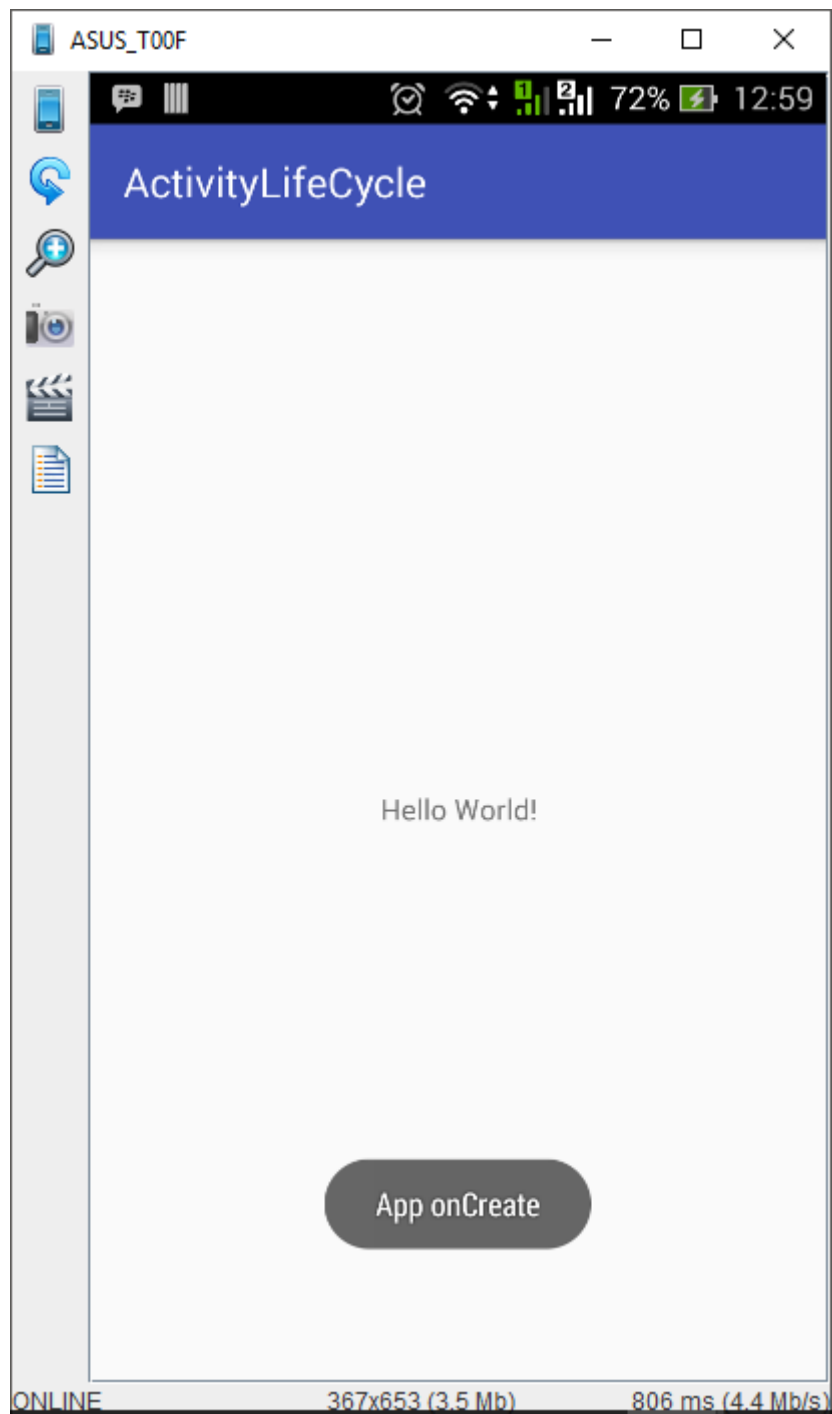


Lesson 3 – Activities and Intents

Praktikum 1 – App Name: Activity Life Cycle



MainActivity.java

```
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Toast.makeText(this, "App onCreate", Toast.LENGTH_SHORT).show();
    }

    @Override
    protected void onStart() {
        super.onStart();
        Toast.makeText(this, "App onStart", Toast.LENGTH_SHORT).show();
    }

    @Override
    public void onRestart() {
        super.onRestart();
        Toast.makeText(this, "App onRestart", Toast.LENGTH_SHORT).show();
    }

    @Override
    public void onResume() {
        super.onResume();
        Toast.makeText(this, "App onResume", Toast.LENGTH_SHORT).show();
    }

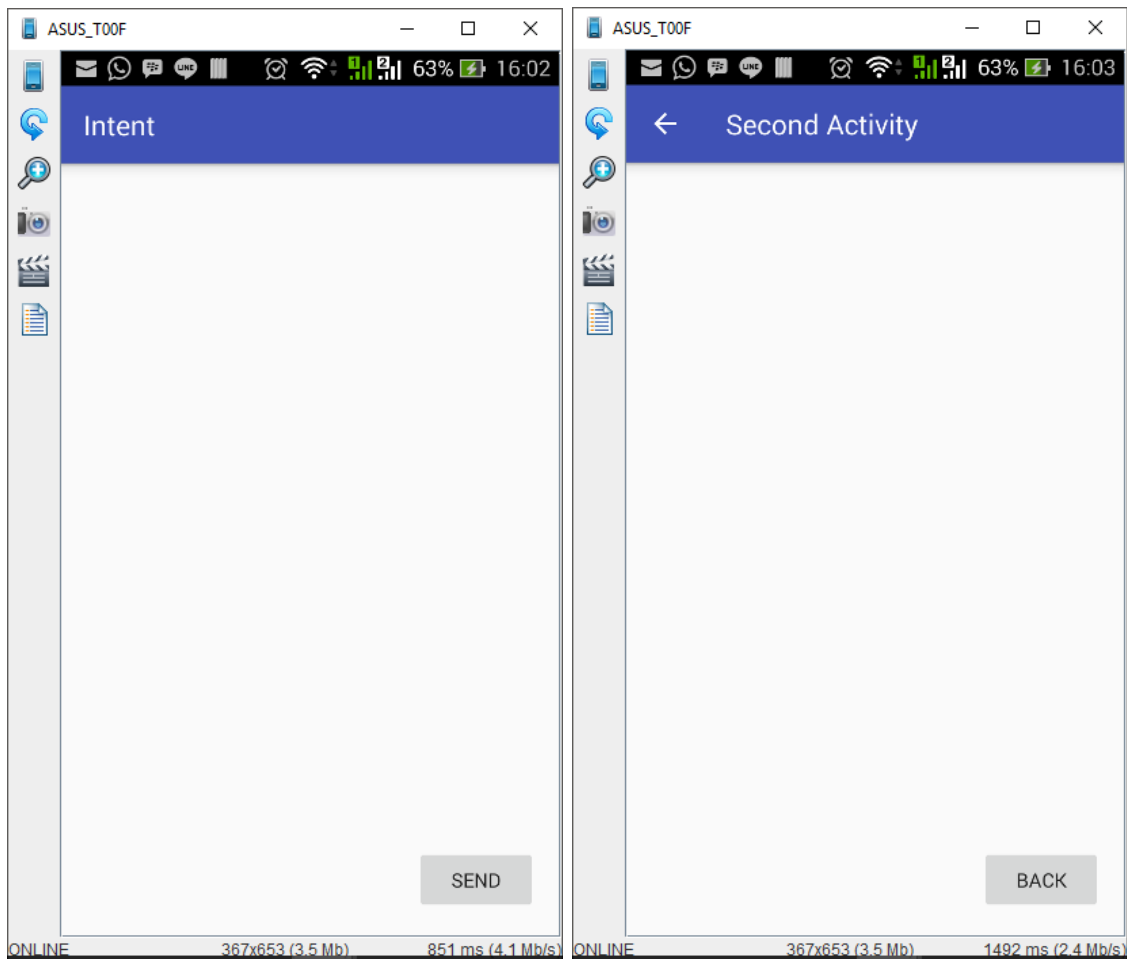
    @Override
    public void onPause() {
        super.onPause();
        Toast.makeText(this, "App onPause", Toast.LENGTH_SHORT).show();
    }

    @Override
    public void onStop() {
        super.onStop();
        Toast.makeText(this, "App onStop", Toast.LENGTH_SHORT).show();
    }

    @Override
    public void onDestroy() {
        super.onDestroy();
        Toast.makeText(this, "App onDestroy", Toast.LENGTH_SHORT).show();
    }
}
```

Lesson 3 – Activities and Intents

Praktikum 2 – App Name: Intent



dimens.xml

```
<resources>
    <!-- Default screen margins, per the Android Design guidelines. -->
    <dimen name="activity_horizontal_margin">16dp</dimen>
    <dimen name="activity_vertical_margin">16dp</dimen>
</resources>
```

strings.xml

```
<resources>
    <string name="app_name">Intent</string>
    <string name="main_activity">Main Activity</string>
    <string name="second_activity">Second Activity</string>
    <string name="button_main">Send</string>
    <string name="button_second">Back</string>
</resources>
```

activity_main.xml

```
<?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="16dp"
    android:paddingLeft="16dp"
    android:paddingRight="16dp"
    android:paddingTop="16dp"
    tools:context=".MainActivity">

    <Button
        android:id="@+id/button_main"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentBottom="true"
        android:layout_alignParentRight="true"
        android:layout_alignParentEnd="true"
        android:onClick="launchSecondActivity"
        android:text="Send" />
</RelativeLayout>
```



activity_second.xml

```
<?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="16dp"
    android:paddingLeft="16dp"
    android:paddingRight="16dp"
    android:paddingTop="16dp"
    tools:context=".SecondActivity">

    <Button
        android:id="@+id/button_main"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentBottom="true"
        android:layout_alignParentRight="true"
        android:layout_alignParentEnd="true"
        android:onClick="ReturnMainActivity"
        android:text="Back" />
</RelativeLayout>
```

MainActivity.java

```
package com.example.nizar.intent;

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

public class MainActivity extends AppCompatActivity {

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

    public void launchSecondActivity(View view) {
        Intent intent = new Intent(this, SecondActivity.class);
        startActivity(intent);
    }
}
```

SecondActivity.java

```
package com.example.nizar.intent;

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

public class SecondActivity extends AppCompatActivity {

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

    public void ReturnMainActivity(View view) {
        Intent intent = new Intent(this, MainActivity.class);
        startActivity(intent);
    }
}
```

AndroidManifest.xml

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

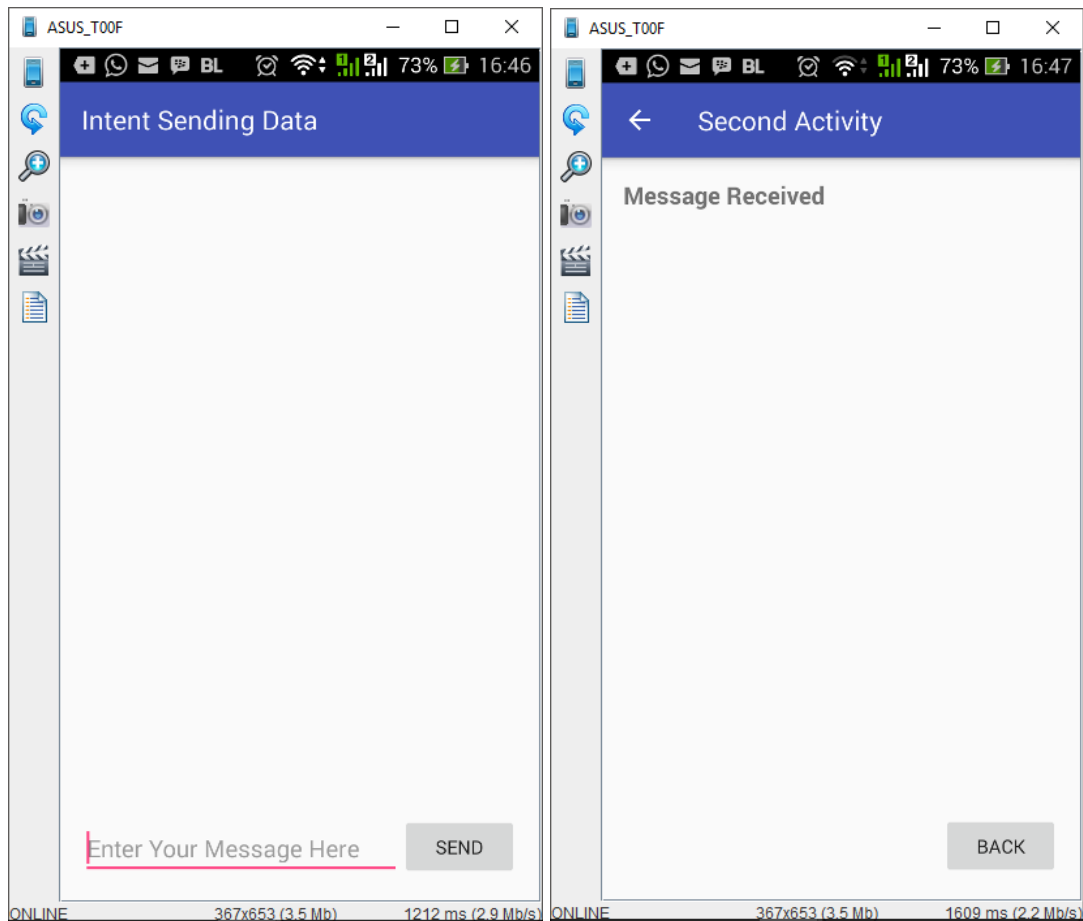
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".MainActivity">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

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <activity android:name=".SecondActivity"
            android:label="@string/second_activity"
            android:parentActivityName=".MainActivity">
            <meta-data
                android:name="android.support.PARENT_ACTIVITY"
                android:value="com.example.nizar.intent.MainActivity" />
            </activity>
        </application>

</manifest>
```

Lesson 3 – Activities and Intents

Praktikum 2 – App Name: Intent Sending Data



dimens.xml

```
<resources>
    <!-- Default screen margins, per the Android Design guidelines. -->
    <dimen name="activity_horizontal_margin">16dp</dimen>
    <dimen name="activity_vertical_margin">16dp</dimen>
</resources>
```

strings.xml

```
<resources>
    <string name="app_name">Intent Sending Data</string>
    <string name="main_activity">Main Activity</string>
    <string name="second_activity">Second Activity</string>
    <string name="button_main">Send</string>
    <string name="button_second">Back</string>
    <string name="editText_main">Enter Your Message Here</string>
    <string name="text_header">Message Received</string>
</resources>
```

activity_main.xml

```
<?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="16dp"
    android:paddingLeft="16dp"
    android:paddingRight="16dp"
    android:paddingTop="16dp"
    tools:context=".MainActivity">

    <Button
        android:id="@+id/button_main"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentBottom="true"
        android:layout_alignParentRight="true"
        android:layout_alignParentEnd="true"
        android:onClick="launchSecondActivity"
        android:text="Send" />

    <EditText
        android:id="@+id/editText_main"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentBottom="true"
        android:layout_toLeftOf="@+id/button_main"
        android:layout_toStartOf="@+id/button_main"
        android:hint="@string/editText_main" />
</RelativeLayout>
```

activity_second.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="16dp"
    android:paddingLeft="16dp"
    android:paddingRight="16dp"
    android:paddingTop="16dp"
    tools:context=".SecondActivity">

    <TextView
        android:id="@+id/text_header"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="16dp"
        android:text="Message Received"
        android:textAppearance="?android:attr/textAppearanceMedium"
        android:textStyle="bold" />
```

```

    }
    <TextView
        android:id="@+id/text_message"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/text_header"
        android:layout_marginLeft="16dp"
        android:layout_marginStart="16dp"
        android:textAppearance="?android:attr/textAppearanceMedium" />

    <Button
        android:id="@+id/button_main"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentBottom="true"
        android:layout_alignParentRight="true"
        android:layout_alignParentEnd="true"
        android:onClick="ReturnMainActivity"
        android:text="Back" />
</RelativeLayout>

```

MainActivity.java

```

package com.example.nizar.intentsendingdata;

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

public class MainActivity extends AppCompatActivity {

    // EditText view for the message
    private EditText mMessageEditText;

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

        // Initialize all the view variables.
        mMessageEditText = (EditText) findViewById(R.id.editText_main);
    }

    public void launchSecondActivity(View view) {
        Intent intent = new Intent(this, SecondActivity.class);
        String message = mMessageEditText.getText().toString();
        intent.putExtra("message", message);
        startActivity(intent);
    }
}

```

SecondActivity.java

```
package com.example.nizar.intentsendingdata;

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

public class SecondActivity extends AppCompatActivity {
    private String message;

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

        Bundle extras = getIntent().getExtras();
        if (extras != null) {
            message = extras.getString("message");
        }

        // Put that message into the text_message TextView
        TextView textView = (TextView) findViewById(R.id.text_message);
        if (textView != null) {
            textView.setText(message);
        }
    }

    public void ReturnMainActivity(View view) {
        Intent intent = new Intent(this, MainActivity.class);
        startActivity(intent);
    }
}
```

AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.nizar.intentsendingdata">
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="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"
            android:label="@string/second_activity"
            android:parentActivityName=".MainActivity">
            <meta-data
                android:name="android.support.PARENT_ACTIVITY"
                android:value="com.example.nizar.intentsendingdata.MainActivity" />
        </activity>
    </application>
</manifest>
```