

SUBJECT: ANDROID DEVELOPMENT	
NAME:	
CLASS:	ROLL NO:
SEMESTER/YEAR:-	EXAM NO:
DATE OF PERFORMANCE:	DATE OF SUBMISSION:
EXAMINED:-	REMARKS:

EXPERIMENT NO –

TITLE: Design a mobile application to show any website using web view

OBJECTIVE:

1. To study and design a mobile application to show any website using web view

PREREQUISITE:

Students should be aware of Android Studio platform

TOOLS USED:

1. Android studio (Electric Eel)

THEORY:

WebView is a view that displays web pages inside your application. You can also specify an HTML string and can show it inside your application using WebView. WebView turns your application to a web application.

In order to add WebView to your application, you have to add <WebView> element to your xml layout file. Its syntax is as follows –

```
<WebView xmlns:android="http://schemas.android.com/apk/res/android"
    android:id="@+id/webview"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
/>
```

In order to use it, you have to get a reference of this view in Java file. To get a reference, create an object of the class WebView. Its syntax is –

```
WebView browser = (WebView) findViewById(R.id.webview);
```

In order to load a web url into the WebView, you need to call a method `loadUrl(String url)` of the WebView class, specifying the required url. Its syntax is:

```
browser.loadUrl("http://www.tutorialspoint.com");
```

Apart from just loading url, you can have more control over your WebView by using the methods defined in WebView class. They are listed as follows –

Sr.No	Method & Description
1	<code>canGoBack()</code> This method specifies the WebView has a back history item.
2	<code>canGoForward()</code> This method specifies the WebView has a forward history item.
3	<code>clearHistory()</code> This method will clear the WebView forward and backward history.
4	<code>destroy()</code> This method destroy the internal state of WebView.
5	<code>findAllAsync(String find)</code> This method find all instances of string and highlight them.
6	<code>getProgress()</code> This method gets the progress of the current page.
7	<code>getTitle()</code> This method return the title of the current page.
8	<code>getUrl()</code> This method return the url of the current page.

Conclusion:

Code:

1. MainActivity.Java

```
package com.example.webview;

import android.os.Bundle;
import android.webkit.WebView;
import android.webkit.WebViewClient;
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        // Find the WebView by its unique ID
        WebView webView = findViewById(R.id.web);

        // loading url in the WebView.
        webView.loadUrl("https://mescoe.mespune.org/");

        // this will enable the javascript.
        webView.getSettings().setJavaScriptEnabled(true);

        // WebViewClient allows you to handle
        // onPageFinished and override Url loading.
        webView.setWebViewClient(new WebViewClient());
    }
}
```

2. Activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">
    <!-- unique ID of WebView -->
    <WebView
        android:id="@+id/web"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        tools:layout_editor_absoluteX="8dp"
        tools:layout_editor_absoluteY="8dp" />
</RelativeLayout>
```

Output

