



*Dear Student,*

*Based upon your enquiry we are pleased to send you the course curriculum for Android 6 Weeks Training*

*Given below is the brief description for the course you are looking for:*

## **Android Application Development**

### **Introduction to Android**

- What is Android?
- Devices based on Android
- Android Story
- Application components

### **Setting up an Android Studio Development Environment**

- Hardware requirements
- Software requirements
- Installation of JDK
- Installation of Android Studio

### **Getting Started with Android Studio**

- How to change theme?
- How to change font size?
- How to change Update settings?
- Code completion
- Parameter information
- Code generation
- Quick documentation lookup
- Optimizing imports
- Code folding
- Design mode
- Text mode

### **Android Architecture**

- Android software stack
- Linux kernel
- Android Runtime (ART)

### Activities

- What is Activity?
- Creating an Activity
- Basic Activity
- Empty Activity
- Google Maps Activity
- Activity life cycle
- Hiding or Changing the Activity Title
- Hiding the ActionBar of Activity

### Running Application

- What is AVD?
- Creating Custom AVD
- Running App on AVD
- Simulating call in AVD
- Simulating SMS in AVD
- Running App on Real Device

### Intents

- Basics of Intents
- Explicit Intents
- Implicit Intents
- Creating Intent
- Intent filters
- Intent filter Collision
- Sending Data
- Receiving Data
- Calling built-in applications
- Pending Intents
- Checking Intent Availability
- Activate Activities
- Activate Services
- Activate Broadcast Receivers

### User Interface

- What is View?
- What is ViewGroup?
- RelativeLayout

- TextView
- Button
- RadioButton
- CheckBox
- Switch
- ToggleButton
- ImageButton
- ImageView
- ProgressBar
- Seekbar
- RatingBar
- Spinner
- WebView
- EditText
- RadioGroup
- ListView
- ScrollView
- VideoView
- AutoCompleteTextView

### Event Handling

- Basics of Events
- Event Listener and Callback
- Implement Shaker Event

### Application Resources in Android

- What is Resource?
- Reusability
- Maintainability
- Alternatives
- String resource
- Color resource
- Access resource in XML
- Access resource in Code
- Resource directory color
- Resource directory drawable
- Resource directory layout
- Resource directory menu

- Resource directory raw
- Resource directory values

### Shared Preferences

- What is Shared Preferences?
- Save data in Shared Preferences
- Show data from Shared Preferences
- Update data in Shared Preferences
- Delete data from Shared Preferences

### Working with Database

- Database concepts
- What is SQLite?
- Data Types
- SQLiteOpenHelper
- SQLiteDatabase
- Cursor
- ContentValues
- Create Table
- Primary key
- Insert Record
- Update Record
- Delete Records
- Show Records

### Multithreading

- Thread Handlers
- What is UI thread?
- AsyncTask

### Making Runtime Permission Requests

- Normal Permissions
- Dangerous Permissions
- Checking for a Permission
- Requesting Permission at Runtime

### Photo, Audio and Video

- Taking Photo from Camera (Image Capture)

- Playing Audio
- Playing Video
- Making Videos
- Sound Recorder

### **Messaging**

- SMS Messaging
- Sending E-mail

### **Location & google map API**

- Display Map
- Find current latitude, longitude
- Monitoring Location
- Fetch location name by Latitude, Longitude
- Fetch Latitude, Longitude by location name

### **Sensors**

- What is Sensors?
- Show Available Sensors in device
- Motion Sensors (Accelerometer)
- Position Sensors (Proximity)

### **Useful Stuff**

- Toast
- AndroidManifest.xml (uses-permission etc...)
- Notifications
- ActionBar
- AlertDialog
- Handling Rotation

Menu

Content Providers

Services

Alarm service

Broadcast Receivers

Consuming Webservice

Consuming JSON service

Convert HTML5, CSS & Javascript app to android app

Debug applicaion in AndroidStudio

Custom Launcher Icon

Creating an APK File for Distribution

## Project

### Prerequisite :

Knowledge of **Java SE (Core JAVA)** is assumed.