Android - Using native pages

Overview

This tutorial explains how to integre 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:

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

   - `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:

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

   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:

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

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

```
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
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:

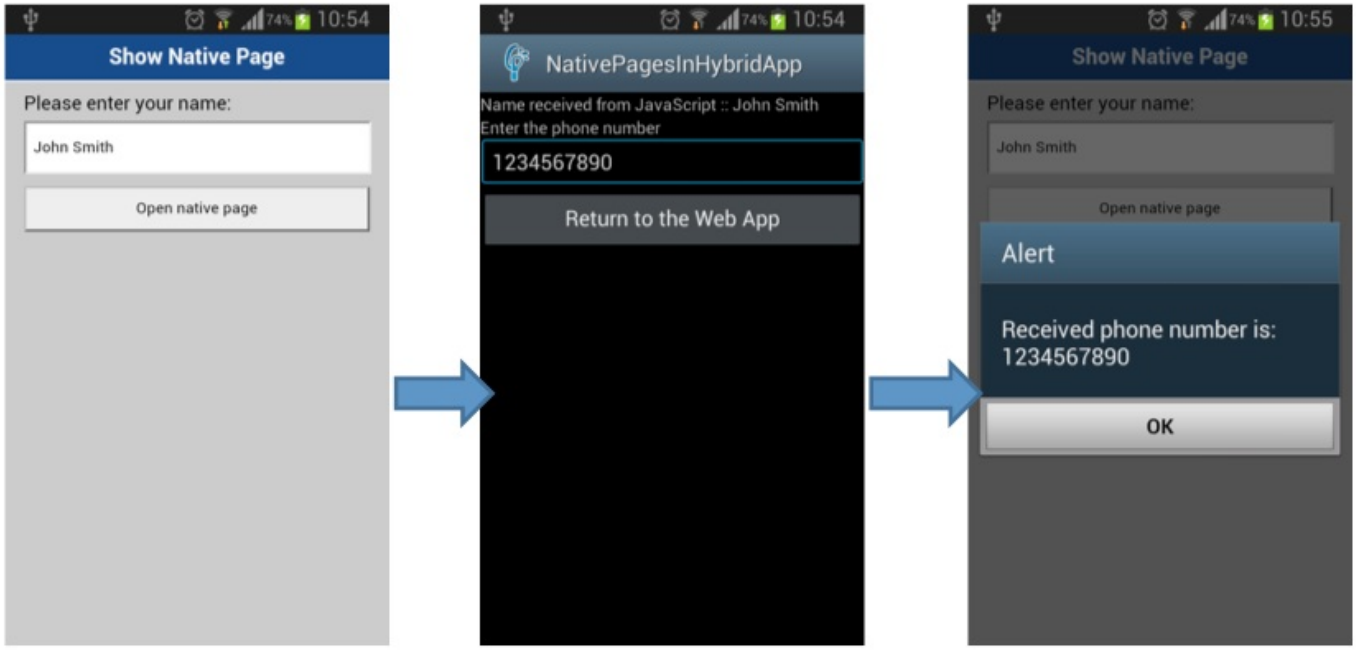
```
String phoneNumber = editText.getText().toString();
Intent phoneNumberInfo = new Intent();
phoneNumberInfo.putExtra("phoneNumber", phoneNumber);
setResult(RESULT_OK, phoneNumberInfo);
finish();
```

JavaScript:

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

Sample application

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


10:54
Show Native Page
Please enter your name:
John Smith
Open native page
10:54
NativePagesInHybridApp
Name received from JavaScript :: John Smith
Enter the phone number
1234567890
Return to the Web App
10:55
Show Native Page
Please enter your name:
John Smith
Open native page
Alert
Received phone number is:
1234567890
OK