CSI 394 – SpTp: GUI and Mobile Programming Fall 2016

Professor: Dr. Ramsey MWF 12:30 - 1:20 Classroom: Dunning N103 Office Hours: Tu 1:30, W: 2:30, F:11:30 Course Website: http://shaunramsey.com/394 Office: Dunning N102 E-mail: sramsey2@washcoll.edu

Course Description

Overview: Mobile devices are available at our fingertips at most times. This course will focus on android development and developing applications for the android platform. We begin by examining the available features in the android gui and move on to capstone projects of your own design. The goal is to tackle beginner and basic aspects of android programming, develop and design an application of your own and then to implement it. Android development is done primarily in the Java programming language and XML. Other oft related topics such as accessibility, proper password protection and JSON will be discussed.

Teaching Philosophy: This course is designed to help you get comfortable with building GUIs and diving into a new API. Often you'll need to seek out source and source help and then use it to build new code. When you first start a new position, new programming language or new framework, you'll be required to make this happen fairly often. Part of the goal of this course is to prepare you for this inevitability as a computer scientist, while simultaneously picking up GUI and mobile programming experience. For some of you, this will come naturally (probably because you've done plenty of it) and for others the first few times will take you a significant amount of time. If it is taking you a bit longer, you'll need to do more of this offline. Get this practice under your belt now and it'll be a cinch to tie in new pieces for your project, senior thesis and in any new software development position you may earn.

Textbook: None. We will make extensive use of online materials, tutorials and API references. (Future version of this course will likely require the purchase of a pre-described tablet. Hoping to keep the price within reach of an expensive textbook.)

Course Policies

Grading Policy

The course grade will be computed as follows:

- 20%. Presentations
- **20%**. Write-Ups
- **30%**. Apps
- **30%**. Final Project

Quizzes. Short quizzes will be posted to canvas. Quizzes will remain open for unpenalized retakes until the last day of class.

Assignments. Some assignments may, by design, be difficult. We will strive to provide adequate support, through email, office hours, and help at the quantitative skills center. We encourage students to work on harder tasks in groups. Most assignments will be submitted through canvas. Late assignments will earn no credit.

Attendance Policy

Attendance: Attendance is mandatory in this course. On your sixth absence, you automatically fail the course. As a matter of courtesy, you are expected to notify your professor before class describing the reason of your absence. You must be present on the day of an exam or you will receive a 0. There is no distinction between excused and unexcused absences. It is quite likely that I will email you to discuss the reasons you have missed the class, but it is ultimately your duty to keep track of your absences and to contact me. Missing a class may result in missed classwork. There is no make-up classwork. It is your responsibility to obtain assigned homework, announcements and class notes from a classmate. Coming late to class or leaving a class early will also count against you. In this case, every two late arrivals or early departures (lates) count as an absence. Thus you fail the course with 12 lates or 6 absences or any mix of the two that add up to 6. Examples are: 2 lates and 5 absences, 4 lates and 4 absences, 6 lates and 3 absences, and so on.

Electronic Distractions

We will often use laptops to program in class. When we are programming in class, please avoid distractions such as email and facebook. If we find extensive use of such distractions, you may be asked to leave the classroom.

Accomodations

If you have an accommodation that has been reported to the college, please let me know as soon as possible so I can work to meet your accommodation. You must notify me of any necessary accommodation at least two weeks prior to the requirement.

Ethical Behavior

You are always subject to the Honor Code of Washington College. You should be aware that when you hand in materials, they carry the weight of the honor code with them.

In short, do not cheat. I will attempt to only assign fair and reasonable amounts of work, and will attempt to provide you enough support to complete it in a reasonable amount of time. Violations of the Honor Code of Washington College will be pursued according to College policy. If you find the workload to be unreasonably heavy, or the assignments too difficult, please bring your criticisms to me, and I will attempt to respond promptly.

While some forms of cheating are obvious, often students are unsure which actions constitute cheating in a programming course. This ethics statement is most emphatically not intended to discourage teamwork. As a rule of thumb, any part of an assignment that is not the work of the stated authors should have a citation. I do not require a particular citation format. However, the answer to the question "Who actually wrote this?" should always be clear.

Of course, it is not plagiarism to completely copy someone else's work and cite it appropriately. However, this does not show us that you have learned anything, hence is not worth credit.

Schedule

This schedule is subject to change as the semester progresses.

Week	Topics
Weeks 1-4	UI Tutorials and Practice
Weeks 5-8	Paper Dev, Screen Devs, Proposal Presentations
Weeks $9-12$	Extended Android Tutorials / Dev
Weeks $12-13$	Final Project Presentations
Week 14	Individual Meetings