

Android Course Content

Overview of the Android Applications

- ❖ OOPs Concepts
- ❖ Packages & interfaces
- ❖ Exception handling
- ❖ Collections
- ❖ JVM & .jar file extension
- ❖ Multi-threading(Thread class & Runnable Interface)
- ❖ SQL commands - DDL, DML, DCL,DTL
- ❖ Introduction Android
- ❖ IDE
- ❖ run on the device
- ❖ Basic Building blocks – Activities, Services, Broadcast Receivers and Content providers, Views & notifications
- ❖ communication components -Intents, Intent Filters
- ❖ Android API levels(versions & version names)
- ❖ Application Structure(in detail)
- ❖ AndroidManifest.xml- uses-permission and uses-sdk, Activity/services/receiver declarations
- ❖ Resources & R.java

Assets

- ❖ Values – strings.xml
- ❖ Layouts & Drawable Resources
- ❖ Activities and Activity lifecycle
- ❖ First sample Application
- ❖ Deploying sample application on a real device

Emulator-Android Virtual Device

Basic UI design

- ❖ Form widgets
- ❖ Text Fields
- ❖ Layouts
 - ❖ Relative,
 - ❖ Table,
- ❖ Frame,
- ❖ Linear
- ❖ Nested
- ❖ Time and Date
- ❖ Images and media
- ❖ Composite
- ❖ Alert Dialogs and Toast Popup

Styles & Themes

- ❖ styles.xml
- ❖ colors.xml- declaring colors and drawables
- ❖ Drawable resources for shapes, gradients(selectors)
- ❖ Shapes drawables
- ❖ State drawables
- ❖ Transition drawables
- ❖ 9 Patch drawables
- ❖ style attribute in layout file
- ❖ Applying themes via code and manifest file

Menu

- ❖ Option menu
- ❖ Context menu
- ❖ Sub menu
- ❖ menu from xm
- ❖ menu via code
- ❖ **Intents (in detail)**
- ❖ Explicit
- ❖ Implicit

SQLite Programming

- ❖ SQLite Open Helper
- ❖ SQLite Database
- ❖ Cursor
- ❖ Content providers
- ❖ Defining and using content providers
- ❖ Example- Sharing database among two different applications using content providers
- ❖ Reading and updating Contacts
- ❖ Reading bookmarks