# Exercise 11: Web Page display

**Aim:** Develop an android application to display a static web page with contents that uses all formatting HTML tags. Also should load the web page from the specified URL.

**Android widgets and layouts used:**

● Linear layout (linear and horizontal)

● Space

● Button

● TextView

● EditText

● WebView

**Code:**

**activity\_main.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:padding="10dp"

tools:context=".MainActivity">

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="vertical">

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<TextView

android:id="@+id/textView"

android:layout\_width="60dp"

android:layout\_height="wrap\_content"

android:paddingBottom="10dp"

android:paddingLeft="15dp"

android:textStyle="bold"

android:text="URL:" />

<EditText

android:id="@+id/url"

android:layout\_width="237dp"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:ems="10"

android:inputType="text" />

<Button

android:id="@+id/load"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="GET" />

</LinearLayout>

<WebView

android:id="@+id/webView"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent">

</WebView>

</LinearLayout>

</LinearLayout>

**MainActivity.java:**

**package com.example.hybridapp;**

**import androidx.appcompat.app.AppCompatActivity;**

**import android.annotation.TargetApi;**

**import android.app.Activity;**

**import android.os.Bundle;**

**import android.view.View;**

**import android.webkit.WebResourceError; import android.webkit.WebResourceRequest; import android.webkit.WebSettings;**

**import android.webkit.WebView;**

**import android.webkit.WebViewClient;**

**import android.widget.Button;**

**import android.widget.EditText;**

**import android.widget.Toast;**

**public class MainActivity extends AppCompatActivity {**

**private WebView webView;**

**private EditText url;**

**private Button getButton;**

**@Override**

**protected void onCreate(Bundle savedInstanceState) {**

**super.onCreate(savedInstanceState);**

**setContentView(R.layout.*activity\_main*);**

**webView = findViewById(R.id.*webView*);**

**url = findViewById(R.id.*url*);**

**getButton = findViewById(R.id.*load*);**

**webView.getSettings().setJavaScriptEnabled(true);**

**// Load static HTML content**

**String staticHtml = "<html>\n" +**

**"<body>\n" +**

**"\n" +**

**"<h1 style=\"color:red; font-family:sans-serif\">This is a HTML Site</h1>\n" +**

**"\n" +**

**"<p style=\"color:blue;\">A blue paragraph.</p>\n" +**

**"\n" +**

**"<h2>An Unordered HTML List</h2>\n" +**

**"\n" +**

**"<ul>\n" +**

**" <li>Coffee</li>\n" +**

**" <li>Tea</li>\n" +**

**" <li>Milk</li>\n" +**

**"</ul>\n" +**

**"\n" +**

**"</body>\n" +**

**"</html>";**

**webView.loadData(staticHtml, "text/html", "UTF-8");**

**webView.setWebViewClient(new WebViewClient()**

**{**

**@Override**

**public boolean shouldOverrideUrlLoading(WebView view, String url) {**

**//view.loadUrl(url);**

**System.*out*.println("hello");**

**return false;**

**}**

**});**

**getButton.setOnClickListener(new View.OnClickListener() { @Override**

**public void onClick(View v) {**

**webView.loadUrl("https://" + url.getText().toString()); }**

**});**

**}**

**}**

**Output:**

Default site: Specified URL:



**Best Practices:**

1. Followed proper naming convention and used camel case for variable names. 2. Meaningful comments are included

3. User-friendly navigation

4. Providing different fonts to show separation and emphasis for titles.

5. Colors are used with valid contrast for readability

6. Usage of Data Binding.

**Learning Outcomes:**

1. I learned how to insert WebView into android app.

2. I learned how to include a webpage using static HTML code. 3. I learned how to display a webpage in android app.

4. Implemented application for loading website using specified URL.