



Mobile devices are the platform that will bring the next five billion people online. With Android expanding rapidly into emerging markets, and growing beyond phones and tablets into wearables, auto and TV. Learning the fundamentals behind Android development represents an opportunity to affect and improve the lives of billions of people. The Android Training courses provides coverage of basic mobile computing paradigm and also covers the basic android application building process with associated key points like, activities, intents, sending SMS, location based services with GPS, working with Gyroscopes, Programming the mediaplayer etc. (Course offered structure here to download or just append it here only)

Android training duration : 4 months

Course content :

Chapter 1: JAVA Concepts

1. OOPs Concepts
2. Inheritance in detail
3. Exception handling
4. Packages & interfaces
5. JVM & .jar file extension
6. Multi threading (Thread class & Runnable Interface)

Chapter 2: SQL

1. DML & DDL Queries in brief

Chapter 3: Introduction to Android

1. What is Android?
2. Setting up development environment
3. Dalvik Virtual Machine & .apk file extension
4. Fundamentals:
 - a. Basic Building blocks - Activities, Services, Broadcast Receivers & Content providers
 - b. UI Components - Views & notifications
 - c. Components for communication - Intents & Intent Filters
5. Android API levels (versions & version names)

Chapter 4: Application Structure (in detail)

1. AndroidManifest.xml
2. uses-permission & uses-sdk
3. Resources & R.java
4. Assets
5. Layouts & Drawable Resources

6. Activities and Activity lifecycle
7. First sample Application

Chapter 5: Emulator-Android Virtual Device

1. Launching emulator
2. Editing emulator settings
3. Emulator shortcuts
4. Logcat usage
5. Introduction to DDMS
6. Second App:- (switching between activities)
Develop an app for demonstrating the communication between Intents

Chapter 6: Basic UI design

1. Form widgets
2. Text Fields
3. Layouts
4. [dip, dp, sip, sp] versus px
5. Examples

Chapter 7: Preferences

1. SharedPreferences
2. Preferences from xml
3. Examples

Chapter 8: Menu

1. Option menu
2. Context menu
3. Sub menu
4. menu from xml
5. menu via code
6. Examples

Chapter 9: Intents (in detail)

1. Explicit Intents
2. Implicit intents
3. Examples

Chapter 10: UI design

1. Time and Date
2. Images and media
3. Composite
4. AlertDialogs & Toast
5. Popup
6. Examples

Chapter 11: Tabs and Tab Activity

1. Examples

Chapter 12: Styles & Themes

1. styles.xml
2. drawable resources for shapes, gradients (selectors)
3. style attribute in layout file
4. Applying themes via code and manifest file
5. Examples

Chapter 13: Content Providers

1. SQLite Programming
2. SQLiteOpenHelper
3. SQLiteDatabase
4. Cursor
5. Reading and updating Contacts
6. Reading bookmarks
7. Example :

Develop an App to demonstrate database usage. CRUD operations must be implemented. Final details should be viewed in GridView as well as in ListView.

Chapter 14: Android Debug Bridge (adb) tool

Chapter 15: Linkify

1. Web URLs, Email address, text, map address, phone numbers
2. MatchFilter & TransformFilter
3. Examples

Chapter 16: Adapters and Widgets

1. Adapters:-
 - a. ArrayAdapter
 - b. BaseAdapters
2. ListView and ListActivity
3. Custom listview
4. GridView using adapters
5. Gallery using adapters
6. Examples

Chapter 17: Notifications

1. Broadcast Receivers
2. Services and notifications
3. Toast
4. Alarms
5. Examples

Chapter 18: Custom components

1. Custom Tabs

2. Custom animated popup panels
3. Other components
4. Examples

Chapter 19: Threads

1. Threads running on UI thread (runOnUiThread)
2. Worker thread
3. Handlers & Runnable
4. AsyncTask (in detail)
5. Examples

Chapter 20: Advanced

1. Live Folders
2. Using sdcards
3. XML Parsing
4. JSON Parsing
5. Maps, GPS, Location based Services
6. Accessing Phone services (Call, SMS, MMS)
7. Network connectivity services
8. Sensors
