



android

Softroniics[©]

Android Training Course Syllabus

CALL: 04916061113, 9037291113 for Queries

Syllabus: Android Training Course

1. JAVA Concepts

OOPs Concepts

Inheritance in detail

Exception handling

Packages & interfaces

JVM & .jar file extension

Collections – HashTable, Vector, List, ArrayList, HashMap

Multi threading(Thread class & Runnable Interface)

2. SQL

DML & DDL Queries in brief

3. Introduction to Android

What is Android?

Setting up development environment

Dalvik Virtual Machine & .apk file

extension Fundamentals :

- a) Basic Building blocks – Activities, Services, Broadcast Receivers & Content providers
- b) UI Components- Views & notifications
- c) Components for communication -Intents & Intent Filters
Android API levels(versions & version names)

4. Application Structure(in detail)

AndroidManifest.xml

Softtroniics[©]

Android Training Course Syllabus

CALL: 04916061113, 9037291113 for Queries

- uses-permission & uses-sdk
- Activity/services/receiver declarations

Resources & R.java

Assets

Values – strings.xml

Layouts & Drawable Resources

Activities and Activity lifecycle

First sample Application

Deploying sample application on a real device

5. Emulator-Android Virtual Device

Launching emulator

Editing emulator settings

Emulator shortcuts

Logcat usage

Introduction to DDMS

File explorer

Second App :- (switching between activities)

– Develop an app for demonstrating the communication between Intents

6. Basic UI design Form

widgets

Text Fields

Layouts

- RelativeLayout ,TableLayout, FrameLayout, LinearLayout

- Nested layouts

[dip,dp,sip,sp] versus px

Examples

7. Preferences

SharedPreferences

Preferences from xml

Examples

8. Menu Option menu

Context menu

Sub menu

menu from xml

menu via code

Examples

9. Intents (in detail)

Explicit

Intents

Implicit intents

Examples

10. UI design Time and Date

Images and media

Composite

Softtroniics[©]

AlertDialogs & Toast

Popup

Examples

11. Tabs and TabActivity

Examples

12. **Styles & Themes** styles.xml colors.xml- declaring colors and drawables Drawable resources for shapes,gradients(selectors)

- Shapes drawables
- State drawables
- Transition drawables
- 9 Patch drawables

style attribute in layout file

Applying themes via code and manifest file

Examples

13. SQLite Programming

SQLite

Programming

SQLiteOpenHelper

er

SQLiteDatabase

Softtroniics[©]

Cursor

Content providers

- Defining and using content providers
- Example- Sharing database among two different applications using content providers

Reading and updating Contacts

Reading bookmarks

Example :

- Develop an App to demonstrate database usage. CRUD operations must be implemented. Final details should be viewed in GridView as well as in ListView.
- Do the same application with database operations in a single class(As a Model class) and do the CRUD operations with this class object

14. Android Debug Bridge(adb) tool

15. Linkify

Web URLs,Email address,text,map address,phone numbers

MatchFilter & TransformFilter

Examples

Softtroniics[©]

16. Adapters and Widgtes

Adapters :-

a) ArrayAdapters

b) BaseAdapters

Example - Efficient Adapter

ListView and ListActivity

Custom listview

GridView using adapters

Gallery using adapters

Examples

17. Notifications

Broadcast Receivers

Services and notifications

Toast

Alarms

Examples

18. Custom components

Custom

Toast

Custom dialogs

Custom Tabs

Custom animated popup panels

Softtronics[©]

Other components

Examples

19. Threads

Threads running on UI thread(runOnUiThread)

Worker thread

Handlers & Runnable

AsyncTask(in detail)

Examples

20. Advanced Live

Folders

Using sdcards – Reading and writing

XML Parsing

JSON Parsing

Including external libraries in our application

Maps via intent and MapActivity

GPS,Location based Services

Accessing Phone services(Call,SMS,MMS)

Network connectivity services

Sensors

Using Wifi & Bluetooth

Action bar tabs and custom views on Action bars

Introduction to fragments

A brief introduction to Ice Cream Sandwich



21. Assignment



Softroniics[©]

Android Training Course Syllabus

CALL: 04916061113, 9037291113 for Queries