CS 344: Mobile Application Development
Fall 2022

Instructor: Michael P. Rogers
Office: Halsey 214
Office Hours: M-F 2-3 PM, or by appointment
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Class Times: MWF 11:30 AM-12:30 PM; Halsey 202 (M), Halsey 101C (WF)
Credits: 3

Prerequisites: A grade of C or better in CS 262.

Description: An introduction to the tools for developing mobile applications. Topics covered include: history of mobile development, using an appropriate IDE, emulating a mobile device, building a flexible user interface, understanding the application lifecycle, creating and managing multiple threads, creating and using web services and encrypting a completed project. A large mobile application will be created throughout the course.

Course Website: if it happens in this course, it will be posted on UWO's Canvas site. Set up notifications to be alerted when announcements are posted, new assignments, quizzes, or notes are posted and graded, etc.

Required Textbook: None: all resources are free and online

Course Outcomes: Upon successful completion of the course, students will be able to:
1. Understand the mobile platform and development environment and how it differs from traditional application development.
2. Understand the basic components on which mobile applications are created.
3. Be able to create a configuration file to present essential information to the system about an application.
4. Use permissions correctly to restrict access to a part of code or to data on a device.
5. Be able to define and create applications with sophisticated user interfaces including using layouts, menus, action bars, dialogs, notifications, drag and drop and toasts.
6. Provide the user with notifications when the application is running in the background.
7. Be able to handle concurrency using threads and handlers.
8. Create an application where the application can access data over a network from a mobile device.
9. Create an application using GPS locational services.
10. Be able to animate an application and create applications that respond to custom gestures.

Grade Scale:

Category	%
Project	50
Labs	35
Quizzes (Fridays)	10
Attendance Quizzes	5

Grading Criteria:

%	≥ 92	90-92	88-90	82-88	80-82	78-80	72-78	70-72	68-70	62-68	60-62	< 60
Letter	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F

Project Schedule:

Artifact	Date
Final Project Proposal	Week 2
Final Project Prototype	Week 4
Final Project GUI Submission	Week 6
Final Project - 1/3 Submission	Week 10
Final Project - Draft submission	Week 12
Final Project - Evaluations	Week 13
Final Project - Final submission	Week 14

Late Policies: Late submissions will not be accepted -- exceptions will be made for medical / personal issues (with a note from a doctor or from the Dean of Students Office).

Absences: It has been scientifically proven that the most significant factor for predicting student success is attendance (although whether this is truly causation or merely correlation is another question). Students should attend each and every class, and notify the instructor ahead of time if you will be absent. Attendance may be taken and factored into the Quizzes category.

Academic Integrity: You may discuss problems with other students, but the work you turn in for labs and your project, and answers to quizzes, must be your own. For code snippets that you use for your team project, the source of those must be clearly labeled in the comments. Failure to adhere to these guidelines will result in a 0 for the lab/project/quiz in question. For detailed information on what constitutes academic misconduct, please see the discussion of UWS Chapter 14, Student Academic Disciplinary Procedures.

Accessibility: Your instructor is committed to ensuring a fair playing field. If you have a disability and need assistance (e.g., a note taker, certain seating, extra time to take tests,

adaptive technology, etc.), please register with the Accessibility Center, and we will accommodate your needs.

Non-discrimination and Anti-harassment: Your instructor is committed to maintaining a harassment-free, welcoming classroom, and will not tolerate discrimination on the basis of race, religion, creed, color, sex, gender, identity/expression, ancestry, national origin, age, marital status, relationship to other employees, sexual orientation, disability, veteran's status, membership in the military, arrest/conviction record, political affiliation, or any other protected status.

Feedback: Your instructor thrives on constructive feedback, especially during the semester: feedback provided via SOS will be too late to benefit you, so if you are having issues, please discuss them with me ASAP.