Android Application Development

Day 1: Let's Learn Android Apps Development

Description:
This topic is regarding the introduction of Android and its components.

Introduction to Android

- What is Android?
- Why Android?
- History and Features of Android
- Different Layer and Version of Android
- Android Lifecycle

JAVA, XML

- JAVA
  o Language Fundamentals
  o OOPs Concept
  o Exception Handling
- XML
  o What is XML?
  o XML v/s HTML
  o XML Structure

Duration: 2 Hour

Day 1: Let's install Android IDE and draw first scratch

Description:
Under this topic, we will cover how to install Android Apps Development Software and Virtual Machine (Emulator)

Android Development Setup

- Installation of Eclipse
- Installing SDK Tools
- Creating Android Virtual Device
- Running Sample Android Application
- First Android Application
  o Hello World

Duration: 3 Hour

Day 1: Let's Start Android Apps. Development

Description:

Under this topic, we will cover how to build first Android Apps and how to run it on Emulator /Mobile .

Android App Fundamental

- Understanding Application Creation & Structure
- Working with Manifest.xml file
- Creating and Managing Activities
- Creating and Using Resources
- Understanding Security and Permissions

Duration: 3 Hour

Day 2 : Explore the More Design and development Part

Working With User Interface & Controls

- Working with text controls
- Working with Button Controls
- Working with List Controls
- Creating Custom List Layouts

Graphics & Styling

- Understanding Units & Layouts
- Layout Manager
- Providing Alternate Layout
- Using Styles and Themes
- Multiple Screen Application
  - o Implicit Intents
  - o Explicit Intents

Handling Notifications

- Introduction to difference mechanism
  - o Toast Notification
  - o Notification Bar
  - o Dialog Builder

Duration: 6 Hour

Student's learning after this module

After this topic gets covered, the students will learn the all basic parameters and basic modules of android apps. Development

Day 2 : SQLite Data base and Google Map

Preference & Data Storage

- Using Shared Preferences
- Using SQLite Database
- Creating SMS based Application

Location Sensors & Screen Widgets

- Location Sensors

  o Importing Google Maps
  o Using GPS to find current location

Student's learning after this module

After this topic gets covered, the students will learn data storage module and get the knowledge of SQLite database and Google Map in android.

Duration: 2 Hour

Module To be cover (Practical)

o Android support for building User Interfaces
o Basic Event Handling
o Basic Views in Android
o Android Layout
o Writing Your Own Layouts
o Built in support for lists and List Activity
o Notification
- Toast Notification
- Notification Bar
- Dialog Builder

o Basic Forms
- Login
- Registration
- List View
- Gallery View
- Services
- Grid View
- Google Map