

Web page Display

Ex. No: 11

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Objective:

- 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.
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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;
            }
        });
    }
}

```

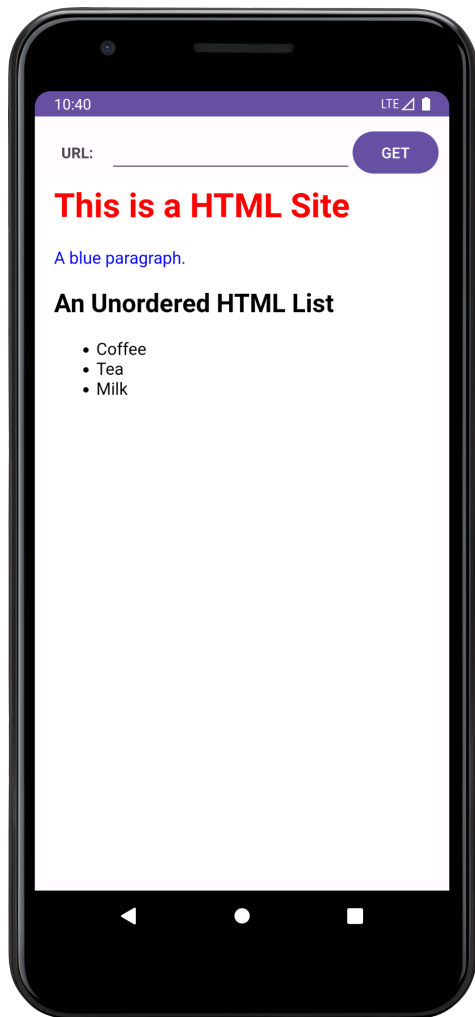
```

        getButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                webView.loadUrl("https://" + url.getText().toString());
            }
        });
    }
}

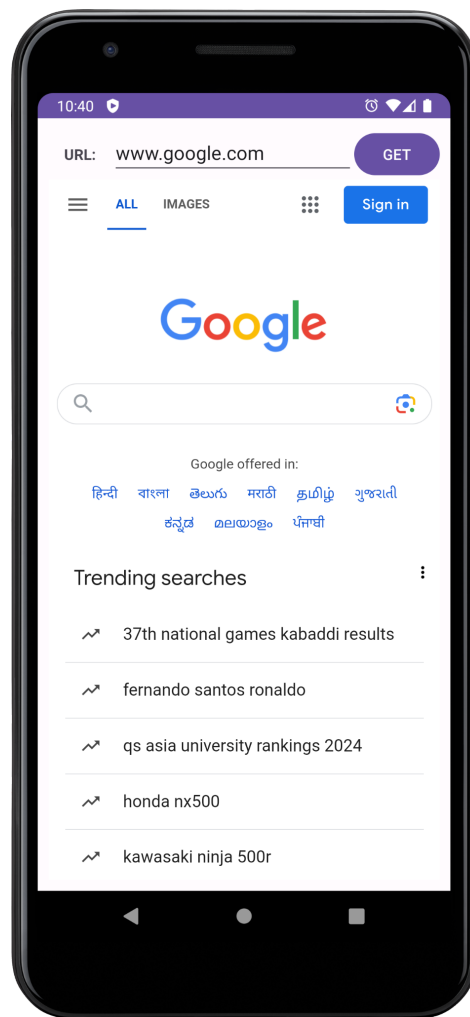
```

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.