

## Workshop content of Android

**Overview:** Android Application Development is a hands-on course which is designed for providing essential skills and experiences to the students in developing applications on mobile platform. The hands-on training is effective for beginners and experienced developers for practical Android Code Application.

### **Session 1: Introduction to the Android**

- Android Architecture
- IO's Vs Android
- Scope
- Understanding Eclipse IDE
- What is API Levels?
  1. Understanding the Building Environment for Android
  2. Basic programming languages : Java and XML
  3. Front-End and Back-End concept
  4. Front-end Designing with XML
  5. Backend Designing with JAVA
  6. Practicing various design Layouts
- Layouts
  1. What are Layouts?
  2. What are Widgets?
  3. Working with different layouts: Linear, Relative, Table, Frame
  4. Working with different Widgets: Text-View, Edit-Text, Buttons, Image-Views, and Scroll View etc.

### **Session 2: Concept of Activity**

- What are Activity and its Life-Cycle?
- Activity Designing
- Life-Cycle Practicing
- Concept Manifest File
- Registering the Activity in Manifest File
- Setting up the Android Virtual Devices
- Testing of Hello World Application
- Concept of Intents
  1. What are Intents?
  2. Types of Intents:
  3. Explicit and Implicit
  4. Starting another Activity using both types of Intents
  5. What is Bundle?
  6. Sending Data from one Activity to another
  7. Building Camera application, fetching image using Intent
- Understanding various Notifications
  1. What is Toast?
  2. What is Dialog and Alert-Dialog?
  3. What is action-bar Notification?

## **Session 1: Developing Applications (PROJECTS)**

- Splash Screen Application
- Music Player Application
- SMS Application
- Camera Application
- Calculator
- Text-To-Speech Application

**Session 2:**

- Query session
- Competition on Android App Development
- Certification Distribution