TEXAS A&M UNIVERSITY
SAN ANTONIO

CSCI 4325:600, Mobile App Development I, Fall 2025, CRN: 11221
Department of Computational, Engineering, and Mathematical Sciences
College of Arts and Sciences

Course Syllabus

Class Modality:	**Online Synchronous**
Class Meeting Time:	W 7:00 – 9:45 PM
Class Duration:	8/27/2025 - 12/10/2025
Instructor:	Dr. Todd Wolfe Office: Remote E-Mail: twolf02@tamusa.edu Student emails will receive a reply within two business days.
Course Website:	https://tamusa.blackboard.com/
Office Hours:	By appointment

Catalog Course Description: This course covers the fundamental concepts of designing and developing software applications targeted for mobile devices running such as the Android operating system. The content is focused on strategies and techniques for designing and structuring mobile applications, including user interface screen layouts, the definition of program logic, and the connection between them. The application life cycle in the mobile environment and its important implications on application design is also examined.

Prerequisites: Prerequisite(s): Grade of C or better in each of: MATH 1314, CSCI 1436 (or CSCI 1136 and 1336), CSCI 1437 (or CSCI 1137 and 1337), CSCI 2436 or (CSCI 2336 and CSCI 2136) or CISA 3309 (or CISA 4309). Students who do not meet the pre-requisites must contact the instructor immediately.

Course Objectives: The objective of the course is to provide students with important knowledge and skills in the design and development of mobile applications running on the Android platform, including direct hands-on experience with the most widely used mobile application platform.

ABET Assessment: The Department is in the planning process of applying for ABET accreditation for its BS in computer science program for which this course is a core course. As part of that process, students will be assessed on program-level outcomes based on course outcomes from this course, and hence students must follow the necessary rigor to ensure mastery of the course outcomes. For this course, the following Program outcome will be assessed:

Outcome 2: Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.

Learning Objectives: After successful completion of this course, students will be able to:

- understand the general characteristics of a mobile computing environment
- understand the implications of those characteristics on the software design and development process
- design, code, compile, and run software applications for mobile devices
- be familiar with basic strategies for designing and structuring mobile applications, including screen layout, program logic, and the connection between them
- be familiar with the application life cycle in a typical mobile computing environment, and its implications for software design
- utilize the tools and techniques most commonly used to design and develop software for mobile devices on the Android platform

Required and Other Materials:

- **CodePath Android Development**: https://courses.codepath.org/courses/and102/pages/getting_started
- **Android Studio:** You will be required to use an Android Studio IDE. Android Studio Bundle comes with JDK and Android SDK, https://developer.android.com/studio/
- **Git** (open-source Version Control System): https://git-scm.com/downloads
- **GitHub** account: https://github.com/
- **Android Developer Guides**: https://developer.android.com/guide
- **Blackboard:** To access Blackboard, log into JagWire, https://jagwire.tamusa.edu/, Lecture slides and homework assignments will be available and turned in through the Blackboard.
- **Computer Hardware:** In order to participate in the tutoring sessions, you will need a computer with an internet connection, a microphone, and speakers/headphones.
- **Time:** You are expected to spend 4-8 hours per week for the course. Based on the background, some students may require more time. Time spent may be longer when assignments are due.

Course Requirements every student must fulfill in order to succeed in course:

1. Students should check the Course Calendar, Announcements, and Messages (e-mail) systems in Blackboard on a regular basis.
2. Students should keep current with all course assignments.
3. Students should communicate with the instructor either in class, online, offline or in office hours.
4. Students should remember that online courses assume greater responsibility and independent learning skills by the student for their own learning outcomes.
5. Students should keep current on class recordings, if not attending the live class.
6. Students are expected to attend the online session at the given time.

Grading Policy: The final course grade will be based on your performance on the exams, assignments and class participation using the following weights:

Attendance	5%
Individual Assignments	60%
Group Project App Milestone	35%
Total	100%

The final letter grades will be assigned as follows: Above 90% ⇒ A; 80 – 89% ⇒ B; 70 – 79% ⇒ C; 60 – 69% ⇒ D; Below 60% ⇒ F.

This course has a requirement of a grade of C as a minimal grade for satisfactory completion of the course.

Late Assignment policy:
There will be several individual and group assignments during the course. For all assignments, ALL intermediate work of the problem solution steps MUST be shown. This includes the use of the formula, the values substituted in the formulas for problem solution, as well as the intermediate steps of the computation. The units of measurement are extremely important and MUST be shown at each stage of computation and programming. All assignments will have a clearly indicated due date. All late assignments will be penalized 10% per day.

No Use of Generative AI Permitted:
This course assumes that all work submitted by students will be generated by the students themselves, working individually or in groups. Students should not have another person/entity do the writing of any portion of an assignment for them, which includes hiring a person or a company to write assignments and/or using artificial intelligence (AI) tools like ChatGPT. Use of any AI-generated content in this course qualifies as academic dishonesty and violates Texas A&M-San Antonio's standards of academic integrity.

Violations of Academic Conduct (Section 14.5 Student Handbook)
As a member in an academic community, students at Texas A&M University-San Antonio are expected to exhibit a high level of honesty and integrity in their pursuit of higher education, be mature, be self-directed and be able to manage their own affairs. Students who are unwilling to abide by these basic expectations will find themselves facing academic and/or disciplinary sanctions. Students are expected to share in the responsibility and authority with faculty and staff to challenge and make known acts that violate the Texas A&M University-San Antonio Code of Conduct. For more information please visit the Office of Student Rights &Responsibilities website http://bit.ly/TAMUSAStudentRR.

Students engaging in an act that violates the standards of academic integrity will find themselves facing academic and/or disciplinary sanctions. Academic misconduct is any act, or attempt, which gives an unfair advantage to the student. Additionally, any behavior specifically prohibited by a faculty member in the course syllabus or class discussion may be considered as academic misconduct. Academic misconduct includes, but is not limited to, cheating, plagiarism, prohibited use of artificial intelligence, multiple submissions, collusion, lying and bribery. For more information, refer to the Student Code of Conduct, Article III: Conduct Rules and Regulations. Texas A&M University-San Antonio faculty has the discretion to impose grade penalties as deemed necessary.

Faculty members are required to report such serious breaches of academic honesty to their chair, their dean and the Office of Student Rights and Responsibilities. In cases of academic misconduct, students may be subject not only to grade sanctions in courses but to disciplinary action. Grade sanctions may be imposed only by faculty members, but suspension or expulsion may be imposed only by the Vice President for Student Affairs. If a student wishes to appeal the decision of suspension or expulsion due to violations of academic misconduct, they must initiate their appeal as outlined within the Student Code of Conduct. Extenuating circumstances may cause the University to deviate from the defined time frames.

All student term papers and other written assignments are subject to analysis by anti-plagiarism and anti-AI software. Posting of any class work given to students, or solutions, or discussion, on publicly accessible forums, social media, or artificial intelligence is not permissible.

Considering the potential consequences of academic misconduct, it is obviously in students' best interests to avoid even the appearance of such behavior. If a student is unclear whether a specific act might constitute academic misconduct, please she/he should contact the instructor for an assessment of the situation.

Fall 2025 CSCI 4325:001 Class Schedule

The provisions and information set forth in the schedule below are intended to be informational and not contractual in nature. The instructor reserves the right to amend, alter, change, delete or modify the provisions of the schedule.

Topics Schedule

Class Date	Wk	Unit Topic	Graded Assignment	Assignment Deadline
8/27/25	1	**Unit 0** • Intro to class/syllabus review • Students complete Android 101 application	Submit application for CodePath	ASAP
9/3	2	**Unit 1** • Android Studio • Gradle • Android App Emulator Lab: Android Studio Scavenger Hunt	Project #1: Hello, Squirrel!	
9/10	3	**Unit 2** • Kotlin Syntax • Debugging Kotlin code Lab: Kotlin Bootcamp	Project #2: Kotlin Debug-a-thon	
9/17	4	**Unit 3** • Designing Android UI • Views and Attributes • ConstraintLayout Lab: Spotify Clone	Project #3: AnimalApps	

Class Date	Wk	Unit Topic	Graded Assignment	Assignment Deadline
9/24	5	**Unit 4** • Debugging in Android Studio • View Binding • Basic Interactive Apps Lab: Red Button	Project #4: CodeMath	
10/1	6	**Unit 5** • API Queries • Parsing JSON data • Loading data from the web Lab: Random Pets	Project #5: Choose Your Own Adventure API	
10/8	7	**Unit 6** • RecyclerView • Connecting RecyclerView to API results Lab: Random Pets 2	Project #6: CYOAPI Part 2: RecyclerView Edition	
10/15	8	**Unit 7** Lab: CodeZen Project: CYOAPI Pt 3: Beautified	Project #7: CYOAPI Part 3: ✨ Beautified ✨ • Theming • Resource Files • Custom Fonts	
Capstone Projects Phase Begins: 10/29 *Students no longer submit individual projects, instead submit group capstone work.				
11/3	9	**Unit 8** (Mini) Lab #8: Multiplayer Mode Group Project: Milestone 1	Milestone #1: Design-o-rama • Product Specs • Wireframing	
11/17	10	**Unit 9**	Milestone #2: Developing Your App	

Class Date	Wk	Unit Topic	Graded Assignment	Assignment Deadline
		Group Project: Milestone 2 (Mini) Lab #9: Shared Lifecycle	• Developing and testing • Recording a demo video	
12/3	11	**Unit 10** • Demo Day prep • Demo Day Presentations	Capstone Milestone 3 • Group presentations	
Final submission deadline - 12/4 **Final grades returned from CodePath -12/11** *Deadline for Faculty to Submit Grades - 12/13*				

IMPORTANT POLICIES AND RESOURCES

Academic Accommodations for Persons with Disabilities: The Americans with Disabilities Act Amendments Act (ADAAA) of 2008 and the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights protection for persons with disabilities. Title II of the ADAAA and Section 504 of the Rehabilitation Act require that students with disabilities be guaranteed equal access to the learning environment through the provision of reasonable and appropriate accommodation of their disability. If you have a diagnosed disability that may require an ccommodation, please contact Disability Support Services (DSS) for the coordination of services. The phone number for DSS is (210) 784-1335 and email is dsupport@tamusa.edu.

Academic Learning Center: The Academic Learning Center provides free course-based tutoring to all currently enrolled students at Texas A&M University-San Antonio. Students wishing to work with a tutor can make appointments through the Brainfuse online tutoring platform. Brainfuse can be accessed in the *Tools* section of Blackboard. You can contact the Academic Learning Center by emailing tutoring@tamusa.edu, calling (210) 784-1307, or visiting the Central Academic Building, room 202.

Counseling/Mental Health Resources: As a college student, there may be times when personal stressors interfere with your academic performance and/or negatively impact your daily functioning. If you are experiencing emotional difficulties or mental health concerns, support is available to you through the Student Counseling Center (SCC). To schedule an appointment call 210-784-1331 or visit Modular C, Room 166 (Rear entrance). All mental health services provided by the SCC are free and confidential (as the law allows). The Student Counseling Center provides brief individual and group therapy, crisis intervention,

consultation, case management, and prevention services**. Crisis support is available 24/7 by calling the SCC at 210-784-1331 (after-hours select option '2').** For more information and self-help resources, please visit www.tamusa.edu/studentcounseling

Emergency Preparedness: JagE Alert is Texas A&M University-San Antonio's mass notification. In the event of an emergency, such as inclement weather, students, staff and faculty, who are registered, will have the option to receive a text message, email with instructions and updates. To register or update your information visit: https://tamusa.bbcportal.com/.
More information about Emergency Preparedness and the Emergency Response Guide can be found here: https://www.tamusa.edu/uploadfile/folders/sdbowen23/pdf/pdf-635073426137928167-10.100.20.116.pdf

Financial Aid and Verification of Attendance: According to the following federal regulation, 34 CFR 668.21: U.S. Department of Education (DoE) Title IV regulation, a student can only receive Title IV funds based on Title IV eligibility criteria which include class attendance. If Title IV funds are disbursed to ineligible students (including students who fail to begin attendance), the institution must return these funds to the U.S. DoE within 30 days of becoming aware that the student will not or has not begun attendance. Faculty will provide the Office of Financial Aid with an electronic notification if a student has not attended the first week of class. Any student receiving federal financial aid who does not attend the first week of class will have their aid terminated and returned to the DoE. Please note that any student who stops attending at any time during the semester may also need to return a portion of their federal aid.
Jaguar Writing Center: The Jaguar Writing Center provides writing assistance to graduate and undergraduate students in all three colleges. Writing tutors work with students to develop reading skills, prepare oral presentations, and plan, draft, and revise their written assignments. Students can make individual or group appointments with a writing tutor. The Writing Center is located in the Central Academic Building, Suite 208. Appointments can also be made through JagWire under the services tab.

Meeting Basic Needs: Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Dean of Students (DOS@tamusa.edu) for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to provide any resources they may possess.

Military Affairs: Veterans and active-duty military personnel are welcomed and encouraged to communicate, in advance if possible, and special circumstances (e.g., upcoming deployment, drill requirements, disability accommodations). You are also encouraged to visit the Patriots' Casa in-person room 202, or to contact the Office of Military Affairs with any questions at military@tamusa.edu or (210)784-1397.

Religious Observances: Texas A&M University-San Antonio recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes for regular session classes.

Respect for Diversity: We understand that our students represent diverse backgrounds and perspectives. When we are equity-minded, we are aware of differences and inequalities and are willing to discuss them so we can act to resolve them. The University is committed to building cultural competencies, or the attitudes, skills, and knowledge that enable individuals and organizations to acknowledge cultural differences and incorporate these differences in working with people from diverse cultures. Respecting and accepting people

different than you is vital to your success in the class, on campus, and as a future professional in the global community. While working together to build this community we ask all members to:

- Share their unique experiences, values, and beliefs.
- Be open to the views of others.
- Honor the uniqueness of their colleagues.
- Value each other's opinions and communicate respectfully.
- Keep confidential discussions that the community has of a personal (or professional) nature.
- Use this opportunity together to discuss ways in which we can create an inclusive environment in this course and across the A&M-San Antonio community.

The Six-Drop Rule: Students are subject to the requirements of Senate Bill (SB) 1231 passed by the Texas Legislature in 2007. SB 1231 limits students to a maximum of six (6) non-punitive course drops (i.e., courses a student chooses to drop) during their undergraduate careers. A non-punitive drop does not affect the student's GPA. However, course drops that exceed the maximum allowed by SB 1231 will be treated as "F" grades and will impact the student's GPA.

Statement of Harassment and Discrimination: Texas A&M University-San Antonio is committed to the fundamental principles of academic freedom, equality of opportunity and human dignity. To fulfill its multiple missions as an institution of higher learning, A&M-San Antonio encourages a climate that values and nurtures collegiality, diversity, pluralism and the uniqueness of the individual within our state, nation, and world. All decisions and actions involving students and employees should be based on applicable law and individual merit. Texas A&M University-San Antonio, in accordance with applicable federal and state law, prohibits discrimination, including harassment, on the basis of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation, gender identity, or gender expression. Individuals who believe they have experienced harassment or discrimination prohibited by this statement are encouraged to contact the appropriate offices within their respective units.

Texas A&M University-San Antonio faculty are committed to providing a safe learning environment for all students and for the university as a whole. If you have experienced any form of sex- or gender-based discrimination or harassment, including sexual assault, sexual harassment, domestic or dating violence, or stalking, know that help and support are available. A&M-San Antonio's Title IX Coordinator can support those impacted by such conduct in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, and more. The university strongly encourages all students to report any such incidents to the Title IX Coordinator. Please be aware that all A&M-San Antonio employees (other than those designated as confidential resources such as counselors and trained victims advocates) are required to report information about such discrimination and harassment to the university. This means that if you tell a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the university's Title IX Coordinator (titleix@tamusa.edu, 210-784-2061, CAB 439K). If you wish to speak to a confidential employee who does not have this reporting responsibility, you can contact the Student Counseling Center at (210) 784-1331, Modular C.

Students' Rights and Responsibilities: The following statement of students' rights and responsibilities is intended to reflect the philosophical base upon which University Student Rules are built. This philosophy acknowledges the existence of both rights and responsibilities, which is inherent to an individual not only as a student at Texas A&M University-San Antonio but also as a citizen of this country.

Students' Rights

1. A student shall have the right to participate in a free exchange of ideas, and there shall be no University rule or administrative rule that in any way abridges the rights of freedom of speech, expression, petition and peaceful assembly as set forth in the U.S. Constitution.
2. Each student shall have the right to participate in all areas and activities of the University, free from any form of discrimination, including harassment, on the basis of race, color, national or ethnic origin, religion, sex, disability, age, sexual orientation, or veteran status in accordance with applicable federal and state laws.
3. A student has the right to personal privacy except as otherwise provided by law, and this will be observed by students and University authorities alike.
4. Each student subject to disciplinary action arising from violations of university student rules shall be assured a fundamentally fair process.

Students' Responsibilities

1. A student has the responsibility to respect the rights and property of others, including other students, the faculty and administration.
2. A student has the responsibility to be fully acquainted with the published University Student Rules found in the Student Handbook, Student Code of Conduct, on our website, University Catalog and to comply with them, as well as federal, state, and local laws.
3. A student has the responsibility to recognize that student actions reflect upon the individuals involved and upon the entire University community.
4. A student has the responsibility to recognize the University's obligation to provide an environment for learning.
5. A student has the responsibility to check their university email for any updates or official university notification.

We expect that students will behave in a manner that is dignified, respectful, and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated. Students expected to exhibit a high level of honesty and integrity in their pursuit of higher education. Students engaging in an act that violates the standards of academic integrity will find themselves facing academic and/or disciplinary sanctions. Academic misconduct is any act, or attempt, which gives an unfair advantage to the student. Additionally, any behavior specifically prohibited by a faculty member in the course syllabus or class discussion may be considered as academic misconduct. For more information on academic misconduct policies and procedures please review the Student Code of Conduct.

Key Dates For Fall 2024 Semester The complete academic calendar is available online:
https://www.tamusa.edu/academics/documents/ay-2025-calendar-09-19-2023.pdf

Academic Calendar 2024-25 (9/19/2023)

Fall 2024 Regular 16-Week Session

August 26, 2024	Monday	First class day
September 2, 2024	Monday	Labor Day Holiday - No classes
September 11, 2024	Wednesday	Census Date
November 27, 2024	Wednesday	Study day - No classes
November 28-November 30, 2024	Thursday-Saturday	Thanksgiving Holiday - No classes
December 5, 2024	Thursday	Last day of scheduled classes for weekday classes
December 6, 2024	Friday	Study day - No classes
December 7-December 13, 2024	Saturday-Friday	Final examinations
December 17, 2024	Tuesday	Commencement
December 24-January 1, 2025	Tuesday-Wednesday	Winter Break

Fall 2024 First 8 Week Session

August 26, 2024	Monday	First class day
September 2, 2024	Monday	Labor Day Holiday - No classes
September 2, 2024	Monday	Census Date
October 14, 2024	Monday	Final examinations
October 14, 2024	Monday	Last day of scheduled classes for weekday classes
November 28-November 30, 2024	Thursday-Saturday	Thanksgiving Holiday - No classes
December 17, 2024	Tuesday	Commencement
December 24-January 1, 2025	Tuesday-Wednesday	Winter Break

Fall 2024 Second 8 Week Session

September 2, 2024	Monday	Labor Day Holiday - No classes
October 15, 2024	Tuesday	First class day
October 22, 2024	Tuesday	Census Date
November 28-November 30, 2024	Thursday-Saturday	Thanksgiving Holiday - No classes
December 5, 2024	Thursday	Final examinations
December 5, 2024	Thursday	Last day of scheduled classes for weekday classes
December 17, 2024	Tuesday	Commencement
December 24-January 1, 2025	Tuesday-Wednesday	Winter Break