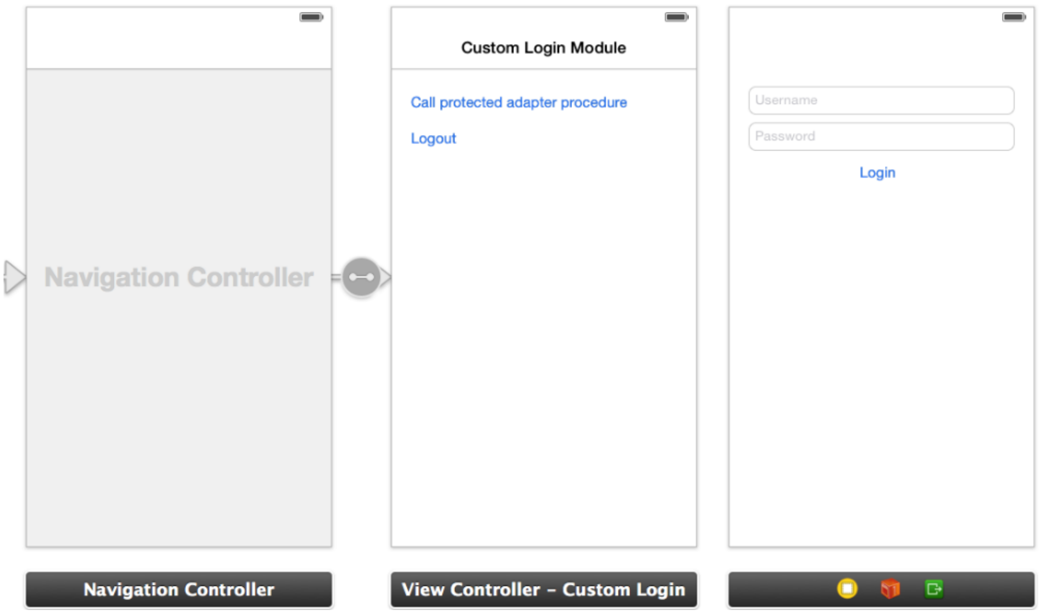
Custom Authenticator and Login Module in native iOS applications

This is a continuation of Custom Authenticator and Login Module (../).

Creating the client-side authentication components

Create a native iOS application and add the IBM MobileFirst Platform Foundation native APIs following the documentation.
In your storyboard, add a *ViewController* containing a login form.



Challenge Handler

Create a *MyChallengeHandler* class as a subclass of *ChallengeHandler*.
We will implement some of the *ChallengeHandler* methods to respond to the challenge.

```
@interface MyChallengeHandler : ChallengeHandler
@property ViewController* vc;
//A convenient way of updating the View
-(id)initWithViewController: (ViewController*) vc;
@end
```

Before calling your protected adapter, make sure to register your challenge handler using *WLClient*'s *registerChallengeHandler* method.

```
[[WLClient sharedInstance] registerChallengeHandler:[[MyChallengeHandler alloc] initWithViewController:self] ];
```

The *isCustomResponse* method of the challenge handler is invoked each time that a response is received from the server. It is used to detect whether the response contains data that is related to this challenge handler. It must return either *true* or *false*.

```
@implementation MyChallengeHandler
//...
-(BOOL) isCustomResponse:(WLResponse *)response {
    if(response &amp;&amp; [response getResponseJson]){
        if ([[response getResponseJson] objectForKey:@"authStatus"]) {
            NSString* authRequired = (NSString*) [[response getResponseJson] objectForKey:@"authStatus"];
             //return if auth is required
return ([authRequired compare:@"required"] == NSOrderedSame);
        }
    }
    return false;
}
@end
```

If *isCustomResponse* returns *true*, the framework calls the *handleChallenge* method. This function is used to perform required actions, such as hide application screen and show login screen.

```
@implementation MyChallengeHandler
//...
-(void) handleChallenge:(WLResponse *)response {
    NSLog(@"Inside handleChallenge - need to show form on the screen");
    LoginViewController* loginController = [self.vc.storyboard instantiateViewControllerWithIdentifier:@"LoginViewContro
    loginController.challengeHandler = self;
    [self.vc.navigationController pushViewController:loginController animated:YES];
}
@end
```

onSuccess and *onFailure* get triggers when the authentication ends.
You need to call *submitSuccess* to inform the framework that the authentication process is over, and allow the invocation’s success handler to be called.

```
@implementation MyChallengeHandler
//...
-(void) onSuccess:(WLResponse *)response {
    NSLog(@"inside challenge success");
    [self.vc.navigationController popViewControllerAnimated:YES];
    [self submitSuccess:response];
}</p>
<p>-(void) onFailure:(WLFailResponse *)response {
    NSLog(@"inside challenge failure");
    [self submitFailure:response];
}
```

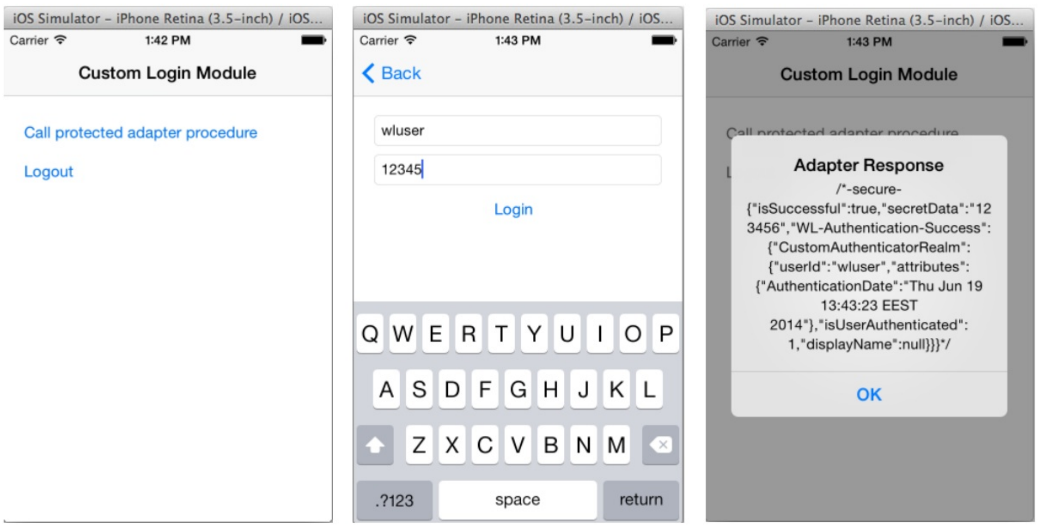
In your *LoginViewController*, when the user clicks to submit his credentials, you need to call*submitLoginForm* to send the credentials to the MobileFirst Server.

```
@implementation LoginViewController
//***
- (IBAction)login:(id)sender {
   [self.challengeHandler
       submitLoginForm:@"/my_custom_auth_request_url"
       requestParameters:@{@"username": self.username.text, @"password": self.password.text}
       requestHeaders:nil
       requestTimeoutInMilliSeconds:0
       requestMethod:@"POST"];
}
```

Sample application

Click to download (http://public.dhe.ibm.com/software/products/en/MobileFirstPlatform/docs/v630/NativeCustomLoginModuleProject.zip) the Studio project.

Click to download (http://public.dhe.ibm.com/software/products/en/MobileFirstPlatform/docs/v630/iOSNativeCustomLoginModuleProject.zip) the Native project.


iOS Simulator - iPhone Retina (3.5-inch) / iOS...
Carrier
1:42 PM
Custom Login Module
Call protected adapter procedure
Logout
iOS Simulator - iPhone Retina (3.5-inch) / iOS...
Carrier
1:43 PM
Back
wluser
12345
Login
QWERTYUIOP
ASDFGHJKL
ZXCVBNM
.?123
space
return
iOS Simulator - iPhone Retina (3.5-inch) / iOS...
Carrier
1:43 PM
Custom Login Module
Call protected adapter procedure
Adapter Response
OK

```
/*-secure-
{"isSuccessful":true,"secretData":"12
3456","WL-Authentication-Success":
{"CustomAuthenticatorRealm":
{"userId":"wluser","attributes":
{"AuthenticationDate":"Thu Jun 19
13:43:23 EEST
2014"},"isUserAuthenticated":
1,"displayName":null}}}*/
```