# **ANDROID COURSE SYLLABUS**

by AndroidManifester K P Ranjith

#### **JAVA**

#### Guidance on

- Introduction to Java
- OOPS refreshing concept

#### **ANDROID**

#### **Basics**

- Introduction to Android
- What is Android
- History of Android
- Android versions History
- How & what we use for [CODING, UI, STORAGE (CUS)] in Android
- Introduction to Android Apps Development TOOL
- What is Activity
- Developing a Simple Android Log In screen UI design
- Types of Layouts in Android
- Introduction to Android Java class file, Its structure.

## Into the Android Apps Development

- Creating a simple Toast Message Application on click of a button
- What is Android Virtual device (AVD)
- How to create Android Virtual Device (AVD)
- How to run our App on our own Android device

- Android Activity Lifecycle
- Android Menus
- Creating Alert dialog box in Android
- Basic widgets in android, Creating a Simple user registration page UI
- Getting data from widgets
- Intents
- Creating a new Activity
- Passing Data between Activities
- WebView
- What is Android Manifest file
- What is build.gradle file
- Date and Time picker
- Playing Audio and Video in android
- Listview, gridview, Spinner
- Turn on Wi-Fi, Bluetooth programmatically
- Sending SMS and Mail programmatically
- StartActivity for result
- Types of Intents
- Creating Notifications in Android
- Animation in android
- Sensors in android
- Basic Components of Android
  - -> Activity
  - -> Intent
  - -> Broadcast Receiver
  - -> Services
  - -> Content Provider
    - Sharing data between Applications

### Android Advanced

- Effective usage of Android Templates
- Shared Preferences
  - Sharing data between Activities.
- Internal and External storage
  - Creating a file in internal storage and external storage
  - Adding data to those files programmatically
- Android Fragments,
- Creating Navigation drawer and loading different fragments on clicking different Menuitem.
- SQLite Database, Create Retrieve Update and Delete operations with it
- Creating a Login and Sign-Up Application using SQLite Database
- Finding the current location using Google maps
- Internet based Applications -
  - Web Service
    - o JSON,
    - Asynctask,
    - HTTP classes
- How to import and Export codes
- How to use Third party library projects and integrating it to our App
- Working with GitHub codes
  - Loading projects from Github URL
  - Uploading codes from Android studio to Github repository
  - How to searching and selecting the best library projects
- Procedures to Launch your App on Play store.
- Firebase
  - What is firebase
  - How to save and retrieve data from Realtime Database
  - How to save and retrieve data from Cloud Firestore
  - How to set up crushes using firebase
  - Firebase Cloud Messaging (FCM)
  - Google Analytics set up
  - AdMob set up

- Final projects based on student's or trainer idea. Guidance for completing will be provided.
-plus
Tasks will be given on everyday after the class.
-plus
Will set up the Android studio tool in your personal system [ Latest Android Studio 4.2.2]
-plus
Will provide you the package of working simple codes (I simplified the complex codes to easy and understandable codes)
-plus
Guidance on latest Android learning enhancement links
-plus
personal care and dedicated care on your Android learning process. :)
Thanks
Thanks,
Ranjith
+91 8148580586
ranjithpsundar@gmail.com