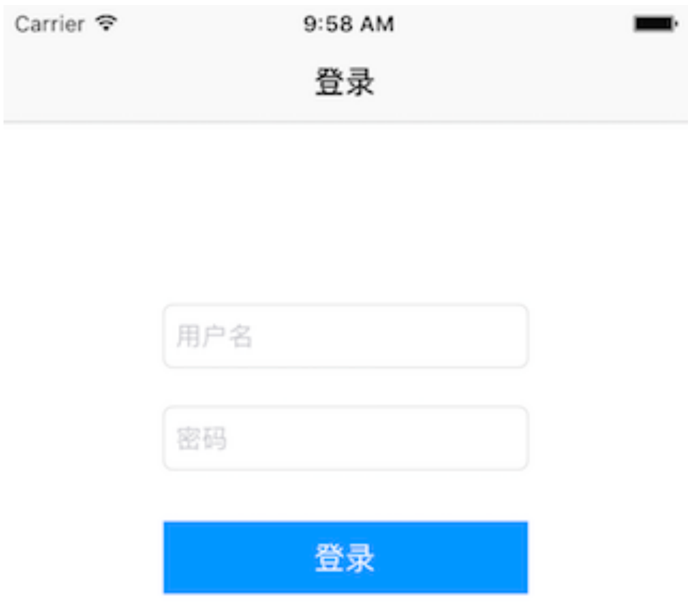
iOS开发 基础篇二

任务

> - 点击登录访问网络接口
> - 解析接口返回JSON数据
> - 登录成功跳转到用户界面并显示头像、名称等信息

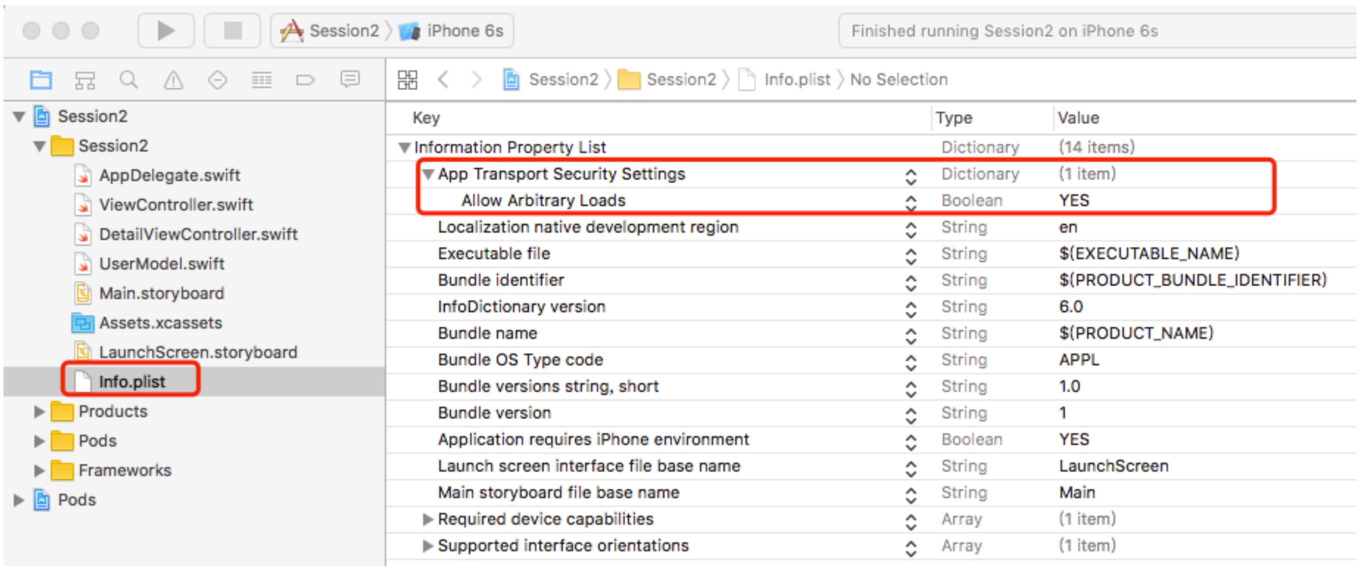
上节回顾



Xcode HTTP支持配置

> iOS9之后,默认不支持HTTP接口的访问。

如果程序技术使用HTTP接口,需要完成如下配置。



Key	Type	Value
Information Property List	Dictionary	(14 items)
App Transport Security Settings	Dictionary	(1 item)
Allow Arbitrary Loads	Boolean	YES
Localization native development region	String	en
Executable file	String	$(EXECUTABLE_NAME)
Bundle identifier	String	$(PRODUCT_BUNDLE_IDENTIFIER)
InfoDictionary version	String	6.0
Bundle name	String	$(PRODUCT_NAME)
Bundle OS Type code	String	APPL
Bundle versions string, short	String	1.0
Bundle version	String	1
Application requires iPhone environment	Boolean	YES
Launch screen interface file base name	String	LaunchScreen
Main storyboard file base name	String	Main
Required device capabilities	Array	(1 item)
Supported interface orientations	Array	(1 item)

网络接口对接

- `URLSession(系统原生API)`

`GET`

```
let url = "http://www.weather.com.cn/data/cityinfo/101010100.html?a=1"
let session = URLSession.shared
let task = session.dataTask(with: URL(string:url)!, completionHandler: { (data, response, error) in
    if error == nil {
        if let response = response as? HTTPURLResponse,response.statusCode == 200 {
            if let data = data {
                do {
                    let jsonObj = try JSONSerialization.jsonObject(with: data, options: .mutableContainers)
                    print(String.init(data: data, encoding: .utf8) ?? "")
                    print(jsonObj as! Dictionary<String,Any>)
                } catch {
                    print("解析JSON失败")
                }
            } else {
                print("数据返回为空")
            }
        } else {
            print((response as! HTTPURLResponse).description)
        }
    } else {
        print(error!.localizedDescription)
    }
})
task.resume()
```

`POST`

```
let url = "http://192.168.0.203:5008/user/login"
var request = URLRequest(url: URL(string: url)!)
request.httpMethod = "POST"
let params = "userName=\(userName)&passWord=\(password)"
request.httpBody = params.data(using: .utf8)
request.timeoutInterval = 5
let session = URLSession.shared
let task = session.dataTask(with: request, completionHandler: { (data, response, e
rror) in
    if error == nil {
        if let response = response as? HTTPURLResponse,response.statusCode == 200
{
            if let data = data {
                do {
                    let jsonObj = try JSONSerialization.jsonObject(with: data, opt
ions: .mutableContainers)
                    print(String.init(data: data, encoding: .utf8) ?? "")
                    print(jsonObj as! Dictionary<String,Any>)
                } catch {
                    print("解析JSON失败")
                }
            } else {
                print("数据返回为空")
            }
        } else {
            print((response as! HTTPURLResponse).description)
        }
    } else {
        print(error!.localizedDescription)
    }
})
task.resume()
```

- 第三方网络请求库 Alamofire

`GET`

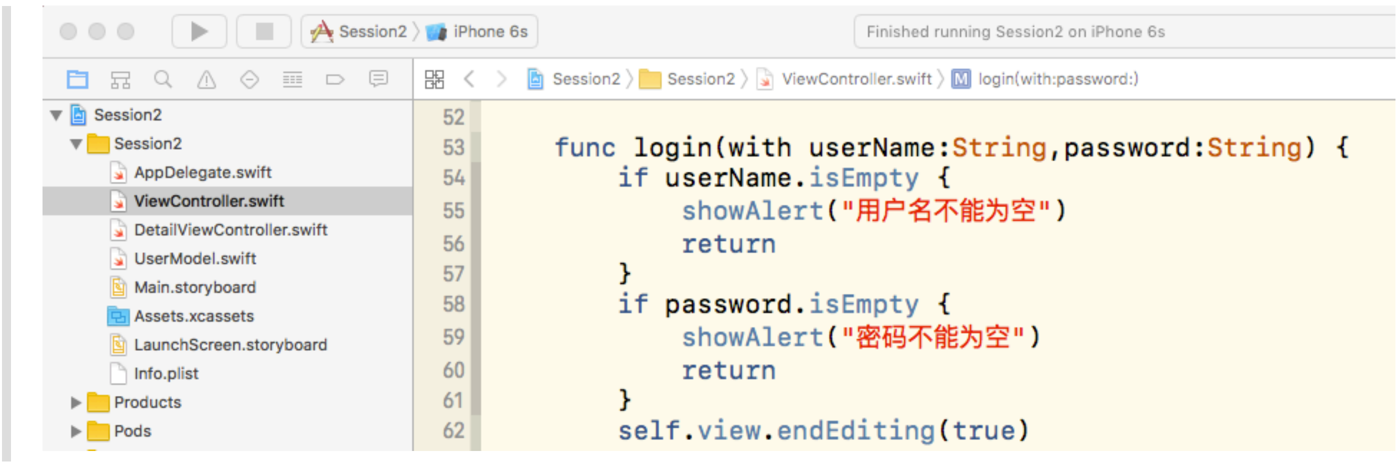
```
Alamofire.request("http://www.weather.com.cn/data/cityinfo/101010100.html?a=1").re
sponseJSON { (data) in
    print(data.value)
}
```

`POST`

```
Alamofire.request("http://192.168.0.203:5008/user/login", method: .post, parameter
s: ["userName":"","passWord":"",], encoding: JSONEncoding.default, headers: nil).r
esponseJSON { (data) in
    print(data.result)
}
```

完善登录事件

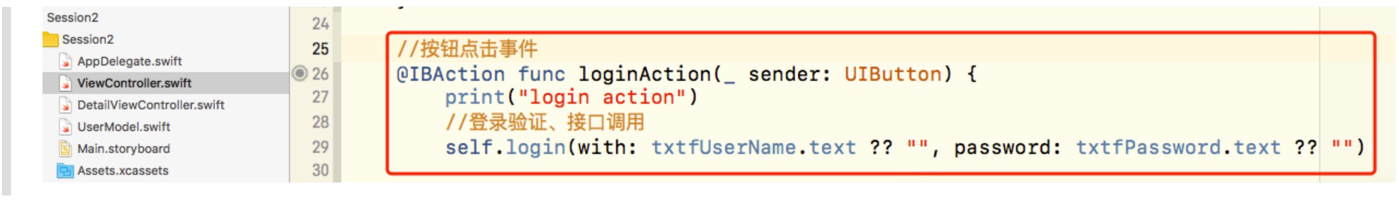
`1.在ViewController中添加登录方法实现`



```

    func login(with userName:String,password:String) {
        if userName.isEmpty {
            showAlert("用户名不能为空")
            return
        }
        if password.isEmpty {
            showAlert("密码不能为空")
            return
        }
        self.view.endEditing(true)
```

```
func login(with userName:String,password:String) {
    if userName.isEmpty {
        showAlert("用户名不能为空")
        return
    }
    if password.isEmpty {
        showAlert("密码不能为空")
        return
    }
    self.view.endEditing(true)

    let url = "http://115.182.15.118:5008/user/login"
    var request = URLRequest(url: URL(string: url)!)
    request.httpMethod = "POST"
    let params = "userName=\(userName)&passWord=\(password)"
    request.httpBody = params.data(using: .utf8)
    request.timeoutInterval = 5

    let session = URLSession.shared
    let task = session.dataTask(with: request) { (data, response, error) in
        DispatchQueue.main.async {
            if error == nil {
                if let response = response as? HTTPURLResponse,response.statusCode
 == 200 {
                    if let data = data {

                    } else {
                        self.showAlert("数据返回为空...")
                    }
                } else {
                    self.showAlert((response as! HTTPURLResponse).description)
                }
            } else {
                self.showAlert(error!.localizedDescription)
            }
        }
    }
    task.resume()
}
```

2.修改Button点击事件



```
//按钮点击事件
@IBAction func loginAction(_ sender: UIButton) {
    print("login action")
    //登录验证、接口调用
    self.login(with: txtfUserName.text ?? "", password: txtfPassword.text ?? "")
```

JSON数据解析

- `JSONSerialization(系统原生)`

```
if let content = try? JSONSerialization.jsonObject(with: data, options: .allowFragments) as? [String: Any],
    let user = content["status"] as? Int,
    // Finally we got the username
}
```

- [SwiftJson]

```
let json = JSON(data: data)
if let userName = content["status"].Int {

}
```

`3.解析接口数据`

> 接口格式:
>
> ```
> {
>     status:"000000",
>     data:{...},
>     msg:""
> }
> ```

`完善login方法`

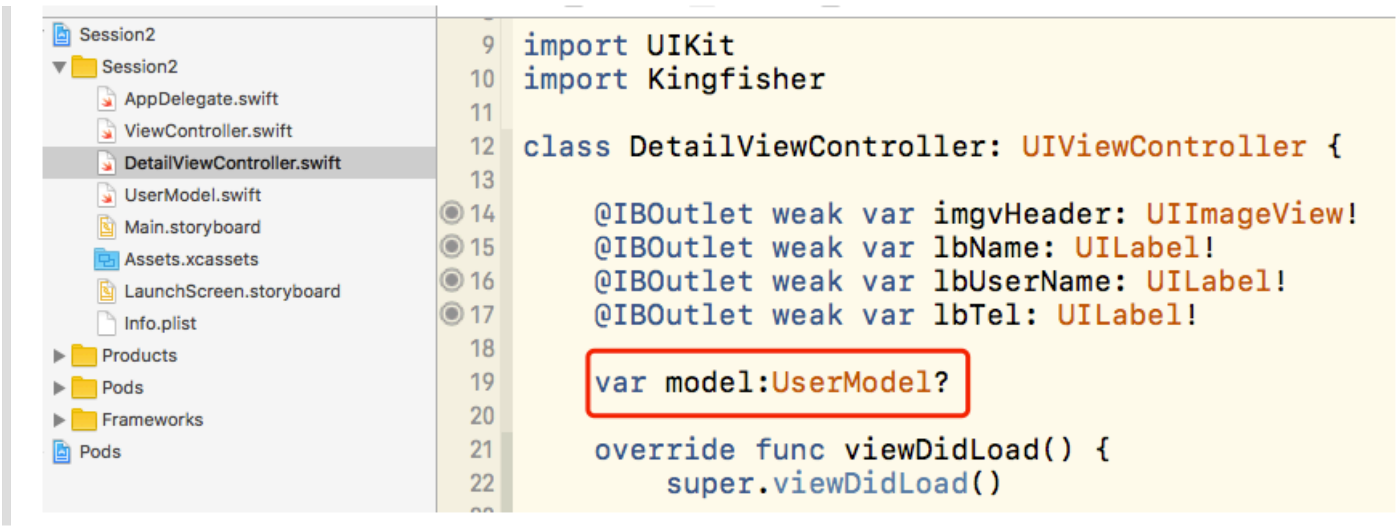
```
func login(with userName:String,password:String) {
    xxx
    xxx
    if let data = data {
       // 插入在这里
        do {
            let jsonObj = try JSONSerialization.jsonObject(with: data, options: .m
utableContainers) //转换为json对象
            if let obj = jsonObj as? Dictionary <String,Any> {
                if let code = obj["status"] as? String,Int(code) == 0 {//status =
0 登录成功
                print("登录成功")
                } else {
                    self.showAlert(obj["msg"] as? String ?? "未知错误")
                }
            } else {
                self.showAlert("数据格式错误")
            }
        } catch {
            self.showAlert("数据格式错误")
        }
    }
    xxx
    xxx
}
```

`4.创建用户信息Model，便于传递给详情界面`

> 新建文件 (commad+N) UserModel

```
class UserModel: NSObject {
    var id:Int32 = 0            //id
    var userName:String = ""    //用户名
    var name:String = ""        //姓名
    var tel:String = ""         //电话
    var headPortraitStr:String = "" //头像
    //其他需要字段自行定义....

    //重写该方法 空实现
    //避免调用 setValuesForKeys 是系统crash
    override func setValue(_ value: Any?, forUndefinedKey key: String) {

    }
}
```

`5.1ViewController 定义userModel变量`


Session2
Session2
AppDelegate.swift
ViewController.swift
DetailViewController.swift
UserModel.swift
Main.storyboard
Assets.xcassets
LaunchScreen.storyboard
Info.plist
Products
Pods
Frameworks
Pods

```swift
import UIKit
import Kingfisher

class DetailViewController: UIViewController {

    @IBOutlet weak var imgvHeader: UIImageView!
    @IBOutlet weak var lbName: UILabel!
    @IBOutlet weak var lbUserName: UILabel!
    @IBOutlet weak var lbTel: UILabel!

    var model:UserModel?

    override func viewDidLoad() {
        super.viewDidLoad()
```

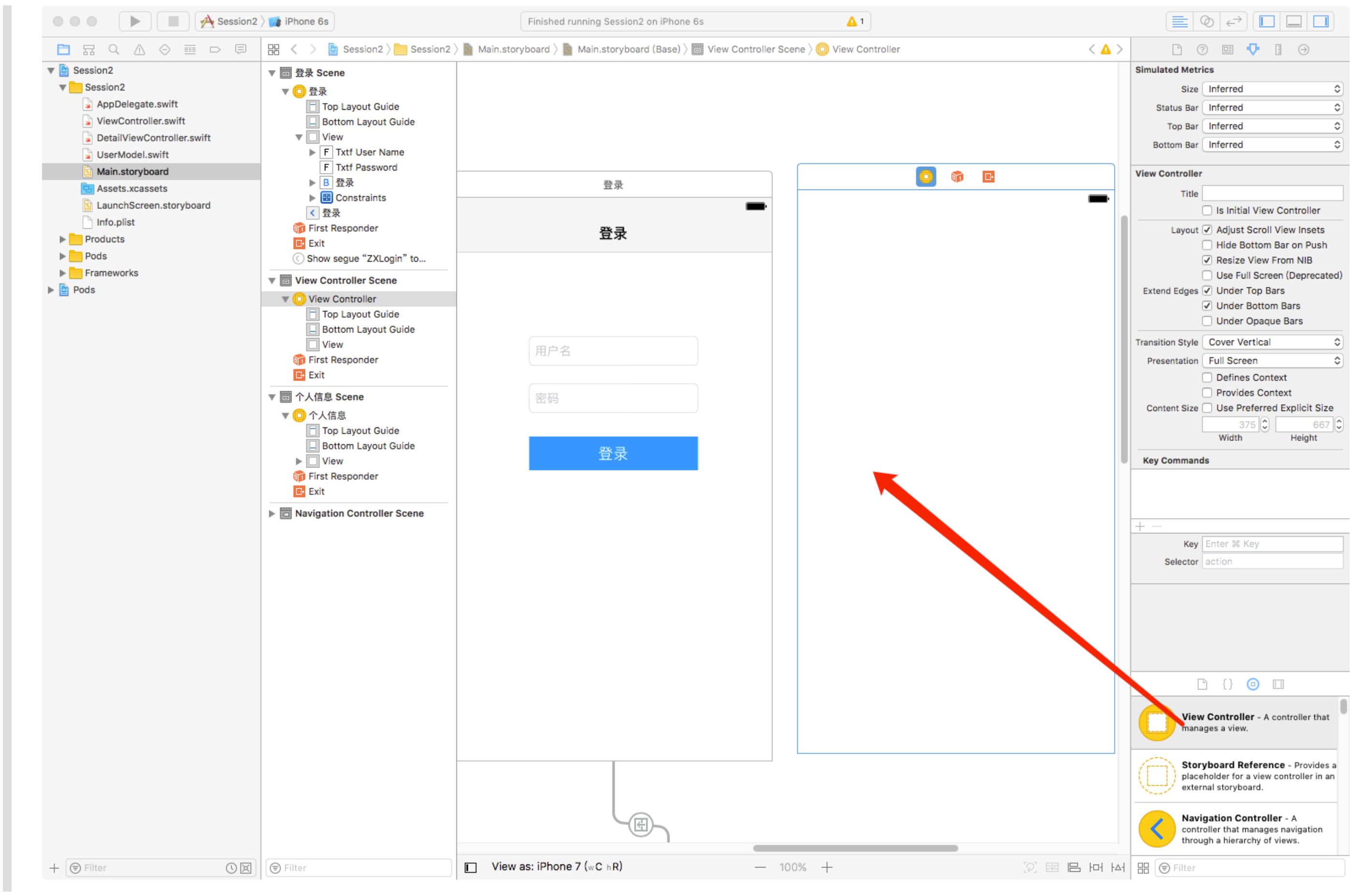
5.2完善longin 方法，给model赋值

```
func login(with userName:String,password:String) {
    xxx
    xxx
    if let data = data {
        do {
        xxx
        xxx
            if let obj = jsonObj as? Dictionary <String,Any> {
                if let code = obj["status"] as? String,Int(code) == 0 {//
                    // 插入在这里
                        let model = UserModel()
                        model.setValuesForKeys(obj["data"] as! Dictionary<String,A
ny>)
                        self.userModel = model
                    }
                    xxx
                    xxx
```

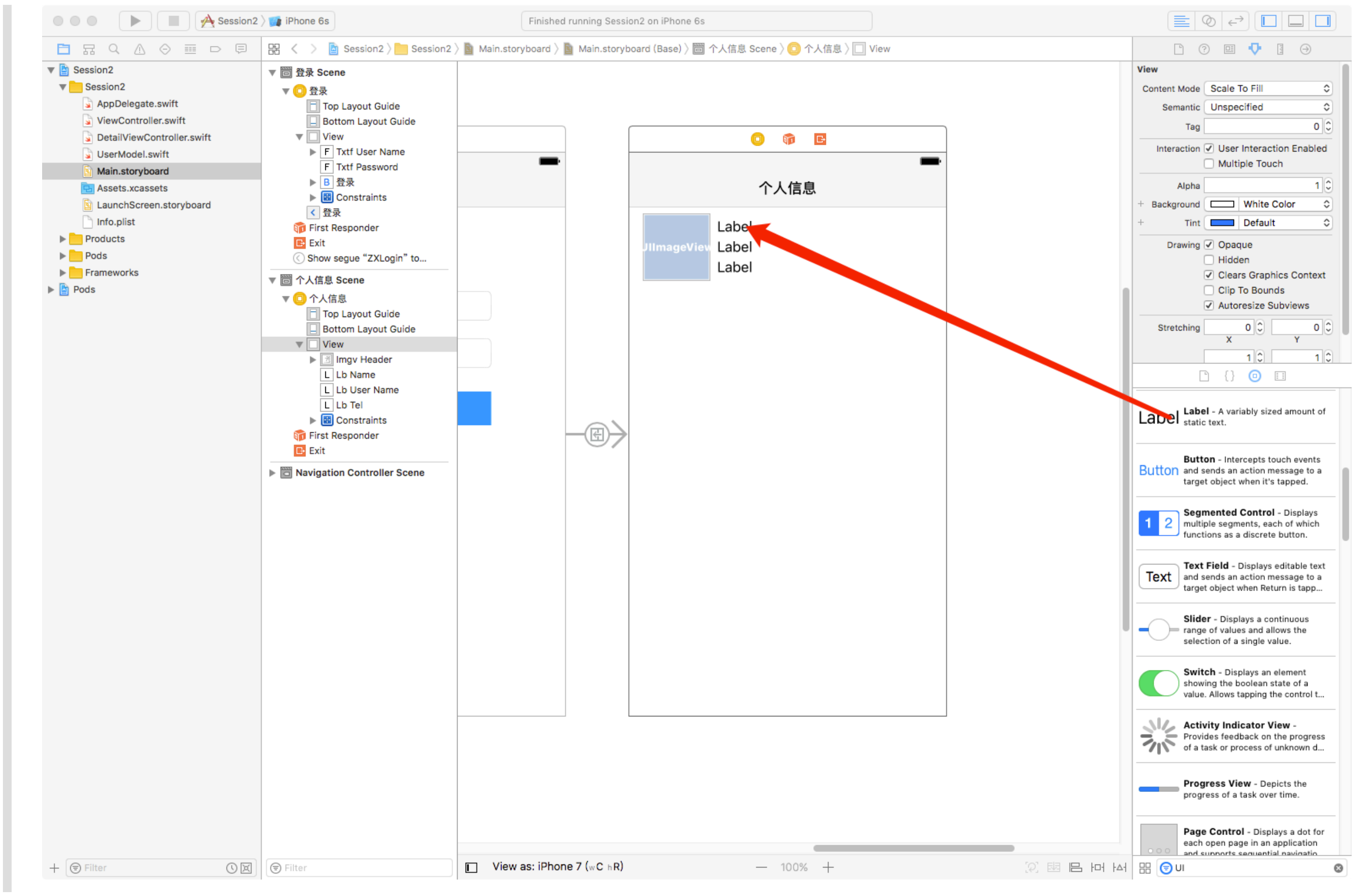
UI界面更新及跳转

6.添加用户详情界面

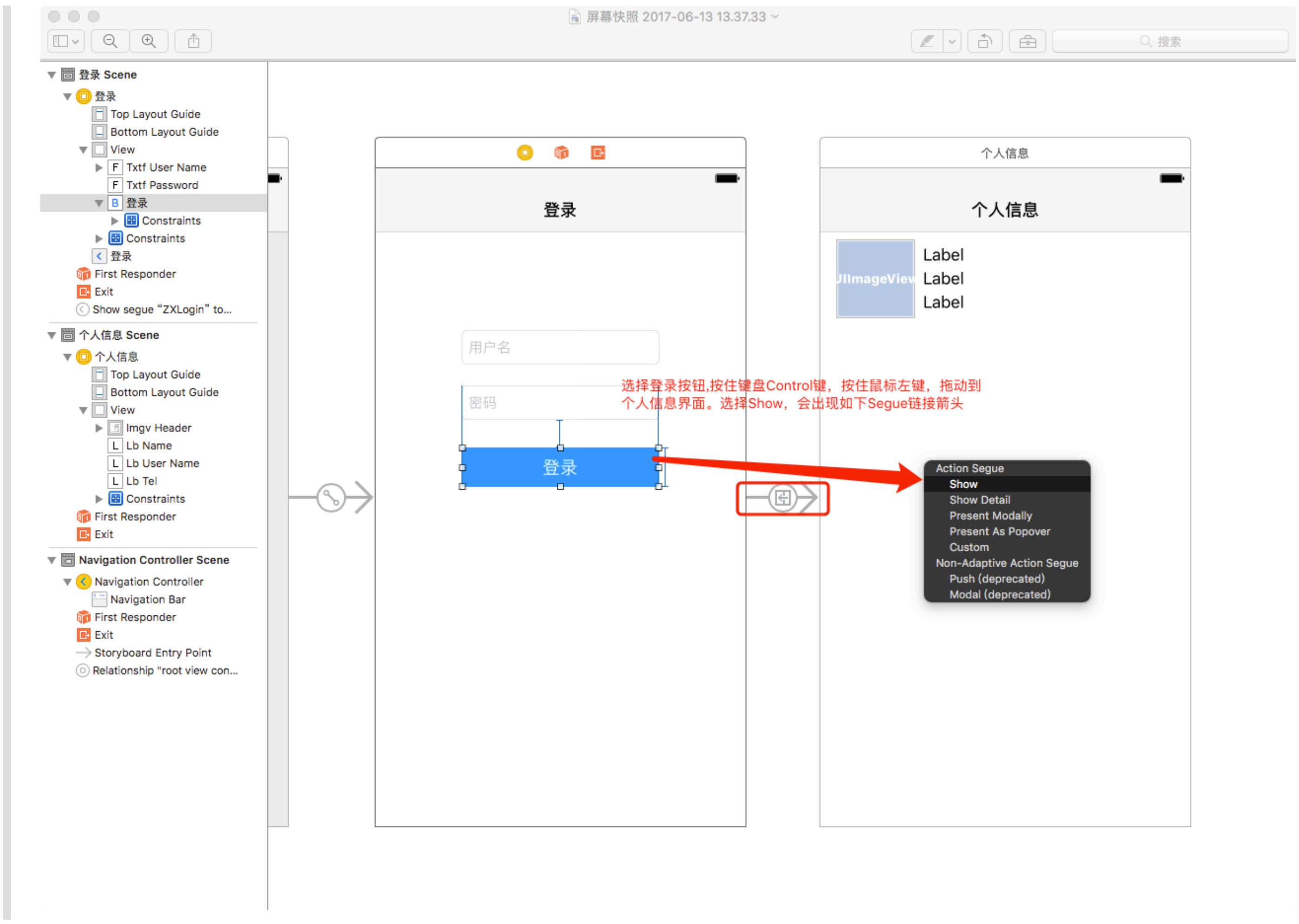
6.1打开Main.storyboard 拖一个ViewController



6.2给新的ViewController 添加1个图片控件 3个Label控件(参考上一节)

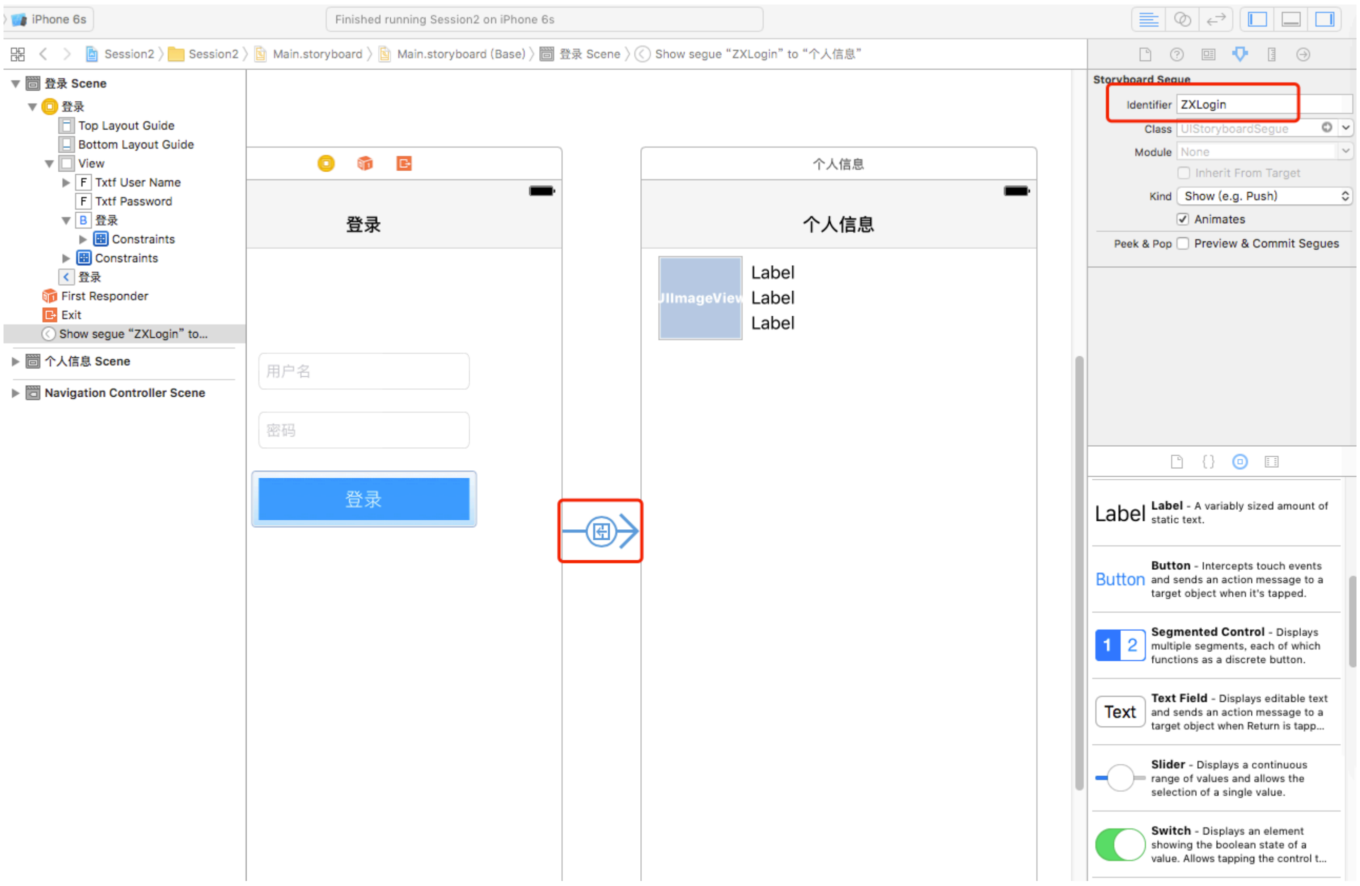


6.3连接界面,用户点击登录案例跳转到[个人信息界面]



选择登录按钮,按住键盘Control键，按住鼠标左键，拖动到个人信息界面。选择Show，会出现如下Segue链接箭头

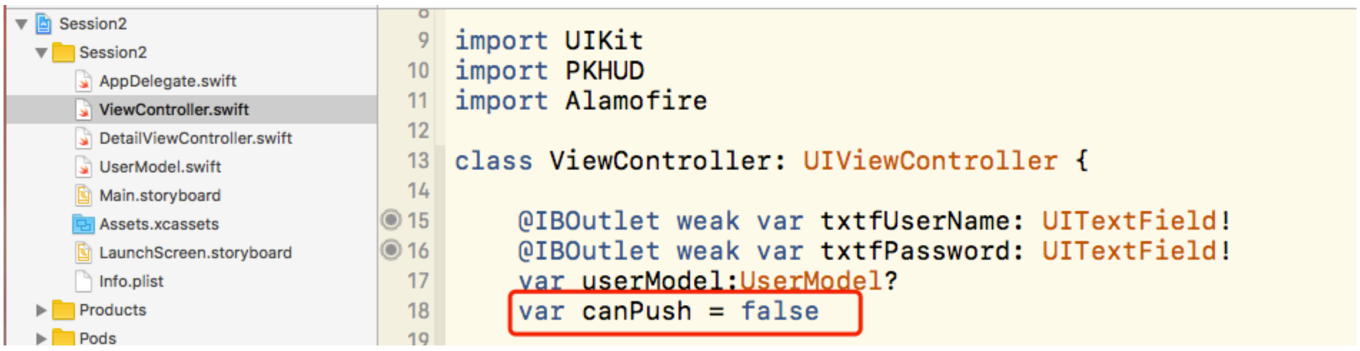
6.4修改segue id (名称自行定义)后面会用到



此时,运行程序.点击登录会跳转到个人信息界面。

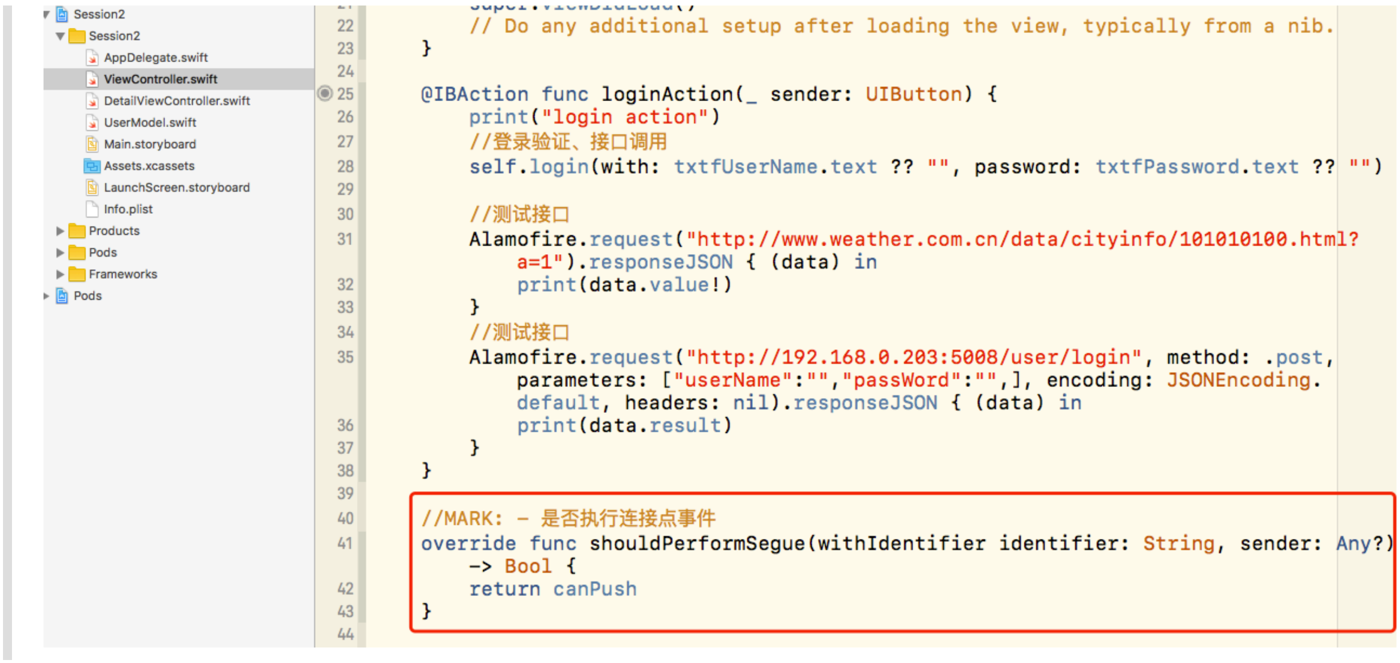
为了接口成功之后才跳转，我们在ViewController中添加如下代码

6.5在ViewController定义canPush变量,用于控制是否跳转到[个人信息界面]



```
import UIKit
import PKHUD
import Alamofire

class ViewController: UIViewController {

    @IBOutlet weak var txtfUserName: UITextField!
    @IBOutlet weak var txtfPassword: UITextField!
    var userModel:UserModel?
    var canPush = false
```

6.6在ViewController重新如下方法



```
        // Do any additional setup after loading the view, typically from a nib.
    }

    @IBAction func loginAction(_ sender: UIButton) {
        print("login action")
        //登录验证、接口调用
        self.login(with: txtfUserName.text ?? "", password: txtfPassword.text ?? "")

        //测试接口
        Alamofire.request("http://www.weather.com.cn/data/cityinfo/101010100.html?
            a=1").responseJSON { (data) in
            print(data.value!)
        }
        //测试接口
        Alamofire.request("http://192.168.0.203:5008/user/login", method: .post,
            parameters: ["userName":"","passWord":"",], encoding: JSONEncoding.
            default, headers: nil).responseJSON { (data) in
            print(data.result)
        }
    }

    //MARK: - 是否执行连接点事件
    override func shouldPerformSegue(withIdentifier identifier: String, sender: Any?)
        -> Bool {
        return canPush
    }
```

```
override func shouldPerformSegue(withIdentifier identifier: String, sender: Any?)
-> Bool {
    return canPush
}
```

6.6登录成功将canpush赋值为true,并执行segue

```
func login(with userName:String,password:String) {
    xxx
    xxx
    if let data = data {
        do {
        xxx
        xxx
            if let obj = jsonObj as? Dictionary <String,Any> {
                if let code = obj["status"] as? String,Int(code) == 0 {//
                        let model = UserModel()
                        model.setValuesForKeys(obj["data"] as! Dictionary<String,A
ny>)
                        self.userModel = model
                        // 插入在这里
                        self.canPush = true
                        //执行Segue
                        self.performSegue(withIdentifier: "ZXLogin", sender: nil)
                    }
                    xxx
                    xxx
```

至此,login func 代码如下

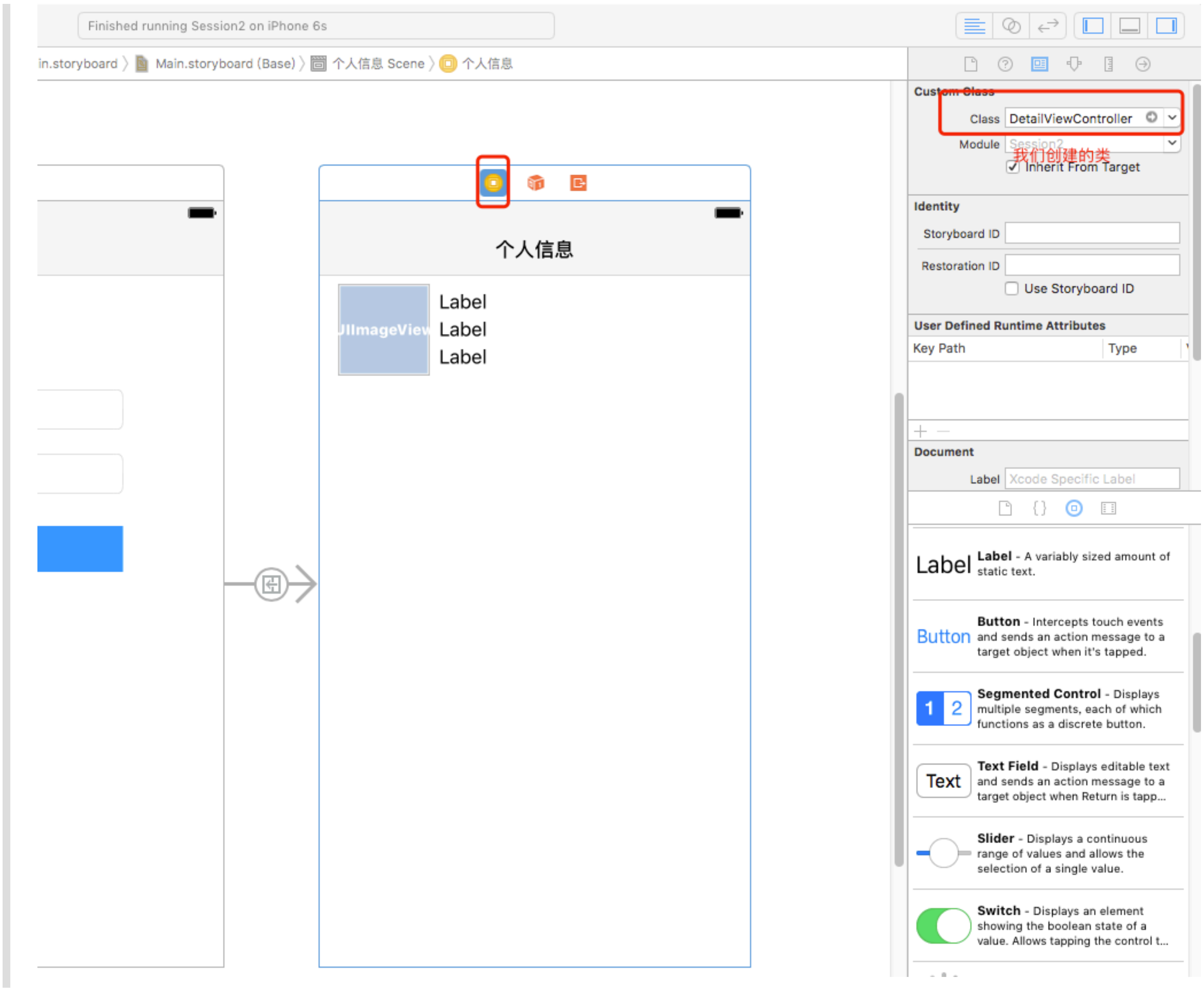
```
func login(with userName:String,password:String) {
    if userName.isEmpty {
        showAlert("用户名不能为空")
        return
    }
    if password.isEmpty {
        showAlert("密码不能为空")
        return
    }
    self.view.endEditing(true)

    PKHUD.sharedHUD.contentView = PKHUDProgressView()
    PKHUD.sharedHUD.show()

    let url = "http://115.182.15.118:5008/user/login"
    var request = URLRequest(url: URL(string: url)!)
    request.httpMethod = "POST"
    let params = "userName=\(userName)&passWord=\(password)"
    request.httpBody = params.data(using: .utf8)
    request.timeoutInterval = 5

    let session = URLSession.shared
    let task = session.dataTask(with: request) { (data, response, error) in
        DispatchQueue.main.async {
            PKHUD.sharedHUD.hide()
            if error == nil {
                if let response = response as? HTTPURLResponse,response.statusCode
 == 200 {
                    if let data = data {
                        do {
                            let jsonObj = try JSONSerialization.jsonObject(with: d
ata, options: .mutableContainers)
                            print(String.init(data: data, encoding: .utf8) ?? "")
                            if let obj = jsonObj as? Dictionary <String,Any> {
                                if let code = obj["status"] as? String,Int(code) =
= 0 {
                                    let model = UserModel()
                                    model.setValuesForKeys(obj["data"] as! Diction
ary<String,Any>)
                                    self.userModel = model
                                    self.canPush = true
                                    //执行Segue
                                    self.performSegue(withIdentifier: "ZXLogin", s
ender: nil)
                                } else {
                                    self.showAlert(obj["msg"] as? String ?? "未知错
误")
                                }
                            } else {
                                self.showAlert("数据格式错误")
                            }
                        } catch {
                            self.showAlert("数据格式错误")
                        }
                    } else {
                        self.showAlert("数据返回为空...")
                    }
                } else {
                    self.showAlert((response as! HTTPURLResponse).description)
                }
            } else {
                self.showAlert(error!.localizedDescription)
            }
        }
    }
    task.resume()
}

//MARK: - 警告框
func showAlert(_ msg:String) {
    let alert = UIAlertController(title: "提示", message: msg, preferredStyle: .ale
rt)
    alert.addAction(UIAlertAction(title: "确定", style: .default, handler: nil))
    self.present(alert, animated: true, completion: nil)
}
```

> 到这里,我们完成的接口调用、数据解析,
>
> 并且登录正确账户密码之后跳转到用户信息界面
>
> 接下来，需要通过userModel 给详情界面控件赋值

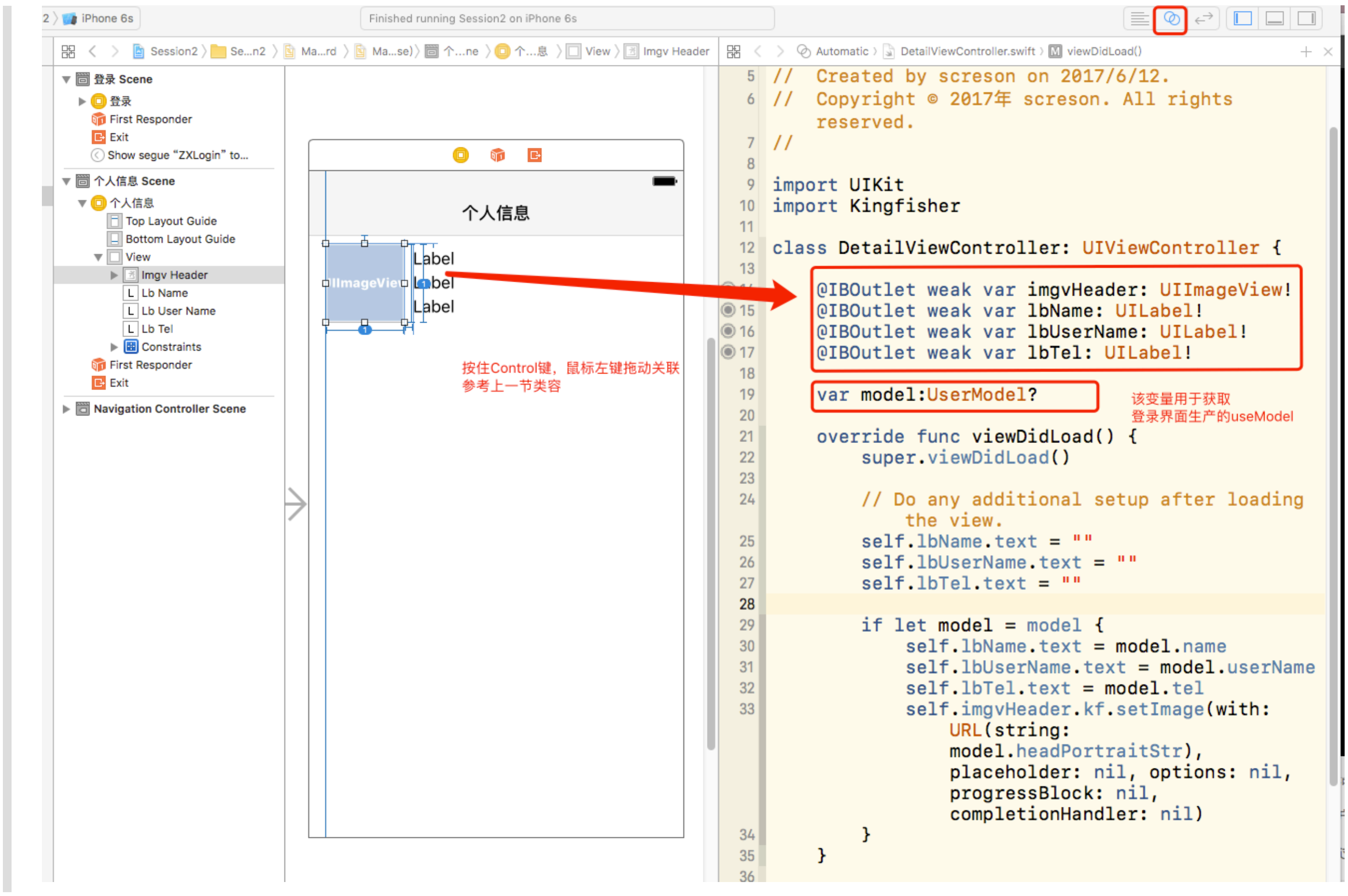
`7.将个人信息界面与代码关联`

`7.1 command+N , 新建DetailViewController.swift`

`7.2 将Storeboard 用户信息界面与DetailViewController类关联`


Finished running Session2 on iPhone 6s
in.storyboard 〉 Main.storyboard (Base) 〉 个人信息 Scene 〉 个人信息
个人信息
UIImageView
Label
Label
Label
Custom Class
Class DetailViewController
Module Session2
我们创建的类
Inherit From Target
Identity
Storyboard ID
Restoration ID
Use Storyboard ID
User Defined Runtime Attributes
Key Path
Type
Document
Label Xcode Specific Label
Label - A variably sized amount of static text.
Button - Intercepts touch events and sends an action message to a target object when it's tapped.
Segmented Control - Displays multiple segments, each of which functions as a discrete button.
Text Field - Displays editable text and sends an action message to a target object when Return is tapp...
Slider - Displays a continuous range of values and allows the selection of a single value.
Switch - Displays an element showing the boolean state of a value. Allows tapping the control t...

7.3 连接控件输出(参考上一节)


iPhone 6s
Finished running Session2 on iPhone 6s
Session2 〉 Se...n2 〉 Ma...rd 〉 Ma...se) 〉 个...ne 〉 个...息 〉 View 〉 Imgv Header
Automatic 〉 DetailViewController.swift 〉 viewDidLoad()
登录 Scene
登录
First Responder
Exit
Show segue "ZXLogin" to...
个人信息 Scene
个人信息
Top Layout Guide
Bottom Layout Guide
View
Imgv Header
Lb Name
Lb User Name
Lb Tel
Constraints
First Responder
Exit
Navigation Controller Scene
个人信息
Label
Label
Label

按住Control键，鼠标左键拖动关联
参考上一节类容

该变量用于获取
登录界面生产的useModel

```
//  Created by screson on 2017/6/12.
//  Copyright © 2017年 screson. All rights
    reserved.
//

import UIKit
import Kingfisher

class DetailViewController: UIViewController {

    @IBOutlet weak var imgvHeader: UIImageView!
    @IBOutlet weak var lbName: UILabel!
    @IBOutlet weak var lbUserName: UILabel!
    @IBOutlet weak var lbTel: UILabel!

    var model:UserModel?

    override func viewDidLoad() {
        super.viewDidLoad()

        // Do any additional setup after loading
            the view.
        self.lbName.text = ""
        self.lbUserName.text = ""
        self.lbTel.text = ""

        if let model = model {
            self.lbName.text = model.name
            self.lbUserName.text = model.userName
            self.lbTel.text = model.tel
            self.imgvHeader.kf.setImage(with:
                URL(string:
                model.headPortraitStr),
                placeholder: nil, options: nil,
                progressBlock: nil,
                completionHandler: nil)
        }
    }
```

7.3 DetailViewController 完成控件赋值

> 网络图片加载
>
> 使用cocoapods安装KingFisher(见上一节文档)

- KingFisher

```
let url = URL(string: "url_of_your_image")
imageView.kf.setImage(with: url)
```

```
override func viewDidLoad() {
    super.viewDidLoad()

    // Do any additional setup after loading the view.
    self.lbName.text = ""
    self.lbUserName.text = ""
    self.lbTel.text = ""

    if let model = model {
        self.lbName.text = model.name
        self.lbUserName.text = model.userName
        self.lbTel.text = model.tel
        self.imgvHeader.kf.setImage(with: URL(string: model.headPortraitStr), plac
eholder: nil, options: nil, progressBlock: nil, completionHandler: nil)
    }
}
```

`CreateBy:JanFelix@screson 2017/06/14`