

Android - Using native pages

Overview

This tutorial explains how to integrate native and web "pages" in an Android application by using the `WL.NativePage.show()` API to open a native page from JavaScript.

With this method, data can be sent from JavaScript to the opened native page. You can specify a callback to be called after the native page closes.

This tutorial covers the following topics:

- Connecting to the plugin from the JavaScript code
- Creating a native page
- Returning control to the web view
- Sample application

Connecting to the plugin from the JavaScript code

1. Implement the `WL.NativePage.show()` method to open the native page:

```
1  function openNativePage() {  
2      var params = {  
3          nameParam : $('#nameInput').val()  
4      };  
5      WL.NativePage.show(nativePageClassName, backFromNativePage, params);  
6  }
```

- `nativePageClassName`: The name of a native Android class to start.
- `backFromNativePage`: A callback function to call when the native page closes.
- `params`: An optional custom parameters object to pass to the native code.

2. To handle the callback function:

```
1  function backFromNativePage(data) {  
2      alert("Received phone number is: " + data.phoneNumber);  
3  }
```

The `backFromNativePage(data)` function passes data back to the web part of an application after the native page closes.

Creating a native page

In Android, the native page must be implemented as an Android Activity, or extend an existing Activity.

1. Declare the native page in the `AndroidManifest.xml` file, as you would any Activity. For example:

```
1 | <activity android:name=".HelloNative"></activity>
```

2. To retrieve custom data parameters that are passed from the web view, use an `Intent` object:

```
1 | protected void onCreate(Bundle savedInstanceState) {  
2 | super.onCreate(savedInstanceState);  
3 | String name = getIntent().getStringExtra("nameParam");
```

Returning control to the web view

When the native page switches back to the web view, the `finish()` function is called for the Activity.

You can pass data back to the web view by using an `Intent` object. For example:

Java:

```
1 | String phoneNumber = editText.getText().toString();  
2 | Intent phoneNumberInfo = new Intent();  
3 | phoneNumberInfo.putExtra("phoneNumber", phoneNumber);  
4 | setResult(RESULT_OK, phoneNumberInfo);  
5 | finish();
```

JavaScript:

```
1 | function backFromNativePage(data) {  
2 |     alert("Received phone number is: " + data.phoneNumber);  
3 | }
```

Sample application

Click to download (<https://github.com/MobileFirst-Platform-Developer-Center/NativePagesInHybridApp>) the MobileFirst project.

