UNIVERSITY OF CONNECTICUT

CSE 3200
Spring, 2024

Program and Course Information

Course Title: Mobile Application Development
Credits: 3.0
Mode/Format: Lecture, MCHU 202 M: W: F: 10:10 am – 11:00 am

Prerequisites: CSE 2102 and 3100; open only to students in the School of Engineering and declared Computer Science minors.

Instructor and TA Information

Instructor: David Strimple
Pronouns: he / him / his
Email: david.strimple@uconn.edu
Office: ITE 260
Office Hours/Availability: Monday 3-4, Tuesday 2-3, and by appointment or drop in**.**

Teaching Assistant: Tyler Hinrichs
Email: tyler.hinrichs@uconn.edu
Office Hours/Availability: TBA

Teaching Assistant: Harsha Sudabattula
Email: sri_harsha.sudabattula@uconn.edu
Office Hours/Availability: TBA

Course Materials

Required Materials:
Android Programming: The Big Nerd Ranch Guide 5th Edition

Other Materials:
Download and install Android Studios
Download and install ScreenRec.
You do NOT NEED an actual android device as you will use an emulator (virtual device).

Course Description

Introduction to mobile application development. Its focus is on Android native development. Java is the native Android Development language, however, since 2017, Kotlin has become the more widely accepted development language. Furthermore, it is commonly accepted that Kotlin is the future of Android Development. We will be using Kotlin in this class. The central objective is to develop students' problem-solving skills for mobile app development.

Course Requirements and Grading

Summary of Course Grading:

Course Components	Weight
Midterm Exam	15%
Class Participation	5%
Quizzes	15%
HW/Projects	45%
Final Exam	20%

Grading Scale

		Grade
grade <= 100%	grade >= 93	A
grade < 93%	grade >= 90	A-
grade < 90%	grade >= 87	B+
grade < 87%	grade >= 83	B
grade < 83%	grade >= 80	B-
grade < 80%	grade >= 77	C+
grade < 77%	grade >= 73	C
grade < 73%	grade >= 70	C-
grade < 70%	grade >= 67	D+
grade < 67%	grade >= 63	D
grade < 63%	grade >= 60	D-
grade < 60%		F

Exams and Short Quizzes will be given in lecture. They will be announced in class and on HuskyCT. Quizzes and exams may be scheduled in multiple or alternate locations.

HW/Projects will be completed in Android Studio on your own computer (desktop or laptop). You will use ScreenRec or similar software to present and submit your assignments via a link. Details of each assignment will follow.

Due Dates and Late Policy:
Due dates will be announced in class and posted on HuskyCt along with the assignment descriptions. There will be no makeup quizzes, but I will drop the lowest quiz score. Your completed quizzes are a good tool for the final exam review. Homework assignments will lose 10% for every 12-hour period in which you are late. I'll give you a one-hour grace period for the initial due date/ time if possible. Example: 1 hour to 12 hours late = -10%. 12 hours, 1 second to 24 hours late = -20% etc. We will not grade homework assignments that are subject to a deduction of 100 percent or more. There may be assignments that will not be accepted late at all. If this is the case, that information will be in the homework description and/or posted on HuskyCt.

Feedback and Grades:
Historically I am very quick to give feedback and grades. However, this will vary depending on the type of assignment. Quizzes and Exams tend to be graded and posted within 24 hours. You will be able to get back your quizzes the class after which they were taken or during office hours. Exams will not be released but you will be able to see your results. The homework assignments will take longer to grade. You may have to wait 1-1.5 weeks to get feedback for those.

Weekly Time Commitment:
You will be expected to work as many hours as it takes, or as long as you can to learn the material and produce the work expected of you. For some this will be 6-9 hours per week outside of class. Others may take longer.

Course Objectives

Objective 1: Gain a solid understanding of Android Application development fundamentals

- **By the end of the course, students should demonstrate knowledge of the core concepts and components of Android app development, including activities, fragments, intents, layouts, and resource management.**
- **Students should be able to develop Android applications using the Android Studios.**

Objective 2: Develop user interfaces that promote interactive experiences for Android apps

- **Students should be able to design and implement intuitive and visually appealing user interfaces (UI) using Android's XML-based layout system.**
- **Students should be able to apply event handling and responsive design principles to respond to user interactions.**

Objective 3: Build and deploy functional Android applications with data persistence and networking capabilities.

- **Students should be able to store and retrieve data using local storage mechanisms like SQLite databases or shared preferences.**
- **Students should be able to integrate network requests and communicate with web APIs, enabling their applications to retrieve and display remote data.**

Book Apps and What We have Covered in the Past

- Chapters 1-8: GeoQuiz 1-4, and 7
- Chapters 9-19: Criminal Intent 9-16
- Chapters 20-23: PhotoGallery 20-21
- Chapters 24 and 25: Toy applications 24 and 25

Schedule

First exam will be around the end of GeoQuiz. Estimate: Feb8, Feb10, or Feb13.
Second exam around the end of Criminal Intent. Estimate: Mar24, Mar27, or Mar29.
Final Exam during exams week: May 1-6.
Quizzes and HW/Projects will be announced. I estimate 4-5 small quizzes and 5-6 HW/Projects

There is no class on Friday, February 3rd during our normal 10:10- 11:00 meeting time.

How to Succeed in this Course

I expect that everyone comes to lecture on the day of an exam or quiz. Exams will be designed to last the entire hour. The final exam will be longer. Quizzes are not intended to last the entire class. I will try to give them at or near the beginning of class most of the time. I plan to post lecture videos to supplement the hour that we have together in lecture. Most people, in order to succeed will have to watch the videos, read the book, code the book, come to lecture, code and record a presentation of their applications. Others will need to find collaborators, find outside sources of materials and/ or come to office hours for extra help. I expect that this will be a fun class teaming with learning opportunities. I wish us all luck.

Students with Disabilities

Students with disabilities will receive accommodations through the CSD. We will make every effort to meet the needs of students with disabilities. If we are not, be sure to self-advocate. If you need to schedule examinations at the CSD, it your responsibility to do so in a timely manner as per the CSD guidelines.

Academic Honesty

Your work needs to be your own. Do not give or except solutions from other students or other sources outside of the class. Do not post your code. If you are found to have claimed another's work as your own, or given the work to others, or been found guilty of some other form of academic dishonesty, you may be subject to loss of credit for the assignment and the class and receive a disciplinary referral. During quizzes and exams you may not have your phone out. You may not use notes or notecards. You may not leave the room until your exam or quiz is turned in.