

**SOFTCRAYONS**  
Tech Solution Pvt. Ltd



### **Practical Training Program Branch - Ghaziabad, Noida**

- » Graphic Designing
- » Programming
  - Python - Java - PHP ++
  - C++ - C - Ruby On Rails
  - Perl
- » Web Designing
- » Networking - CCNA
  - CCNP - MCITP - MCSE
  - Hardware
- » CAD- CAM-CAE
  - Autocad for Civil
  - Autocad for Electrical
  - Autocad for Mechanical
  - Catia V5 / Staap PRO/
  - Revit / Revit Structure
  - Revet Architecture / Soliworks
  - PRO E / CREOC(Fr - Designers)
  - 3D Max / Inventor / Ansys / Vray
- » Digital Marketing
- » Android Application
- » Sap - ERP - ABAP
  - Erp Basis / Erp-Bi
  - Erp-Bo / CRM/ HR/HCM / MM
  - PP / Controlling / Hana / SCM
  - Finance
- » Software testing
  - Manual testing
  - Automation - testing
  - QTP - Selenium
- » MS Office
- » Tally With GST
- » 1 Angular Js / 2 Angular
  - 3 Angular / 4 Angular
- » Vmware

## **Module 1 . Introduction to Android**

Introduction to Android

Brief history of Android

What is Android?

Why is Android important?

What benefits does Android have?

What is OHA?

Why to choose Android?

Software architecture of Android

Advantages of Android

Android features

Android market

Comparing Android with other platform

Terms and acronyms

## **Module 2. Installation and Configuration of Android**

Details about the software requirement

Download and installation process of eclipse

Download and installation process of JDK

Installation of ADT plugin for eclipse

Download and installation process of

Android SDK

Configuration of ADT plug-in for eclipse

How to select Android version?

Step to create new project?

Running your application

Creation of new AVD

## **Module 3. Getting Started**

How to select Android version?

Step to create new project

Running Your Application

Creation of New AVD

Creating run configuration

Creating your first Android activity

List of basic sample programs

## **Module 4. Introductions to Application Components Activities**

Services

Broadcast receivers

Content providers

Intents

Notifications

Activating and shutting down components

Brief idea about manifest file

Brief idea about activities and Task

## **Module 5. Android Component Life Cycle**

Activity Life Cycle with sample program

Service Life Cycle with sample program

## **Module 6. Android Layouts**

What are views, Layouts and there

classification?

How Android Draws views and Layout?

Classification

Table Layout in detail with Example

Tab Layout in detail with Example

Frame Layout in detail with Example

Absolute Layout in detail with Example

Linear Layout in detail with Example

## Module 7. Android Views

Grid View In detail With Example

Map View In detail with Example

Cont. Sub Topical Views

Web View In detail with Example

Spinner In detail with Example

Gallery In detail with Example

Google Map View In detail with Example

Introduction to creating activity user with  
views

Different ways of creating views Using xm

## Module 8. Styles and Themes

Providing resources

Different resource file location

Providing alternative resources

Android finds the best matching resource

Accessing resources

Accessing platform resources

Handling runtime changes

Introduction to JQuery

JQuery work in Android

## Module 9. What are Fragments?

Multipane & Singlepane

Fragment Life Cycle

Addition of Fragments

Fragments Working without UI

## **Module 10. Introduction to Menus**

How to create menus?

Types of Android Application Menus

Option Menu

Expanded - In detail with Example

Context Menu In detail with example

Sub Menu-In detail with example

## **Module 11. Introduction to Drawers**

Navigation Drawer

Simple Side Drawer

Tab Drawer

Extra Drawerl

## **Module 12. Handling User Interaction Events**

Handling user events

Different types of event listener

Unclick

OnLongClickO

OnFocusChangeO

OnKeyO

OnTouchO

OnCreateContextMenuO

Different types of event handler

OnKeyDown (int, Key Event)

OnKeyUp (int, Key Event)

OnTrackballEvent (Motion Event)

OnTouchEvent (Motion Event)

OnFocusChanged (boolean,int,Rect)

## **Module 13. Creating Dialogs**

Introduction to dialogs

Showing and dismissing of dialog boxes

Alert dialog In detail with example

Progress dialog In detail with example

Threading and handler

Creating running applications-Events

Creating running applications-Dialogs

## **Module 14. Notifications**

Notifying Users

Status bar Notification

Toast Notification

Dialog Notification

## **Module 15. Intents, Broadcast Receivers,Adapters and Internet**

Different types of intent?

Launching sub-activities

What is intent filter

Intent objects---In detail with example

Using intents to take pictures

Handling sub activity results

## **Module 16. Data Storage**

Android techniques for data storage

Creating and saving shared preferences

Retrieving shared preferences

Storing in files

Loading from files.

Storing in databases.

## **Module 17. Working with SQL Lite**

Introducing SQLite database.

Working with Android databases.

Using SQLite Open Helper.

Cursors and content values.

Opening and closing Database

## **Module 18. Working in Background**

Introducing services

Creating and controlling services

Registering a service in the manifest

Starting, controlling, and interacting with a  
service

## **Module 19. Using the Camera, Taking Pictures and the**

Media API

Controlling the camera and taking pictures

Playing audio and video

Introducing the media player

Preparing audio for playback

Packaging audio as an application resource

Initializing audio content for playback

Preparing for video playback

Playing video using the video view

Setting up a surface for video playback

Initializing video content for playback

Supported video formats

Controlling playback

Managing media playback output

Multimedia supported audio formats

Recording audio and video

Using Intents to Record Video

Configuring and Controlling Video

Recording

Previewing Video Recording

Reading and Writing JPEG EXIF Image

Details

Adding new media to media storage

Using the Media Scanner

Inserting Media into the Media Store

Raw video manipulation



Recording Sound with Audio Record

Playing Sound with Audio Track

Speech recognition

Creating and Running and Testing

## **Module 20. Maps, GEO coding and Location Based**

Services

Using Location Based Services

Working with the location manager

Configuring the Emulator to Test Location

Based Services

## **Module 21. About ADB (Android Debug Bridge)**

DDMS: Dalvik debug monitor Service

Trace View

## **Module 22. Data Security and Permission**

Security Architecture

User Ids and File Access

Using Permissions

Declaring and Enforcing Permissions

## **Module 23. Drawing 2D and 3D Graphics**

Rolling your own Widgets

Drawables

Bitmaps

Paint

## **Module 24. Using Bluetooth and Managing and**

Monitoring Wi-Fi

Accessing the Local Bluetooth Device

Adapter

Managing Bluetooth Properties and State

Managing Device Discoverability

Discovering Remote Devices

Monitoring Active Connection Details

Scanning for Hotspots

Managing Wi-Fi Configurations

Creating Wi-Fi Network Configurations

Device Vibration

Controlling device vibration

## **Module 25. Introduction SMS and MMS**

Using SMS and MMS in Your Application

Sending SMS and MMS from your

Application

Using Intents and the Native Client

Sending SMS Messages Manually

Tracking and Conforming SMS Message

Delivery

Conforming to the Maximum SMS

Message Size Sending DAT Messages

## **Module 26. P2P Communication**

Introduction Android Instant Messaging

Using the G Talk Service

Binding the the G Talk Service

Making a G Talk Connection and Starting an  
IM Session

Handling Subscription Rousts

Removing and Blocking Contacts

Managing the User's Presence

Managing Chat Session

Sending Instant Text Messages

Receiving Instant Text Messages

Chat Rooms and Group Chats

Managing Group Chat Sessions

Sending an receiving Data Messages

Transmitting Data Messages

Receiving Data Messages

## **Module 27. Content Providers**

What is content provider

How to access build in Content provider

Retrieving build - in Content provider data

## **Module 28. Android Telephony**

Lanching the Dialer to Initiate Phone

Calls Replacing the Native Dialer

Accessing phone and Network Properties &

Status

Reading Phone Device Details

Reading Data Connection and Transfer State

Reading Network Details

## **Module 29. Sensor Device**

Using sensors and the sensor manager

Introducing Sensors

Supported Android Sensors

Finding Sensors

Using Sensors

Interpreting the sensor values

Using the compass , accelerometer and

orientation sensors

Introducing Accelerometers

Detecting Acceleration Changes

Creating a G-Forceometer

## **Module 30. Further Advanced Topics**

Binding Activities to services

Prioritizing Background services

Binding data with service

## **Module 31. Web Services with Architecture**

What are web services

Web service Architecture

REST & SOAP

Parsing Techniques JSON, XML

Consuming Web Services

CRUD Operations over Server

## **Module 32. Google Cloud Messaging**

What is GCM ?

GCM Architecture

GCM Services

Instant Messaging

TTL (Time to Live)

Group Messaging

Server Communication

## **Module 33. Introduction to NDK**

What is NDK

Need of NDK

Memory Management

Machine Architecture

## **Module 34. Introduction to Gaming**

Sensors with Canvas & Bitmap

Introduction to Open GLs

Making figures

Provide figure Transformation

## **Module 35. Integration**

Facebook Integration

Twitter Integration

Google/Gmail Integration

## **Module 36. Material Design**

List and Card

View Shadows/ Custom Shadows

App Bar /Action Bar

Material Theme

Adapter view and Recycler View

## **Module 37. Animation**

Clockwise

Zoom

Fade

Blink

Move

Slide

## **Module 38. Debugging and testing Android Apps**

20g Cat

Debugger

Trace View

Monkey Runner

UI Automator



**Get in Touch**  
**8545012345**

## Deployment

1. Deploying using Github
2. Angular2 Hosting Options
3. Hosting Angular App on cloud server Heroku

## Batch Timings –

Days	Class Duration	Course Duration
Monday-Friday	2 Hours	1 Month
Saturday & Sunday	3 Hours	1.5 Months
Sunday	4 Hours	2 Months

Regards,

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