How to build your own Android App -Guide

1. Prerequisites of android app development:

If you want to create a basic android app, you should have basic knowledge on coding languages like JAVA, C, C++.

Start Android App Development with SRS:

Before you start creating app check your software requirements.

Download and install the both Database and Android Studio

- **Java Jdk1.7 or Jdk 1.8**

  http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html
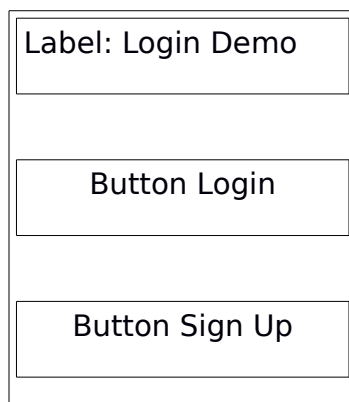
- **Android Studio**

  http://developer.android.com/sdk/index.html

  Hardware Requirements

    - **Ram 4GB**

    - **Hard disk 500GB**

2. Wireframe:

Draw wireframe for your basic app

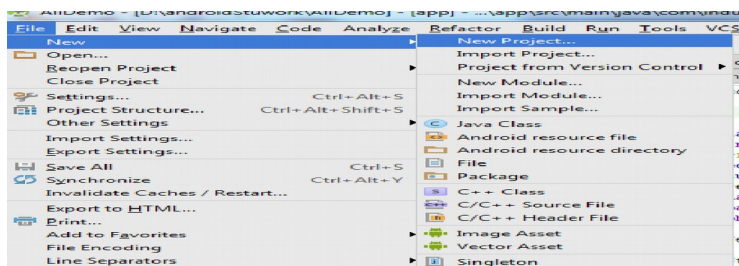| Label: Login Demo |
| :---: |
| Button Login |
| Button Sign Up |

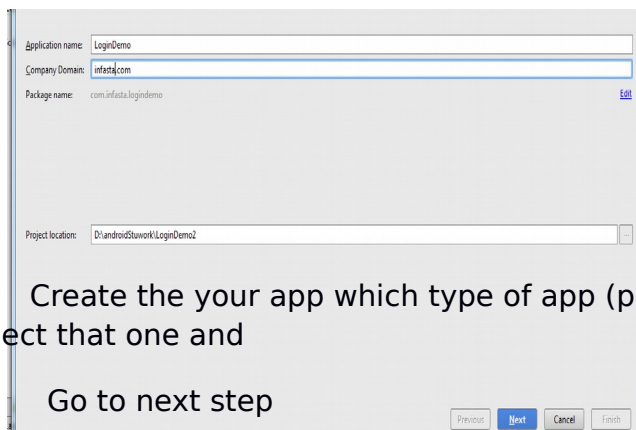**3. Design:** Design your wireframe with proper colors

4. Start Development:

Step 1: How to create android app (Login app Demo)

Open the your android studio, create the new app and you can follow   the bellow steps
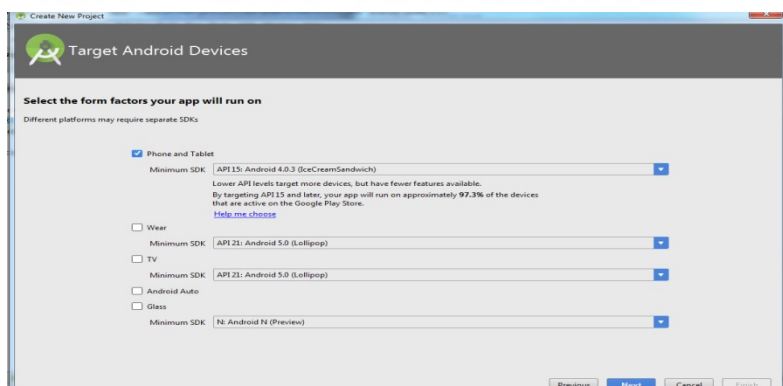
Go to file------->New ----> new project

Step 2   Define the your app name, package name and go to next step

Step 3   Create the your app which type of app (phone&tab, wear, tv, glass), you can select that one and
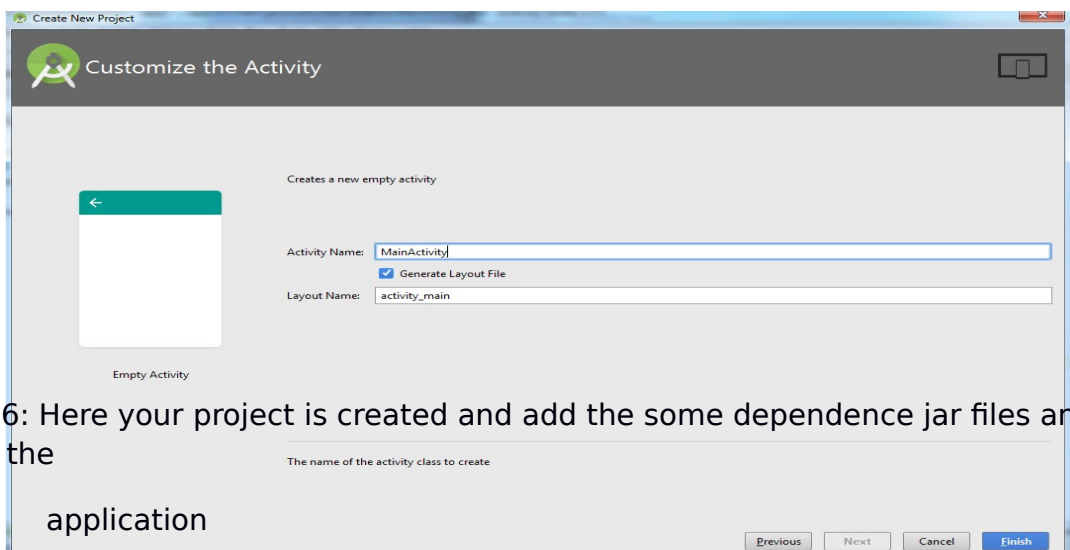
Go to next step

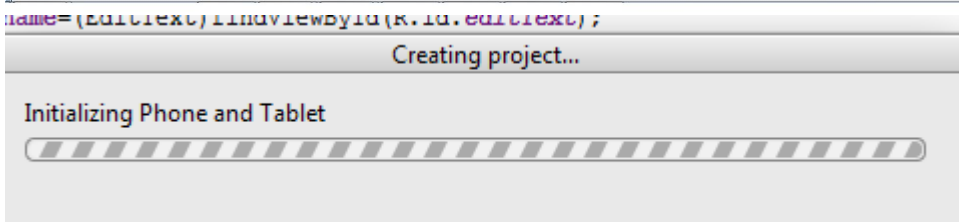Step 4: Select any one that type of code automatically generated   and go to next step
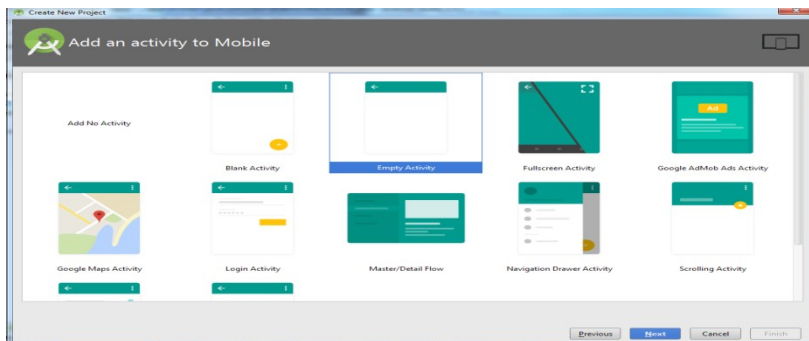
Step 5: Here generated the screen (default class, xml names as MainActivity and activity_main)

You can change the class and xml file names also
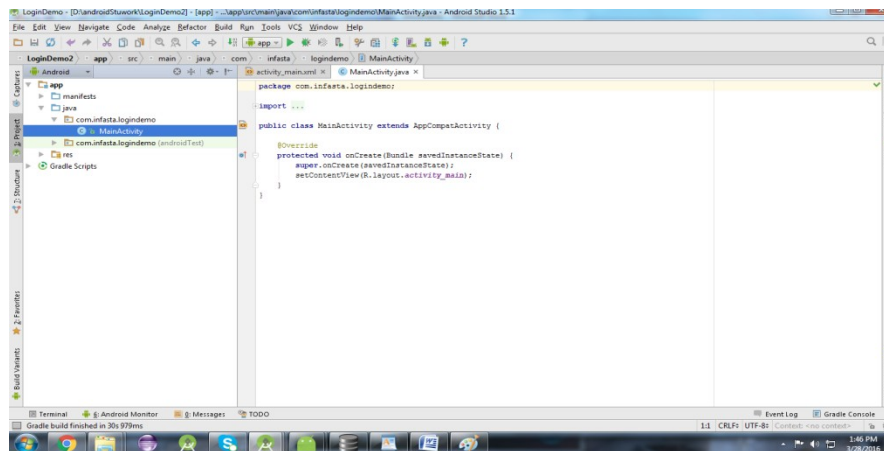

Step 6: Here your project is created and add the some dependence jar files and build the

application

Step 7   Here your project is created and automatically open java class and xml
files

Sample app above the steps

Step 8: Here can you drug the two buttons inside of the xml file

activity_man.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context="com.infasta.logindemo.MainActivity">

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Login"
        android:id="@+id/SignUp"
        android:layout_alignParentTop="true"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true"
        android:layout_marginTop="108dp"
        android:layout_alignParentRight="true"
        android:layout_alignParentEnd="true"
        android:onClick="loginPage"/>
```

```
            <!—onClick=loginPage this method name you can write the inside the java class

             end of onCreate() method  -->


        <Button
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Signup"
            android:id="@+id/button2"
            android:layout_below="@+id/SignUp"
            android:layout_alignParentLeft="true"
            android:layout_alignParentStart="true"
            android:layout_alignRight="@+id/SignUp"
            android:layout_alignEnd="@+id/SignUp"
            android:onClick="signupPage"/>
            <!—onClick=signupPage this method name you can write the inside the java class

             end of onCreate() method  -->

</RelativeLayout>
```

Step 9: Above the screen java file and here define the button actions mean's one screen to another

  screen logical code

MainActivity.java

```
package com.infasta.logindemo;

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
    //login button method
    public void loginPage(View v){
        Intent intent=new Intent(this,LoginActivity.class);
        startActivity(intent);
    }
    //signup button method
    public void signupPage(View v){
        Intent intent=new Intent(this,LoginActivity.class);
        startActivity(intent);
    }
}
```

How to create the new Activity or another screen

Step 10   create new Activity follow the below screen and you can defend the java class, xml file name

also
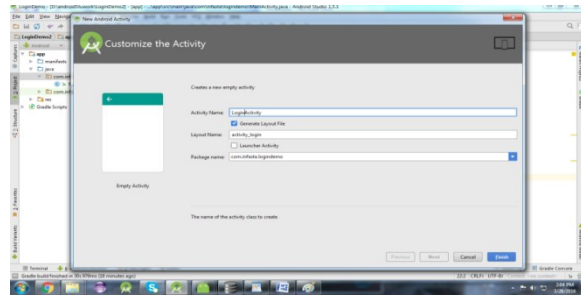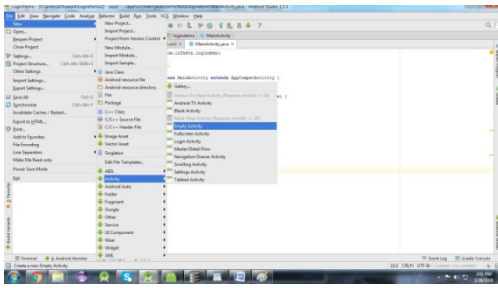
Step 11:   This screen (Login screen) java and xml files

activity_login.xml


```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context="com.infasta.logindemo.LoginActivity">

    <EditText
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/editText"
        android:layout_alignParentTop="true"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true"
        android:layout_marginTop="77dp"
        android:layout_alignParentRight="true"
        android:layout_alignParentEnd="true"
        android:hint="user name"/>

    <EditText
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/editText2"
        android:layout_below="@+id/editText"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true"
        android:layout_alignRight="@+id/editText"
        android:layout_alignEnd="@+id/editText"
        android:hint="password"/>

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Login"
        android:onClick="homePage"
        android:id="@+id/button"
        android:layout_below="@+id/editText2"
        android:layout_centerHorizontal="true" />
</RelativeLayout>
```

Step 12: Above the screen java file

LoginActivity.java

```java
package com.infasta.logindemo;

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;

public class LoginActivity extends AppCompatActivity {
EditText nameEdt,passEdt;  //user reference variable names
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_login);
        //register the editText id's and type cast to xml id's
        nameEdt=(EditText)findViewById(R.id.editText);
        passEdt=(EditText)findViewById(R.id.editText2);
    }
    public void homePage(View v){
        //navigation one screen to another screen
        //current class and target class name
        Intent intent=new Intent(this,LoginActivity.class);
        startActivity(intent);
    }

}
```

Step 13: This screen (signup screen) java and xml files

Activity_signup.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context="com.infasta.logindemo.SignUpActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="New User"
        android:id="@+id/textView"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="54dp" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="Name"
        android:id="@+id/textView2"
```

```xml
        android:layout_below="@+id/textView"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true"
        android:layout_marginTop="50dp" />

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/editText3"
        android:layout_alignBottom="@+id/textView2"
        android:layout_alignLeft="@+id/textView"
        android:layout_alignStart="@+id/textView" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="Phone"
        android:id="@+id/textView3"
        android:layout_alignBottom="@+id/editText4"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true" />

    <EditText
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:inputType="phone"
        android:ems="10"
        android:id="@+id/editText4"
        android:layout_below="@+id/editText3"
        android:layout_alignRight="@+id/editText3"
        android:layout_alignEnd="@+id/editText3" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="Password"
        android:id="@+id/textView4"
        android:layout_alignBottom="@+id/editText5"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true" />

    <EditText
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:inputType="textPassword"
        android:ems="10"
        android:id="@+id/editText5"
        android:layout_below="@+id/editText4"
        android:layout_alignLeft="@+id/editText4"
        android:layout_alignStart="@+id/editText4" />

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="signup"
        android:id="@+id/button3"
        android:layout_below="@+id/textView4"
        android:layout_alignRight="@+id/textView"
        android:layout_alignEnd="@+id/textView"
        android:layout_marginTop="40dp"
```

```
                android:onClick="signup"/>
</RelativeLayout>
```

Step 14: : Above the screen java file

SignupAcitvity.java

```java
package com.infasta.logindemo;

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;

public class SignUpActivity extends AppCompatActivity {
    EditText nameEdt,passEdt,phoneEdt;   //user reference variable names
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_sign_up);
        //register the editText id's and type cast to xml id's
        nameEdt=(EditText)findViewById(R.id.editText3);
        passEdt=(EditText)findViewById(R.id.editText4);
        phoneEdt=(EditText)findViewById(R.id.editText5);
    }
    //button
    public void signup(View v){
        //get the values from edit text
        String name=nameEdt.getText().toString();
        String pass=passEdt.getText().toString();
        String phone=phoneEdt.getText().toString();
        //navigation one screen to another screen
        //current class and target class name
        Intent intent=new Intent(this,HomeActivity.class);
        //put the values from Intent
        intent.putExtra("key1",name);//key and value pair
        intent.putExtra("key2",pass);
        intent.putExtra("key3",phone);
        startActivity(intent);
    }
}
```

Step 15: How to pass the values from one screen to another screen OR

   Here show the above signup details

Ctivity_home.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context="com.infasta.logindemo.HomeActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
```
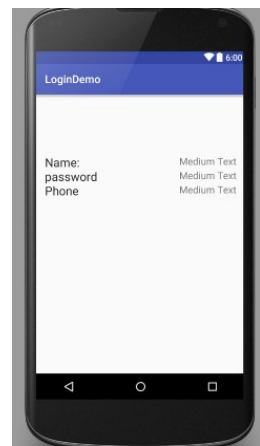
```xml
        android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="Name:"
        android:id="@+id/textView5"
        android:layout_alignParentTop="true"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true"
        android:layout_marginTop="96dp" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceMedium"
        android:text="Medium Text"
        android:id="@+id/textView6"
        android:layout_alignTop="@+id/textView5"
        android:layout_alignParentRight="true"
        android:layout_alignParentEnd="true" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="password"
        android:id="@+id/textView7"
        android:layout_below="@+id/textView5"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceMedium"
        android:text="Medium Text"
        android:id="@+id/textView8"
        android:layout_below="@+id/textView5"
        android:layout_alignRight="@+id/textView6"
        android:layout_alignEnd="@+id/textView6" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="Phone"
        android:id="@+id/textView9"
        android:layout_below="@+id/textView7"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceMedium"
        android:text="Medium Text"
        android:id="@+id/textView10"
        android:layout_alignTop="@+id/textView9"
        android:layout_alignLeft="@+id/textView8"
        android:layout_alignStart="@+id/textView8" />
</RelativeLayout>
```

Step 16: Above the screen java file

HomeActivity.java

```java
package com.infasta.logindemo;

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.TextView;

public class HomeActivity extends AppCompatActivity {
TextView name,pass,phone;//user reference variable names
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_home);
        //register the editText id's and type cast to xml id's
        name=(TextView)findViewById(R.id.textView6);
        pass=(TextView)findViewById(R.id.textView8);
        phone=(TextView)findViewById(R.id.textView10);
        //get the values from Intent
        Intent intent=getIntent();
        //Display the values
                //key1,key,key2,key3=intent key's name
        name.setText(intent.getStringExtra("key1"));
        pass.setText(intent.getStringExtra("key2"));
                phone.setText(intent.getStringExtra("key3"));

        }
        }
```