

# iOS shell development

## Overview

In this tutorial, you learn how to add an iOS environment to your shell component, test application, and inner application.

## Adding an iOS environment to a shell component

Start by adding an iPhone environment to your shell component by following the same procedure as for a standard IBM MobileFirst Platform Foundation application.



The following folder structure is created:

- **css**, **images**, **fragments** and **js** contain resources that override or extend resources from the Shell component **common** folder.
- The **native** folder contains an application template to be used when you create an iOS project from an inner application.
- The **nativeEmptyApp** folder contains an application that is built from the shell component and an empty inner application as described in the Shell Development Concepts (../) module.

The files in the **native** folder are templates that are used to create the inner application iOS project. Some of the folder and file names contain placeholder elements that are populated during the build. For example:

- The placeholder **\${xcodeProjectName}.xcodeproj.wluser** is populated with a package name used in the application.

- The `${xcodeProjectName}-Info.plist.wltemplate.wluser` is populated with the application name, thus creating the main application *plist* file.

Files with the `.wluser` extension are template files that shell developers can modify.



## Adding custom Objective C code to a Shell component

Because the *iphone|native* folder of a Shell component is not an iOS project, advanced features such as auto-complete are not provided when you work on it directly.

The solution is to use the iPhone environment of the test application to create, modify, and debug the Objective C code.

The generated iOS project is created under the test application *native|* folder.

Use it to work with your Objective C code.

Open the generated iOS project in Xcode.

Add an Objective C **MyCustomAlert** class in the **Classes** folder.

Add a method signature to **MyCustomAlert.h**, and method implementation to **MyCustomAlert.m** files:

```

#import "MyCustomAlert.h"
<p>@implementation MyCustomAlert
+(void)showUIAlert:(NSString *)text{
    UIAlertView *alert = [[UIAlertView alloc] initWithTitle:@"Native Alert
"
    message:text
    delegate:nil
    cancelButtonTitle:@"Close"
    otherButtonTitles:nil];
    [alert show];
    [alert release];
}
@end

```

Import **MyCustomAlert.h** and call this method from the **viewDidLoad** method of the application **ViewController**:

```

- (void)viewDidLoad
{
    [super viewDidLoad];
    [MyCustomAlert showUIAlert:@"Hello from native iOS Shell"];
}

```

Run your application to see the implemented functions.



Finally, copy your Objective C code from the iPhone project that you used to develop it back to the shell component.





**Important:**

NativeEmptyApp cannot load a remote inner application that has the device provisioning enabled. NativeEmptyApp can be used only in the development environment.

## Sample application

Click to download

(<http://public.dhe.ibm.com/software/products/en/MobileFirstPlatform/docs/v630/ShellDevelopmentProject.zip>)  
the Studio project.