ANDROID TRAINING COURSE MODULES

Module-I: Introduction to Android – Part-I

- Introducing Android.
- Installing Development Tools.
- Using the Emulator.
- Android developer tools.
- Eclipse, IDEs and Tools.

Module-II: Introduction to Android – Part-II

- Android Development Environment
- Elements of Android SDK
- Using the Emulator.
- Android Software Stack
- Android Application Architecture
- Android Libraries
- Lab Exercise: Initial Configuration of the Android SDK

Module-III: Java with Android

- Android User Interface
- The Example Application
- Design by Declaration
- Opening Screen Design
- Applying Styles
- Adding a Menu

Module-IV: Files, Saving States and Preferences

- Saving Application Data
- Creating and saving preferences
- Creating standard preference activity
- Saving Activity State

Module-V: Database and Content Providers

- Introducing SQLite
- Cursors and content values
- Working with SQLite Database
- Using Content providers

Module-VI: SQL Database Demo

- Content provider MIME types
- Searching for content
- Adding, changing, and removing content
- Working with content files
- Lab Exercise: Create Application that Works with an Android Content Provider

Module-VII: Hello Android Mobile World App

- Creating your first project
- The manifest file
- Layout resource
- Running your app on Emulator
- Lab Exercise: Create, Compile and Run 'Hello, Android' App

Module-VIII: Hello Android Mobile World App

- File System
- Preferences
- Notifications
- Security model
- Lab Exercise: Create Application with Toast Notifications

Module-IX: Bluetooth , Network and WiFi

- Using Bluetooth
- Managing Network Connectivity
- Managing WiFi

Module-X: Sensors

- Using Sensors and Sensor Manager Interpreting sensor values
- Using Compass, Accelerometer and orientation services
- Controlling Device Vibration

Module-XI: Mapping and Location Based Services

- Using Location Based Services
- Setting up your Emulator with Location Based Services
- Selecting a Location Provider
- Finding Your Location
- Using Proximity Alerts
- Using the Geocoder
- Creating MapBased Activities
- Lab Exercise: Create Location-Aware application that uses Proximity Alerts and Google Maps API