

Android Course Content

1. JAVA Concepts

- OOPs Concepts
- Inheritance in detail
- Exception handling
- OOPs Concepts
- Inheritance in detail
- Exception handling
- Packages & interfaces
- JVM & .jar file extension
- Multi threading (Thread class & Runnable Interface)

2. SQL

- DML & DDL Queries in brief
- Chapter 3: Introduction to Android
- What is Android?
- Setting up development environment
- Dalvik Virtual Machine & .apk file extension
- Fundamentals:
- Basic Building blocks - Activities, Services, Broadcast Receivers & Content providers
- UI Components - Views & notifications
- Components for communication - Intents & Intent Filters
- Android API levels (versions & version names)

3. Application Structure (in detail)

- AndroidManifest.xml
- uses-permission & uses-sdk
- Resources & R.java
- Assets
- Layouts & Drawable Resources
- Activities and Activity lifecycle
- First sample Application

4. Emulator-Android Virtual Device

- Launching emulator
- Editing emulator settings
- Emulator shortcuts
- Logcat usage
- Introduction to DDMS
- Second App:- (switching between activities)

5. Basic UI design

- Form widgets
- Text Fields
- Layouts
- [dip, dp, sip, sp] versus px
- Examples

6. Preferences

- SharedPreferences
- Preferences from xml
- Examples

7. Menu

- option menu
- Context menu
- Sub menu
- menu from xml
- menu via code
- Examples

8. Intents (in detail)

- Explicit Intents
- Implicit intents
- Examples Android Application

9. UI design

- Time and Date
- Images and media
- Composite
- AlertDialogs& Toast
- Popup
- Examples

10. Tabs and Tab Activity

- Examples

11. Styles & Themes

- styles.xml
- drawable resources for shapes, gradients (selectors)
- style attribute in layout file
- Applying themes via code and manifest file
- Examples

12. Content Providers

- SQLite Programming
- SQLiteOpenHelper
- SQLiteDatabase
- Cursor
- Reading and updating Contacts
- Reading bookmarks
- Example :
- Develop an App to demonstrate database usage. CRUD operations must be implemented.
- Final details should be viewed in GridView as well as in ListView.

13. Android Debug Bridge (adb) tool Linkify

- Web URLs, Email address, text, map address, phone numbers
- MatchFilter&TransformFilter
- Examples Android Training Course Syllabus ipsr solutions ltd

14. Adapters and Widgets

- Adapters:-
 - a. ArrayAdapter
 - b. BaseAdapters
- ListView and ListActivity
- Custom listview
- GridView using adapters
- Gallery using adapters

15. Notifications

- Broadcast Receivers
- Services and notifications
- Toast
- Alarms

16. Custom components

- Custom Tabs
- Custom animated popup panels
- other components

17. Threads

- Threads running on UI thread (runOnUiThread)
- Worker thread
- Handlers & Runnable
- AsyncTask (in detail)

18. Advanced

- Live Folders
- Using sdcards
- XML Parsing
- JSON Parsing
- Maps, GPS, Location based Services
- Accessing Phone services (Call, SMS, MMS)
- Network connectivity services
- Sensors