

```

/* Starter project for Mobile Platform Development in main diet 2023/2024
   You should use this project as the starting point for your assignment.
   This project simply reads the data from the required URL and displays the
   raw data in a TextField
*/

//
// Name _____
// Student ID _____
// Programme of Study _____
//

// UPDATE THE PACKAGE NAME to include your Student Identifier
package com.example.resitcw_skeleton;

import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.util.Log;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.TextView;

import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
import java.net.URL;
import java.net.URLConnection;

public class MainActivity extends AppCompatActivity implements OnClickListener
{
    private TextView rawDataDisplay;
    private Button startButton;
    private String result;
    private String url1="";
    private String urlSource="https://weather-broker-
cdn.api.bbc.co.uk/en/forecast/rss/3day/2643123";

    @Override
    protected void onCreate(Bundle savedInstanceState)
    {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        // Set up the raw links to the graphical components
        rawDataDisplay = (TextView)findViewById(R.id.rawDataDisplay);
        startButton = (Button)findViewById(R.id.startButton);
        startButton.setOnClickListener(this);

        // More Code goes here
    }

    public void onClick(View aview)
    {
        startProgress();
    }

    public void startProgress()
    {
        // Run network access on a separate thread;
        new Thread(new Task(urlSource)).start();
    } //

    // Need separate thread to access the internet resource over network
    // Other neater solutions should be adopted in later iterations.

```

```
private class Task implements Runnable
{
    private String url;

    public Task(String aurl)
    {
        url = aurl;
    }
    @Override
    public void run()
    {

        URL aurl;
        URLConnection yc;
        BufferedReader in = null;
        String inputLine = "";

        Log.e("MyTag","in run");

        try
        {
            Log.e("MyTag","in try");
            aurl = new URL(url);
            yc = aurl.openConnection();
            in = new BufferedReader(new InputStreamReader(yc.getInputStream()));
            while ((inputLine = in.readLine()) != null)
            {
                result = result + inputLine;
                Log.e("MyTag",inputLine);
            }
            in.close();
        }
        catch (IOException ae)
        {
            Log.e("MyTag", "ioexception");
        }

        //Get rid of the first tag <?xml version="1.0" encoding="utf-8"?>
        int i = result.indexOf(">");
        result = result.substring(i+1);
        Log.e("MyTag - cleaned",result);

        //
        // Now that you have the xml data you can parse it
        //

        // Now update the TextView to display raw XML data
        // Probably not the best way to update TextView
        // but we are just getting started !

        MainActivity.this.runOnUiThread(new Runnable()
        {
            public void run() {
                Log.d("UI thread", "I am the UI thread");
                rawDataDisplay.setText(result);
            }
        });
    }
}
```

}