

Android Development

(5 days hands-on)

Android is Google's open-source Java-based platform for mobile/cell-phone development. This course provides comprehensive hands-on coverage of Android. You will learn how to use the full features of the Android SDK, using the Eclipse-based Android development environment.

Contents:

- **Overview of Android:** Overview of mobile development platforms; The role of Android; Understanding the Android stack; Overview of the Android SDK; Creating a simple Android application
- **Key Concepts:** Activities; Intents; Services; Content providers and broadcast receivers
- **UI Development:** XML UIs; Java UIs; Screen resolution; Managing layout; Using UI components; Selection; Menus and dialog boxes; Handling events; Graphics and animations
- **Interacting with the Android System:** Accessing the file system; Accessing preferences; Managing notifications; Understanding the Android security model
- **Multimedia:** Overview of multimedia capabilities; Playing-back audio and video; Audio formats; Video formats
- **Database Access:** Overview of SQLite; Creating a database; Connection management; Creating and executing commands
- **Managing Content:** MIME types; Adding, deleting, and modifying content; Searching for content; Content files; Custom content providers
- **Managing Location:** Overview of Location Manager; Using Location Manager; Working with Google Maps
- **Services and Broadcast Receivers:** Overview of Services; Bound and unbound services; Implementing a service; Overview of Broadcast receivers; Implementing a Broadcast Receiver
- **Intent Filters:** Overview of filters; Listing filters; Implementing filters
- **Going Further with Android:** Interacting with Web Services; Sensors; Managing WiFi; Telephony; Interacting with the camera; Bluetooth

Who Should Attend:

Developers who want to create compelling applications for Android-based devices.

Prerequisites:

Familiarity with Java. Awareness of mobile development is also an advantage.