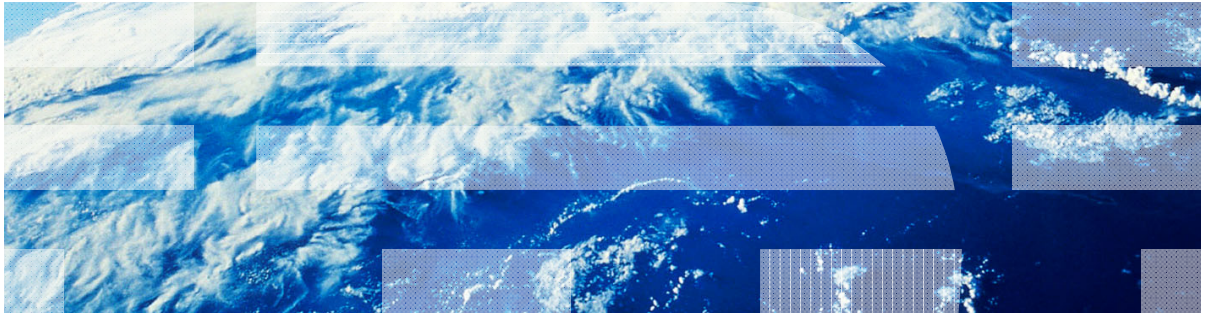


# ***IBM Worklight V5.0.5***

## ***Getting Started***

### **Module 8.1 – iOS Development: Combining Native and Web Pages**



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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 is a continuation of module 7.6 – Combining Native and Web Pages.
- It explains how to combine native and web pages on an iOS device.
- The `WL.NativePage.show()` is a Worklight® method used in order to access native data from JavaScript code.
- This method can be used either to pass data to native code or to retrieve data from native code.

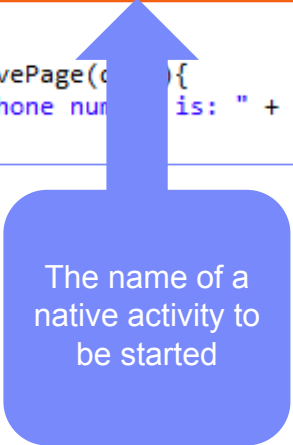
# Agenda

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

## Web portion of the code

- 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);  
}
```

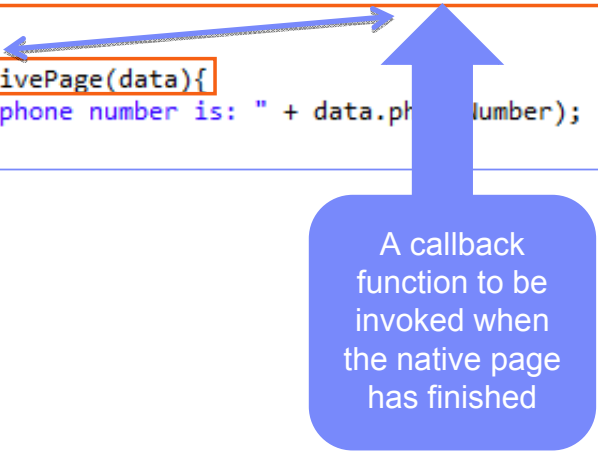


The name of a  
native activity to  
be started

## Web portion of the code

- 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  
invoked when  
the native page  
has finished

## Web portion of the code

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

```
function openNativePage(){  
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```

Custom  
parameters  
object can be  
passed to the  
native code



## Web portion of the code

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

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function openNativePage(){  
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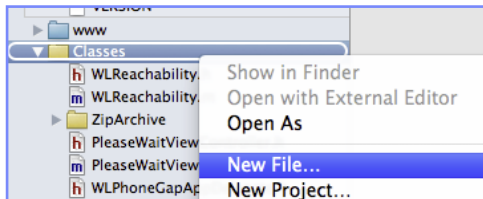
When the native page finishes, it can pass data back to the web part of an application

## Agenda

- Combining native and web
- Web portion of the code
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- Exercise

## Create a native page

- Add a new file to your `Classes` folder in Xcode.



- Make sure to add a class that is a subclass of the **UIViewController**.



## Create a native page

- Import `NativePage.h` to your class.
- Custom data parameters passed from the web view can be retrieved 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

- Combining native and web
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## Returning control to the web view

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

### 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

- Combining native and web
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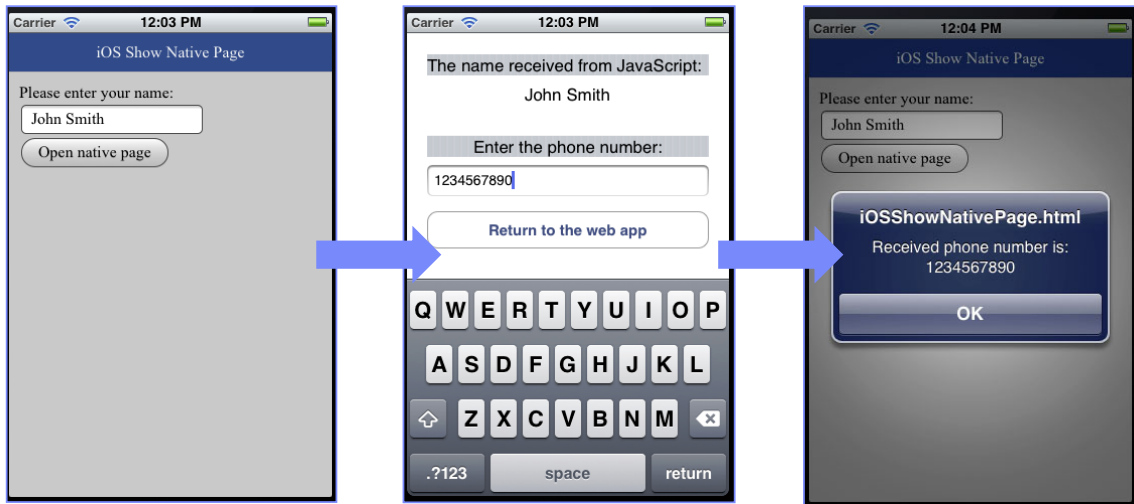
## ***Exercise***

- 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 containing 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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  - Create a new Objective C class, subclass the UIViewController.
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