

Common Course Outline
CSIT 268
Android Application Development
4 Credits
The Community College of Baltimore County

Description

CSIT 268 – 4 credits – Android Application Development introduces students to Android development utilizing the Android Software Development Kit (SDK), Android Virtual Device (AVD) and Eclipse to create mobile applications. Students also learn how to test, debug, and deploy applications.

4 Credits

Prerequisite: CSIT 210 or CSIT 212 or CSIT 214, or consent of department chair.

Overall Course Objectives

Upon completion of this course students will be able to:

1. use the Android user interface;
2. implement Android user input, variables, and operations;
3. implement icons and decision-making controls;
4. implement Android lists, arrays, and web browsers;
5. integrate audio in Android apps;
6. implement pictures in gridview;
7. implement DatePicker on tables;
8. implement master/detail flow activity on a tablet;
9. integrate animation in Android apps;
10. implement persistent data in Android apps; and
11. utilize Android app publishing.

Major Topics

- I. The Android world
 - A. Eclipse
 - B. User interface
 - C. Package explorer
 - D. User interface layout
 - E. Form widgets
 - F. The emulator
- II. Designing
- III. Themes and the Android manifest file
- IV. Conditional statements
 - A. If statement
 - B. If Else statement
 - C. Relational operators

- D. Logical operators
- E. Data validation
- F. Toast notification
- G. isChecked() method
- H. Nested if statements
- I. Button events
- V. Intents
- VI. Music
- VII. Testing
- VIII. Android virtual device
- IX. Application templates
 - A. Master/detail flow template
 - B. Images and the drawable folder
- X. Animation
- XI. Persistent data
 - A. Shared preferences
 - B. Internal storage
 - C. External storage
 - D. SQLite databases
 - E. Network connections
- XII. Google play

Course Requirements

Grading procedures will be determined by the individual faculty member and will include the following:

- Minimum of 4 programming projects*
- Minimum of 2 tests
- Comprehensive final exam or programming project

*These projects will include collaborative work, written portions and oral presentations as assigned by the faculty member.

Written Assignments: Students are required to utilize appropriate resources.