

Android Training Syllabus

Introduction to Android

1. What is Android?
2. Open Handset Alliance
3. Android Features
4. Development Framework for Android
5. Dalvik Virtual Machine

Android SDK

1. Android SDK tools
2. Android development tools
3. Android Versions
4. Android Architecture
5. Android Application Life Cycle

Android Installation and First Project

1. IDE and Android Installation
2. Developing first Project
3. Limitations of Mobile Device

Creating User Interfaces

1. Views, ViewGroups
2. Layout Managers
3. Notifications
4. XML configuration of Layouts
5. Building user interfaces using Graphical Layout
6. Event handling Mechanism

Advanced User Interfaces

1. Adapters
2. Customized User Interfaces
3. Drawable Resources
4. Resolution and Density Independence
5. Menus, Dialog Boxes
6. Animation, Graphics

Services and Receivers

1. Service Life cycle
2. Permissions
3. Implementing Services

4. Receiver tag
5. Implementing Receivers

Data Storage and File System

1. Data Storage and File System Overview

Data Storage and File System

1. Shared Preferences
2. File System in Android
3. Internal Storage

SQLite and Content Providers

1. What is SQLite?
2. Creating SQLite Databases
3. DML Operations on Data
4. Cursors and Content Values
5. Sharing Databases Content Provider scenarios
6. Sharing Databases across application boundaries

Telephony and SMS

1. Telephony
2. Reading Phone device details
3. Reading SIM Details
4. Tracking Cell Location Changes
5. Introducing and Sending SMS and MMS
6. Reading incoming messages

Location Based Services and Maps

1. Finding current location Location Manager
2. GeoCoding Forward and reverse GeoCoding
3. User Interface - Map View
4. Changing views on the map

Web Services and Network Connectivity

1. What is Web service?
2. Integrating Web Services
3. SOAP based calling
4. Managing Network Connectivity
5. Monitoring Wi-Fi
6. Bluetooth

Multimedia

1. Playing Audio and Video
2. Managing Media Controller