

Course Catalog 2012-2013

ANDROID DEVELOPMENT



Android Development

Introduction to programming for the Android platform course is designed to quickly get you up to speed with writing apps for Android devices. You will learn the basics of the Android platform, and gain an understanding of the application lifecycle. By the end of the course, you will be able to write simple GUI applications, use built-in widgets and components, work with the database to store data locally, and much more. This is a perfect course to get started with Android programming.

Course Objectives

Upon completion of this course, students will be able to:

- Write simple GUI applications.
- Use built-in widgets and components.
- Work with the database to store data locally.

Who Should Attend

This course is for students who wish to get up to speed with writing apps for Android devices.

Prerequisite:

Java experience is required to get the most benefit from this training.

Course Duration:

48 hours, Total 16 classes, 3hours per class

Course Details

Lesson 01: Introduction

- Introduction to Android
- Native Android Application
- Android SDK Features
- Open Handset Alliance
- Android Development Framework
- Android Application Architecture
- Android Libraries

Lesson 02: Development Tools

- Developing for Android
- Using Eclipse
- Running and Debugging
- Developing for mobile devices
- Android development Tools

Lesson 03: Working with Applications

- Creating Application and Activities
- Application Manifest Introduction
- Android Application Life Cycle
- Application Priority and process states
- Externalizing resources
- Android Application Class
- Android Activities

Lesson 04: Advanced UI

- Fundamental Android UI Design
- Introducing Views
- Introducing Layouts
- Creating new Views
- Drawable Resources
- Resolution and density independence
- Creating and using menus

Lesson 05: Intent & Intent Filters

- Introducing Intents
- Pending Intents
- Adapters
- Using Internet Resources
- Introducing Dialogs

Lesson 06: Saving & Loading

- Saving Application Data
- Creating and saving preferences
- Retrieving shared preferences
- Introducing the preference Activity and preference Framework
- Creating a standard preference activity
- Saving Activity State
- Saving and Loading Files

- Including static files as Resources
- File management tools

Lesson 07: Working with database

- Android Databases
- Introducing SQLite
- Cursors and content values
- Working with SQLite Database
- Creating new content Provider
- Using Content providers
- Creating and Using Earthquake content provider
- Native Android Content provider

Lesson 08: Location Based Services

- Using Location based Services
- Configuring Emulator to test Location based Services
- Updating Locations in Emulator Location Providers
- Selecting a location provider
- Finding your location
- Using proximity Alerts
- Using a geo coder
- Creating Map based Activity

Lesson 09: Service Manager

- Introducing Services
- Using background Threads
- Let's make a toast
- Introducing Notifications
- Using Alarms

Lesson 10: Screen & Search Box

- Home Screen widgets
- App widgets
- Earthquake widget example
- Live Folders