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Question.

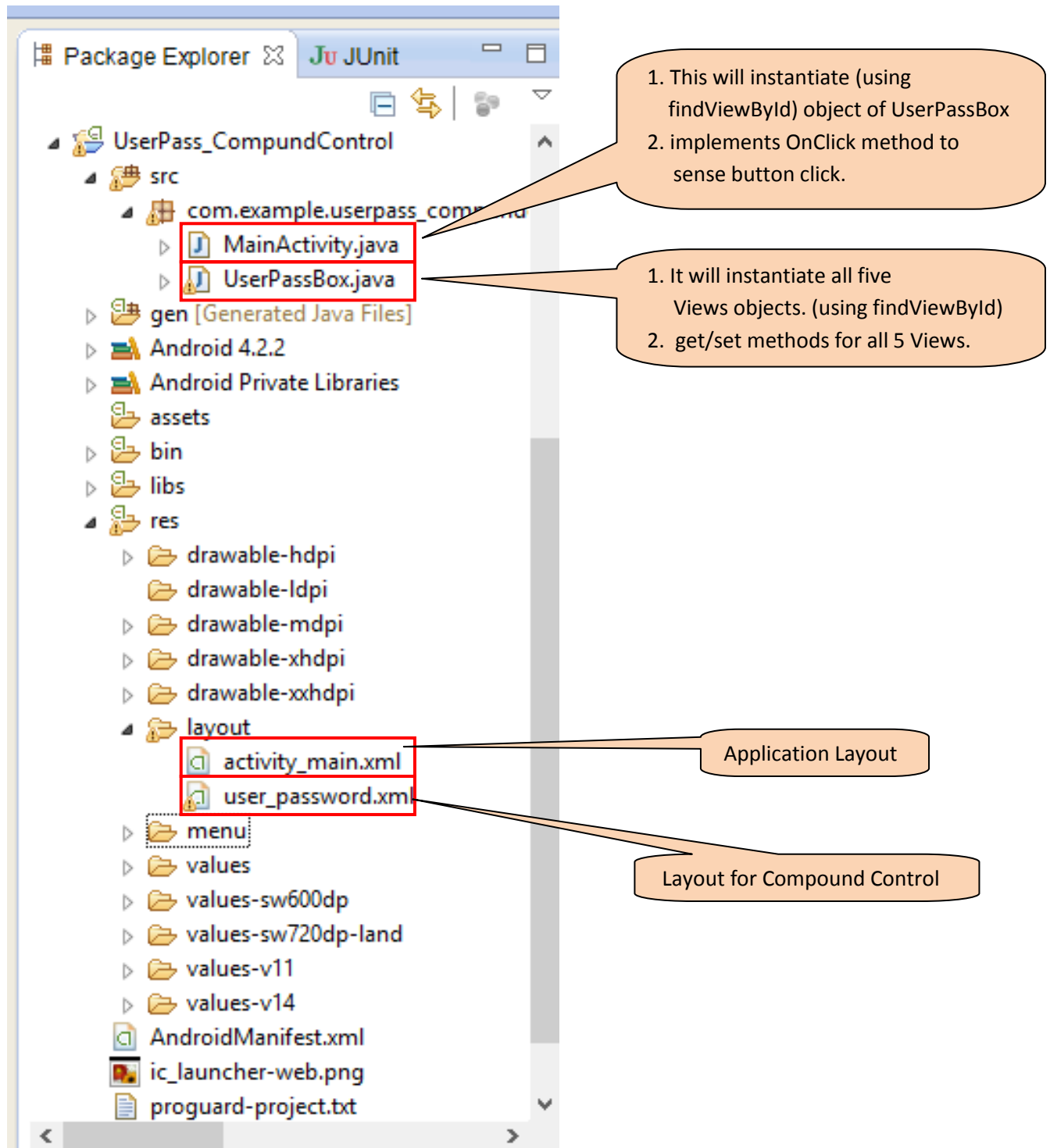
[Creating Compound Controls](#)

- Creating the following [Compound Controls](#)

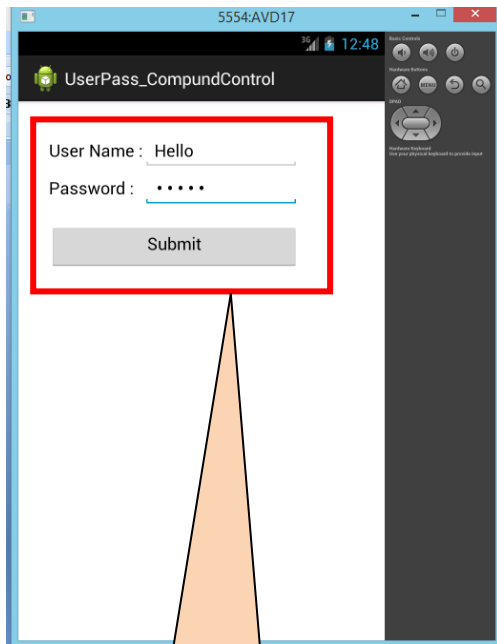
User Name:	+-----+
	+-----+
Password:	+-----+
	+-----+
	+-----+
	Submit
	+-----+

After entering the user name and the password, pressing the button **Submit** to activate a [Toast](#) to display the entered user name and password.

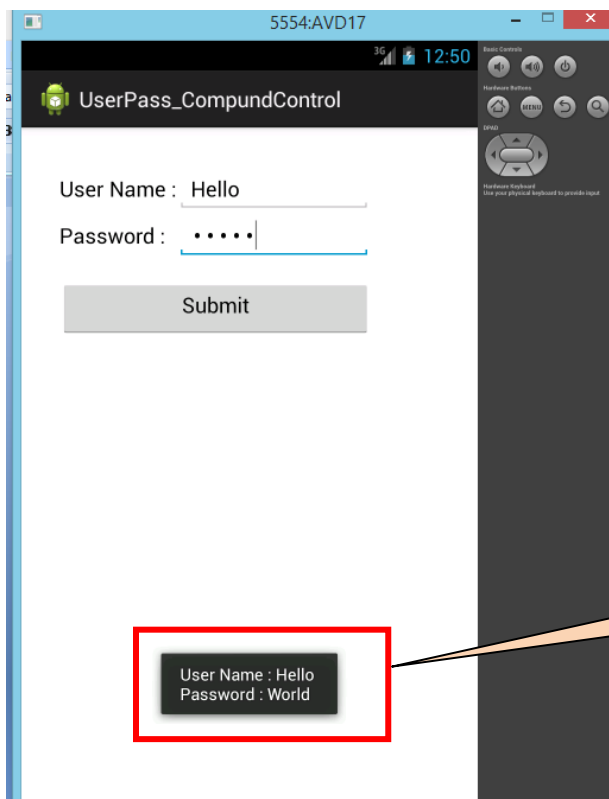
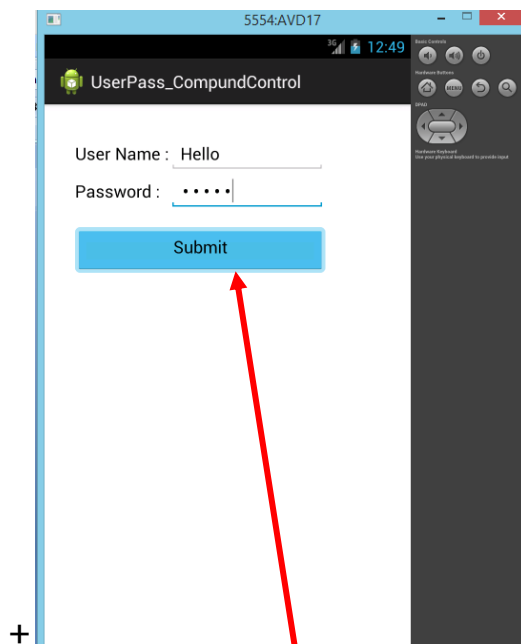
We will be working with 4 files mainly...



SnapShots::



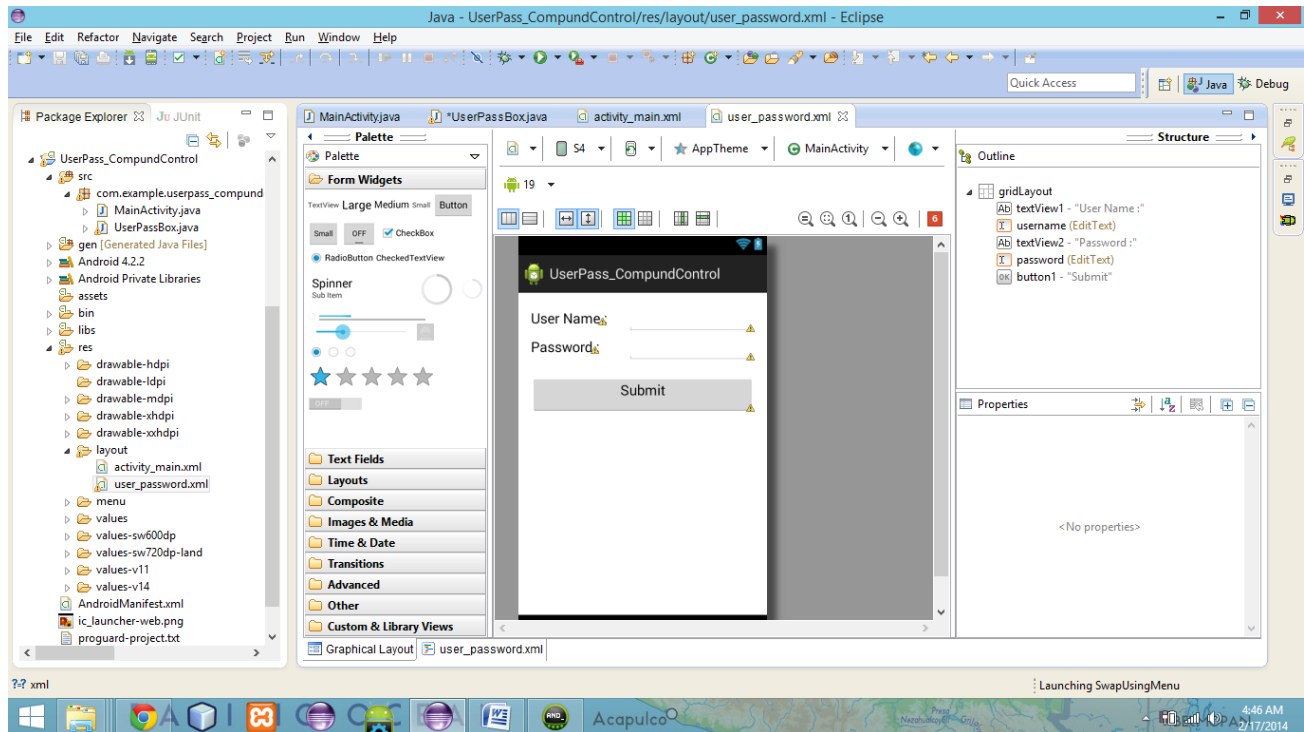
This is a Compound Control



When we click Submit it will
Toast the UserName and
password entered.

Step:1 Create new Layout file user_password.xml

user_password.xml --> Graphical Layout



user_password.xml

We have used GridLayout so we will be Extending GridLayout in UserPassBox.java

```
<?xml version="1.0" encoding="utf-8"?>
<GridLayout 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=".MainActivity"

    android:id="@+id/gridLayout"
    android:columnCount="3"
    android:rowCount="3">

    <TextView
        android:id="@+id/textView1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_column="0"
```

```

        android:layout_gravity="left"
        android:layout_row="0"
        android:text="User Name :"
        android:textAppearance="?android:attr/textAppearanceMedium" />

<EditText
    android:id="@+id/username"
    android:layout_width="164dp"
    android:layout_height="wrap_content"
    android:layout_column="1"
    android:layout_columnSpan="2"
    android:layout_row="0"
    android:ems="10" />

<TextView
    android:id="@+id/textView2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_column="0"
    android:layout_gravity="left"
    android:layout_row="1"
    android:text="Password :"
    android:textAppearance="?android:attr/textAppearanceMedium" />

<EditText
    android:id="@+id/password"
    android:layout_width="164dp"
    android:layout_height="wrap_content"
    android:layout_column="1"
    android:layout_columnSpan="2"
    android:layout_row="1"
    android:ems="10"
    android:inputType="textPassword" />

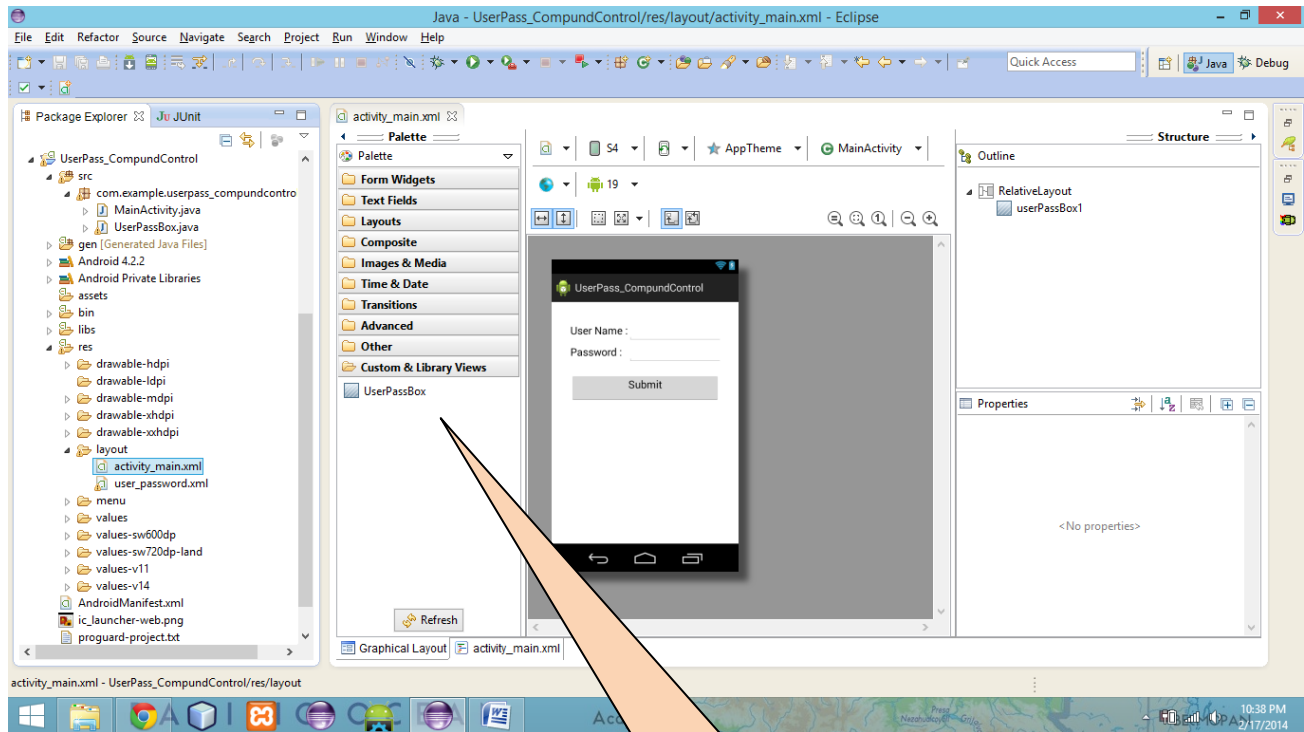
<Button
    android:id="@+id/button1"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_column="0"
    android:layout_columnSpan="2"
    android:layout_gravity="left"
    android:layout_marginTop="18dp"
    android:layout_row="2"
    android:gravity="center_horizontal"
    android:text="Submit" />

</GridLayout>

```

Step:2 Modify acitivity_mail.xml

activity_main.xml --> Graphical Layout



Drag and Drop Custom control UserPassBox from Custom & Library View

activity_main.xml

```
<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=".MainActivity" >

    <com.example.userpass_compundcontrol.UserPassBox
        android:id="@+id/userPassBox1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content" >

    </com.example.userpass_compundcontrol.UserPassBox>

</RelativeLayout>
```

Step:3 Create UserPassBox.java under scr folder which extends Layout

UserPassBox.java

(This is java class for Compound Control user_password.xml)

```
package com.example.userpass_compundcontrol;

import android.content.Context;
import android.util.AttributeSet;
import android.view.LayoutInflater;
import android.widget.*;

public class UserPassBox extends GridLayout {
    private TextView textView1, textView2;
    private EditText userName, password;
    private Button submit;
    public UserPassBox(Context context) {
        super(context);
        loadViews();
    }
    public UserPassBox(Context context, AttributeSet attrs) {
        super(context, attrs);

        LayoutInflater inflater = LayoutInflater.from(context);
        inflater.inflate(R.layout.user_password, this);

        loadViews();
    }
    public EditText getUserUsername() {
        return userName;
    }
    public EditText getPassword() {
        return password;
    }
    public Button getSubmit() {
        return submit;
    }
    public void setUserUsername(EditText userName) {
        this.userName = userName;
    }
    public void setPassword(EditText password) {
        this.password = password;
    }
    private void loadViews() {
        textView1 = (TextView) findViewById(R.id.textView1);
        textView2 = (TextView) findViewById(R.id.textView2);
        userName = (EditText) findViewById(R.id.username);
        password = (EditText) findViewById(R.id.password);
        submit = (Button) findViewById(R.id.button1);
    }
}
```

Extend type of Layout we used
to create user_password.xml

Instantiate all 5 views we
used in user_password.xml

Step:4 Modify MainActivity.java

MainActivity.java

```
package com.example.userpass_compundcontrol;

import android.os.Bundle;
import android.app.Activity;
import android.view.*;
import android.view.View.OnClickListener;
import android.widget.Toast;

public class MainActivity extends Activity {

    UserPassBox userbox;
    String userName,password;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        userbox = (UserPassBox)findViewById(R.id.userPassBox1);

        userbox.getSubmit().setOnClickListener( new OnClickListener() {
            @Override
            public void onClick(View v) {
                userName =userbox.getUserName().getText().toString();
                password =userbox.getPassword().getText().toString();
                Toast.makeText(MainActivity.this,"User Name : "+ userName+"\nPassword : "
                    +password,Toast.LENGTH_LONG).show();
            }
        });
    }
}
```

instantiate (using findViewById)
Compound Control and set the
listener for it.

OnClick() method Listens
for Submit button click and
gets the user inputs and
Toast it on the screen.