

Android

Duration: 60 hours

Batches: Regular/ Weekends

History

- What is Mobile OS
- Need Of Android
- Difference with other

Extracting Core Architecture

- Overview
- Linux Kernel
- Dalvik
- Application Framework

Making Your Environment

- Where to grab it
- Platforms
- Tools
- Software Development Kit
- Android Studio
- Android Development Kit
- Versions
- Emulator

Let's Begin the chase

- Hello world to Android
- Manifest File
- Resources
- Running On Device and Emulator

Android Technical View

- How Application Works?
- Basic Components
 - Activity
 - Service
 - Broadcast Receiver
 - Content Provider
- Intents

Android UI Framework

- View Hierarchy
 - Views
 - View measurement units
- UI through Code and XML
- Layouts
- Inter Activity Communication
- Java's Sweet Event Handling

Building Reach UI

- Adapter Views
- Menus
- Compound Views
- Custom Views
- Animations

Fragments

- Fragment lifecycle
- Creating fragment using fragment tag & framelayout
- Fragment transaction management

Notifications

- Toast
- Status Bar
- Dialog fragment

Assets And Resources

- Resources and Use
- Localization
- Handling Runtime Changes

Styles And Themes

- Creating Style
- Style As a Theme
- Inheritance

Intent, Intent Filters, Broadcast Receiver

- Intent and Intent Filter mechanism
- Registration to components
- Broadcasts Receivers
 - Built In Receivers
 - Custom Receiver
 - Sending Broadcast

Storing And Sharing Data

- Shared Preferences
- File Manipulation
 - Linux File System
 - Phone Memory
 - SD Card
- SQLite
 - Why SQLite ?

- Using Helper
- Insertion, Updation, Deletion And Cursor
- Content Provider
 - Built In Provider
 - Custom Provider
 - File Content Provider

Services

- Why Services ?
- Life Cycle
- Creating Service
- Android Interface Definition Language

Material Design

- What is material design?
- Using material theme
- Toolbar & Appbar
- Navigation drawer

Multimedia

- Audio Support
- Video Support

Web Services

- Mechanism Of Web Architecture
- Requesting And Responses
- JSON Parsing

Location Based Services

- Searching Location
- Current Position Algorithm
- Location Listener
- Proximity

Sensors

- Sensors Mechanism Overview
- Sensor Listener
- Different types of sensors

Bluetooth

- Understanding Local Bluetooth
- Discovering And Pairing
- Managing Connectivity
- Communication With Remote Devices

Camera

- Built In Camera
- Surface View , Holder And Customized Camera
- Media Recorder

Wifi

- Understanding Mechanism
- Managing Connections
- Managing Wifi Networks

Telephony Services

- SMS Sending
- Making Calls
- Network Information
- Phone States
- Making Phone Call

Advanced Android Topics

- Fragments
- Google 3D maps
- Google Cloud Messaging(GCM)
- Google Analytics

Deployment