Experiment 1.4

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Aim

Click on activity and open many intents.

Objective

Create an application having three components which changes view to different intents by clicking on them.

Theory

Android Intent is the message that is passed between components such as activities, content providers, broadcast receivers, services etc.

It is generally used with startActivity() method to invoke activity, broadcast receivers etc.

The dictionary meaning of intent is *intention or purpose*. So, it can be described as the intention to do action.

The LabeledIntent is the subclass of android.content.Intent class.

Intents facilitate communication between different components in several ways.

The intent is used to launch an activity, start the services, broadcast receivers, display a web page, dial a phone call, send messages from one activity to another activity, and so on.

There are two intents available in android as Implicit Intents and Explicit Intents.

Code

MainActivity.kt

```kotlin
package com.example.intents

import android.content.Intent
import android.net.Uri
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.provider.MediaStore
import android.widget.Button
import androidx.cardview.widget.CardView

class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        val btnIntent = findViewById<Button>(R.id.button)
        btnIntent.setOnClickListener{
            //open new activity
            intent = Intent(applicationContext, SecondActivity::class.java)
            startActivity(intent)
        }

        val webButton = findViewById<CardView>(R.id.cardWeb)
        val cameraButton = findViewById<CardView>(R.id.cardCamera)

        webButton.setOnClickListener {
            val intent = Intent(Intent.ACTION_VIEW)
            intent.data =
Uri.parse("https://www.linkedin.com/in/adityanarayansharma/")
            startActivity(intent)
        }
        cameraButton.setOnClickListener {
            val intent = Intent(MediaStore.ACTION_IMAGE_CAPTURE)
            startActivity(intent)
        }
    }
}
```

SecondActivity.kt

```kotlin
package com.example.intents

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
```

```kotlin
class SecondActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_second)
    }
}
```

ActivityMain.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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"
    android:orientation="vertical"
    tools:context=".MainActivity">


    <Button
        android:id="@+id/button"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:layout_margin="100dp"
        android:text="Click Me!" />
    <Button
        android:id="@+id/button2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Button" />

    <androidx.cardview.widget.CardView
        android:id="@+id/cardWeb"
        android:layout_width="250dp"
        android:layout_height="150dp"
        android:backgroundTint="@color/purple_200"
        android:layout_gravity="center"
        android:layout_margin="30dp"
        app:cardCornerRadius="20dp">

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:text="It's Website"
            android:textStyle="bold"
            android:textSize="25dp"
            />

    </androidx.cardview.widget.CardView>

    <androidx.cardview.widget.CardView
        android:id="@+id/cardCamera"
```
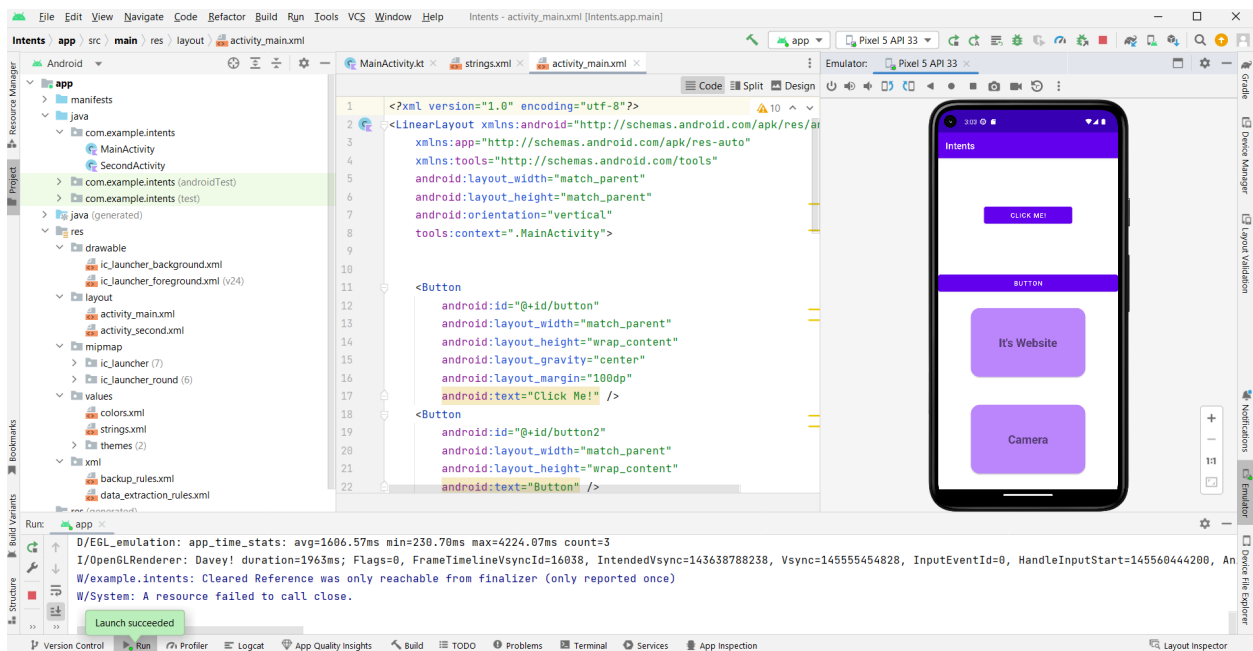
```xml
        android:layout_width="250dp"
        android:layout_height="150dp"
        android:backgroundTint="@color/purple_200"
        android:layout_gravity="center"
        android:layout_margin="30dp"
        app:cardCornerRadius="20dp">

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:text="Camera"
            android:textStyle="bold"
            android:textSize="25dp"
            />

    </androidx.cardview.widget.CardView>


</LinearLayout>
```
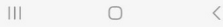
Output

Intents

CLICK ME!

BUTTON

It's Website

Camera

Intents

Screen 2