

IT WORKSHOP

ON

ANDROID APPLICATION DEVELOPMENT

OVERVIEW

Android App Development Workshop mainly focuses on how to use Android OS for building your own Android Application. Only the basic knowledge of programming is required for *Android App Development*, you do not have to be a geek for it! The workshop will start from the basics like designing layouts and building complex layouts. Once the basics of Android are done we will begin with building Apps.

The duration of this workshop will be two consecutive days, with eight hours session each day in a total of sixteen hours, properly divided into theory and hand on practical sessions. At the end of this workshop, a competition will be organized among the participating students where each participating student will get Certificate of Participation and the Winners will get Certificate of Merit.

Workshop Level: Intermediate Level

Best Suited for: All B.Tech/B.E./BCA/BSc Students

Workshop Certification: Manac Infotech Pvt. Ltd.

COURSE

Day 1 (Session 1)

1. Introduction to the Android world

- Android Architecture
- IO's Vs Android
- Scope as an Android App Developer
- Understanding Android Studio IDE
- What is API Levels?

2. Understanding the Building Environment for Android

- Basic programming languages intro: Java and XML
- What is Front-End and Back-End environment
- Designing Front-end through XML
- Designing Backend through JAVA
- Practicing various design Layouts

3. Understanding Layouts

- What are Layouts and Widgets?
- Working with various layouts: Linear, Relative, Table, Frame
- Working with various Widgets: Text-View, Edit-Text, Buttons, Image-Views, and Scroll View etc.
- Practicing Layout Nesting's on various Layouts
- What is Weight-sum and Gravity?

Day 1 (Session 2)

1. Getting familiar with Activity

- What are Activity and its Life-Cycle?
- Designing an Activity
- Practicing its Life-Cycle
- What is Manifest File
- Registering the Activity in Manifest File
- Setting up the Android Virtual Devices
- Testing your Hello World Application

2. Introduction to Intents

- What are Intents
- Types of Intents: Explicit and Implicit
- Starting another Activity using both types of Intents
- What is Bundle?
- Sending Data from one Activity to another
- Building Camera application, fetching image using Intent

3. Understanding various Notifications

- What is Toast?
- What is Dialog and Alert-Dialog?
- What is action-bar Notification?

Day 2 (Session 3)

1. Developing Applications

- Splash Screen Application
- Music Player Application
- SMS Application
- Camera & Gallery Application

Day 2 (Session 4)

2. Developing Applications

- Horizontal Scroll View
- Video View
- Audio Recording Application
- Dialogs

3. Workshop Competition

After the hand on theory and practical experience from the workshop, App Development Competition will be conducted for the participants.

4. Certificate Distribution

On behalf of Manac Infotech Pvt. Ltd. Certificate of Merit will be provided to all Zonal Round Winners and Certificate of Participation will be provided to all the Zonal Round Participants (Excluding Merit Participants).