Windows Phone 8 - Using native pages in hybrid applications

Overview

This tutorial explains how to create and integrate native and web "pages" in a Windows Phone 8 application by using the WL.NativePage.show() API to open a native page from JavaScript.

With this method, you can have data sent from JavaScript to the open native page and 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() to open the native page.

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

- o nativePageClassName: The name of a native Windows Phone 8 class to start.
- backFromNativePage: A callback function to call when the native page closes.
- o 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) parameter can pass data back to the web part of an application after the native closes.

Creating a native page

For Windows Phone 8, implement the native page as a Windows Phone User Control, or extend an existing one.

Step 1

In the new User Control, add using Cordova.Extension.Commands; to the .cs file, and use the same package and class name as in the WL.NativePage API call in the JavaScript:

```
using Cordova.Extension.Commands;
using Newtonsoft.Json;
namespace NativePagesInHybridApp
{
    public partial class HelloNative : UserControl<br /
>
    {
```

Step 2

To retrieve custom data parameters that are passed from the web view, use the WLNativePage.Data: (NSDictionary*)data method.

In the example below, the data is sent as a JSON string. For this purpose, the external JSON.NET library is used to convert the incoming JSON string to a native dictionary. For more information, see the JSON.NET (http://json.codeplex.com/) page.

```
InitializeComponent();
    if (WLNativePage.Data != null)
    {
        Dictionary<string, string> data = JsonConvert.DeserializeObject<Dictionary<string, string>
>(WLNativePage.Data);
        NameReceivedTextBlock.Text = "Hello " + data["nameParam"];
        tb_returnValue.Text = "1234567890";
    }
```

Returning control to the web view

When the native page needs to switch back to the web view, it calls the WLNativePage.backFromNative method.

Data can be passed back to the web view as parameters to the call.

Objective-C

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.

