Mobile Application Development

2023-2024 Catal

[ARCHIVED CATALOG]

SDEV 264 - Mobile Application Development

PREREQUISITES/COREQUISITE: SDEV 200 - Software Development using Jav OR SDEV 210 - Software Development using Visual Basic in the .NET Framework OR SDEV 220 - Software Development Using Python OR SDEV 230 - Software Development using C++ OR SDEV 240 - Software Development Using C#.

PROGRAM: Software Development

CREDIT HOURS MIN: 3 LECTURE HOURS MIN: 2 LAB HOURS MIN: 2

DATE OF LAST REVISION: Fall, 2017

Introduces students to concepts and practices of different programming and software development languages for mobile applications. Students will learn the software development lifecycle for mobile devices including investigating requirements, feasibility, building, testing, deploying, and supporting the application. Concepts will be applied through creating hands-on applications for one or more platforms using current development environments and tools. Students will practice skills such as team building, work ethic, communication, documentation, and adaptability.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

- 1. Compare and contrast different mobile platforms, their tools, and the development process.
- 2. Identify and apply the software development lifecycle steps for mobile devices.
- 3. Install software development IDE(s) for mobile application development.
- 4. Create applications using variables, controls, math operators, and control loops.
- 5. Create applications using lists and arrays.
- 6. Create an application to launch a web browser.
- 7. Develop applications using audio, images and animation.
- 8. Develop applications using persistent data.
- 9. Use object-oriented programming techniques (e.g., encapsulation, inheritance, and polymorphism) in creating mobile applications.
- 10. Optimize programming code for mobile architectures and utilize timers, event handlers, messaging, location services, broadcasting, and broadcast receivers in software applications.
- 11. Discuss various methods to publish your applications.

COURSE CONTENT: Topical areas of study include -

- Mobile Application Development
- Object Oriented Programming
- Application Development Lifecycle
- Mobile Platforms
- IDEs
- User input, variables and operations
- Icons
- · Decision controls
- · Lists, arrays
- · Audio, images and animation

• Persistent data

Course Addendum - Syllabus (Click to expand)

