**Android Course Syllabus**

# Introduction and Settings

* Introduction
* Install java JDKInstall Android Studio on Mac
* Install Android Studio on Windows

# Start up

* Why Android ?
* Android Studio updates
* Run First App
* XML
* Properties and methods
* Find Error
* Passing data between activities
* Activity Lifecycle
* Vulnerability in Start activity

# Layouts and Menu implementaion

* ConstraintLayout
* Legacy layouts
* Padding, margin, width, and height
* Linear layout
* Layout Desgin Weight
* TableLayout and GridLayout
* Menu, Menu SearchView

# Layout desgin

* Shape and selector
* Colors
* Style
* Localization and String.xml
* Supporting Multiple Screens sizes
* Generate different image size

# Views and UI tools

* LayoutInflater and View
* ListView
* ListView more
* GridView
* Spinner

# UI Components & Event Listeners

* Text View & Edit Text
* Button & Event Listener Interfaces
* Button & Event Listener Interfaces
* Other Event Listener - OnLongClick
* Images Views & Image Button
* Compound Buttons-Toggle, Checkbox & Radio Button
* User Interface Screen Containers

# Dialogs

* DialogFragment and TimePicker
* DialogFragment and DatePicker
* AlertDialog

# Fragments

* Fragments
* Fragments Lifecycle
* Fragment Transactions and Manager
* Fragment-to-fragment communication

# Adapters

* Adapters introduction
* Array Adapter
* Spinner
* List View (With more than 1 column)

# Advanced User Interfaces

* Understanding Advanced UI
* Tool Bar
* Using Floating Action Button

# Activity & Intents

* Activity and Activity Lifecycle
* Creating a new Activity
* Explicit Intent
* Implicit Intent

# Storage and Database

* SharedPreferences
* SQLite Review
* SQLite Create Database and table
* SQLite insert data
* SQLite Query
* SQLite to ListView and Search
* SQLite Delete
* SQLite Update

# System services

* Notifications
* Battery Receiver

# API Calls and Web services

* Learn JSON and XML
* Read JSON
* HTTP connection

# GPS and Map

* Get Last Known Location.
* Location Listener
* App|Real-Time tracking
* Map and marker
* Add Circle , Polyline and Polygon in Map

# Firebase

* Firebase Analytics
* Connect to the firebase backend
* Write Data to Database
* Create User Interface components
* Send Data to Server
* Retrieving Data from Firebase
* Uploading an Audio to Firebase
* Testing App on the Actual Device
* Firebase Authorization

# Camera and Sensor

* Light Sensor
* Accelerometer Sensor

# Social media integration

* Using Facebook Login in Android Apps
* Using twitter Login in Android Apps

# Versioning

* Introduction to GIT
* Maintaining code and branching