Web View

WebView allows you to create your own window for viewing web pages (or even develop a complete browser). In this tutorial, you'll create a simple Activity that can view and navigate web pages.

1. Create a new project named *HelloWebView*.
2. Open the `res/layout/main.xml` file and insert the following:

```
<?xml version="1.0" encoding="utf-8"?>
<WebView  xmlns:android="http://schemas.android.com/apk/res/android"
    android:id="@+id/webview"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
/>
```

3. Now open the `HelloWebView.java` file. At the top of the class, declare a WebView object:

```
WebView mWebView;
```

Then use the following code for the `onCreate()` method:

```
public void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.main);

    mWebView = (WebView) findViewById(R.id.webview);
    mWebView.getSettings().setJavaScriptEnabled(true);
    mWebView.loadUrl("http://www.google.com");
}
```

This initializes the member WebView with the one from the Activity layout; requests a WebSettings object with `getSettings()`; and enables JavaScript for the WebView with`setJavaScriptEnabled(boolean)`. Finally, an initial web page is loaded with `loadUrl(String)`.

4. Because this application needs access to the Internet, you need to add the appropriate permissions to the Android manifest file. Open the `AndroidManifest.xml` file and add the following as a child of the `<manifest>` element:

```
<uses-permission android:name="android.permission.INTERNET" />
```

5. While you're in the manifest, give some more space for web pages by removing the title bar, with the "NoTitleBar" theme:

```
<activity android:name=".HelloWebView" android:label="@string/app_name"
     android:theme="@android:style/Theme.NoTitleBar">
```

6. Now run the application.

You now have a simplest web page viewer. It's not quite a browser yet because as soon as you click a link, the default Android Browser handles the Intent to view a web page, because this`Activity` isn't technically enabled to do so. Instead of adding an intent filter to view web pages, you can override the `WebViewClient` class and enable this `Activity` to handle its own URL requests.

7. In the `HelloAndroid` Activity, add this nested class:

```
private class HelloWebViewClient extends WebViewClient {
    @Override
    public boolean shouldOverrideUrlLoading(WebView view, String url) {
        view.loadUrl(url);
        return true;
    }
}
```

8. Then towards the end of the `onCreate(Bundle)` method, set an instance of the `HelloWebViewClient` as the `WebViewClient`:

```
mWebView.setWebViewClient(new HelloWebViewClient());
```

This line can go anywhere following the initialization of the `WebView` object.

This creates a `WebViewClient` that will load any URL selected from this `WebView` into the same `WebView`. The `shouldOverrideUrlLoading(WebView, String)` method is passed the current `WebView` and the URL requested, so all it needs to do is load the URL in the given view. Returning `true` says that the method has handled the URL and the event should not propagate (in which case, an Intent would be created that's handled by the Browser application).

If you run the application again, new pages will now load in this Activity. However, you can't navigate back to previous pages. To do this, you need to handle the BACK button on the device, so that it will return to the previous page, rather than exit the application.

9. To handle the BACK button key press, add the following method inside the `HelloWebView` Activity:

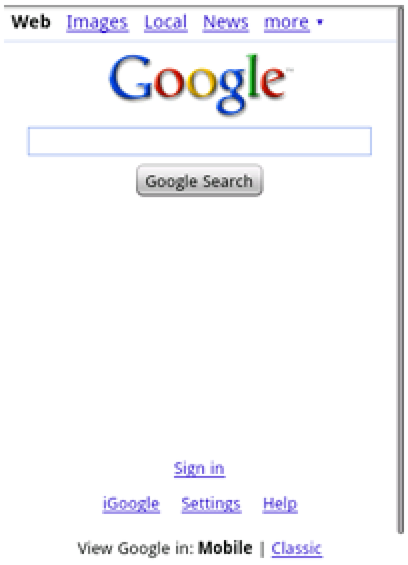
```

@Override
public boolean onKeyDown(int keyCode, KeyEvent event) {
    if ((keyCode == KeyEvent.KEYCODE_BACK) && mWebView.canGoBack()) {
        mWebView.goBack();
        return true;
    }
    return super.onKeyDown(keyCode, event);
}
```

This `onKeyDown(int, KeyEvent)` callback method will be called anytime a button is pressed while in the Activity. The condition inside uses the `KeyEvent` to check whether the key pressed is the BACK button and whether the `WebView` is actually capable of navigating back (if it has a history). If both are true, then the `goBack()` method is called, which will navigate back one step in the `WebView` history.Returning `true` indicates that the event has been handled. If this condition is not met, then the event is sent back to the system.

10. Run the application again. You'll now be able to follow links and navigate back through the page history.

When you open the application, it should look like this:


Web Images Local News more
Google
Google Search
Sign in
iGoogle Settings Help
View Google in: Mobile | Classic