Android Training and Development syllabus:

Number of Module: 6

Duration of Course: 6 Weeks

IDE: Android Studio

Language: Java

Perquisite: Basics of Core Java

Modules:

Module 1: Fundamentals of Android

Module 2: Learning the Language (Java)

Module 3: Android OS

Module 5: Database connectivity (SQLite and MySQL)

Module 6: Projects

Module 1: Fundamentals Of Android

- 1) OOPS Concept
- 2) SQL queries
- 3) Basics of Designing
- 4) Android Basics
 - 1.1. Installing Android Studio
 - 1.2. Creating an Android app project
 - 1.3. Deploying the app to an emulator and a device
 - 1.4. Layouts, Views and Resources
 - 1.5. Text and Scrolling views (working with TextView Elements)
- 5) PHP and HTML basics

Module 2: Learning the Language(Java)

- 1. Classes and Object
- 2. Encapsulation
- 3. Constructors
- 4. Inheritance
- 5. Method Overriding

- 6. Polymorphism
- 7. Abstract method and classes
- 8. Interface and Packages
- 9. Exception Handling
- 10. Multitasking and Multithreading
- 11. Synchronization

Module 3: Android OS

- 1. Activities and Intents
- 2. Activity Lifecycle and Saving State
- 3. Activities and Implicit Intents
- 4. Debugging Your App
- 5. Testing Your App
- 6. User Input Controls
- 7. Menus
- 8. Screen Navigation
- 9. RecyclerView
- 10. Delightful User Experience
 - 10.1. Drawable, Themes and Styles
 - 10.2. Material design
 - 10.3. Supporting landscape, multiple screen sizes
- 11. AsyncTask and AsyncTaskLoader
- 12. Broadcast receivers
- 13. Notifications
- 14. Transferring data efficiently

Module 5: Database connectivity

- 1. SQLite Data Types
- 2. Adding, Updating and Deleting Content using SQLite Database
- 3. Working with MySQL

Module 6: Project Work

Practicals:

Practicals:
HTML Basics
PHP Basics
Java Programming
Install Android Studio and Run Hello World
First Interactive UI
Using different Layouts
Working with Textview Elements
Create and Start Activities
Activity Lifecycle and Saving State
Using the Debugger
User Input Controls
Menus
Screen Navigation Using the App Bar and Tabs
Create a RecyclerView
Drawables, Themes and Styles
Supporting landscape, multiple screen sizes
Create an AsyncTask
BroadcastReceiver
Transferring data efficiently
(Job Scheduler)
Querying the SQLite database and the basics of SQLite and MySQL
Adding, Updating and Deleting Content in APP using SQLite Database
Use a loader with a content provider
Send Data to Server using PHP and MySQL
Publish Your App
Project