
Handout Praktikum Mobile Application

Topik 1 – Activity dan Intent

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1 Tujuan

1. Mahasiswa dapat memahami siklus hidup *activity*
2. Mahasiswa dapat menentukan gaya dan tema *activity*
3. Mahasiswa dapat menampilkan *activity* sebagai jendela dialog
4. Mahasiswa dapat memahami konsep *intent*

2 Komponen/Peralatan

- PC/laptop
- Android Studio

3 Dasar Teori

Aplikasi Android memiliki banyak komponen, salah empatnya adalah *activity*, *service*, *broadcast receiver*, dan *content provider*. Hari ini kita khusus mempelajari *activity*.

Activity adalah komponen UI paling utama. Setidaknya dalam satu aplikasi terdapat satu buah *activity*. Di dalamnya bisa kamu isi dengan *View* dan *ViewGroup*. Contoh *View* adalah *TextView* yang berfungsi untuk menampung *string*. Selain itu ada pula *Button* yang berfungsi layaknya *push-button* dalam dunia nyata. *ViewGroup* berfungsi untuk memberikan tata letak *View*. Dalam praktikum ini, kita tidak akan membahas detail mengenai *user interface*.

Setiap *activity* mempunyai siklus hidup-nya masing-masing. Berikut ini adalah diagram *state*-nya.

Dalam percobaan 4.1 kalian akan mencoba memperhatikan siklus hidup *activity*.

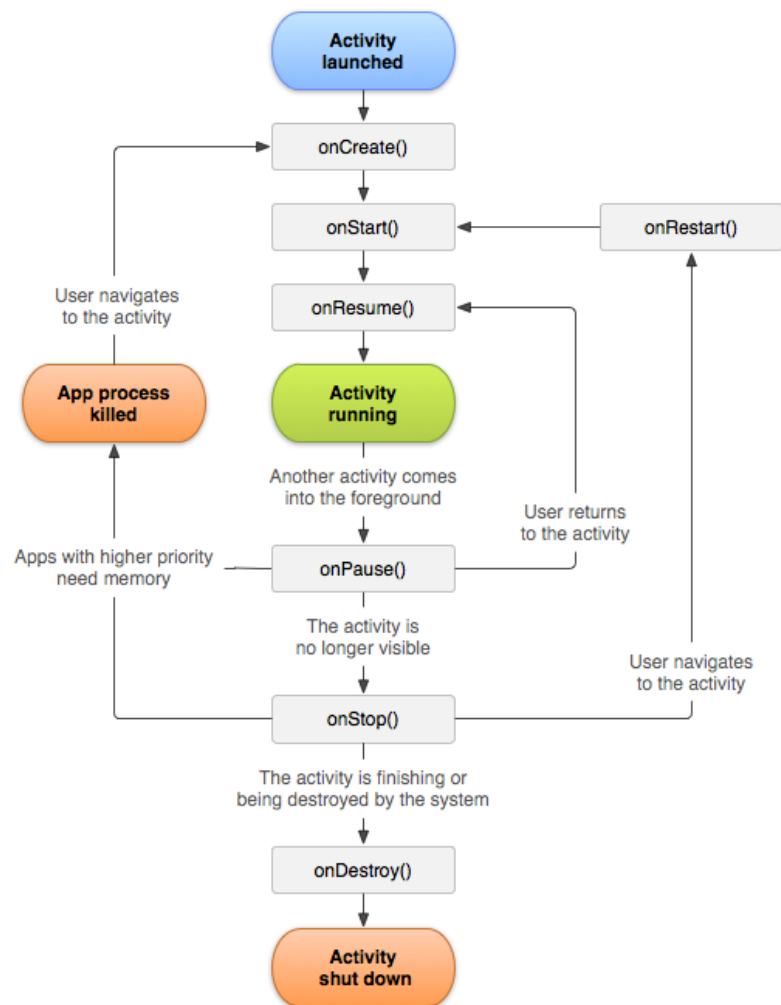


Figure 1: Siklus Hidup *Activity*

Dalam satu aplikasi biasanya ada banyak *activity*. Jika kasusnya demikian, mungkin kamu harus menggunakan *intent* untuk menghubungkan antar *activity*.

Untuk keterangan lebih lanjut silahkan baca *website* resmi Android.

4 Langkah Praktikum

4.1 Memahami Siklus Hidup Activity

1. Buat proyek baru dengan ketentuan sebagai berikut.
 - Nama aplikasi → **Activity101**
 - Pilih *template* activity → **Empty Activity**
 - Nama activity → **Activity101Activity**
2. Buka file Activity101Activity.java lalu *copy-paste* listing di bawah ini.

```
package com.example.activity101;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.util.Log;

public class Activity101Activity extends AppCompatActivity {

    String tag = "Lifecycle Step";

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_activity101);
        Log.d(tag, "In the onCreate() event");
    }

    public void onStart() {
        super.onStart();
        Log.d(tag, "In the onStart() event");
    }

    public void onRestart() {
        super.onRestart();
        Log.d(tag, "In the onRestart() event");
    }

    public void onResume() {
        super.onResume();
        Log.d(tag, "In the onResume() event");
    }

    public void onPause() {
        super.onPause();
        Log.d(tag, "In the onPause() event");
    }
}
```

```

    }

    public void onStop() {
        super.onStop();
        Log.d(tag, "In the onStop() event");
    }

    public void onDestroy() {
        super.onDestroy();
        Log.d(tag, "In the onDestroy() event");
    }
}

```

3. Tekan Shift + F9 (atau pilih Run > Debug) untuk men-*debug* aplikasi. Pilih salah satu Android Virtual Device yang kalian inginkan.

4. Ketika Activity pertama kali berjalan, kamu akan melihat baris log pada konsol logcat yang mirip seperti berikut ini.

```

06-04 17:42:48.344 21251-21251/com.example.activity101 D/Lifecycle
→ Step: In the onCreate() event
06-04 17:42:48.344 21251-21251/com.example.activity101 D/Lifecycle
→ Step: In the onStart() event
06-04 17:42:48.345 21251-21251/com.example.activity101 D/Lifecycle
→ Step: In the onResume() event

```

5. Tekan tombol Back pada emulator, lalu perhatikan konsol logcat. Terdapat baris log seperti berikut.

```

06-04 17:43:17.148 21251-21251/com.example.activity101 D/Lifecycle
→ Step: In the onPause() event
06-04 17:43:17.610 21251-21251/com.example.activity101 D/Lifecycle
→ Step: In the onStop() event
06-04 17:43:17.610 21251-21251/com.example.activity101 D/Lifecycle
→ Step: In the onDestroy() event

```

6. Tekan tombol Home pada emulator, jalankan kembali aplikasi Activity101, lalu perhatikan konsol logcat. Terdapat baris log seperti berikut.

```

06-04 17:44:20.841 21251-21251/com.example.activity101 D/Lifecycle
→ Step: In the onCreate() event
06-04 17:44:20.842 21251-21251/com.example.activity101 D/Lifecycle
→ Step: In the onStart() event
06-04 17:44:20.844 21251-21251/com.example.activity101 D/Lifecycle
→ Step: In the onResume() event

```

7. Tekan tombol Home pada emulator, jalankan aplikasi Phone, lalu perhatikan konsol logcat. Terdapat baris log seperti berikut.

```

06-04 17:44:57.703 21251-21251/com.example.activity101 D/Lifecycle
→ Step: In the onPause() event
06-04 17:44:57.748 21251-21251/com.example.activity101 D/Lifecycle
→ Step: In the onStop() event

```

8. Perhatikan bahwa *event onDestory()* tidak terpanggil. Terakhir, tekan tombol Back pada emulator, jalankan aplikasi Activity101, lalu perhatikan konsol logcat. Terdapat baris log seperti berikut.

```
06-04 17:46:51.928 21251-21251/com.example.activity101 D/Lifecycle
  → Step: In the onRestart() event
06-04 17:46:51.928 21251-21251/com.example.activity101 D/Lifecycle
  → Step: In the onStart() event
06-04 17:46:51.929 21251-21251/com.example.activity101 D/Lifecycle
  → Step: In the onResume() event
```

4.2 Menampilkan Jendela Dialog Menggunakan Activity

1. Buat proyek baru dengan ketentuan berikut ini.
 - Nama aplikasi → **Dialog**
 - Pilih *template* activity → **Basic Activity**.
 - Nama *activity* → **DialogActivity**.
2. Buka file `AndroidManifest.xml`, lalu *copy-paste* listing berikut ini.

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

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/AppTheme" >
        <activity
            android:name=".DialogActivity"
            android:label="@string/app_name"
            android:theme="@style/Theme.AppCompat.Dialog" >
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

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

</manifest>
```

3. Tekan Shift+F9 (atau pilih Run > Debug) untuk men-*debug* aplikasi. Pilih salah satu Android Virtual Devices yang kalian inginkan. Hasil akhir ditunjukkan pada Figure 2.

4.3 Menampilkan Dialog Perkembangan

1. Gunakan kembali proyek **Activity101**.

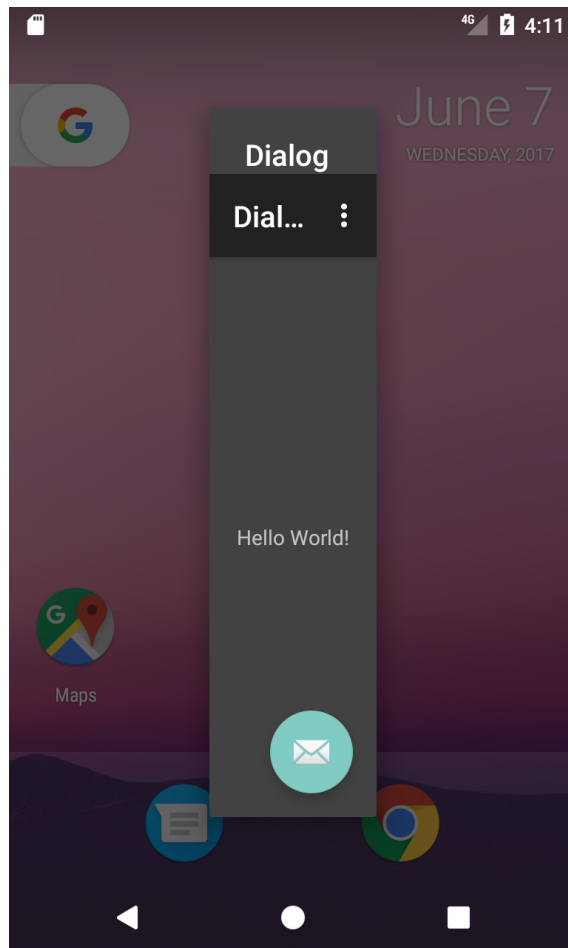


Figure 2: Hasil Akhir

2. Buka file AndroidManifest.xml, lalu *copy-paste* listing berikut ini.

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.activity101">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@android:style/Theme.Material">
        <activity android:name=".Activity101Activity">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

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

</manifest>
```

3. Buka file Activity101Activity.java, lalu *copy-paste* listing berikut ini.

```
package com.example.activity101;

import android.app.Activity;
import android.app.AlertDialog;
import android.os.Bundle;
import android.os.CountDownTimer;

public class Activity101Activity extends Activity {

    ProgressDialog progressDialog;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_activity101);
    }

    public void onStart()
    {
        super.onStart();
        progressDialog = ProgressDialog.show(this, "Please Wait",
            ↪ "Processing...", true);
        CountDownTimer timer = new CountDownTimer(3000, 1000) {
            @Override
            public void onTick(long millisUntilFinished) {
```

```

    }

    @Override
    public void onFinish() {
        progressDialog.dismiss();
    }
}.start();
}
}

```

4. Tekan **Shift+F9** (atau pilih **Run > Debug**) untuk men-*debug* aplikasi. Pilih salah satu **Android Virtual Devices** yang kalian inginkan. Hasil akhir ditunjukkan pada Figure 3 dan Figure 4.

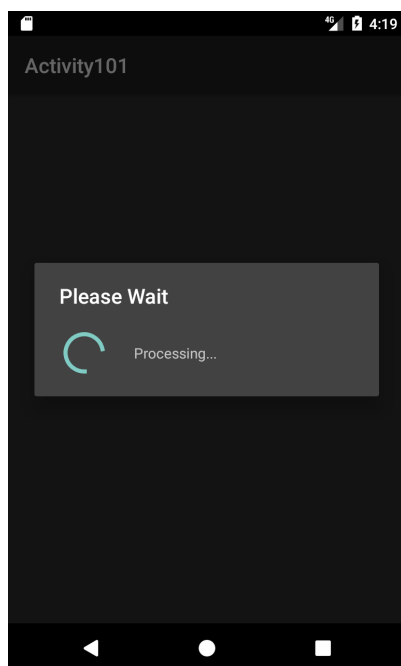


Figure 3: Hasil Akhir (1)

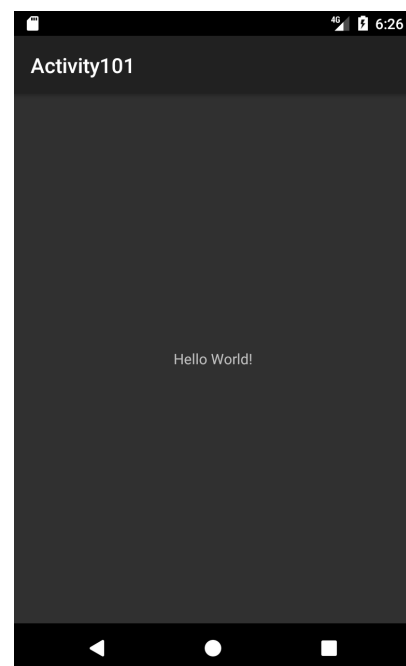


Figure 4: Hasil Akhir (2)

4.4 Menghubungkan Antar Activity Menggunakan Intent

1. Buat proyek baru dengan ketentuan berikut ini.
 - Nama aplikasi → **UsingIntent**
 - Pilih *template* activity → **Empty Activity**.
2. Pilih **File > New > Activity > Empty Activity**. Activity yang baru tersebut diberi nama **SecondActivity**.
3. Buka **AndroidManifest.xml** lalu *copy-paste* listing berikut ini

```

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

    <application

```



```

        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".MainActivity">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <activity android:name=".SecondActivity">
            <intent-filter>
                <action android:name="com.example.usingintent.SecondActivity"
                ↪ />
                <category android:name="android.intent.category.DEFAULT" />
            </intent-filter>
        </activity>
    </application>

</manifest>

```

4. Buka activity_main.xml, lalu *copy-paste* listing berikut ini.

```

<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout
    ↪ xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context="com.example.usingintent.MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Main Activity!"
        android:id="@+id/textView"
        app:layout_constraintTop_toTopOf="parent"
        android:layout_marginTop="8dp"
        android:layout_marginBottom="8dp"
        app:layout_constraintBottom_toTopOf="@+id/button"
        android:layout_marginRight="8dp"
        app:layout_constraintRight_toRightOf="parent"
        android:layout_marginLeft="8dp"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintHorizontal_bias="0.501"
        app:layout_constraintVertical_bias="0.646" />

    <Button
        android:layout_width="wrap_content"

```

```

        android:layout_height="wrap_content"
        android:text="Display second activity"
        android:onClick="onClick"
        android:id="@+id/button"
        android:layout_below="@+id/textView"
        android:layout_alignParentStart="true"
        android:layout_alignParentLeft="true"
        android:layout_marginBottom="232dp"
        app:layout_constraintBottom_toBottomOf="parent"
        android:layout_marginLeft="8dp"
        app:layout_constraintLeft_toLeftOf="parent"
        android:layout_marginRight="8dp"
        app:layout_constraintRight_toRightOf="parent" />

```

```
</android.support.constraint.ConstraintLayout>
```

5. Buka `second_activity.xml`, lalu *copy-paste* listing berikut ini.

```

<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context="com.example.usingintent.SecondActivity">

```

```

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="This is the Second Activity!"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        tools:layout_constraintTop_creator="1"
        tools:layout_constraintRight_creator="1"
        tools:layout_constraintBottom_creator="1"
        tools:layout_constraintLeft_creator="1" />
</android.support.constraint.ConstraintLayout>

```

6. Buka `MainActivity.java`, lalu *copy-paste* listing di bawah ini.

```

package com.example.usingintent;

import android.app.Activity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;

public class MainActivity extends Activity {

```

```

@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
}

public void onClick(View view) {
    startActivity(new
        ↪ Intent("com.example.usingintent.SecondActivity"));
}
}

```

7. Tekan Shift+F9 (atau pilih Run > Debug) untuk men-*debug* aplikasi. Pilih salah satu Android Virtual Devices yang kalian inginkan. Hasil akhir ditunjukkan pada Figure 5 dan Figure 6.



Figure 5: Hasil Akhir (1)

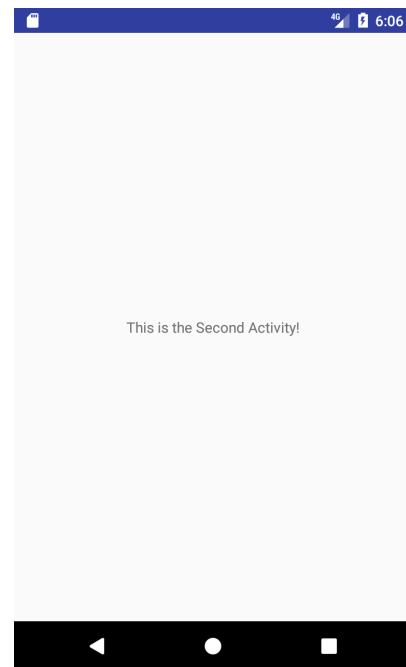


Figure 6: Hasil Akhir (2)

4.5 Mendapatkan Hasil dari Activity

1. Gunakan kembali proyek **UsingIntent**.
2. Buka `activity_second.xml`, lalu *copy-paste* listing di bawah ini.

```

<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout
    ↪ xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context="com.example.usingintent.SecondActivity">

```

```

<TextView
    android:id="@+id/textView2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Please enter your name"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.067"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.066"
    tools:layout_constraintBottom_creator="1"
    tools:layout_constraintLeft_creator="1"
    tools:layout_constraintRight_creator="1"
    tools:layout_constraintTop_creator="1" />

```

```

<TextView
    android:id="@+id/textView3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="This is the Second Activity!"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    tools:layout_constraintTop_creator="1"
    tools:layout_constraintRight_creator="1"
    tools:layout_constraintBottom_creator="1"
    tools:layout_constraintLeft_creator="1"
    app:layout_constraintHorizontal_bias="0.073"
    app:layout_constraintVertical_bias="0.032" />

```

```

<EditText
    android:id="@+id/editText"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginLeft="16dp"
    android:layout_marginRight="8dp"
    android:ems="10"
    android:hint="John Doe"
    android:inputType="textPersonName"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.0"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.106" />

```

```

<Button

```

```

        android:id="@+id/button2"
        android:onClick="onClick"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="16dp"
        android:text="OK"
        app:layout_constraintLeft_toLeftOf="parent"
        android:layout_marginRight="8dp"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        android:layout_marginTop="8dp"
        app:layout_constraintBottom_toBottomOf="parent"
        android:layout_marginBottom="8dp"
        app:layout_constraintHorizontal_bias="0.0"
        app:layout_constraintVertical_bias="0.19" />
    </android.support.constraint.ConstraintLayout>

```

3. Buka file SecondActivity.java, lalu *copy-paste* listing di bawah ini.

```

package com.example.usingintent;

import android.app.Activity;
import android.content.Intent;
import android.net.Uri;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;

public class SecondActivity extends Activity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_second);
    }

    public void onClick(View view) {
        Intent data = new Intent();

        // get the EditText view
        EditText txt_username = (EditText) findViewById(R.id.editText);

        // set the data to pass back
        data.setData(Uri.parse(txt_username.getText().toString()));
        setResult(RESULT_OK, data);

        // close the activity
        finish();
    }
}

```

4. Buka file MainActivity.java, lalu *copy-paste* listing di bawah ini.

```

package com.example.usingintent;

import android.app.Activity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Toast;

public class MainActivity extends Activity {

    int request_Code = 1;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }

    public void onClick(View view) {
        startActivityForResult(new
            ↪ Intent("com.example.usingintent.SecondActivity"),
            ↪ request_Code);
    }

    public void onActivityResult(int requestCode, int resultCode, Intent
        ↪ data) {
        if (requestCode == request_Code) {
            if (resultCode == RESULT_OK) {
                Toast.makeText(this, data.getData().toString(),
                    Toast.LENGTH_SHORT).show();
            }
        }
    }
}

```

5. Tekan Shift+F9 (atau pilih Run > Debug) untuk men-*debug* aplikasi. Pilih salah satu Android Virtual Devices yang kalian inginkan. Hasil akhir ditunjukkan pada Figure 7, Figure 8, Figure 9, dan Figure 10.

4.6 Passing Data Menggunakan Obyek Intent

1. Buat proyek baru dengan ketentuan berikut ini.
 - Nama aplikasi: **PassingData**
 - Pilih **Empty Activity**
2. Pilih File > New > Activity > Empty Activity. Activity yang baru tersebut diberi nama **SecondActivity**.
3. Buka file `AndroidManifest.xml`, lalu *copy-paste* listing berikut ini.

```

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

```



Figure 7: Hasil Akhir (1)

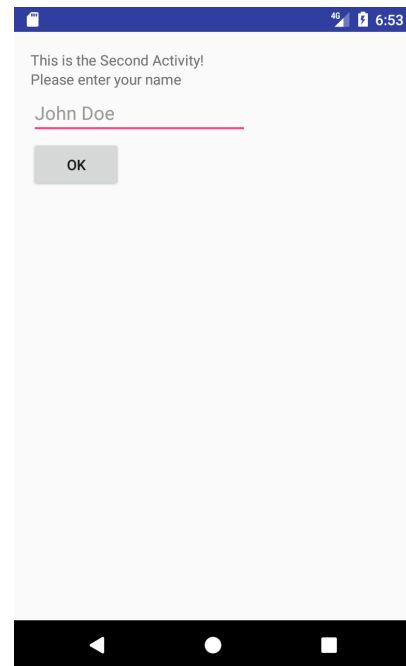


Figure 8: Hasil Akhir (2)

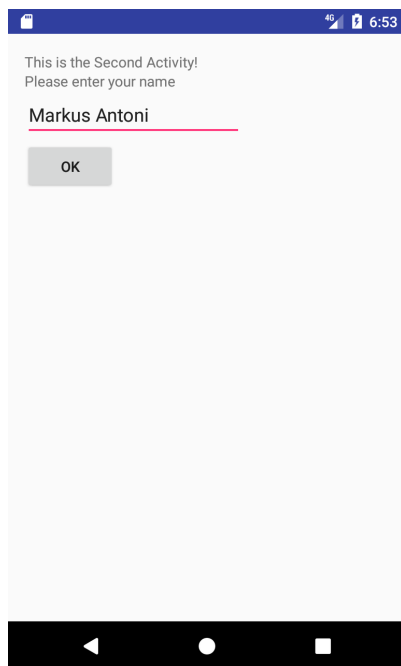


Figure 9: Hasil Akhir (3)

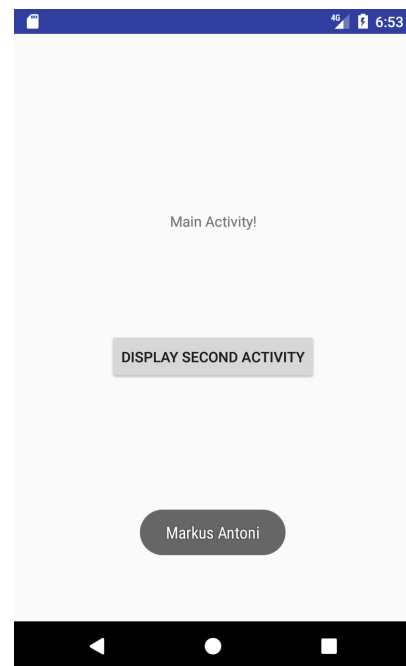


Figure 10: Hasil Akhir (4)

```

package="com.example.passingdata">

<application
    android:allowBackup="true"
    android:icon="@mipmap/ic_launcher"
    android:label="@string/app_name"
    android:roundIcon="@mipmap/ic_launcher_round"
    android:supportsRtl="true"
    android:theme="@style/AppTheme">
    <activity android:name=".MainActivity">
        <intent-filter>
            <action android:name="android.intent.action.MAIN" />
            <category android:name="android.intent.category.LAUNCHER" />
        </intent-filter>
    </activity>
    <activity android:name=".SecondActivity">
        <intent-filter>
            <action android:name="com.example.passingdata.SecondActivity"
                ↪ />
            <category android:name="android.intent.category.DEFAULT" />
        </intent-filter>
    </activity>
</application>

</manifest>

```

4. Buka file activity_main.xml, lalu *copy-paste* listing berikut ini.

```

<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout
    ↪ xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context="com.example.passingdata.MainActivity">

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Click to go to Second Activity"
        android:id="@+id/button"
        android:onClick="onClick"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintRight_toRightOf="parent" />

</android.support.constraint.ConstraintLayout>

```

5. Buka file activity_second.xml, lalu *copy-paste* listing berikut ini.


```

<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context="com.example.passingdata.SecondActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Welcome to the Second Activity"
        android:id="@+id/textView"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintHorizontal_bias="0.529"
        app:layout_constraintBottom_toBottomOf="@+id/button" />

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Click to go to Main Activity"
        android:id="@+id/button"
        android:onClick="onClick"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintHorizontal_bias="0.536"
        app:layout_constraintTop_toBottomOf="@+id/textView" />

</android.support.constraint.ConstraintLayout>

```

6. Buka file MainActivity.java, lalu *copy-paste* listing di bawah ini.

```

package com.example.passingdata;

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

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
}

```

```

public void onClick(View view) {

    Intent i = new Intent("com.example.passingdata.SecondActivity");

    // use putExtra() to add new name/value pairs
    i.putExtra("str1", "This is a string");
    i.putExtra("age1", 25);

    // use a Bundle object to add new name/values pairs
    Bundle extras = new Bundle();
    extras.putString("str2", "This is another string");
    extras.putInt("age2", 35);

    // attach the Bundle object to the Intent object
    i.putExtras(extras);

    // start the activity to get a result back
    startActivityForResult(i, 1);
}

public void onActivityResult(int requestCode, int resultCode, Intent
→ data) {
    // check if the request code is 1
    if (requestCode == 1) {

        // if the result is OK
        if (resultCode == RESULT_OK) {

            // get the result using getIntExtra()
            Toast.makeText(this, Integer.toString(
                data.getIntExtra("age3", 0)),
                Toast.LENGTH_SHORT).show();

            // get the result using getData()
            Toast.makeText(this, data.getData().toString(),
                Toast.LENGTH_SHORT).show();
        }
    }
}
}

```

7. Buka file SecondActivity.java, lalu *copy-paste* listing di bawah ini.

```

package com.example.passingdata;

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

```

```

import android.widget.Toast;

public class SecondActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_second);

        // get the data passed in using getStringExtra()
        Toast.makeText(this, getIntent().getStringExtra("str1"),
            Toast.LENGTH_SHORT).show();

        // get the data passed in using getIntExtra()
        Toast.makeText(this, Integer.toString(
            getIntent().getIntExtra("age1", 0)),
            Toast.LENGTH_SHORT).show();

        // get the Bundle object passed in
        Bundle bundle = getIntent().getExtras();

        // get the data using the getString()
        Toast.makeText(this, bundle.getString("str2"),
            Toast.LENGTH_SHORT).show();

        // get the data using the getInt() method
        Toast.makeText(this, Integer.toString(bundle.getInt("age2")),
            Toast.LENGTH_SHORT).show();
    }

    public void onClick(View view) {
        // use an Intent object to return data

        Intent i = new Intent();

        // use the putExtra() method to return some value
        i.putExtra("age3", 45);

        // use the setData() method to return some value
        i.setData(Uri.parse("Something passed back to main activity"));

        // set the result with OK and the Intent object
        setResult(RESULT_OK, i);

        // destroy the current activity
        finish();
    }
}

```

8. Tekan Shift+F9 (atau pilih Run > Debug) untuk men-*debug* aplikasi. Pilih salah satu Android Virtual Devices yang kalian inginkan. Hasil akhir ditunjukkan pada Figure

11, Figure 12, Figure 13, Figure 14, Figure 15, Figure 16, Figure 17, dan Figure 18.

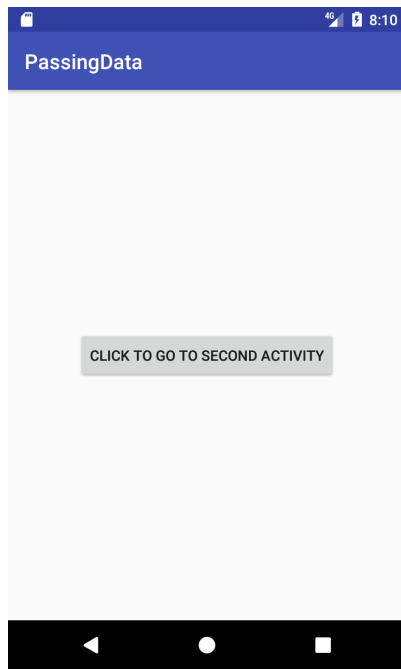


Figure 11: Hasil Akhir (1)

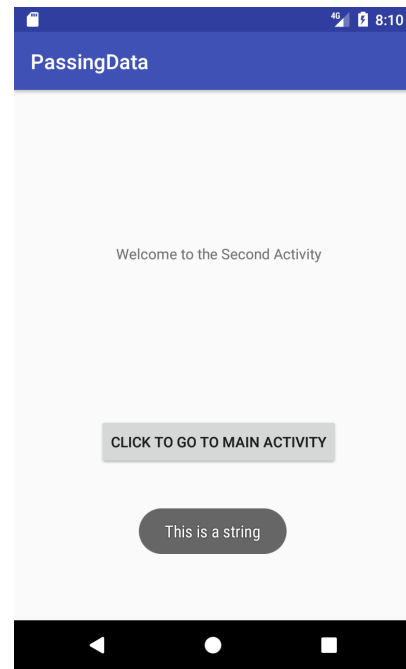


Figure 12: Hasil Akhir (2)

THE END

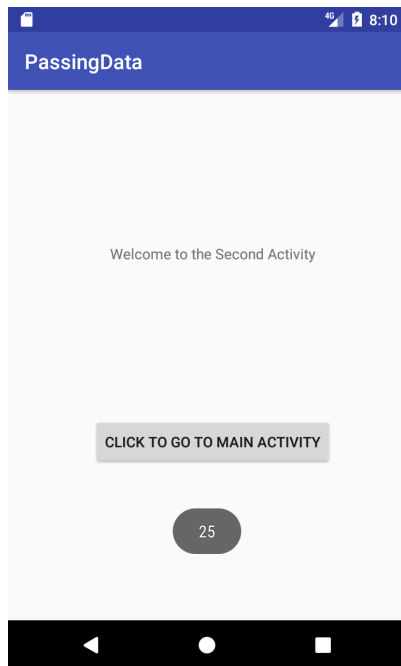


Figure 13: Hasil Akhir (1)

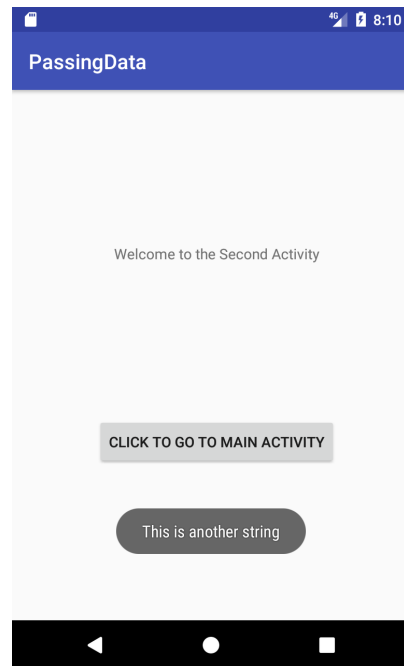


Figure 14: Hasil Akhir (2)

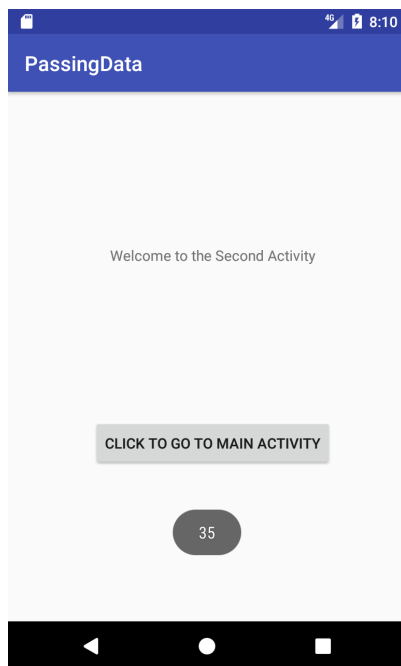


Figure 15: Hasil Akhir (1)

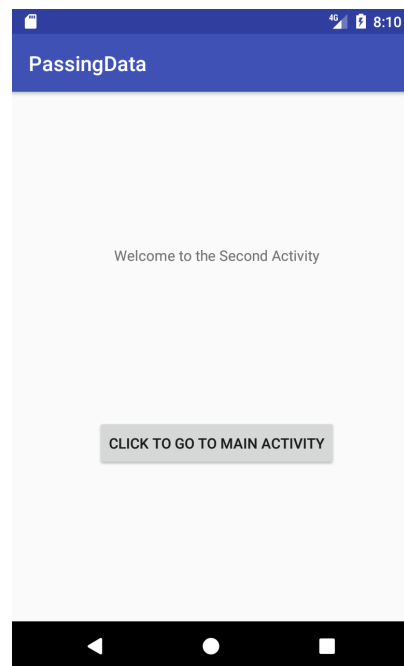


Figure 16: Hasil Akhir (2)

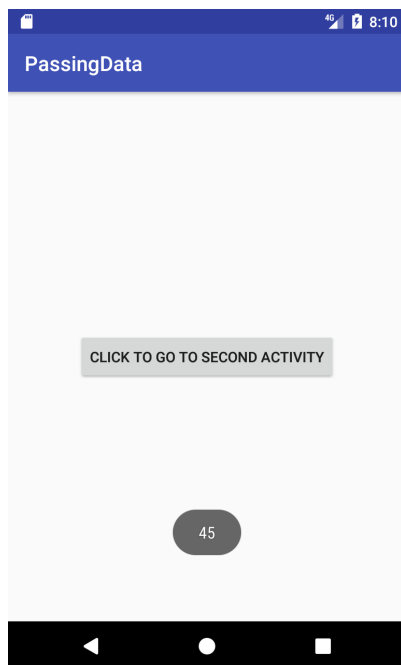


Figure 17: Hasil Akhir (1)

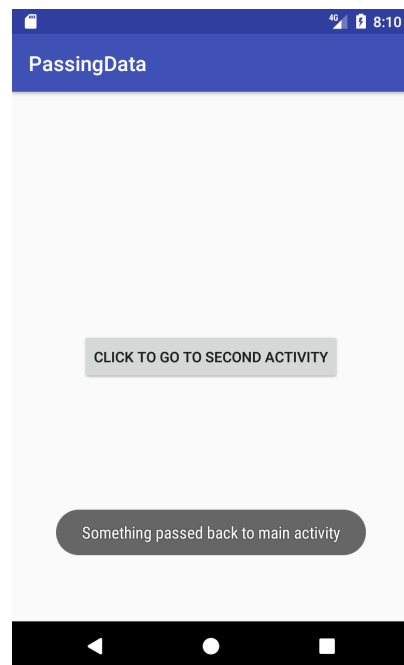


Figure 18: Hasil Akhir (2)