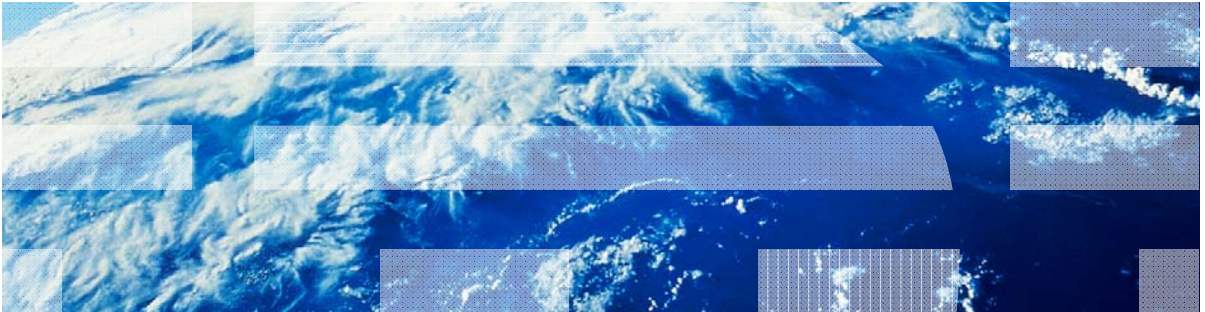


# ***IBM Worklight V6.0.0 Getting Started***

## **iOS - Using native pages in hybrid applications**



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# Agenda

- Overview
- Web portion of the code
- Create a native page
- Returning control to the web view
- Exercise

## Overview

- This module explains how to combine native and web pages on an iOS application.
- Use the `WL.NativePage.show()` API to open a native page from JavaScript™.
- With this method, you can send data from JavaScript to the opened native page and specify a callback to be called after the native page closed.

# Agenda

- Overview
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## Web portion of the code (1 of 4)

- Use the **WL.NativePage.show()** API to start a native page.


```
function openNativePage(){  
    var params = {nameParam : $('#nameInput').val()};  
    WL.NativePage.show('HelloNative', backFromNativePage, params);  
}  
  
function backFromNativePage(data){  
    alert("Received phone number is: " + data.phoneNumber);  
}
```

The name of a  
native iOS  
UIViewController  
instance to be  
started

## Web portion of the code (2 of 4)

- Use the **WL.NativePage.show()** API to start a native page.

```
function openNativePage(){  
    var params = {nameParam : $('#nameInput').val()};  
    WL.NativePage.show('HelloNative', backFromNativePage, params);  
}  
  
function backFromNativePage(data){  
    alert("Received phone number is: " + data.phoneNumber);  
}
```



A callback  
function to be  
called when the  
native page  
finished

## Web portion of the code (3 of 4)

- Use the **WL.NativePage.show()** API to start a native page.

```
function openNativePage(){  
    var params = {nameParam : $('#nameInput').val()};  
    WL.NativePage.show('HelloNative', backFromNativePage, params);  
}  
  
function backFromNativePage(data){  
    alert("Received phone number is: " + data.phoneNumber);  
}
```

You can pass custom parameters object to the native code.



## Web portion of the code (4 of 4)

- Use the **WL.NativePage.show()** API to start a native page.

```
function openNativePage(){  
    var params = {nameParam : $('#nameInput').val()};  
    WL.NativePage.show('HelloNative', backFromNativePage, params);  
}  
  
function backFromNativePage(data){  
    alert("Received phone number is: " + data.phoneNumber);  
}
```

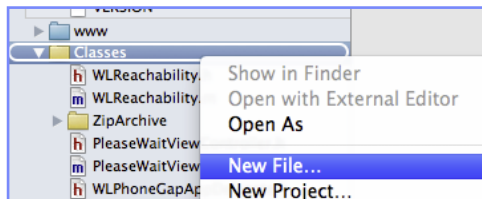
After the native page finishes, it can pass data back to the web part of an application.

## Agenda

- Combining native and web
- Web portion of the code
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## Create a native page (1 of 3)

- Add a file to your Classes folder in Xcode.



- Make sure to subclass the **UIViewController**.



## Create a native page (2 of 3)

### Important:

- If you work with existing “.m” and “.h” files, make sure to place these files in the `Classes` folder in the Xcode project.
- Placing these “.m” and “.h” files in the `iphone\native\classes` folder in Eclipse is not enough to have them referenced in the Xcode project.

## Create a native page (3 of 3)

- Import `NativePage.h` to your class.
- You can retrieve custom data parameters that are passed from the web view by using the `setDataFromWebView:(NSDictionary*)data` method.

### JavaScript code

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



### Native code

```
-(void)setDataFromWebView:(NSDictionary*)data{  
    self.nameParam = (NSString*)[data valueForKey:@"nameParam"];  
}
```

## Agenda

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## Returning control to the web view

- When the native page must switch back to the web view, a [NativePage showWebView:] method should be called.
- You can pass data back to the web view by using NSDictionary object.

### Native code

```
-(IBAction)returnClicked:(id)sender{
    NSString *phone = [phoneNumber text];
    NSDictionary *returnedData = [NSDictionary dictionaryWithObject:phone
                                                                forKey:@"phoneNumber"];
    [NativePage showWebView:returnedData];
}
```

### JavaScript code

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

## Agenda

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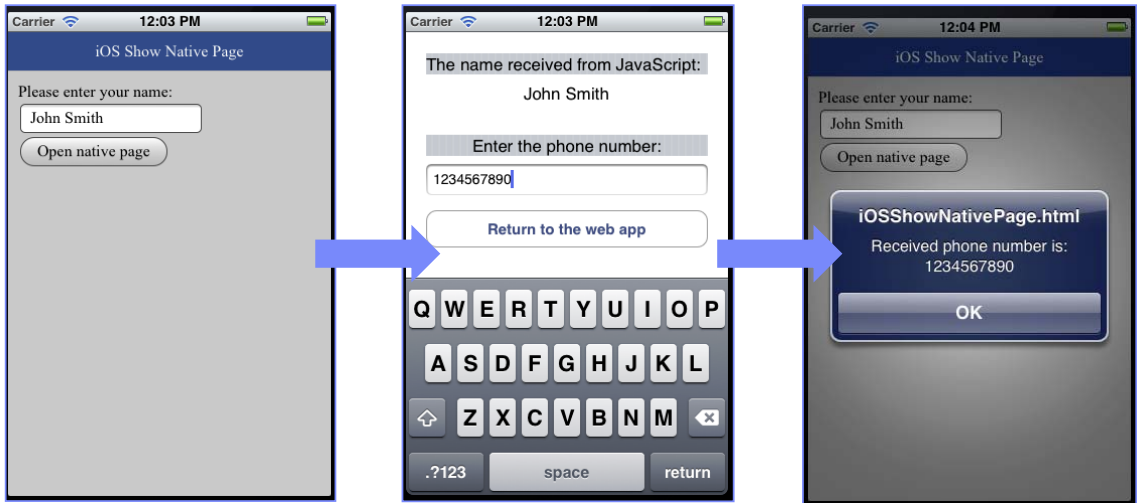


## Exercise

- Create an application that behaves as follows:
  - Opens a web page that contains a button.
  - When the button is clicked, a native page is displayed with text received from the web page.
  - The native page also contains a button.
  - When the native button is clicked, the native page is closed and the web page is displayed.
  - An alert that contains the text from the native page is displayed.

## Exercise: Solution

- The sample for this training module can be found in the Getting Started page of the IBM Worklight documentation website at <http://www.ibm.com/mobile-docs>



## Check yourself questions

- What are the steps of creating a native page?
  - Create a new Objective C class, subclass the UIViewController.
  - Create a new Objective C class, subclass the UINavigationController.
  - Create a new Objective C class, make it partial class of the application main ViewController.
  - Add UI layout to the existing ViewController.
- Is it possible to transfer data between web and native page?
  - Web to native – no, native to web – no.
  - Web to native – yes, native to web – no.
  - Web to native – no, native to web – yes.
  - Web to native – yes, native to web – yes.

## Check yourself questions

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  - Web to native – yes, native to web – yes.

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