**Input validation activity**

Create a new android project

Project Name: InputValidation

Target Name: Android 2.3.3

Package Name: android.inputvalidation

In activity\_main.xml layout, copy the following text

*<?***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="android.inputvalidation.MainActivity"**>  
  
 <**TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Submit User Information"  
 android:layout\_alignParentTop="true"  
 android:layout\_centerHorizontal="true"  
 android:id="@+id/textView"** />  
  
 <**EditText  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/editText"  
 android:layout\_alignRight="@+id/textView"  
 android:layout\_alignEnd="@+id/textView"  
 android:layout\_below="@+id/textView2"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"** />  
  
 <**TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Email:"  
 android:id="@+id/textView2"  
 android:layout\_below="@+id/textView"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"** />  
  
 <**TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Phone Number:"  
 android:id="@+id/textView3"  
 android:layout\_below="@+id/editText"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"** />  
  
 <**EditText  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/editText2"  
 android:layout\_below="@+id/textView3"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignRight="@+id/textView"  
 android:layout\_alignEnd="@+id/textView"** />  
  
 <**TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Annual Salary:"  
 android:id="@+id/textView4"  
 android:layout\_below="@+id/editText2"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"** />  
  
 <**EditText  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/editText3"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignRight="@+id/textView"  
 android:layout\_alignEnd="@+id/textView"  
 android:layout\_gravity="left|center|bottom"  
 android:layout\_below="@+id/textView4"** />  
  
 <**Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Submit"  
 android:id="@+id/button"  
 android:layout\_marginTop="71dp"  
 android:layout\_below="@+id/editText3"  
 android:layout\_centerHorizontal="true"** />  
</**RelativeLayout**>

in the Mainactivity.java, copy the following

**package** android.inputvalidation;  
  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.text.method.DigitsKeyListener;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.EditText;  
**import** java.util.regex.Pattern;  
**import** android.widget.Toast;  
**public class** MainActivity **extends** AppCompatActivity {  
**public static boolean** isValid(EditText editText, String regex, String errMsg, **boolean** required) {  
 String text = editText.getText().toString().trim();  
 *// clearing the error, if it was previously set by some other values* editText.setError(**null**);  
 *// text required and editText is blank, so return false* **if** (required && !*hasText*(editText) ) **return false**;  
 *// pattern doesn't match so returning false* **if** (required && !Pattern.*matches*(regex, text)) {  
 editText.setError(errMsg);  
 **return false**;  
 }  
 **return true**;  
 }  
 **public static boolean** hasText(EditText txtEdit){  
 **if** (txtEdit.toString().length()>0)  
 **return true**;  
 **else  
 return false**;  
 }  
 **public static boolean** isIntegerOverflow(EditText editText, String errMsg, **boolean** required){  
 String text = editText.getText().toString().trim();  
 editText.setError(**null**);  
 editText.setKeyListener(**new** DigitsKeyListener(**false**,**true**));  
 **try**{  
 **int** temp=Integer.*parseInt*(editText.getText().toString());  
 **if** ( required && !*hasText*(editText) ) **return false**;  
 **if** (required && (temp<Integer.***MIN\_VALUE***||temp>Integer.***MAX\_VALUE***)) {  
 editText.setError(errMsg);  
 **return false**;  
 }  
 }  
 **catch**(Exception e){  
 editText.setError(errMsg);  
 **return false**;  
 }  
 **return true**;  
 }  
 */\*\* Called when the activity is first created. \*/* @Override  
 **public void** onCreate(Bundle savedInstanceState) {  
  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 **final** Button submitButton=(Button)findViewById(R.id.***button***);  
 **final** EditText email=(EditText)findViewById(R.id.***editText***);  
 **final** EditText phone=(EditText)findViewById(R.id.***editText2***);  
 **final** EditText salary=(EditText)findViewById(R.id.***editText3***);  
 submitButton.setOnClickListener(**new** View.OnClickListener()  
 {  
 **public void** onClick(View v)  
 {  
 **try** {  
 String emailExpression = **"^([a-zA-Z0-9\_\\-\\.]+)@([a-zA-Z0-9\_\\-\\.]+)\\.([a-zA-Z]{2,5})$"**;  
 *//String phoneExpression = "((\\(\\d{3}\\) ?)|(\\d{3}-))?\\d{3}-\\d{4}";* String phoneExpression =**"^\\d{3}-\\d{7}$"**;  
 **if** (*isValid*(email, emailExpression,**"This email address is Not Valid"**, **true**))  
 **if** (*isValid*(phone,phoneExpression,**"Phone format: 123-4567890"**,**true**))  
 **if** (*isIntegerOverflow*(salary,**"Integer value less than 2,147,483,648"**,**true**))  
 Toast.*makeText*(getApplicationContext(), **"Everything looks great!"**, Toast.***LENGTH\_LONG***).show();  
 } **catch** (Exception e) {  
 *//* ***TODO Auto-generated catch block*** Toast.*makeText*(getApplicationContext(), **"Ooops...Something wrong happened!"**, Toast.***LENGTH\_LONG***).show();  
  
 }  
 };  
 *//public void onClick(View v) {  
 // int s=Integer.parseInt(salary.getText().toString());  
 // Toast.makeText(getApplicationContext(), Integer.toString(s), Toast.LENGTH\_LONG).show();  
 //}* });  
 }  
  
}