

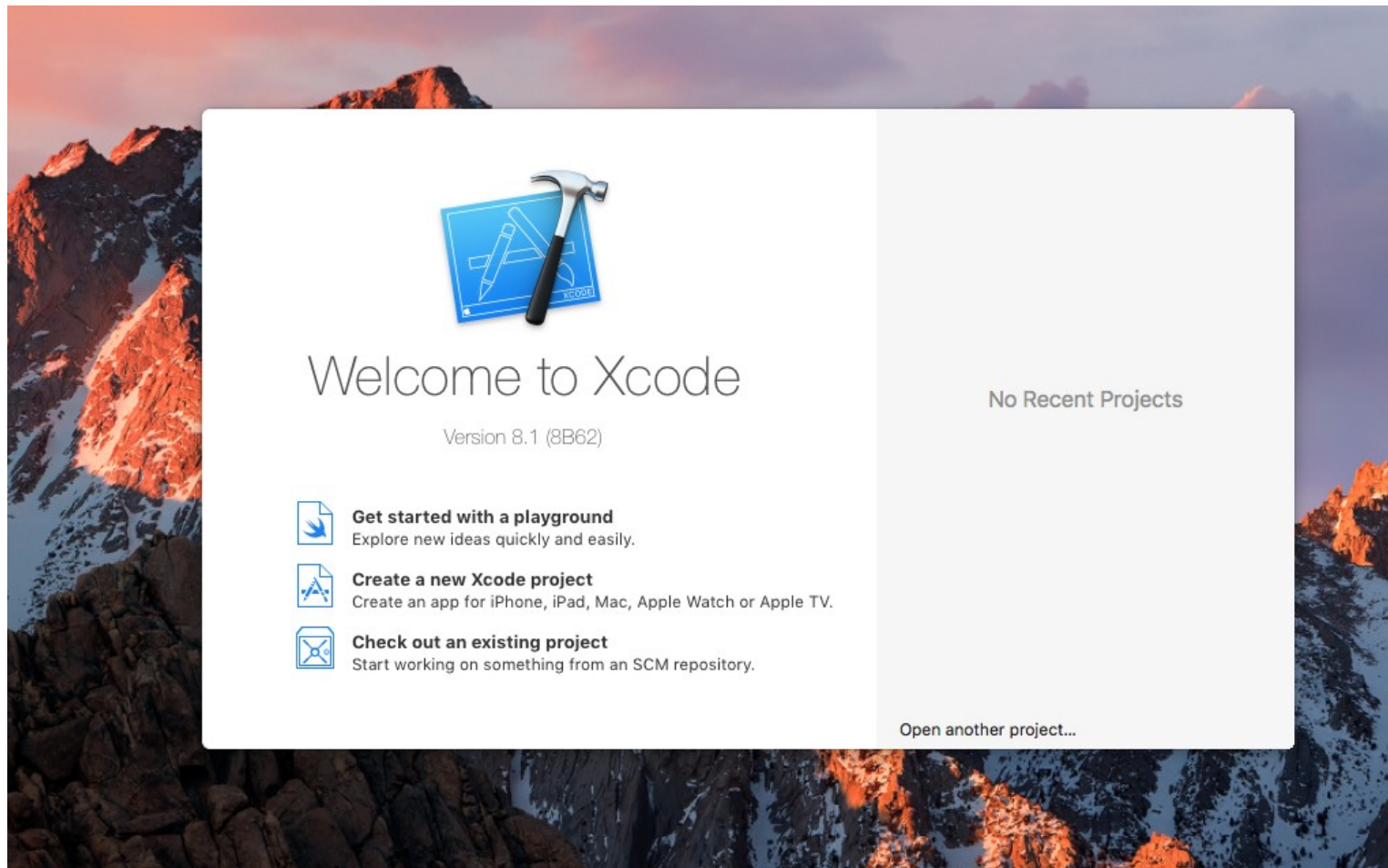
Aufgabe 4: (H) Verwendung von Xib-Dateien in Objective C

Bei der Entwicklung einer Benutzeroberfläche im Team bietet es sich an, die einzelnen Views einer iOS-Anwendung in jeweils einer eigenen Xib-Datei zu implementieren.

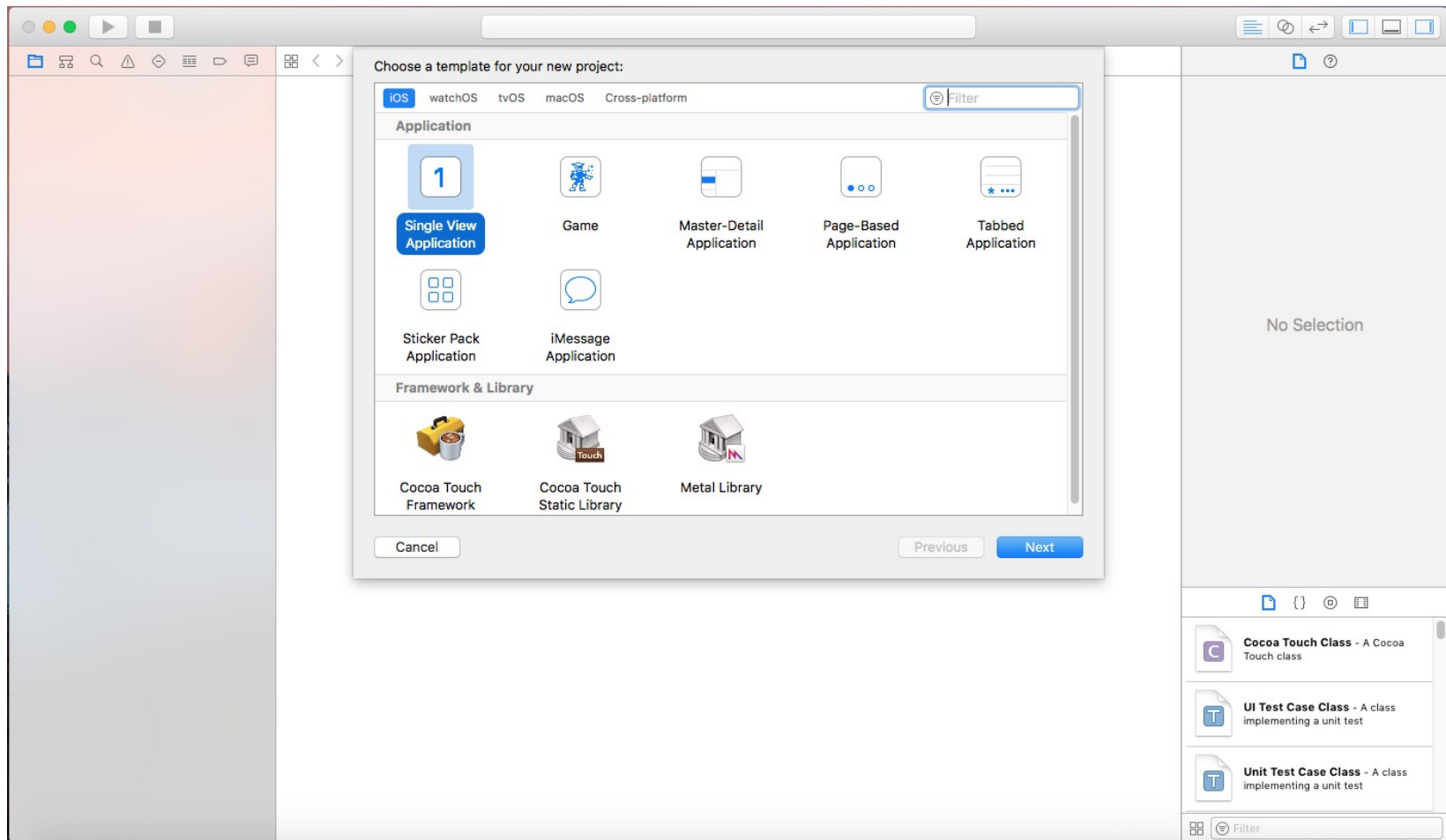
In dieser Aufgabe sollen sie die Benutzeroberfläche der in der Vorlesung vorgestellten App **MyQuiz** mit Hilfe einer Xib-Datei in Objective-C implementieren.

Hinweis: Die dazu notwendigen Schritte für Objective C entsprechen semantisch denjenigen, die in der Vorlesung anhand des Programmierbeispiels für Swift erklärt wurden.

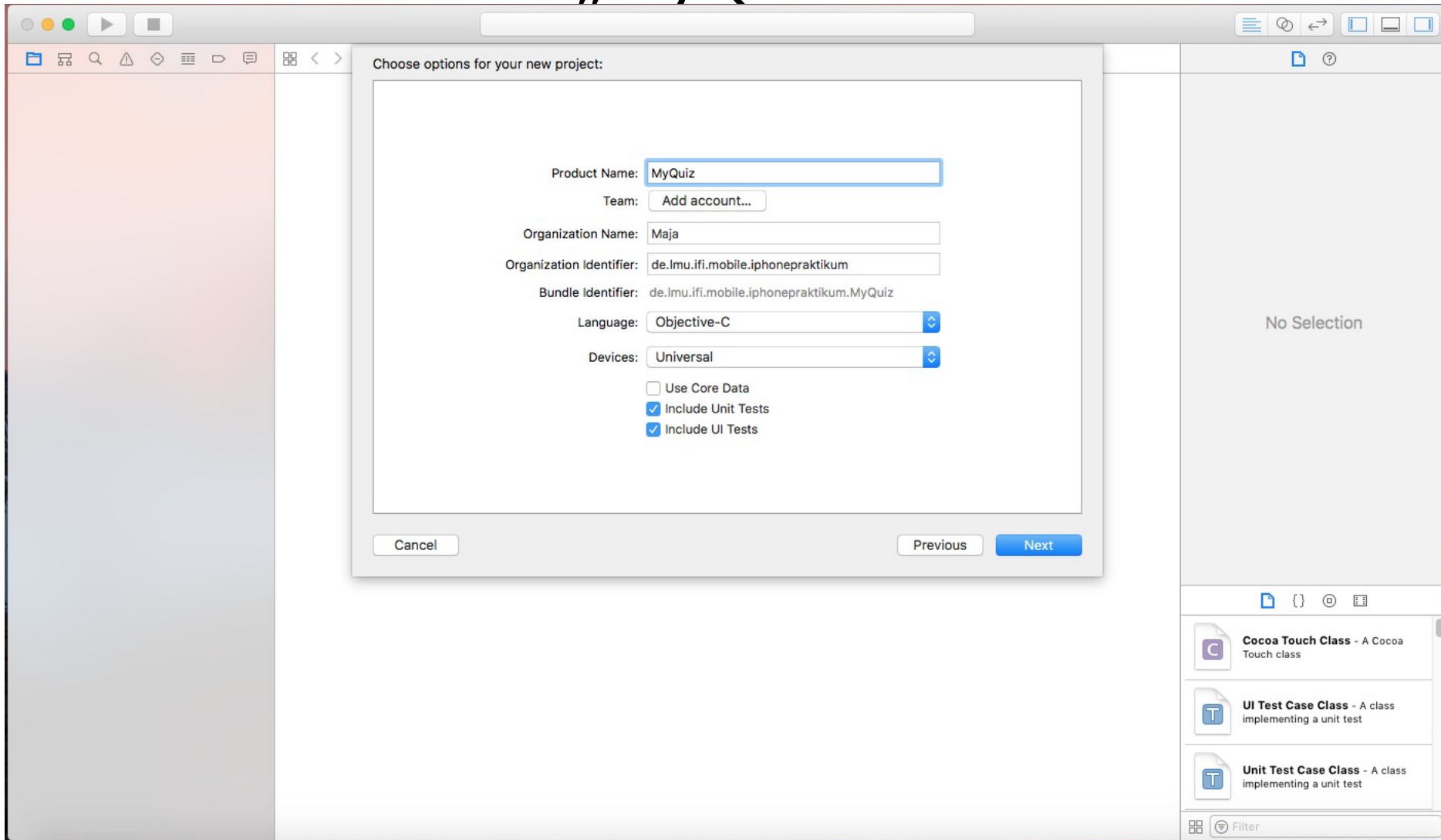
Erstellen eines neuen Projekts



Erstellen eines neuen Projekts



Erstellen eines neuen Projekts „MyQuiz“



Neues Projekt wurde erstellt

Neues Projekt wurde erstellt

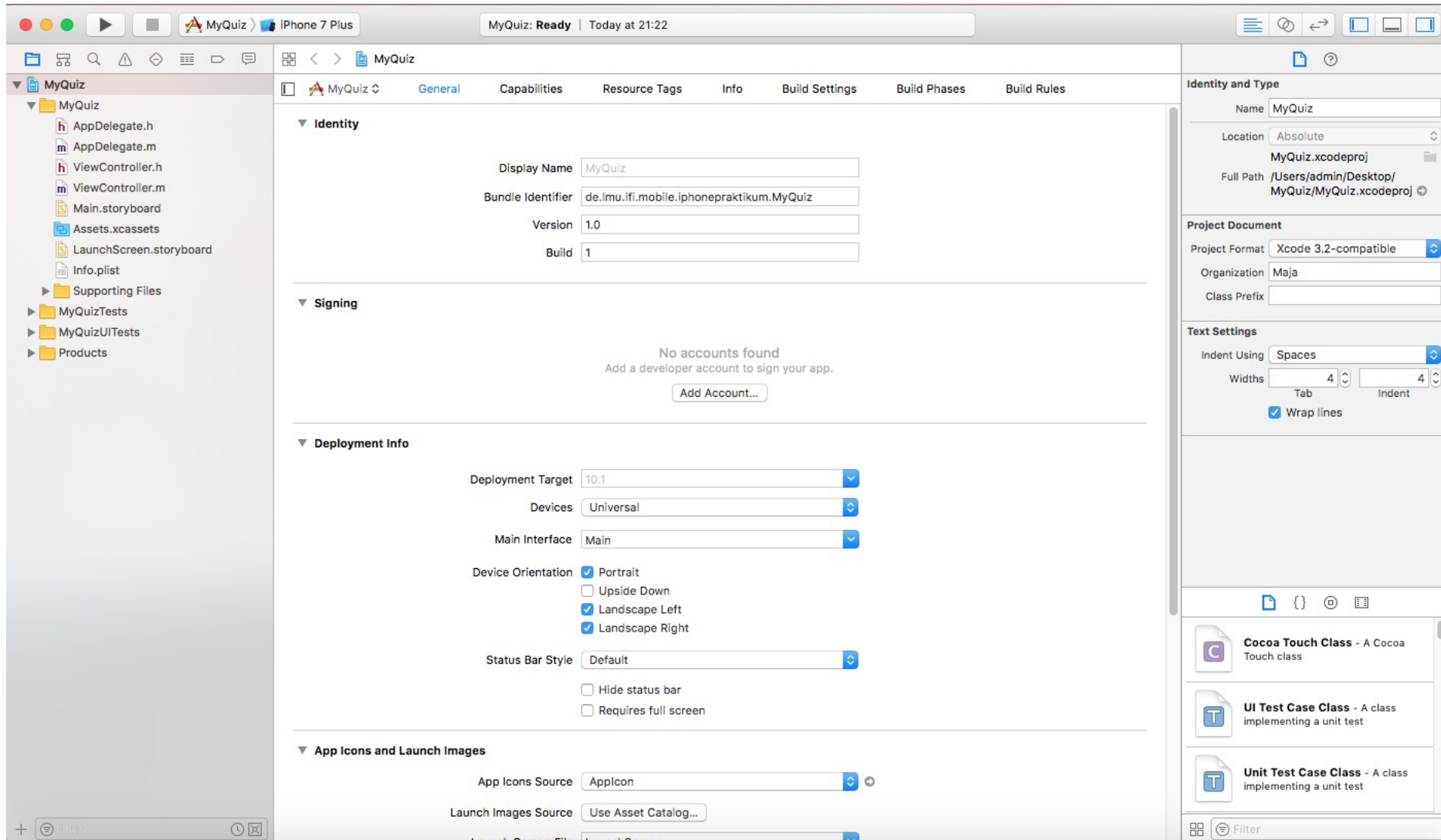
Herauslöschten der Dateien die überflüssig sind

→ Herauslöschten der Dateien die überflüssig sind

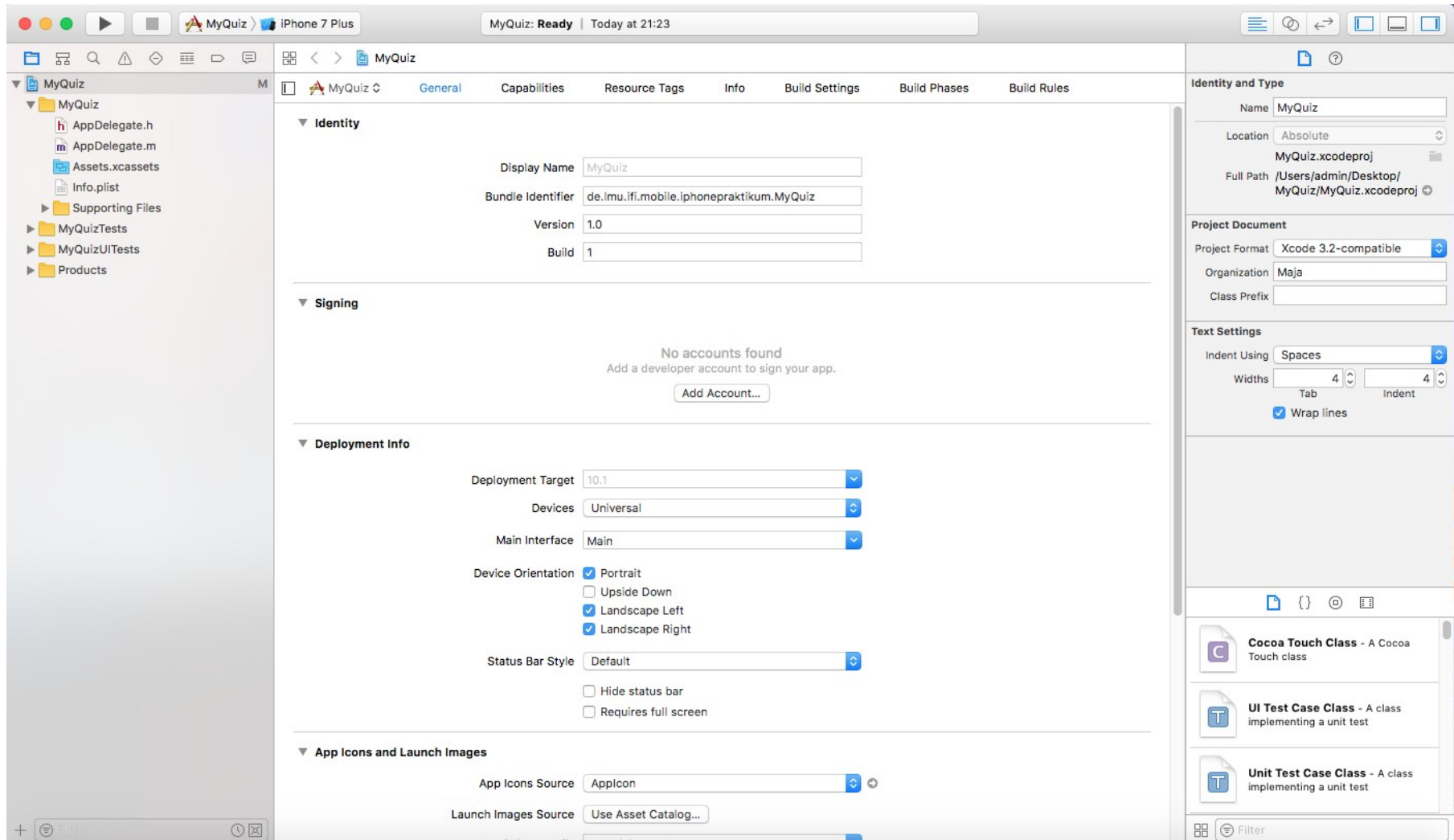
(ViewController.h/ m, main.storyboard

(ViewController.h/ m, main.storyboard, LaunchScreen.storyboard)

LaunchScreen.storyboard)



Neues Projekt mit herausgelöschten Dateien



→ Herauslöschender Referenzen überflüssig sind

The screenshot shows the Xcode IDE with the 'MyQuiz' project selected. The central pane displays the 'Info.plist' file, which is an 'Information Property List' (Dictionary) containing 14 items. The right-hand pane shows the 'Identity and Type' section, 'On Demand Resource Tags', 'Localization', and 'Target Membership'.

Key	Type	Value
Information Property List (Dictionary) (14 items)		
Localization native development re...	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 enviro...	Boolean	YES
Launch screen interface file base...	String	LaunchScreen
Main storyboard file base name	String	Main
Required device capabilities	Array	(1 item)
Supported interface orientations	Array	(3 items)
Supported interface orientations (i...	Array	(4 items)

Identity and Type

- Name: Info.plist
- Type: Default - Property List XML
- Location: Relative to Group
- Info.plist
- Full Path: /Users/admin/Desktop/MyQuiz/MyQuiz/Info.plist

On Demand Resource Tags

Add to a target to enable tagging

Localization

Localize...

Target Membership

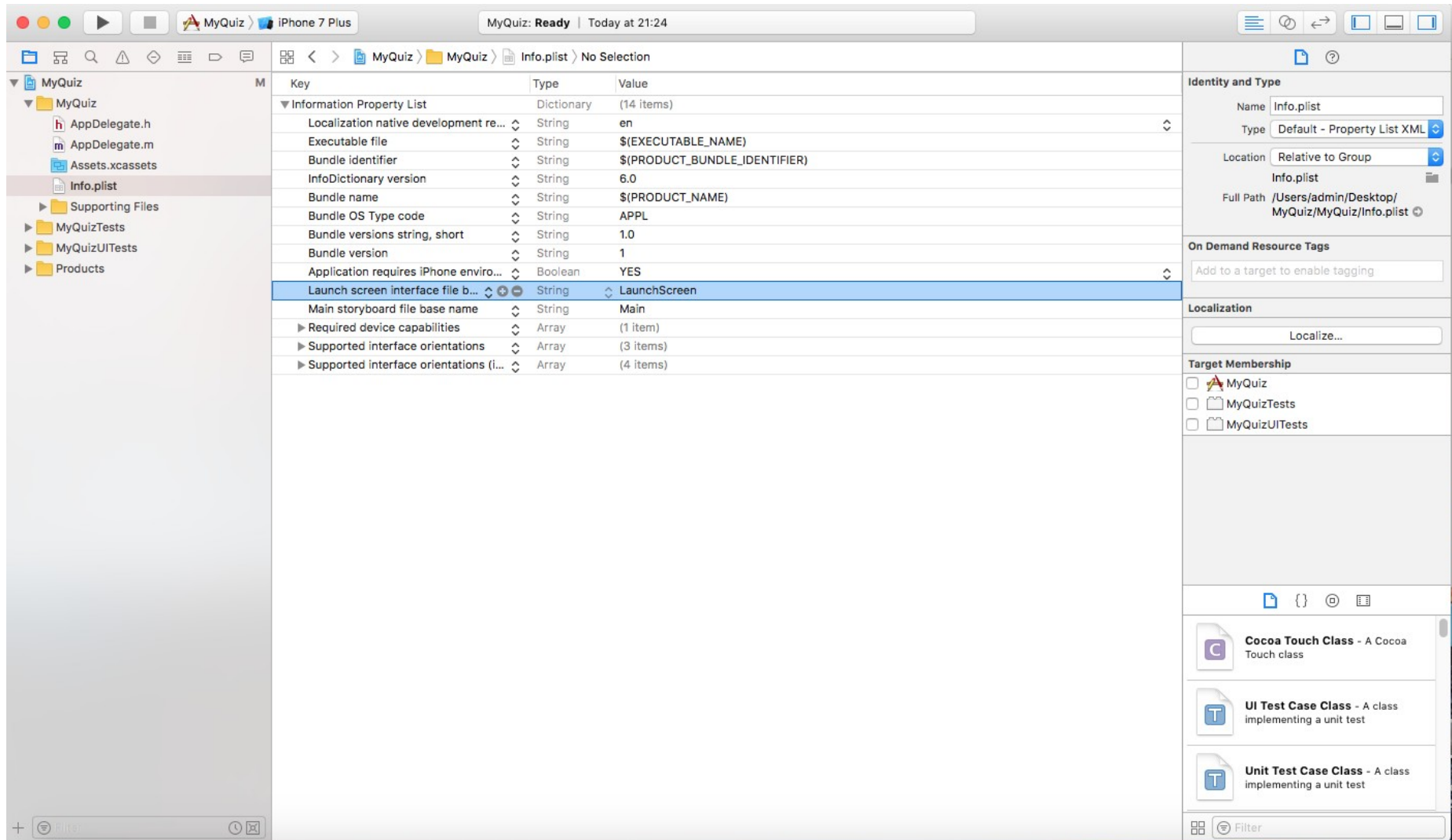
- ☐ MyQuiz
- ☐ MyQuizTests
- ☐ MyQuizUITests

Cocoa Touch Class - A Cocoa Touch class

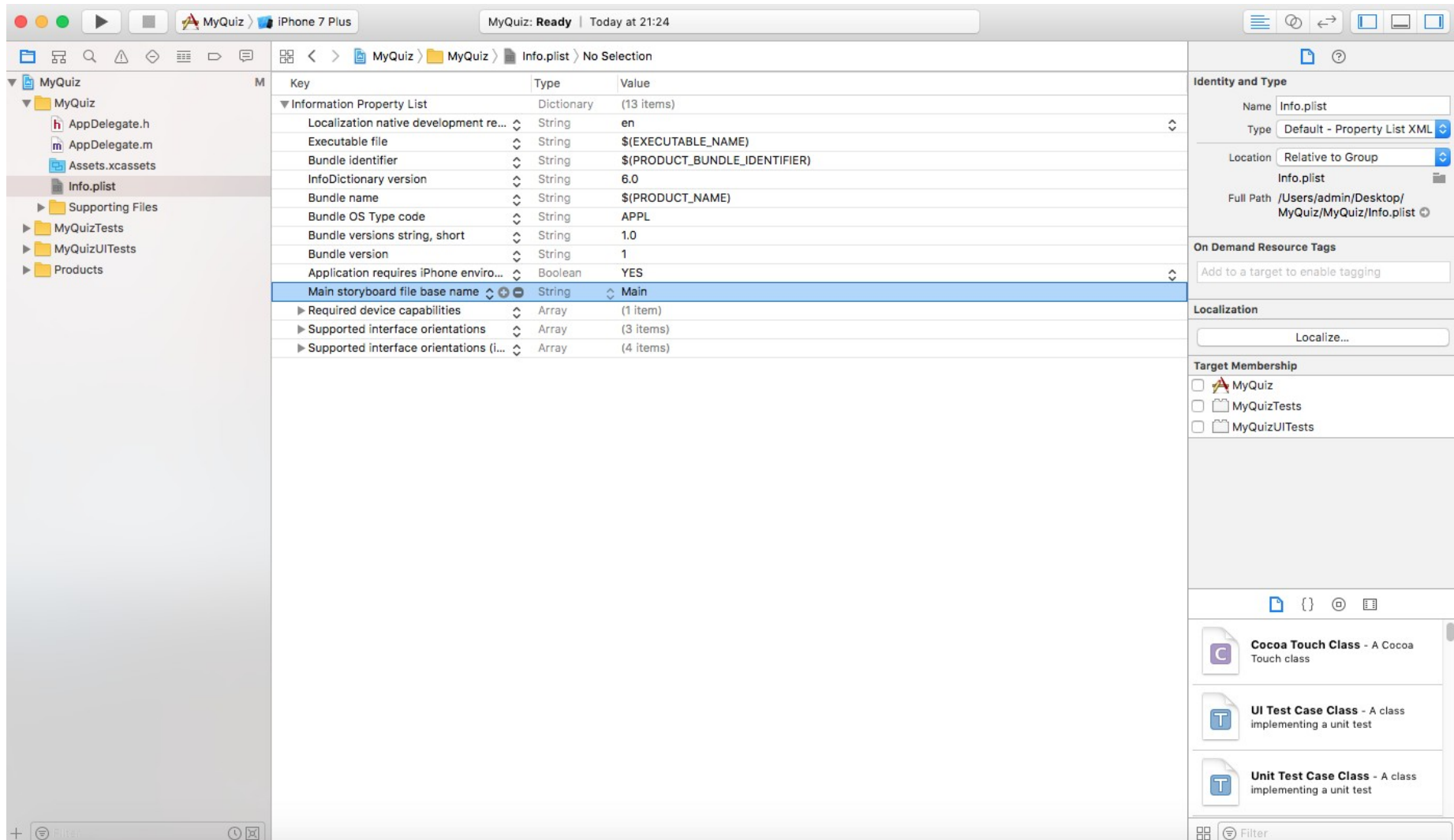
UI Test Case Class - A class implementing a unit test

Unit Test Case Class - A class implementing a unit test

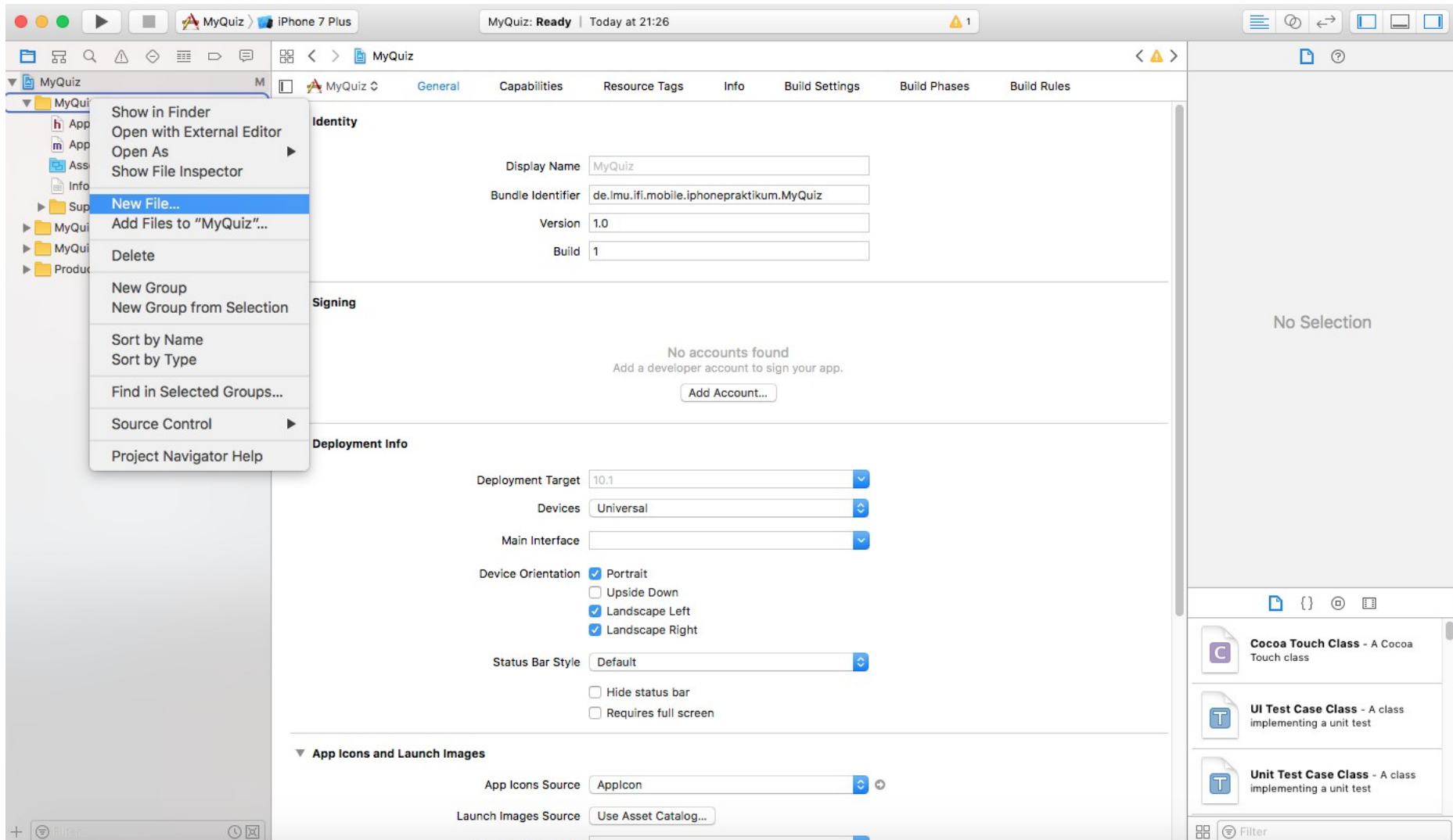
→ Herauslöschend der Referenz überflüssig sind
(Launch screen interface file b...)



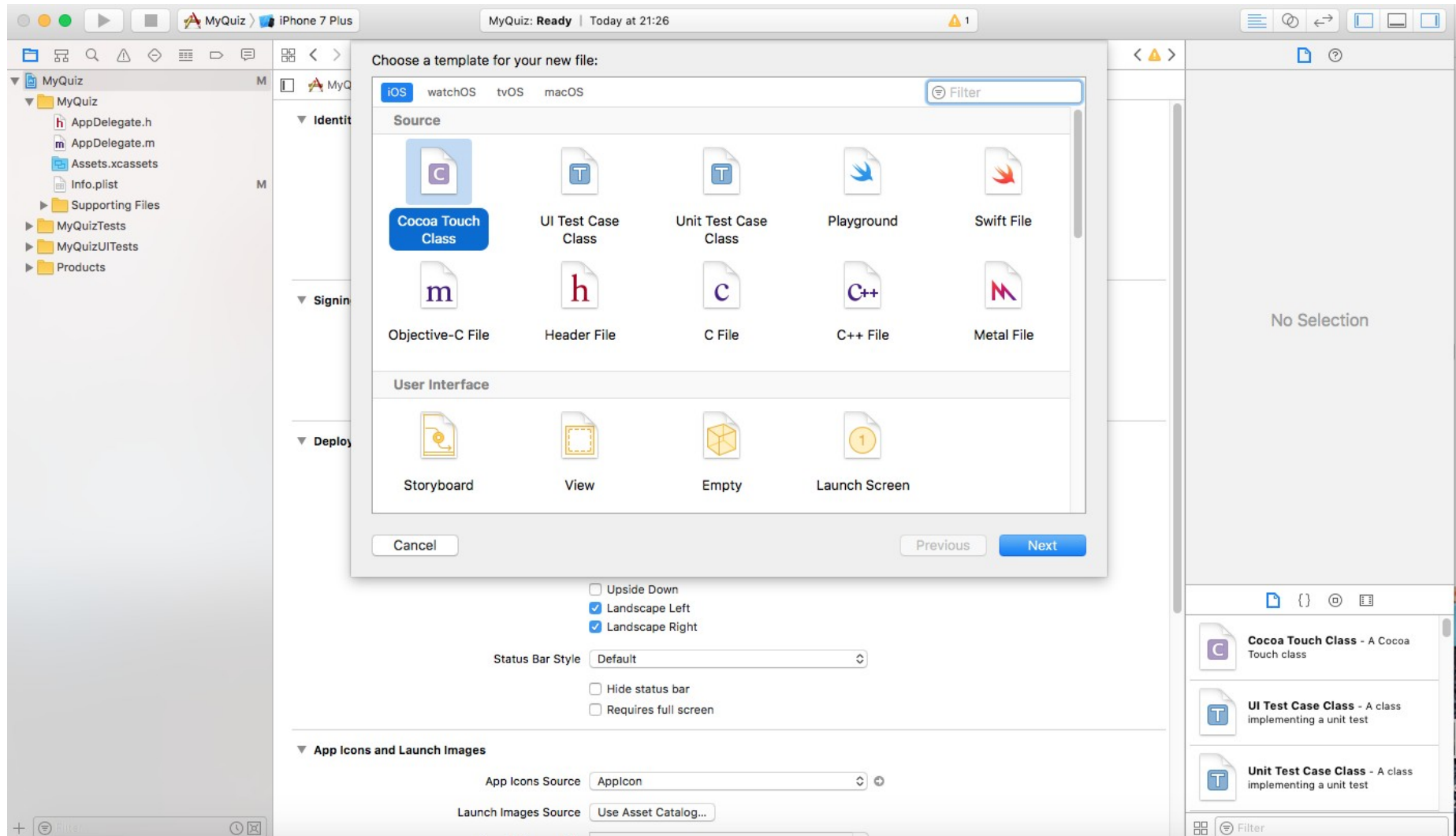
→ Herauslöschender Referenzen überflüssig sind
(Main storyboard file base name)



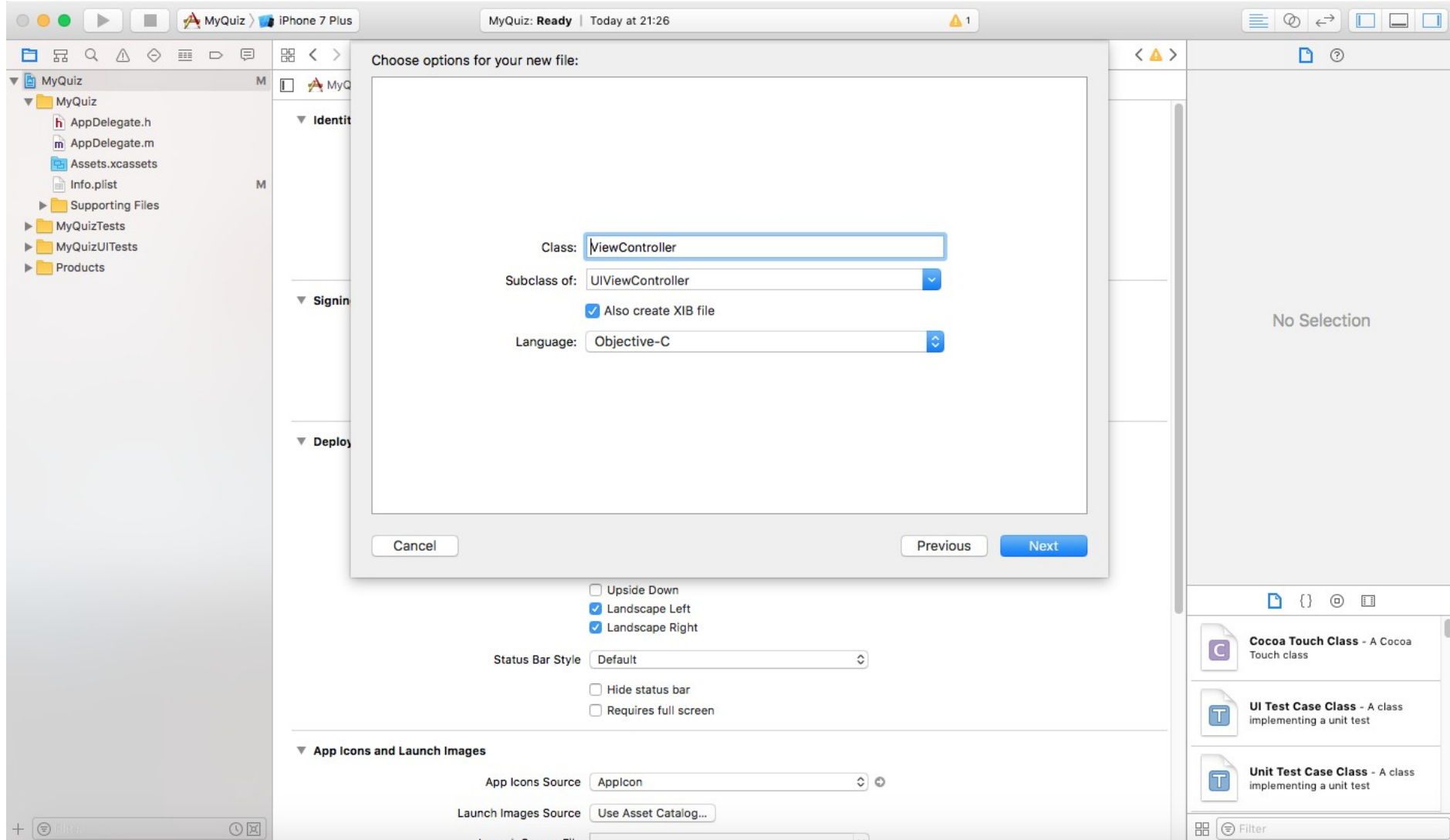
Erzeugen einer neuen View



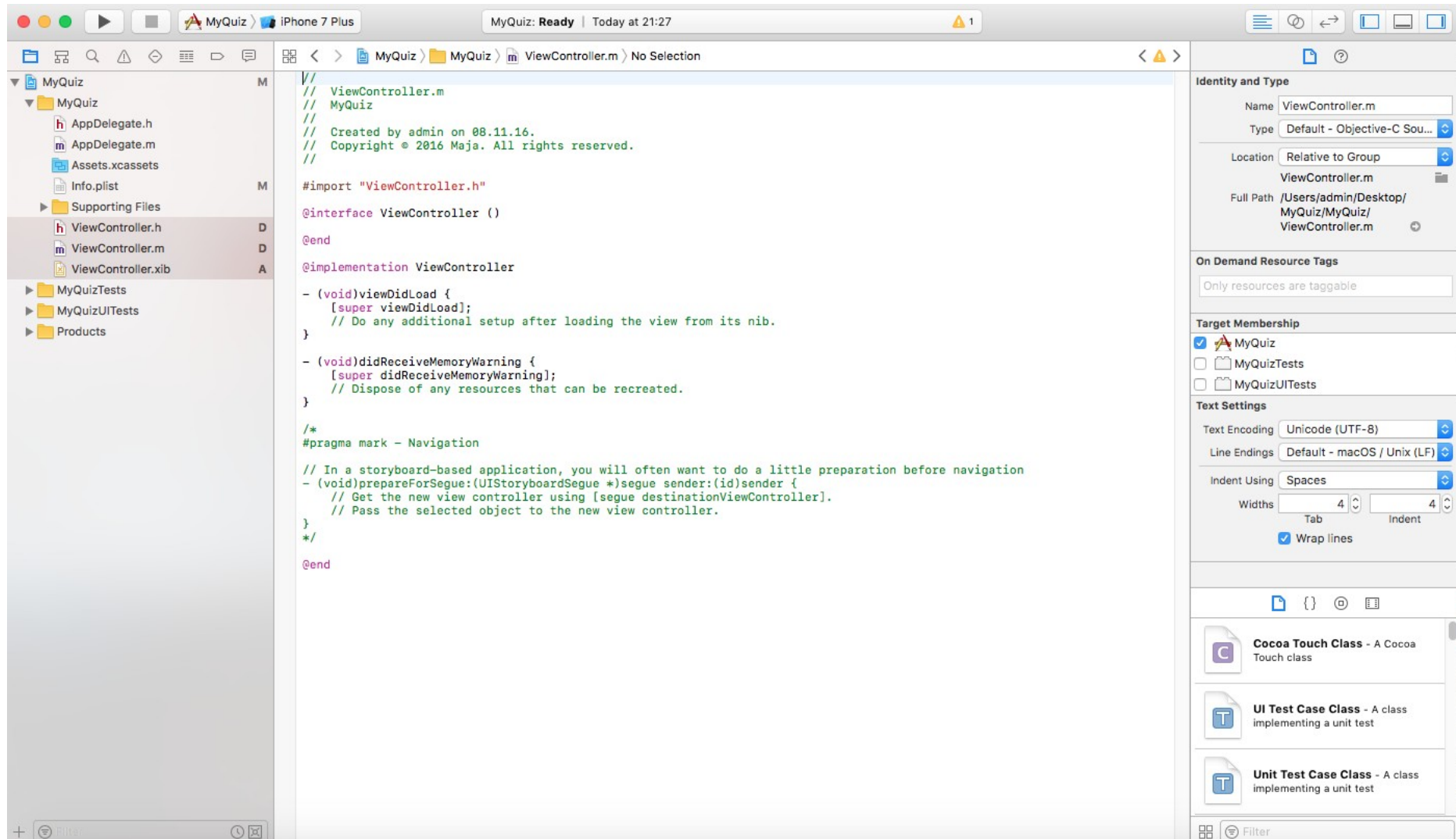
Erzeugen einer neuen View



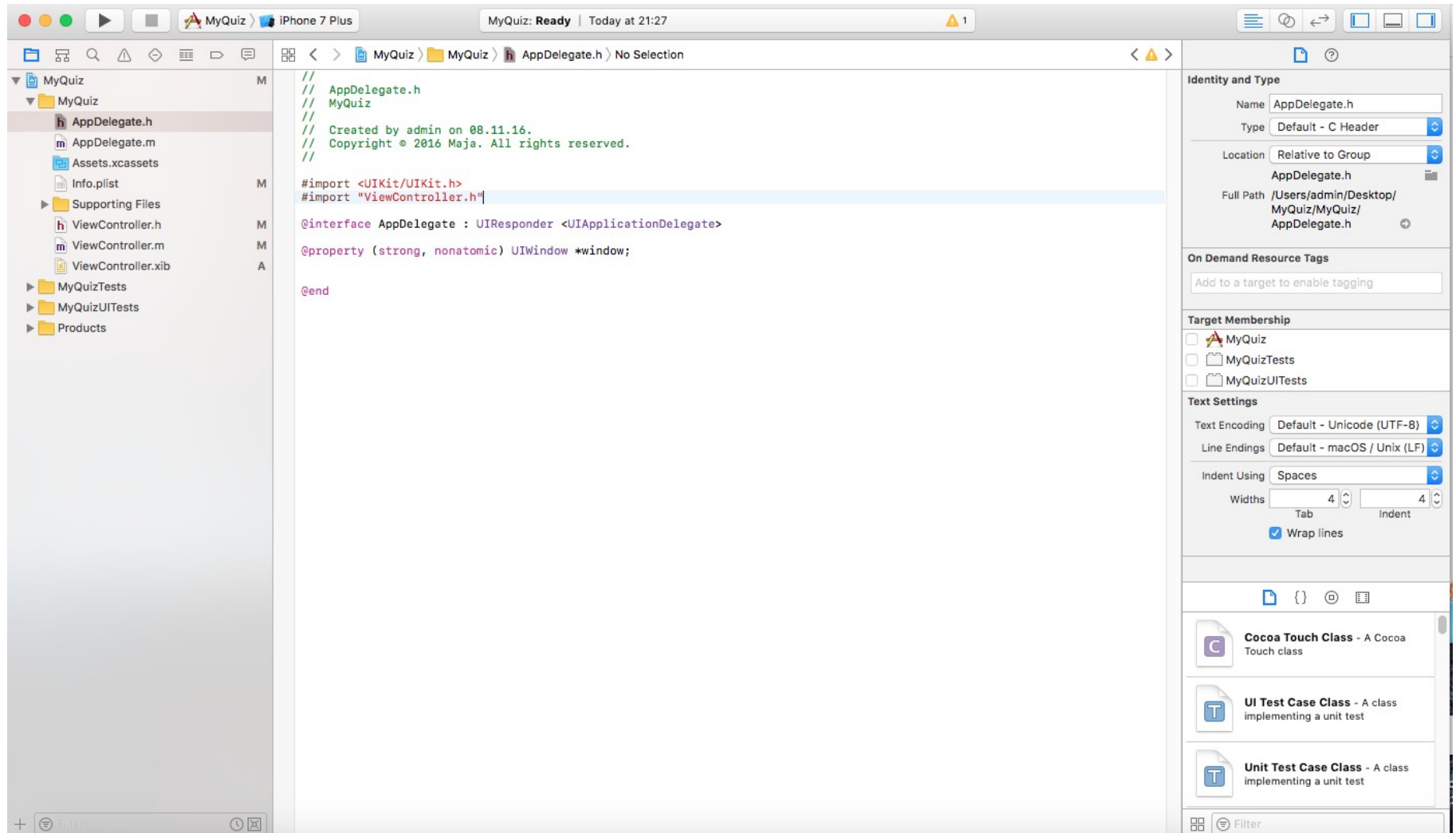
Erzeugen eines neuen Viewcontrollers



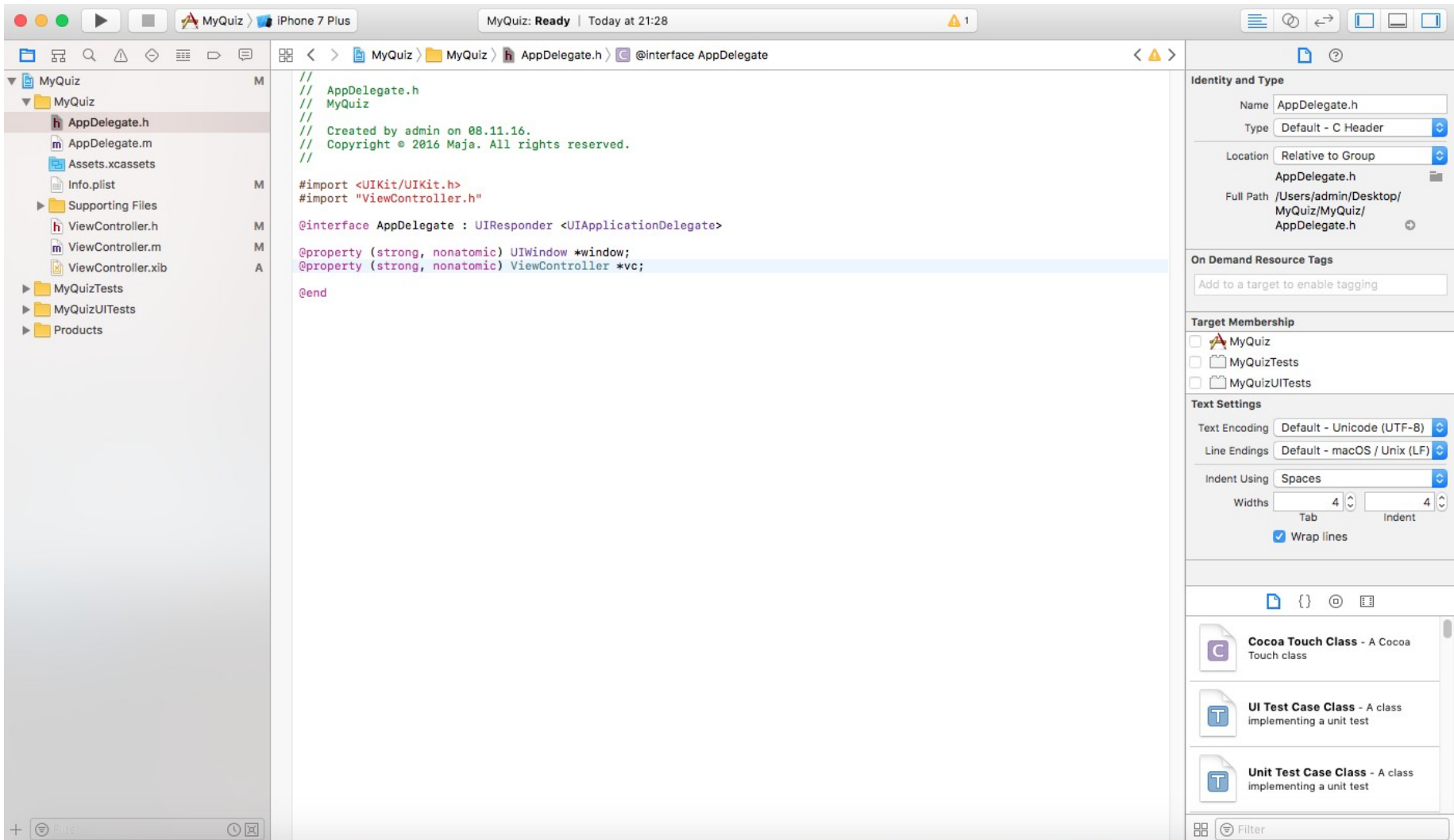
Neuer Viewcontroller wurde erstellt (ViewController.h/.m/.xib-Dateien)



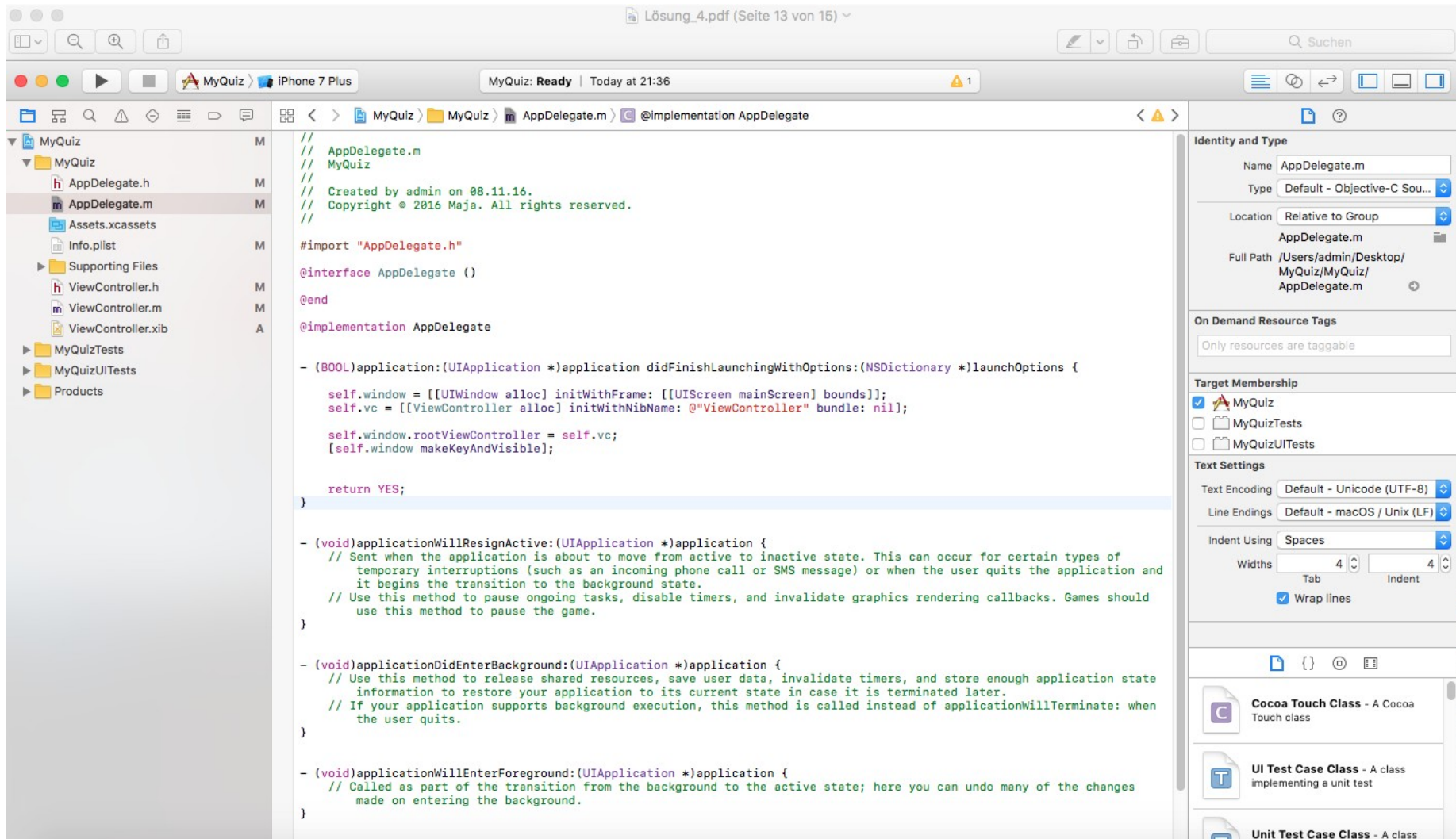
Manuelle Anpassung der AppDelegate.h-Datei



Manuelle Anpassung der AppDelegate.h-Datei



Manuelle Anpassung der AppDelegate.m-Datei



The screenshot displays the Xcode IDE with a project named "MyQuiz" open. The main editor shows the `AppDelegate.m` file, which implements the `AppDelegate` class. The code includes comments about its creation and copyright, followed by the implementation of several `UIApplicationDelegate` methods.

```
// AppDelegate.m
// MyQuiz
// Created by admin on 08.11.16.
// Copyright © 2016 Maja. All rights reserved.

#import "AppDelegate.h"

@interface AppDelegate ()

@end

@implementation AppDelegate

- (BOOL)application:(UIApplication *)application didFinishLaunchingWithOptions:(NSDictionary *)launchOptions {
    self.window = [[UIWindow alloc] initWithFrame:[UIScreen mainScreen] bounds];
    self.vc = [[ViewController alloc] initWithNibName:@"ViewController" bundle:nil];

    self.window.rootViewController = self.vc;
    [self.window makeKeyAndVisible];

    return YES;
}

- (void)applicationWillResignActive:(UIApplication *)application {
    // Sent when the application is about to move from active to inactive state. This can occur for certain types of
    // temporary interruptions (such as an incoming phone call or SMS message) or when the user quits the application and
    // it begins the transition to the background state.
    // Use this method to pause ongoing tasks, disable timers, and invalidate graphics rendering callbacks. Games should
    // use this method to pause the game.
}

- (void)applicationDidEnterBackground:(UIApplication *)application {
    // Use this method to release shared resources, save user data, invalidate timers, and store enough application state
    // information to restore your application to its current state in case it is terminated later.
    // If your application supports background execution, this method is called instead of applicationWillTerminate: when
    // the user quits.
}

- (void)applicationWillEnterForeground:(UIApplication *)application {
    // Called as part of the transition from the background to the active state; here you can undo many of the changes
    // made on entering the background.
}
```

The right sidebar shows the "Identity and Type" panel for the selected file, `AppDelegate.m`. It displays the following information:

- Name:** AppDelegate.m
- Type:** Default - Objective-C Source File
- Location:** Relative to Group
- Full Path:** /Users/admin/Desktop/MyQuiz/MyQuiz/AppDelegate.m

Below the Identity and Type panel, the "On Demand Resource Tags" section indicates that only resources are taggable. The "Target Membership" section shows that the file is a member of the "MyQuiz" target. The "Text Settings" section shows the following configuration:

- Text Encoding:** Default - Unicode (UTF-8)
- Line Endings:** Default - macOS / Unix (LF)
- Indent Using:** Spaces
- Widths:** 4 (Tab), 4 (Indent)
- Wrap lines:** Checked

At the bottom of the sidebar, there are links to other classes in the project:

- Cocoa Touch Class - A Cocoa Touch class**
- UI Test Case Class - A class implementing a unit test**
- Unit Test Case Class - A class**

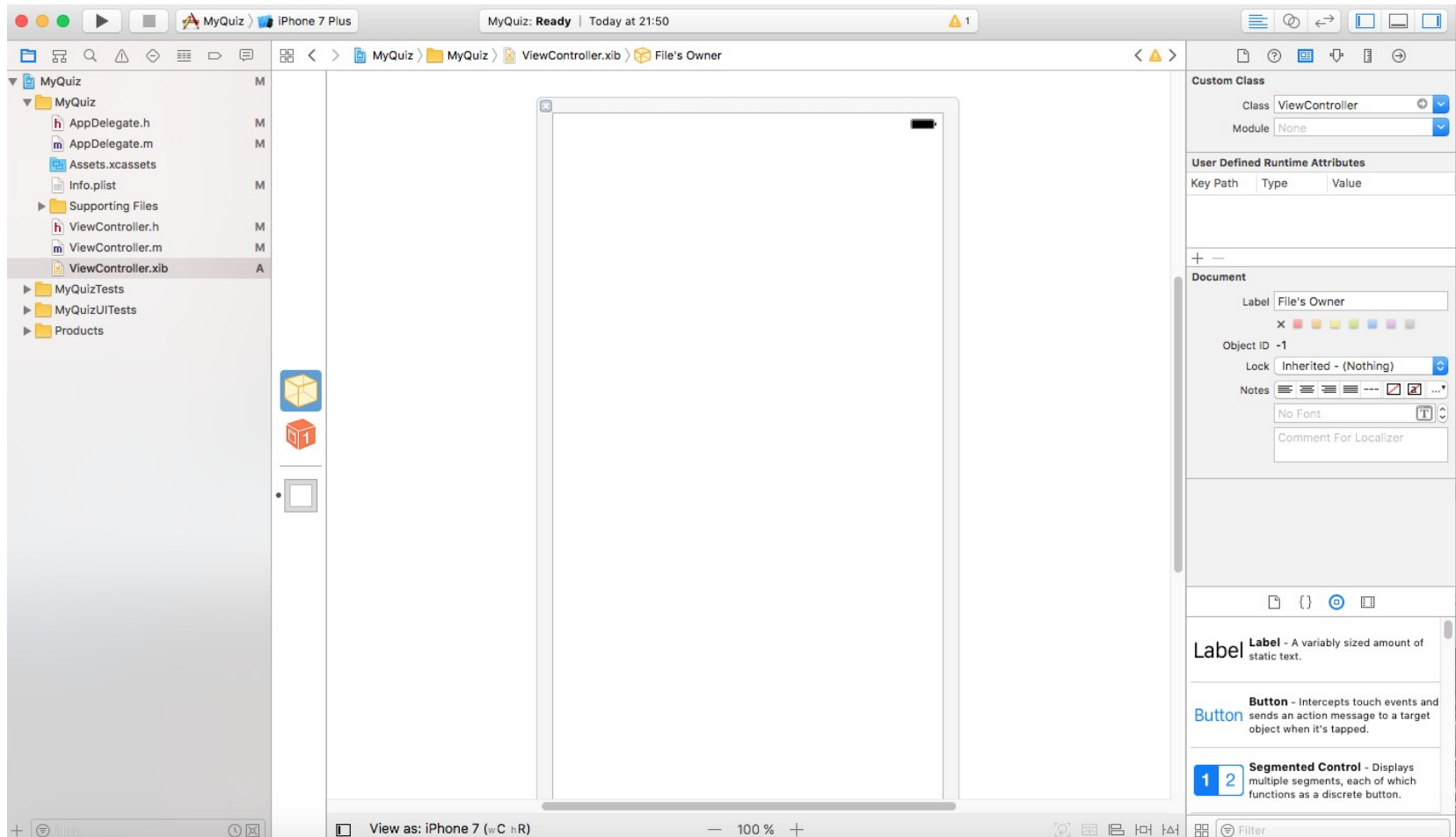
Anpassung der xib-Datei

Anpassung der xib-Datei

→ „File's Owner“

im „Identity Inspector“ schon automatisch auf

→ Im „Identity Inspector“ schon automatisch auf „ViewController“ gesetzt
„ViewController“ gesetzt

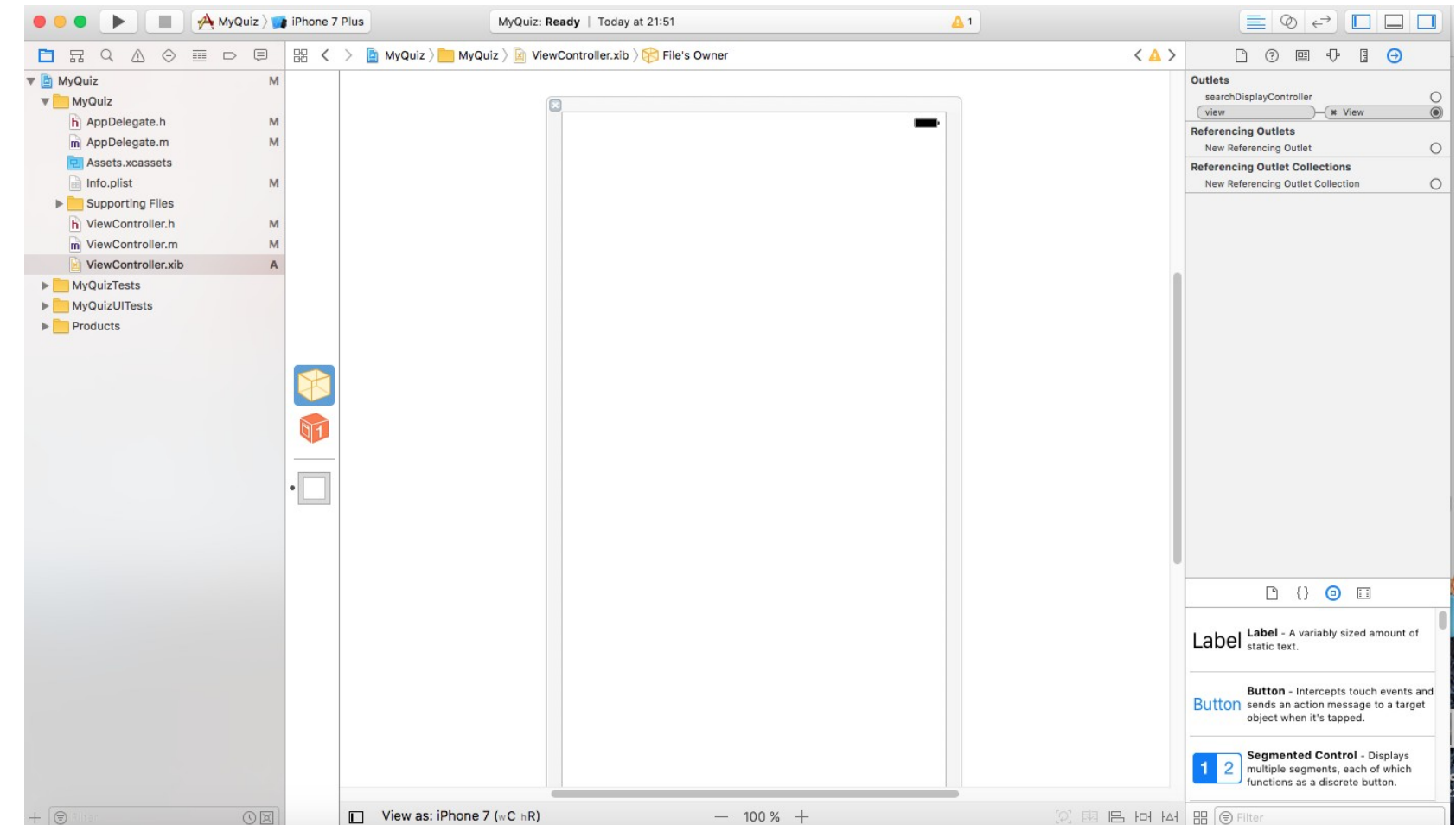


Anpassung der xib-Datei

Anpassung der xib-Datei

→ „File's Owner“

im „Connections Inspector“ View Outlet schon automatisch auf View gesetzt



Hinzufügen von UI Komponenten

