the place you will assign the roles to each group member, and hence this assignment can change every month.
  – Once you submit a plan for the month, you will need to adhere to it in this month and we will evaluate your work based on it.
  – Details available in Monthly Plan Assignment
Grading

• **Weekly standup (20%)**
  – Starting in February, on Monday each week we will have weekly standups (except for the first week in February)
  – You don’t need to prepare a PPT or anything; we will walk down to each group and you just need to show us what you did last week. We will determine your grade based on how well you completed tasks on your plan. You can still keep working on your project when we are checking other groups.
  – Details available in Weekly Standup Assignment.

Grading

• **First submission to app store by 03/16/2020 (10%)**
  – You need to make an initial submission of a working app to app store by 03/11/2020. It doesn’t have to be successful, but you need to submit the proof that you did it.
Grading

- **Update presentation (10%)**
  - On 03/23/2020, all groups will give a presentation on what you did so far.
    - One week after your submission to app store,
    - Potentially include data on how your app performed
  - Details about what you are expected to present are available in Update Presentation Assignment.

Grading

- **Final presentation (35%)**
  - On 04/22/2020 (last day of class), all groups will give a presentation on your work throughout the whole semester, including your apps, whether they made it to app store, and if so, how did the app perform.
  - Details about what you are expected to present are available in Final Presentation Assignment.
International Students (F1 Visa)

- International students on an F1 visa need to be aware of the rules regarding earning income while you are a student

https://www.cse.wustl.edu/~cytron/AdvisingFAQ/#keyword84

International Students (F1 Visa)

- Outside of OPT and CPT experiences that are allowed for students on an F1 visa, such students are not allowed to earn money pursuant to self-employment or independent contractor status. They also generally are not able to work off campus unless they can document sever economic hardship. You should check with the International Office for further information.

- Such students can be paid as TAs by the university, because that contributes to the students' studies and is managed by the university.

- Attempts to earn money outside the university are treacherous for students on an F1 visa. Especially in recent times, the USCIS agency has been both more vigilant in finding offenders and more quick to take action, which can include removal (deportation).

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International Students (F1 Visa)

A relevant example would be a student posting an app to the Apple iTunes store. There are the following possible problems with that for students with an F1 visa:

- If the student earns money from publication of the app, the student becomes self-employed, which is prohibited for such students. Most likely a tax form will be issued, which can then alert authorities that the student has earned money and violated his or her visa status. That could then lead to the student accruing unlawful presence and possible removal proceedings.

- If the student does not earn any money from the published app, the work done to create and publish the app could be construed as volunteer work, which is also prohibited by USCIS. While it is much less likely the student would be caught, the danger still exists.

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Students are advised to consult counsel and to take steps to be on the safe side of any line drawn for such issues.

For the reasons above, no course taught in our department can require students to publish an app. They can submit the app for evaluation by a company, but they are not required to publish the app.

**Group work:** the issues above become even trickier if the student is involved in group work. It is important that the group establish up-front whether any or all members are interested in publishing their work for money or even for free. If some members want to earn money or publish their work, and others do not, it is best that the group disband.

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Content Creators Form

- Students working in groups should agree on whether their app will be published, and if so, will it be free or paid app.

- I strongly encourage groups to come to a written agreement before you start working on the app.

- We have a content creator form on the course website that will assist with this process.

Questions?
Apple Developer Account

App Ideas