

Android Course Contents

Overview

- a. Why go MAD (Mobile Application Development)?
- b. Why Android and not iPhone or other OS?

Architecture of Android

- c. Components of Android
- d. Layouts in Android
- e. Life Cycle of Activity

Getting Started

- f. Android SDK
- g. ADT Bundle & Eclipse
- h. Creating a Virtual Device/emulator

Hello World Application

- i. Creating new Android application
- j. Running an Android application
- k. Understanding Android application structure

Android UI Design & Event Handling

- l. Edit Text
- m. Global Strings
- n. Checkbox
- o. Radio Buttons
- p. Spinner
- q. Button
- r. Using Images
- s. Image Button
- t. List

Menus

- u. Options Menu
- v. Custom Menu

Intent

- w. Switching screens / activities

Service

- a. Life Cycle of Service
- b. Implementing & running a Service
- c. Stopping a Service

Alerts & Dialogs

- d. Toast
- e. Alert Dialog
- f. Custom Dialog

Multi Media Programming

- g. Playing an audio

Database Programming in Android

- h. Shared preferences
- i. Storing internally
- j. Storing externally

Hardware Programming in Android

- k. Camera
- l. Vibrate

Custom Designs

- m. Customizing Button and other controls

Graphics and Animation

- n. Creating Graphics for different screen size, mobiles and tablets
- o. Creating Animations in Android (rotate, scale, alpha, translate)

Sensors

- a. Light
- b. Orientation (Gyroscope)
- c. Location
- d. Vibration

Maps

- a. GPS & Geo-location programming
- b. Getting current location

Social Networking Integration

- a. Facebook login integration
- b. Twitter login integration

Applications (Cloud services)

- a. Firebase
- b. Fabric

Deploying Publishing an Android Application

- a. Signing App
- b. Creating Developer / Publisher account(Procedure)
- c. Publishing App