**Problem Statement:** Create an application using Grid Layout to open various URLs.

**AndroidManifest.xml Manifest File:**

<?xml version="1.0" encoding="utf-8"?>

<manifest xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:tools="http://schemas.android.com/tools">

<application

android:allowBackup="true"

android:dataExtractionRules="@xml/data\_extraction\_rules"

android:fullBackupContent="@xml/backup\_rules"

android:icon="@mipmap/ic\_launcher"

android:label="@string/app\_name"

android:roundIcon="@mipmap/ic\_launcher\_round"

android:supportsRtl="true"

android:theme="@style/Theme.URLGridApp"

tools:targetApi="31">

<activity

android:name=".MainActivity"

android:exported="true">

<intent-filter>

<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />

</intent-filter>

</activity>

</application>

</manifest>

**activity\_main.xml Layout Resource File:**

<?xml version="1.0" encoding="utf-8"?>

<GridLayout xmlns:android="http://schemas.android.com/apk/res/android"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:columnCount="2"

android:rowCount="2"

android:padding="16dp">

<Button

android:id="@+id/button1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Open Google" />

<Button

android:id="@+id/button2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Open StackOverflow" />

<!-- Add more buttons as needed -->

</GridLayout>

**colors.xml Values Resource File:**

<?xml version="1.0" encoding="utf-8"?>

<resources>

<color name="black">#FF000000</color>

<color name="white">#FFFFFFFF</color>

</resources>

**strings.xml Values Resource File:**

<resources>

<string name="app\_name">URLGridApp</string>

</resources>

**MainActivity.java JAVA File:**

package com.example.urlgridapp;

import android.content.Intent;

import android.net.Uri;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

Button button1 = findViewById(R.id.button1);

button1.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

openWebPage("https://www.google.com");

}

});

Button button2 = findViewById(R.id.button2);

button2.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

openWebPage("https://www.stackoverflow.com");

}

});

// Add more buttons as needed

}

/\*\*

\* Open a web page of a specified URL

\*

\* @param url URL to open

\*/

public void openWebPage(String url) {

Uri webpage = Uri.parse(url);

Intent intent = new Intent(Intent.ACTION\_VIEW, webpage);

if (intent.resolveActivity(getPackageManager()) != null) {

startActivity(intent);

}

}

}

**OUTPUT:**





