

Course Contents

Basic Syntax of Android Programming : Android Versions, Feature Set (Kitkat), Installation , "Hello World" App.

MVC Pattern : All Apps uploaded on Google Play have to follow Model – View – Control Architecture.

Different Layouts using XML: Linear, Relative, absolute, frame Layout, Scroll view, Table Layout.

Activities and Intent programming: Understanding Complete Activity Life cycle. **Developing many** Apps using single and Multiple activities. Using Intent to call activities and build in applications like Phone Book, Google Maps, Message , Browser , Audio / Video player .

User Interface Components : TextView , EditText , Button, Radio button , Check box , List , Spinner , Menus , Images.

Options and Context Menu: Coding Options and Context menu and integrating with Android Apps.

Data Storage – Files (Phone and SD card) : Storing and Retrieving data from file stored on phone memory (internal) and external (SD card)

NEW **Data Storage – SQLite DB**: Concept of DB programming, Syntaxes of Create , Drop , Insert , Update ,Delete , Select . **Where** condition , **Sorting** records. Working with SQLite – DbAdapter , SQ Lite Open Helper Class, Programming

Message Sending : Sending text Messages from 1 :1 and 1 : n. Learning 2 possible techniques of sending Messages.

Emailing : Sending text Mails from 1 : 1 and 1 : n. Using Build – in **Email API**

Google Maps and Location Based Services: Show Google Map in our developed application. Convert Touch-Event to Geo-Point And fetch latitude and longitude coordinates. `animateTo(GeoPoint object)` . Develop Location Based service applications.

NEW **Connecting to Remote Server (PHP - MySQL)**: Learning how Mobile app connects to Server. `<Async>` task , its build in Methods. Develop 2 – tier and 3 – tier Applications. Understand how commercial applications are developed.