app→ res→ drawable→ rightclick→ new → drawable resource file → Enter file name as “sample” → ok

Sample.xml

*<?***xml version="1.0" encoding="utf-8"***?>*

*<!-- The order of the <item> elements is important because they are evaluated in order.*

*This is why the "normal" button image comes last, because it will only be applied after*

*android:state\_pressed and android:state\_focused have both evaluated false.-->*

<**selector xmlns:android="http://schemas.android.com/apk/res/android"**>

<**item android:state\_pressed="true"**

**android:drawable="@drawable/button\_pressed"** /> *<!-- pressed -->*

<**item android:state\_focused="true"**

**android:drawable="@drawable/button\_focused"** /> *<!-- focused -->*

<**item android:drawable="@drawable/button\_normal"** /> *<!-- default -->*

</**selector**>

2. Download some images, copy the images in file system, right click drawable → paste

3. Create 3 new “Vector Asset” inside drawable folder with different colors and name them as button\_pressed, button\_focused, button\_normal

Button\_pressed.xml

<**vector android:height="24dp" android:tint="#EA050F"**

**android:viewportHeight="24.0" android:viewportWidth="24.0"**

**android:width="24dp" xmlns:android="http://schemas.android.com/apk/res/android"**>

<**path android:fillColor="#FF000000" android:pathData="M6,18c0,0.55 0.45,1 1,1h1v3.5c0,0.83 0.67,1.5 1.5,1.5s1.5,-0.67 1.5,-1.5L11,19h2v3.5c0,0.83 0.67,1.5 1.5,1.5s1.5,-0.67 1.5,-1.5L16,19h1c0.55,0 1,-0.45 1,-1L18,8L6,8v10zM3.5,8C2.67,8 2,8.67 2,9.5v7c0,0.83 0.67,1.5 1.5,1.5S5,17.33 5,16.5v-7C5,8.67 4.33,8 3.5,8zM20.5,8c-0.83,0 -1.5,0.67 -1.5,1.5v7c0,0.83 0.67,1.5 1.5,1.5s1.5,-0.67 1.5,-1.5v-7c0,-0.83 -0.67,-1.5 -1.5,-1.5zM15.53,2.16l1.3,-1.3c0.2,-0.2 0.2,-0.51 0,-0.71 -0.2,-0.2 -0.51,-0.2 -0.71,0l-1.48,1.48C13.85,1.23 12.95,1 12,1c-0.96,0 -1.86,0.23 -2.66,0.63L7.85,0.15c-0.2,-0.2 -0.51,-0.2 -0.71,0 -0.2,0.2 -0.2,0.51 0,0.71l1.31,1.31C6.97,3.26 6,5.01 6,7h12c0,-1.99 -0.97,-3.75 -2.47,-4.84zM10,5L9,5L9,4h1v1zM15,5h-1L14,4h1v1z"**/>

</**vector**>

Button\_focused.xml

<**vector android:height="24dp" android:tint="#3A2CEA"**

**android:viewportHeight="24.0" android:viewportWidth="24.0"**

**android:width="24dp" xmlns:android="http://schemas.android.com/apk/res/android"**>

<**path android:fillColor="#FF000000" android:pathData="M6,18c0,0.55 0.45,1 1,1h1v3.5c0,0.83 0.67,1.5 1.5,1.5s1.5,-0.67 1.5,-1.5L11,19h2v3.5c0,0.83 0.67,1.5 1.5,1.5s1.5,-0.67 1.5,-1.5L16,19h1c0.55,0 1,-0.45 1,-1L18,8L6,8v10zM3.5,8C2.67,8 2,8.67 2,9.5v7c0,0.83 0.67,1.5 1.5,1.5S5,17.33 5,16.5v-7C5,8.67 4.33,8 3.5,8zM20.5,8c-0.83,0 -1.5,0.67 -1.5,1.5v7c0,0.83 0.67,1.5 1.5,1.5s1.5,-0.67 1.5,-1.5v-7c0,-0.83 -0.67,-1.5 -1.5,-1.5zM15.53,2.16l1.3,-1.3c0.2,-0.2 0.2,-0.51 0,-0.71 -0.2,-0.2 -0.51,-0.2 -0.71,0l-1.48,1.48C13.85,1.23 12.95,1 12,1c-0.96,0 -1.86,0.23 -2.66,0.63L7.85,0.15c-0.2,-0.2 -0.51,-0.2 -0.71,0 -0.2,0.2 -0.2,0.51 0,0.71l1.31,1.31C6.97,3.26 6,5.01 6,7h12c0,-1.99 -0.97,-3.75 -2.47,-4.84zM10,5L9,5L9,4h1v1zM15,5h-1L14,4h1v1z"**/>

</**vector**>

Button\_normal.xml

<**vector android:height="24dp" android:tint="#28EA2E"**

**android:viewportHeight="24.0" android:viewportWidth="24.0"**

**android:width="24dp" xmlns:android="http://schemas.android.com/apk/res/android"**>

<**path android:fillColor="#FF000000" android:pathData="M6,18c0,0.55 0.45,1 1,1h1v3.5c0,0.83 0.67,1.5 1.5,1.5s1.5,-0.67 1.5,-1.5L11,19h2v3.5c0,0.83 0.67,1.5 1.5,1.5s1.5,-0.67 1.5,-1.5L16,19h1c0.55,0 1,-0.45 1,-1L18,8L6,8v10zM3.5,8C2.67,8 2,8.67 2,9.5v7c0,0.83 0.67,1.5 1.5,1.5S5,17.33 5,16.5v-7C5,8.67 4.33,8 3.5,8zM20.5,8c-0.83,0 -1.5,0.67 -1.5,1.5v7c0,0.83 0.67,1.5 1.5,1.5s1.5,-0.67 1.5,-1.5v-7c0,-0.83 -0.67,-1.5 -1.5,-1.5zM15.53,2.16l1.3,-1.3c0.2,-0.2 0.2,-0.51 0,-0.71 -0.2,-0.2 -0.51,-0.2 -0.71,0l-1.48,1.48C13.85,1.23 12.95,1 12,1c-0.96,0 -1.86,0.23 -2.66,0.63L7.85,0.15c-0.2,-0.2 -0.51,-0.2 -0.71,0 -0.2,0.2 -0.2,0.51 0,0.71l1.31,1.31C6.97,3.26 6,5.01 6,7h12c0,-1.99 -0.97,-3.75 -2.47,-4.84zM10,5L9,5L9,4h1v1zM15,5h-1L14,4h1v1z"**/>

</**vector**>

Activity\_main.xml

*<?***xml version="1.0" encoding="utf-8"***?>*

<**LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"**

**xmlns:tools="http://schemas.android.com/tools"**

**android:id="@+id/activity\_main"**

**android:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**android:orientation="vertical"**

**android:paddingBottom="@dimen/activity\_vertical\_margin"**

**android:paddingRight="@dimen/activity\_horizontal\_margin"**

**android:paddingTop="@dimen/activity\_vertical\_margin"**

**android:scrollbars="vertical"**

**tools:context=".MainActivity"**>

*<!-- Scroll view may have only one direct child placed within it.*

*To add multiple views within the scroll view, make the direct child you add a view group,*

*for example LinearLayout, and place additional views within that LinearLayout. -->*

<**ScrollView**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**>

<**LinearLayout**

**android:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**android:orientation="vertical"**>

<**TextView**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="Image Button Demo: "**

**android:textColor="@color/colorAccent"**/>

<**ImageButton**

**android:id="@+id/ib1"**

**android:layout\_width="200dp"**

**android:layout\_height="wrap\_content"**

**android:src="@drawable/android"** />

<**TextView**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_marginTop="15dp"**

**android:text="Image Button with Varying images: "**

**android:textColor="@color/colorAccent"**/>

<**ImageButton**

**android:id="@+id/ib2"**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:src="@drawable/sample"** />

<**TextView**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_marginTop="15dp"**

**android:text="Image View: "**

**android:textColor="@color/colorAccent"**/>

<**ImageView**

**android:id="@+id/iv1"**

**android:layout\_width="match\_parent"**

**android:layout\_height="100dp"**

**android:scaleType="fitStart"**

**android:src="@drawable/androido"**

/>

*<!-- try scaleType=fitcenter, fitStart, etc-->*

<**ImageView**

**android:id="@+id/iv2"**

**android:layout\_width="match\_parent"**

**android:layout\_height="200dp"**

**android:layout\_marginTop="10dp"**

**android:scaleType="fitXY"**

**android:background="#000"**

/>

</**LinearLayout**>

</**ScrollView**>

</**LinearLayout**>

Main\_activity.java

**package** com.example.jevitha.a12\_imageview\_imagebutton;

**import** android.support.v7.app.AppCompatActivity;

**import** android.os.Bundle;

**import** android.view.View;

**import** android.widget.Button;

**import** android.widget.CheckBox;

**import** android.widget.EditText;

**import** android.widget.ImageButton;

**import** android.widget.ImageView;

**import** android.widget.ListView;

**import** android.widget.RadioButton;

**import** android.widget.TextView;

**import** android.widget.Toast;

*//https://developer.android.com/reference/android/widget/ImageView.html*

*//https://developer.android.com/reference/android/widget/ImageButton*

**public class** MainActivity **extends** AppCompatActivity **implements** View.OnClickListener {

ImageButton **b1**;

ImageView **v1**,**v2**;

@Override

**protected void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

**b1** = findViewById(R.id.***ib1***);

**v1** = findViewById(R.id.***iv1***);

**b1**.setOnClickListener(**this**);

**v1**.setOnClickListener(**this**);

**v2** =(ImageView) findViewById(R.id.***iv2***);

**v2**.setOnClickListener(**new** View.OnClickListener(){

@Override

**public void** onClick(View view) {

**v2**.setImageResource(R.drawable.***android***); *//set the source in java class*

}

});

}

@Override

**public void** onClick(View view) {

**if**(view.getId() == **b1**.getId())

Toast.*makeText*(**this**,**"ImageButton clicked"**, Toast.***LENGTH\_SHORT***).show();

**else**

Toast.*makeText*(**this**,**"ImageView clicked"**, Toast.***LENGTH\_SHORT***).show();

}

}