



**Course: Android Mobile Application Development**

**Duration: 7 Days**

## *Training Syllabus*

### **1. Introduction to Android.**

### **2. Android Overview and History.**

### **3. Android Architecture**

- Linux kernel
- Android Runtime
- Dalvik Virtual Machine
- Libraries
- Application Framework
- Applications

### **4. Core java**

- Introduction to java
- Data types, operators and control statements
- Classes & Objects
- Methods
- Constructors
- Strings and String Buffer classes
- OOPS
- Collection Framework
- Exception Handling
- Multithreading

### **5. Android SDK Overview**

### **6. Android Software Installations**

- For windows7
- For Linux
- For Mac OS

### **7. Building Blocks of Android**

### **8. Creating First Project**

### **9. Folder Structure of Android (Exploring Project Structure)**

### **10. Layouts**

- Linear Layout
- Absolute Layout
- Frame Layout
- Table Layout
- Relative Layout
- Inner layouts

### **11. UserInterface**

- Creating Button
- Creating TextView
- Creating Edit Text
- Creating Image Button
- Creating Image View
- Creating Toggle Button
- Etc.

### **12. ScrollView**

- **Vertical Scroll view**
- **Horizontal Scroll view**

### **13. Creating Multiple Screens (Activities)**

## **14. Intents**

- Implicit Intent
- Explicit Intent
- Intent Filter
- Pending Intent
- Sticky Intent

## **15. Activity LifeCycle**

- On Create ()
- On Start ()
- OnResume()
- OnPause()
- OnStop()
- OnDestroy()
- OnRestart()
- OnSavedInstanceState()

## **16. Shared Preferences**

- Saving Data into SharedPreferences
- Retrieving Data from SharedPreferences

## **17. DDMS**

## **18. StartActivityForResult**

## **19. Menus**

- Options Menu
- Context Menu

## **20. Dialogs**

- AlertDialog
- CustomDialog
- ProgressDialog
- Date Picker Dialog
- Time Picker Dialog

## **21. ListViews**

- ArrayAdapter
- BaseAdapter
- Simple List View
- CustomListview

## **22. Gallery View**

## **23. Grid View**

## **24. Spinner View**

## **25. Autocomplete TextView**

## **26. Layout Land**

## **27. WebView**

## **28. Using HTML pages in Android.**

## **29. ActionBar Tab**

## **30. MultiMedia**

- Audio
- Video
- Media Recording

## **31. ViewFlipper**

## **32. Checking Internet Connection**

# **ADVANCED ANDROID CONCEPTS**

## **33. Saving Files**

## **34. Accessing SD Card**

## **35. SQLite Database**

- Simple Example on SQLite Database
- Creating,Opening and Closing Database
- Inserting records into Database
- Deleting Records into Database
- Updating Records into Database

## **36. Content Providers**

## **37. Notifications**

- Toast Notifications
- Status bar Notifications

## **38. Text To Speech**

## **39. Speech To Text**

## **40. Sensors**

## **41. Bluetooth**

## **42. WiFi**

## **43. Services**

## **44. Broadcast Receivers**

## **45. Maps & Location Services**

- Overview
- Getting the Google Maps Android API v2
- The Google Maps API Key
- Displaying certificate information
- Creating an API Project
- Obtaining an API Key
- Adding the API Key to your application
- Specify settings in the Application Manifest
- Specifying permissions
- Requiring OpenGL ES version 2
- Add a Map
- Accessing Current Location

## **46. Where Am I? Example**

## **47. Telephony**

## **48. SMS**

## **49. Camera**

## **50. Handlers**

## **51. AsyncTask**

## **52. View Pager**

## **53. ActionBar**

## **54. XML Parsing**

## **55. JSON parsing**

## **56. Fragments**

- Static Fragment
- Dynamic Fragment
- Dialog Fragment
- List Fragment
- Preferences Fragment

## **57. Deploying Applications into Android Mobile Devices.**

## **58. Publishing Apps into Google Play Store.**

## **59. Publishing adds in Android Applications.**

- Ad mob
- Air push

## **60. Start App**