

Developing iOS Apps with Liferay Screens

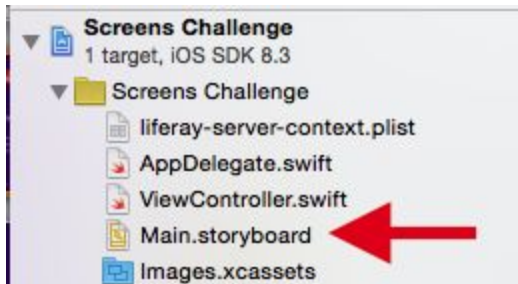
Introduction



Liferay Screens is a collection of visual components which integrates directly with the tools normally used for creating native mobile applications such as XCode for iOS and Android Studio for Android. The Liferay platform provides the backend for the mobile application handling user authentication, data persistence and serving content. The purpose of this exercise is to showcase using Liferay Screens with the Liferay platform as a mobile backend.

User Authentication with Liferay Screens

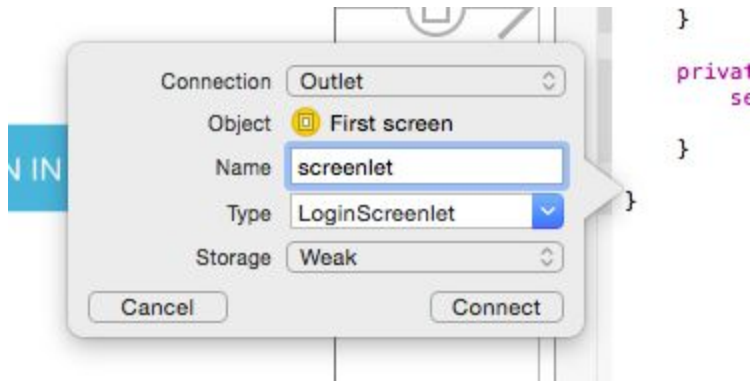
In this section, you will use a LoginScreenlet within Liferay Screens to handle user authentication in the mobile application. The user account will be created in the Liferay platform and will be in charge of handling the login on the backend.

1. Create an account on the [Screens Signup](#) page if you haven't already done so.
2. In Xcode, click on your Main.storyboard file. This represents the screen-flow used in the app.



3. Select the left screen by clicking it.
4. Now go to the third icon in the right sidebar  and type the following
 - a. Class: **LoginScreenlet**
 - b. Module: LiferayScreens (should be filled automatically)
5. Xcode will begin automatically building. If everything goes well, you'll see the login screenlet showing in the left screen
6. Go to Main.storyboard, select the main screen (or view controller), find the fifth button starting from the right, in the top toolbar (two circles joined) , and click on it. The screen will be split and the source code will appear at the right.
7. Click on the login screenlet in the screen, hold your Control key, drag and drop it into the code just when a gray label appears saying "Insert Outlet"

8. A small dialog will appear, just type “screenlet” in the **Name** field. This will create a variable called “screenlet” in your view controller, and it will be automatically connected with your UI object.



9. Uncomment the following section located inside view controller’s **viewDidLoad** method by removing `//`:

```
self.screenlet.delegate = self;
```

This makes your view controller the screenlet’s delegate, so when anything happens inside the screenlet, the view controller will be notified.

10. Uncomment the view controller protocol’s methods by removing `/**` and `*/` around the code. We only need to know when the login operation is successful:


```
func screenlet(screenlet: BaseScreenlet,
    onLoginResponseUserAttributes attributes:
    [String:AnyObject]) {
    println("User attributes -> \(attributes)")


    self.goToNextScreen()
}
```

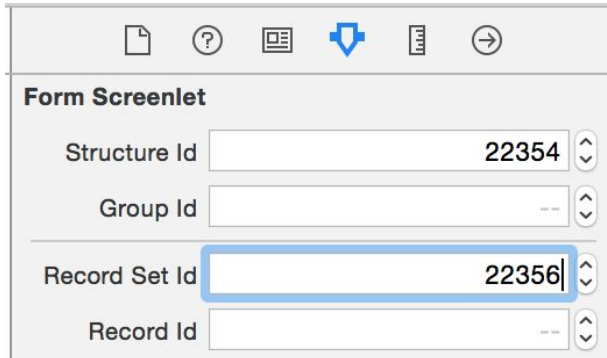
11. Run the app (Cmd + R). Try signing in with the incorrect user credentials. Notice the errors displayed by the Login screen in the application. Next try using the correct credentials. You’ll see how a new blank screen appears when the login is completed. Also notice the user attributes returned by the Liferay Portal are printed in the Xcode’s console

Displaying a Dynamic Form from Liferay

In this section, you will use a `DDLFormScreenlet` within Liferay Screens to display a dynamic form that is located on the backend Liferay platform. The form can be completed from within the mobile application and the captured data can be viewed from the backend Liferay platform.

1. In Xcode, open your Main.storyboard, go to the second screen.
2. Now go to the third icon in the right sidebar  and type the following
 - a. Class: **DDLFormScreenlet**
 - b. Module: LiferayScreens (should be filled automatically)

3. Xcode will begin automatically building. If everything goes well, you'll see a sample form showing in the right screen.
4. Go to the fourth icon in the right sidebar  and type the following values (these values come from the portal instance):




Form Screenlet	
Structure Id	22354
Group Id	--
Record Set Id	22356
Record Id	--

5. That's it! Just run the app (Cmd + R), type right credentials, and you'll see how the form will appear ready to be filled in.
 - a. Leave some fields empty, and press Submit button. You'll see how validation fails because of required fields.
 - b. Fill all values and press Submit button. You'll see a success message.
6. Go to the [Screens List](#) on the server. Notice the data that you used in the form appears near the top of the list.



Theming

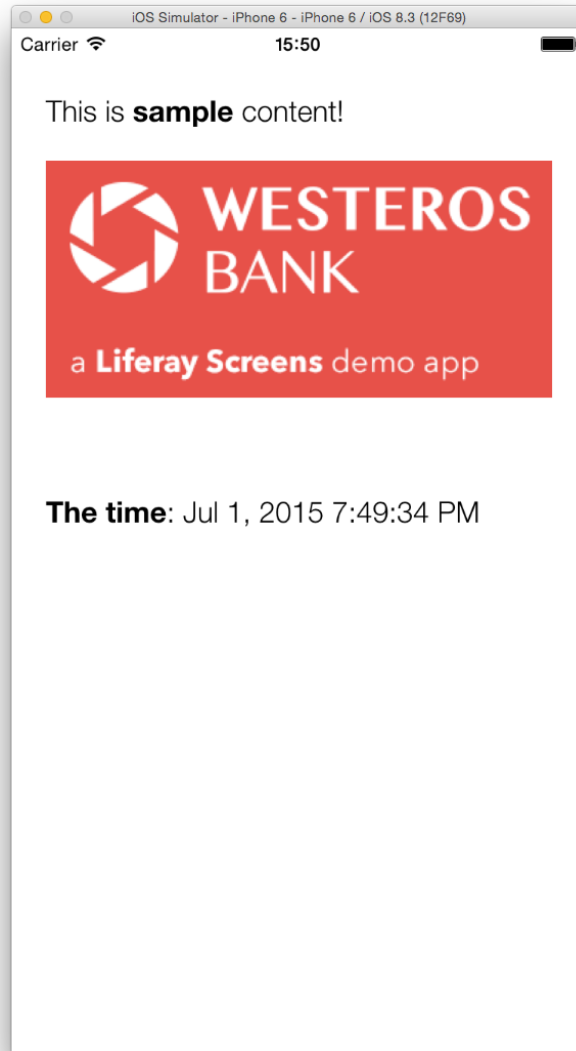
In this section, you will learn how to modify the look & feel of your mobile application. For this, we use a Liferay Screens Theme which allows you to change the style and behavior of the mobile application without changing core functionality.

1. In Xcode, open your Main.storyboard, select the first screen, and then select the LoginScreenlet.
2. In the properties pane (fourth icon in the right sidebar ) , look for "Theme Name" field and type demo there.
3. When the project gets compiled, you'll see the new look and feel of your screenlet (Note: Xcode is buggy and sometimes it doesn't show the preview. In such case, you'll see a blank box instead of the preview)
4. Repeat the same step for the DDLFormScreenlet.
5. Run the app (Cmd + R), type right credentials, and you'll see how the form will appear with the new theme applied.
6. If you have issues with the new theme showing up try a Clean, Build and Run the app again.

Post-Event Follow-up Activity

In this section, you will use the skills learned above to change the app to display web content from Liferay's web content management system. Don't worry, the content is already created, all you have to do is insert the screenlet and go!

1. In Xcode, open your Main.storyboard, select the second screen (the one with the DDLFormScreenlet).
2. Now go to the third icon in the right sidebar  and change the type of screenlet by selecting the following
 - a. Class: **WebContentDisplayScreenlet**
 - b. Module: LiferayScreens (should be filled automatically)
3. Go to the fourth icon in the right sidebar  and type the following values (these values come from the portal instance):
 - a. Group Id: 22339
 - b. Article Id: 41713
4. That's it! Just run the app (Cmd + R), type right credentials, and you should see the example content:



5. Take a screenshot and post it to the [Screens forum thread created for this event](#). Include your comments, questions, and other feedback! The first 10 people to do this will receive a small gift from Liferay! Note: in order to post, you will need to register for a free account at liferay.com if you do not yet have one.