Custom Authenticator and Login Module in native Windows Phone 8 applications

fork and edit tutorial (https://github.ibm.com/MFPSamples/DevCenter/tree/master/tutorials/en/foundation/7.0/authentication-security/custom-authenticator-login-module/custom-authenticator-and-login-module-in-native-windows-phone-8-applications.html) | report issue (https://github.ibm.com/MFPSamples/DevCenter/issues/new)

Overview

This tutorial illustrates the native Windows Phone 8 client-side authentication components for custom authentication. Make sure you read Custom Authenticator and Login Module (../) first.

Creating the client-side authentication components

Create a native Windows Phone 8 application and add the MobileFirst native APIs following the documentation.

CustomChallengeHandler

Create a `CustomChallengeHandler` class as a subclass of `ChallengeHandler`. `CustomChallengeHandler` should implement

- `isCustomResponse`
- `handleChallenge`

`isCustomResponse` checks every custom response received from MobileFirst Server to see if this is the challenge we are expecting.

```
public override bool isCustomResponse(WLResponse response)
{
  if(response == null ||
    response.getResponseJSON() == null)
  {<
    return false;
  }
  if(response.ToString().IndexOf("authStatus") > -1)
  {
    return true;
  }
  else
  {
    return false;
  }
}
```

`handleChallenge` method, is called after the `isCustomResponse` method returned true.
Within this method we present our login form. Different approaches may be adopted to present the login form.

```
public override void handleChallenge(JObject response)
{
  Deployment.Current.Dispatcher.BeginInvoke(() =>
  {
    MainPage._this.NavigationService.Navigate(new Uri("/LoginPage.xaml", UriKind.Relative))
;
  });
}
```

From the login form , credentials are passed to the `CustomChallengeHandler` class. The `submitLoginForm()` method is used to send our input data to the authenticator.

```
public void submitLogin(string username, string password)
{
   Dictionary<String, String> parms = new Dictionary<String, String>();
   parms.Add("username", username);
   parms.Add("password", password);
   submitLoginForm("/my_custom_auth_request_url", parms, null, 10000, "post")
;
}
```

MainPage

Within the MainPage class connect to MobileFirst server, register your `challengeHandler` and invoke the protected adapter procedure.
The procedure invocation will trigger MobileFirst server to send a challenge that will trigger our `challengeHandler`.

```
   WLClient client;
   client = WLClient.getInstance();
   challengeHandler = new WindowsChallengeHandler();
   client.registerChallengeHandler((BaseChallengeHandler<JObject>)challengeHandler)
;
   client.connect(new MyConnectResponseListener(this));
```

Since the native API not protected by a defined security test, there is no login form presented during server connection. Invoke the protected adapter procedure and the login form is presented by the `challengeHandler`.

```
   WLProcedureInvocationData invokeData = new WLProcedureInvocationData("DummyAdapter", "getSecretData");
   WLRequestOptions options = new WLRequestOptions();
   client.invokeProcedure(invokeData, new MyResponseListener(this), options);
```

Sample application

Click to download (http://public.dhe.ibm.com/software/products/en/MobileFirstPlatform/docs/v700/NativeCustomLoginModuleProject.zip) the Studio project.
Click to download (http://public.dhe.ibm.com/software/products/en/MobileFirstPlatform/docs/v700/WP8NativeCustomLoginModuleProject.zip) the Native project.

custom login

Invoke Procedure

Logout

custom login

username

user

password

•••••

Login

in module au

Console

Connecting...
Connected SuccessfullySuccessfully invoked
/*-secure-
{"isSuccessful":true,"secretData":"123456","W
Authentication-Success":
{"CustomAuthenticatorRealm":
{"userId":"user","attributes":
{"AuthenticationDate":"Fri Mar 06 19:47:11 IS
2015"},"isUserAuthenticated":1,"displayNam
l,"deviceId":"user"}}}*/