Course Info

Intro Android App Development

CIS165DA 39469 Fall 2020
Start Date: Sep 21, 2020
End Date: May 28, 2021
Credits: 3
Modality: In Person

Instructor Information

Name: Thomas Clarke
Contact Information:
Email: thomas.clarke@dvusd.org
Location: Boulder Creek High School
Office Hours: before school and by appointment
Website: https://www.dvusd.org/domain/3959

Course Competencies

Official Course Description

Beginning with an overview of Android features, this class explores the required software tools and programming techniques for developing Android device applications from creating the user interface, working with activities, intents and views, to using databases, providing data persistence, accessing device services, to debugging and publishing applications.

Official Course Prerequisites

Prerequisites: A grade of C or better in CIS150++, or CIS156, or CIS159, or CIS162++, or CIS163AA, or permission of Instructor.

Official Course Competencies

1. Identify features of the Android architecture and operating system. (I)
2. Describe the process to install and configure Android development tools including the Software Development Kit (SDK). (II)
3. Create Android applications using the essential statements, data types, structures and syntax of an Android-focused language such as Java or Kotlin. (III)
4. Analyze target audience, purpose and determine the viability of an application. (IV)
5. Configure an Android Virtual Device using the Android Emulator for testing an application. (II, V)
6. Utilize various layouts in designing Activities. (V)
7. Place and code various views in an Activity including Buttons, TextViews, ListViews and ImageViews. (VI)
8. Link activities using Intents. (VII)
9. Create and use a simple database in an application. (VIII)
10. Persist data using internal and basic external storage. (IX)
11. Add media to a project including audio and graphics. (X)
12. Access message and web services in an application. (XI, XII)
13. Prepare an application for deployment. (XIII)

Standards and Expectations

This dual enrollment college course is intended for high school students at the junior and senior level.

Time Requirement

You will need to dedicate significant time to this college course. For each credit hour, plan to spend at least two hours a week on homework in addition to class presentation time.

Course Calendar

Weeks	Lessons
1,2	Identify features of the Android architecture and operating system.

3,4	Install and configure Android development tools including the Software Development Kit (SDK)
5,6	Configure an Android Virtual Device using the Android Emulator for testing an app
7-9	Utilize multiple layouts in designing Activities
10,11	Place and code various views in an Activity including Buttons, TextViews, ListViews and ImageViews
12,13	Link activities using Intents
14,15	Review
16	Mid-term
17,18	Create and use a simple database in an application
19,20	Persist data using internal and external storage
21,22	Add media to a project including audio, graphics, and frame-by-frame animation
23,24	Access device sensors in an app such as the Global Positioning System (GPS) and accelerometer.
25,26	Access device sensors in an app such as the Global Positioning System (GPS) and accelerometer.
27-29	Access message and web services in an application
30,31	Package an app for deployment
32-34	Project
35	Review
36	Final

Grading Standards

Grade	Percentage
A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	Below 60%

Attendance Standards

Full attendance and active participation are necessary for success in this course. District and school attendance policies as stated in the student handbook will be strictly followed.

Late Policy

District and school policies as stated in the student handbook will be strictly followed.