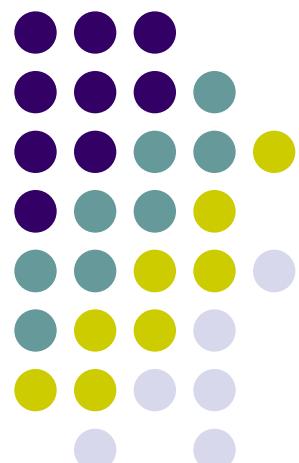


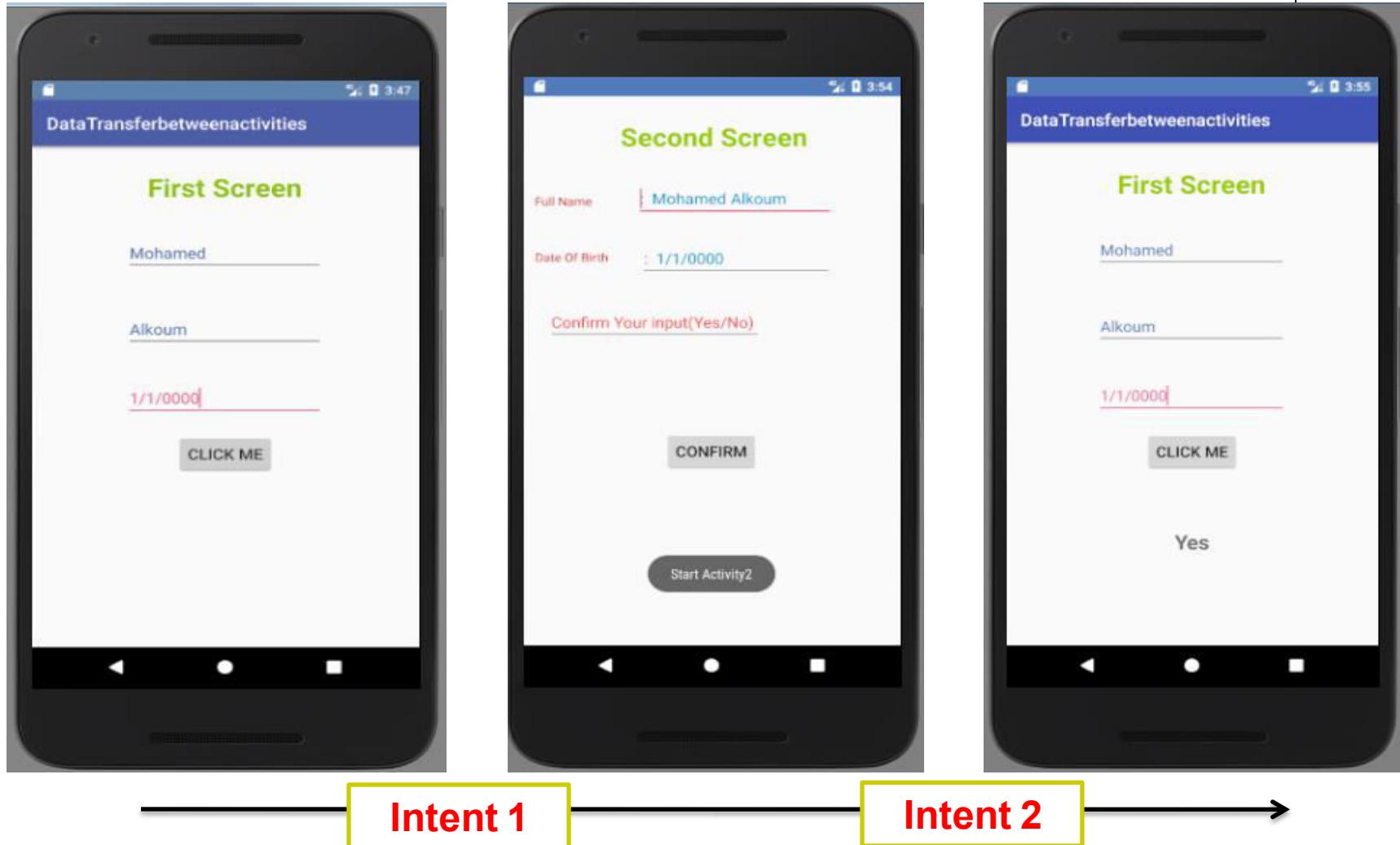
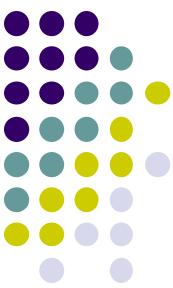
# Mobile Application Development

Transfer Data Between Activities Using Intent

**MOBILE APPLICATION DEVELOPMENT**



# Example of Data Transfer between Activities





# Activities in Manifest

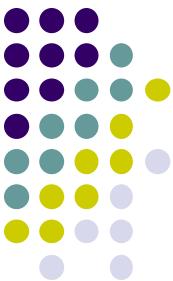
- Every activity has an entry in project's **AndroidManifest.xml**, added automatically by Android Studio:

```
<?xml version="1.0" encoding="utf-8" ?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.uot96.datatransferbetweenactivities">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="DataTransferBetweenActivities"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".MyFirstScreen">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

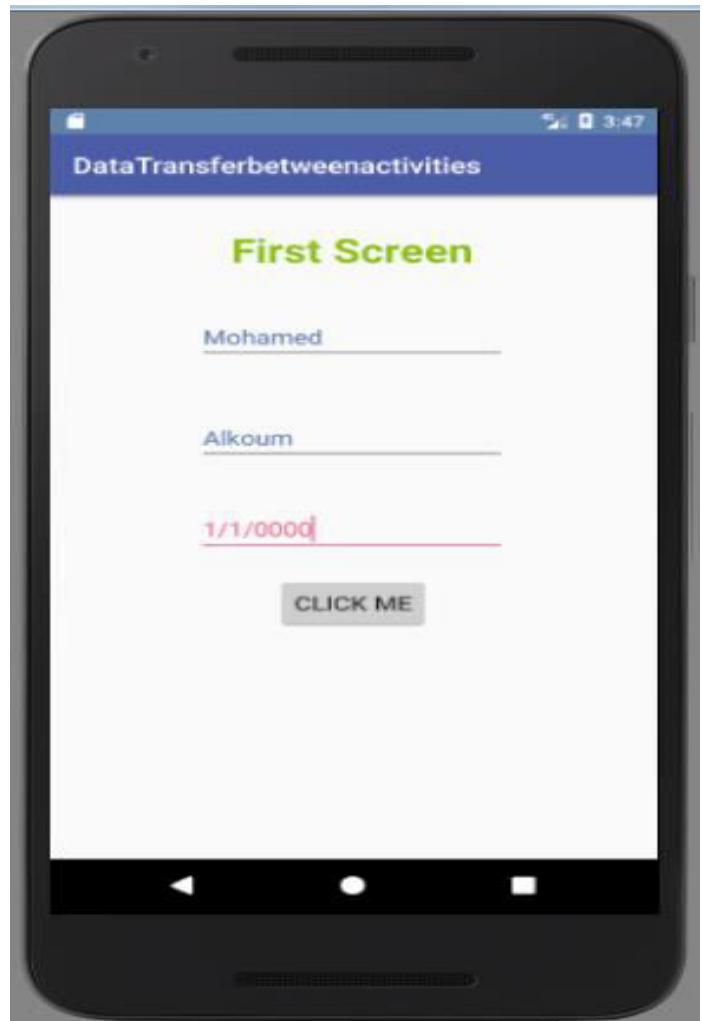
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <activity android:name=".MySecondScreen"></activity>
    </application>

</manifest>
```



# Step-1

- The code for
  - **first\_screen.XML** file





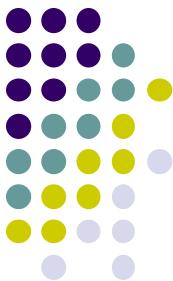
```
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
    xmlns:tools="http://schemas.android.com/tools"  
    android:layout_width="match_parent"  
    android:layout_height="match_parent"  
    android:paddingLeft="@dimen/activity_horizontal_margin"  
    android:orientation="vertical"  
    android:paddingRight="@dimen/activity_horizontal_margin"  
    android:paddingTop="@dimen/activity_vertical_margin"  
    android:paddingBottom="@dimen/activity_vertical_margin"  
    tools:context=".FirstScreen"  
    android:id="@+id/linearLayout1">  
    <TextView android:text="First Screen"  
        android:layout_width="wrap_content"  
        android:textStyle="bold"  
        android:textSize="30dp"  
        android:layout_height="wrap_content"  
        android:layout_gravity="center_horizontal"  
        android:textColor="#0bff14"  
        android:id="@+id/textView1" />
```



```
<EditText  
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:hint="First name"  
    android:id="@+id/editText1"  
    android:textColorHint="#ff9aee" />
```

```
<EditText  
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:hint="Last name"  
    android:textColorHint="#ff9aee"  
    android:id="@+id/editText2" />
```

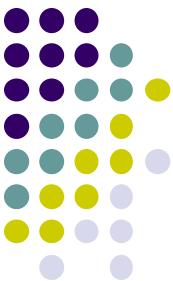
```
<EditText  
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:hint="Date of birth"  
    android:textColorHint="#ff9aee"  
    android:id="@+id/editText3" />
```



```
<Button  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center_horizontal"  
    android:textColor="#ff1c2e"  
    android:text="Click Me"  
    android:id="@+id/button1" />
```

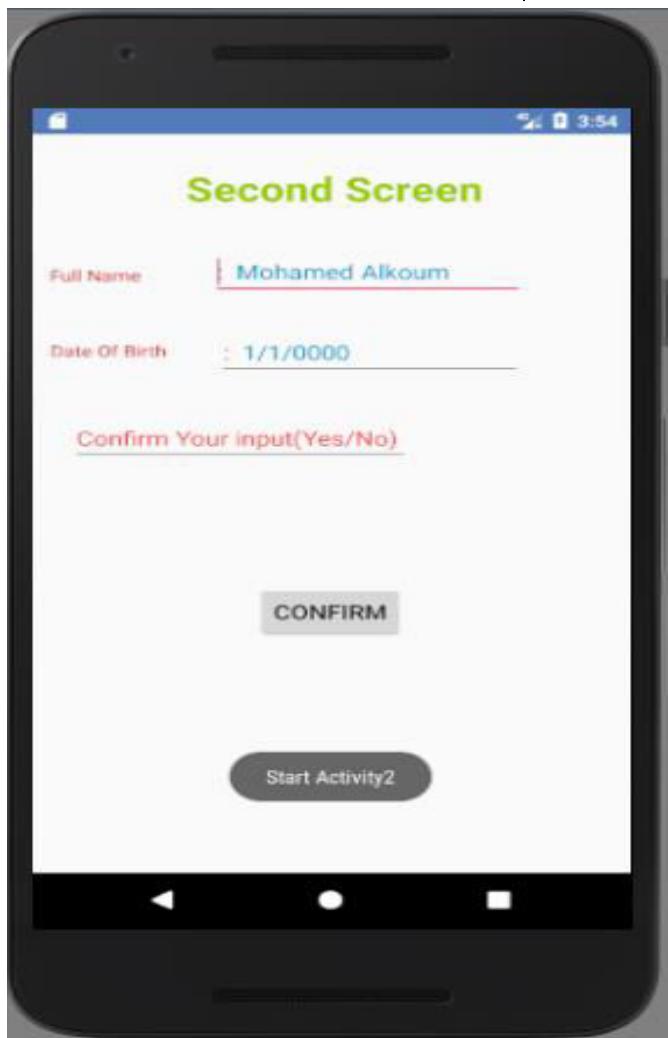
```
<TextView  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:id="@+id/textView2"  
    android:textSize="20dp"  
    android:textStyle="bold"  
    android:layout_gravity="center_horizontal"/>
```

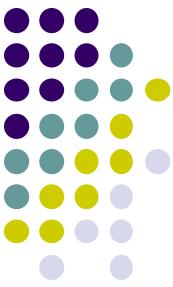
```
</LinearLayout>
```



# Step-2

- The code for
  - **second\_screen.XML** file





```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:orientation="vertical"
    android:layout_height="match_parent"
    android:id="@+id/linearLayout2">
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Second Screen"
    android:textSize="30dp"
    android:textStyle="bold"
    android:textColor="#0bff14"
    android:layout_gravity="center_horizontal"
    android:id="@+id/textView3" />
```



```
<LinearLayout
```

```
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:orientation="horizontal">
```

```
<TextView
```

```
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:text="Full Name"  
    android:textSize="22dp"  
    android:id="@+id/textView4"/>
```

```
<TextView
```

```
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:id="@+id/textView5"  
    android:textSize="25dp"/>
```

```
</LinearLayout>
```



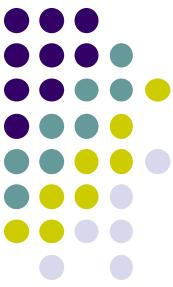
```
<LinearLayout  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:orientation="horizontal" >  
  
<TextView  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:text="Date Of Birth"  
    android:textSize="22dp"  
    android:id="@+id/textView6"/>  
  
<TextView  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:textSize="25dp"  
    android:id="@+id/textView7"/>  
  
</LinearLayout>
```



```
<EditText  
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:hint="Confirm Your input(Yes/No)"  
    android:textColorHint="#ff9aee"  
    android:id="@+id/editText4"/>
```

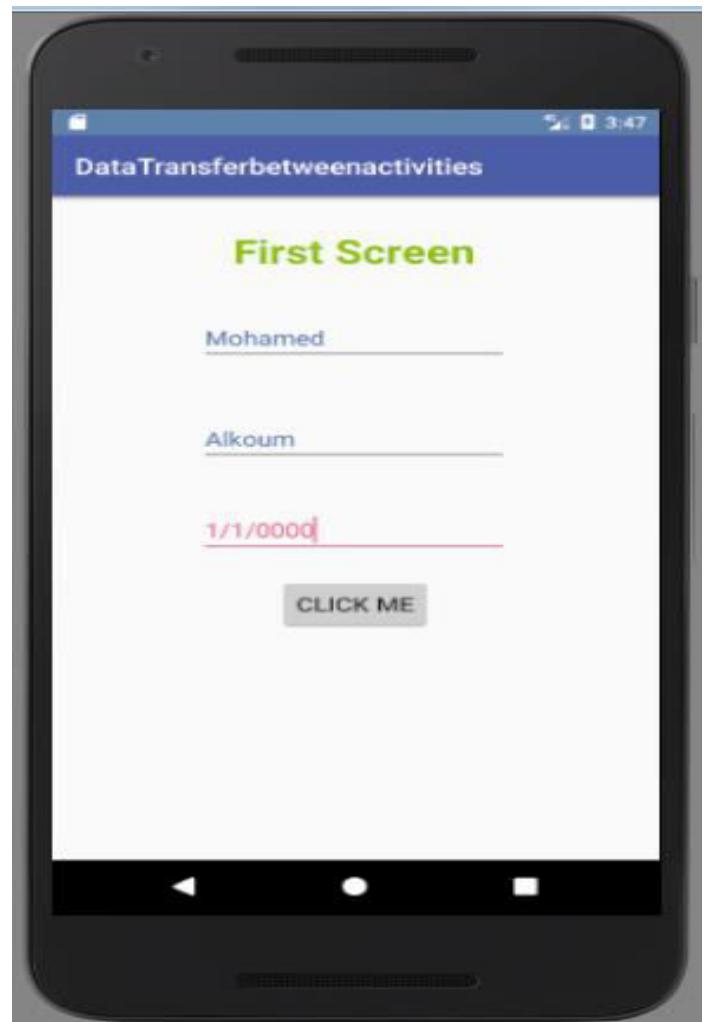
```
<Button  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:text="Confirm"  
    android:textColor="#ff1c2e"  
    android:id="@+id/button2"  
    android:layout_gravity="center_horizontal" />
```

```
</LinearLayout>
```



# Step-3

- The code for
  - **FirstScreen.Java** file



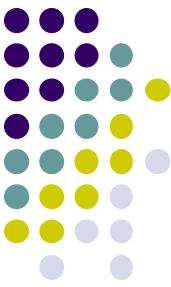


```
package com.hackpundit.www.datatransferbetweenactivities;
```

```
import android.content.Intent;  
import android.support.v7.app.AppCompatActivity;  
import android.os.Bundle;  
import android.view.Menu;  
import android.view.MenuItem;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
import android.widget.Toast;
```

## **public class FirstScreen extends AppCompatActivity {**

```
    TextView txt1,txt2;  
    EditText edt1,edt2,edt3;  
    Button btn1;
```



```
@Override  
protected void onCreate(Bundle savedInstanceState) {  
    super.onCreate(savedInstanceState);  
    mt("Create Activity1");  
    setContentView(R.layout.first_screen);  
  
    txt1 = (TextView) findViewById(R.id.textView1);  
    txt2 = (TextView) findViewById(R.id.textView2);  
    edt1 = (EditText) findViewById(R.id.editText1);  
    edt2 = (EditText) findViewById(R.id.editText2);  
    edt3 = (EditText) findViewById(R.id.editText3);  
    btn1 = (Button) findViewById(R.id.button1);  
  
    btn1.setOnClickListener(new View.OnClickListener() {  
        @Override  
        public void onClick(View v) {  
            Intent intent1 = new Intent(FirstScreen.this, SecondScreen.class);
```



```
    intent1.putExtra("first_name",edt1.getText().toString());
    intent1.putExtra("last_name",edt2.getText().toString());
    intent1.putExtra("date_of_birth",edt3.getText().toString());

    // startActivity(intent1);
    startActivityForResult(intent1,1);
}

});

}

@Override
protected void onActivityResult(int requestCode, int resultCode, Intent data) {
    txt2.setText(data.getStringExtra("confirmation"));
}
```



```
@Override  
protected void onResume() {  
    super.onResume();  
    mt("Rsume Activity1");  
}  
  
@Override  
protected void onPause() {  
    super.onPause();  
    mt("Pause Activity1");  
}  
  
@Override  
protected void onRestart() {  
    super.onRestart();  
    mt("Restart Activity1");  
}  
  
@Override  
protected void onStart() {  
    super.onStart();  
    mt("Start Activity1");  
}
```



```
}
```

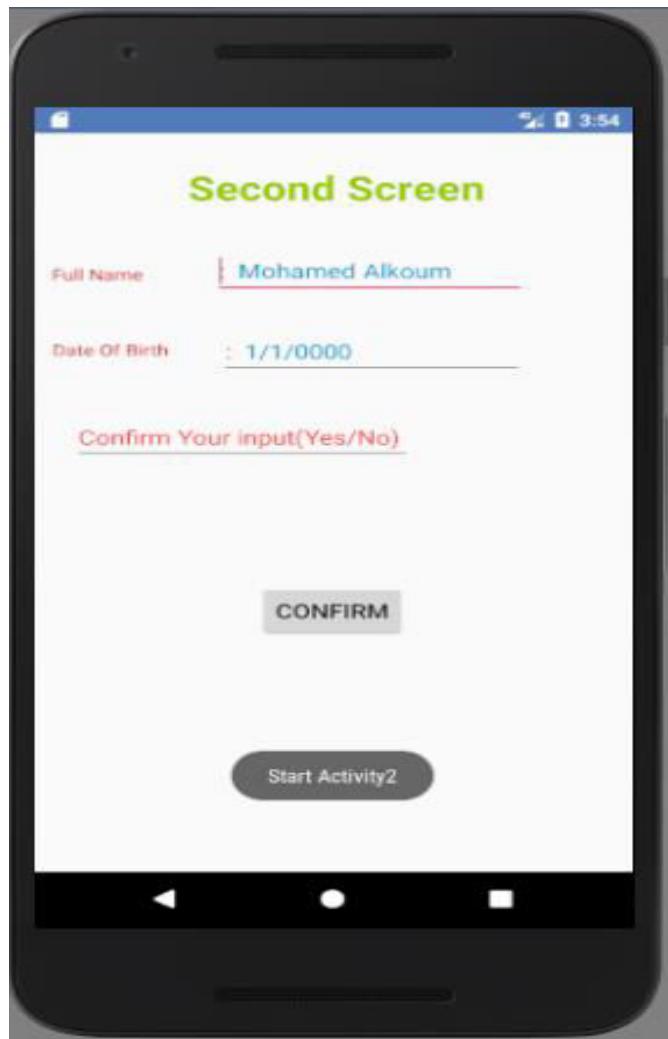
```
@Override  
protected void onStop() {  
    mt("Stop Activity1 ");  
    super.onStop();  
}
```

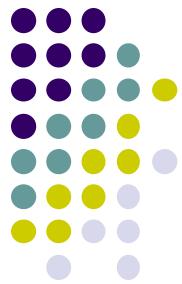
```
@Override  
protected void onDestroy() {  
    mt("Destroy Activity1");  
    super.onDestroy();  
}
```

```
public void mt(String string){  
    Toast.makeText(this, string, Toast.LENGTH_SHORT).show();  
}  
}
```

# Step-4

- the code for
  - **SecondScreen.Java**



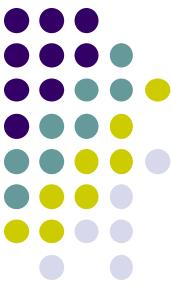


```
package com.hackpundit.www.datatransferbetweenactivities;

import android.app.Activity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;
```

## **public class SecondScreen extends Activity {**

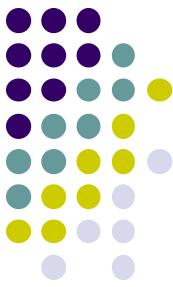
```
    TextView txt5,txt7;
    EditText edt4;
    Button btn2;
```



```
protected void onCreate(Bundle savedInstanceState) {  
    super.onCreate(savedInstanceState);  
    mt("Create Activity2");  
    setContentView(R.layout.second_screen);  
  
    txt5 = (TextView) findViewById(R.id.textView5);  
    txt7 = (TextView) findViewById(R.id.textView7);  
    edt4 = (EditText) findViewById(R.id.editText4);  
    btn2 = (Button) findViewById(R.id.button2);
```

Intent **intent2** = **getIntent()**;

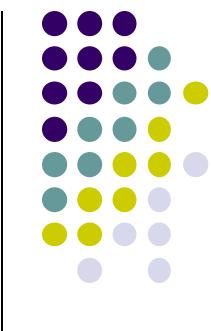
```
// String first = intent2.getStringExtra("first_name");  
// String last = intent2.getStringExtra("last_name");  
// Stringdob = intent2.getStringExtra("date_of_birth");
```



```
Bundle bundle = intent2.getExtras();
String first = bundle.getString("first_name");
String last = bundle.getString("last_name");
String dob = bundle.getString("date_of_birth");
```

```
txt5.setText(": "+first.toString()+" "+last.toString());
txt7.setText(": "+dob.toString());
```

```
btn2.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent intent2 = new Intent();
        intent2.putExtra("confirmation", edt4.getText().toString());
        setResult(1, intent2);
        finish();
    }
});
```

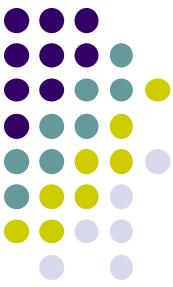


```
@Override  
protected void onResume() {  
    super.onResume();  
    mt("Rsume Activity2");  
}
```

```
@Override  
protected void onPause() {  
    super.onPause();  
    mt("Pause Activity2");  
}
```

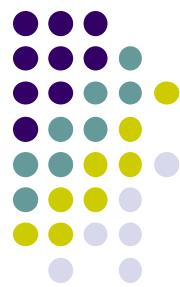
```
@Override  
protected void onRestart() {  
    super.onRestart();  
    mt("Restart Activity2");  
}
```

```
@Override  
protected void onStart() {  
    super.onStart();  
    mt("StartActivity2");  
}
```

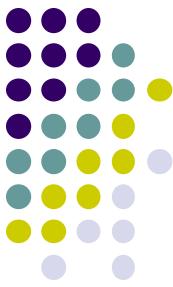


```
@Override  
protected void onStop() {  
    mt("Stop Activity2 ");  
    super.onStop();  
}  
  
@Override  
protected void onDestroy() {  
    mt("Destroy Activity2");  
    super.onDestroy();  
}  
  
public void mt(String string){  
    Toast.makeText(this, string, Toast.LENGTH_SHORT).show();  
}  
}
```

# Predefined Action/URI Combinations



Action	URI	Meaning
Intent.ACTION_CALL	tel: <i>phone_number</i>	Opens phone application and calls <i>phone_number</i> .
Intent.ACTION_DIAL	tel: <i>phone_number</i>	Opens phone application and dials (but doesn't call) <i>phone_number</i> .
Intent.ACTION_DIAL	voicemail:	Opens phone application and dials (but doesn't call) the voice mail number.
Intent.ACTION_VIEW	geo: <i>lat,long</i>	Opens the maps application centered on ( <i>lat, long</i> ).
Intent.ACTION_VIEW	geo:0,0?q= <i>address</i>	Opens the maps application centered on the specified address.
Intent.ACTION_VIEW	http:// <i>url</i> https:// <i>url</i>	Opens the browser application to the specified address.
Intent.ACTION_WEB_SEARCH	<i>plain_text</i>	Opens the browser application and uses Google search for given string.



# References

- **Android Tutorial – Transfer Data Between Activities Using Intent**

By: [Abhinav Kumar](#) | Last Updated: December 26, 2015

- **javatpoint**

- **Android StartActivityForResult Example**
- **Starting Another Activity | Android Developers**
  - <https://developer.android.com/training/basics/.../starting-activity.html>
- **Multiple Activities in Android Studio**
  - <http://stackoverflow.com/questions/28374264/multiple-activities-in-android-studio>
- **Android Application Basics: Activities and Intents**
  - <http://www.informit.com/articles/article.aspx?p=1646053&seqNum=3>



# Reference

- Starting Another Activity | Android Developers
  - <https://developer.android.com/training/basics/.../starting-activity.html>
- Multiple Activities in Android Studio
  - <http://stackoverflow.com/questions/28374264/multiple-activities-in-android-studio>
- Android Application Basics: Activities and Intents
  - <http://www.informit.com/articles/article.aspx?p=1646053&seqNum=3>