

Introduction to Android

- The Android family
- Overview of Android and Android SDK
- History of Android
- Android features

Android Architecture overview

- Introduction to OS layers
- Linux kernel
- Libraries
- Android Runtime
- Application framework

Setup of Android Development environment

- System requirements
- Eclipse and SDK installation, AVD creation
- Creating first Android application
- Project Structure

Android Application Fundamentals

- Android application building blocks
- Activating components
- Shutting down components
- Life Cycle of Application
- Development tools, Manifest File
- Life Cycle of Activity

User Interface

- View Hierarchy and Layouts
- UI Events
- Building Menus
- Notifying users
- Creating dialogs
- Graphics & Animations

Main Building Blocks

- Activity
- Services
- Content Providers
- Broadcast Receivers

Resources

- Overview of Android Resources
- Creating Resources
- Using Resources
- Drawable Resources
- Animation Resources

Data Storage

- Shared Preferences

Internal Storage (Files)
External Storage(SD Card)
SQLite Databases

Android Media API

Playing audio/video
Media recording
Blue tooth
WiFi
Camera
TelephonyManager
Location Services
Google Maps
Deploying Android Application on Device