

CESAR Summer School - iOS

Aula 01





Vinicius Emanuel

Desenvolvedor (iOS/tvOS/watchOS)

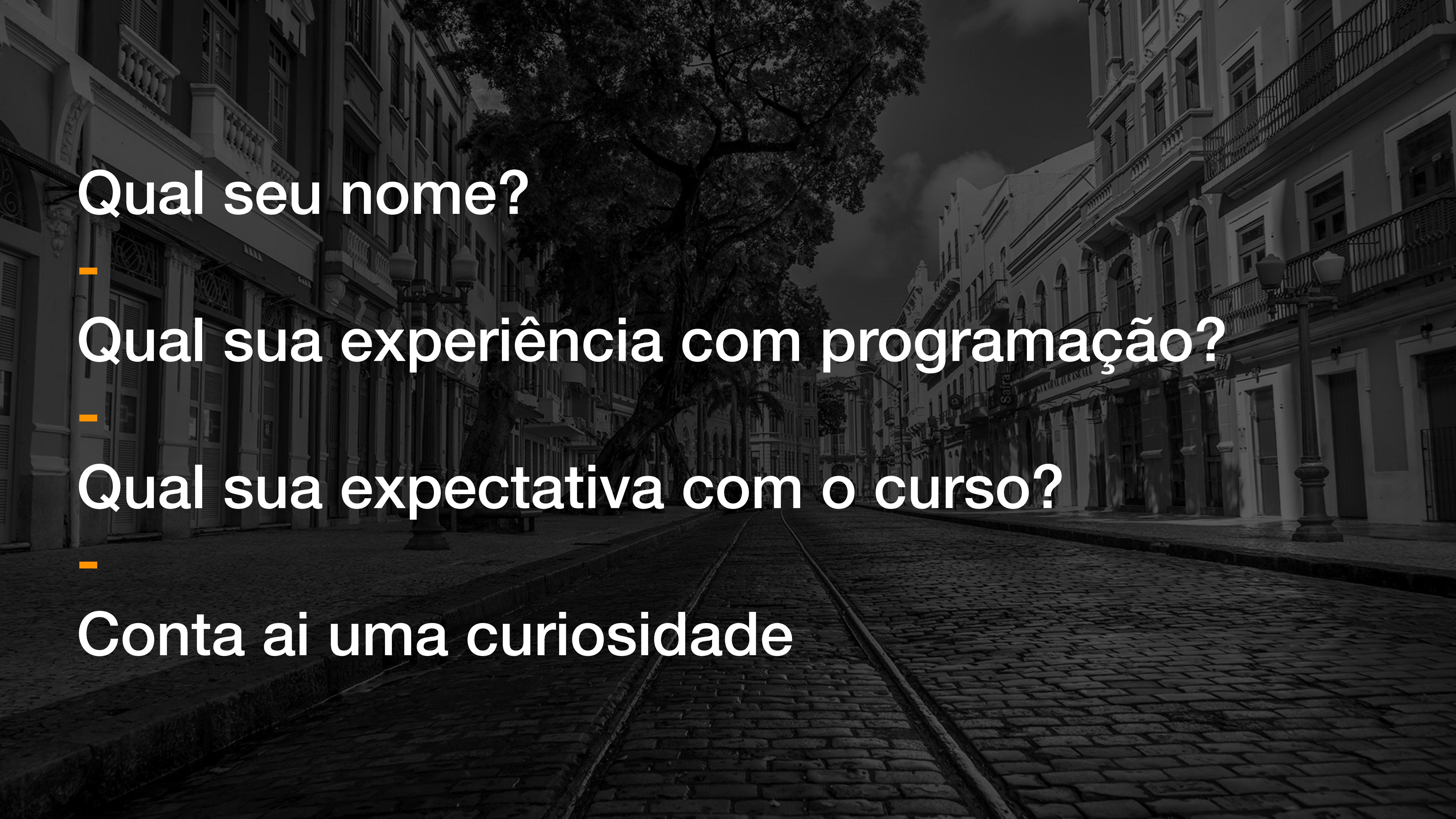
Surubinense e Ciclista



Victor Leal

Desenvolvedor (iOS/tvOS/watchOS)

Surubinense e Batuqueiro



Qual seu nome?

-

Qual sua experiência com programação?

-

Qual sua expectativa com o curso?

-

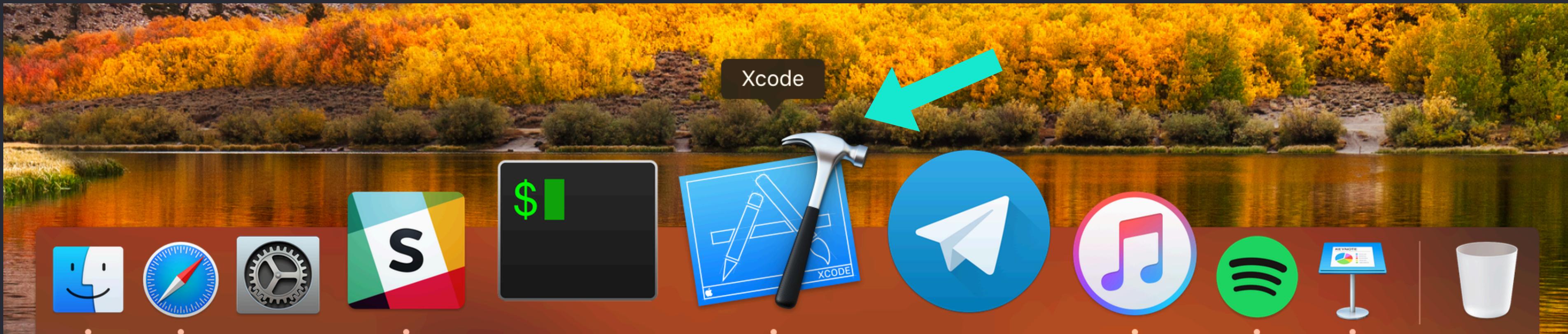
Conta ai uma curiosidade

Introdução ao Xcode





Abra o Xcode





Crie um novo projeto

Choose a template for your new project:

ios watchOS tvOS macOS Cross-platform

Filter

Application



Single View App



Game



Augmented Reality App



Document Based App



Master-Detail App



Page-Based App



Tabbed App



Sticker Pack App



iMessage App

Framework & Library



Cocoa Touch Framework



Cocoa Touch Static Library



Metal Library

Cancel

Previous

Next

Choose options for your new project:

Product Name:

Team: Victor Leal

Organization Name:

Organization Identifier:

Bundle Identifier: com.yourcompany.ProductName

Language: Swift

Use Core Data

Include Unit Tests

Include UI Tests

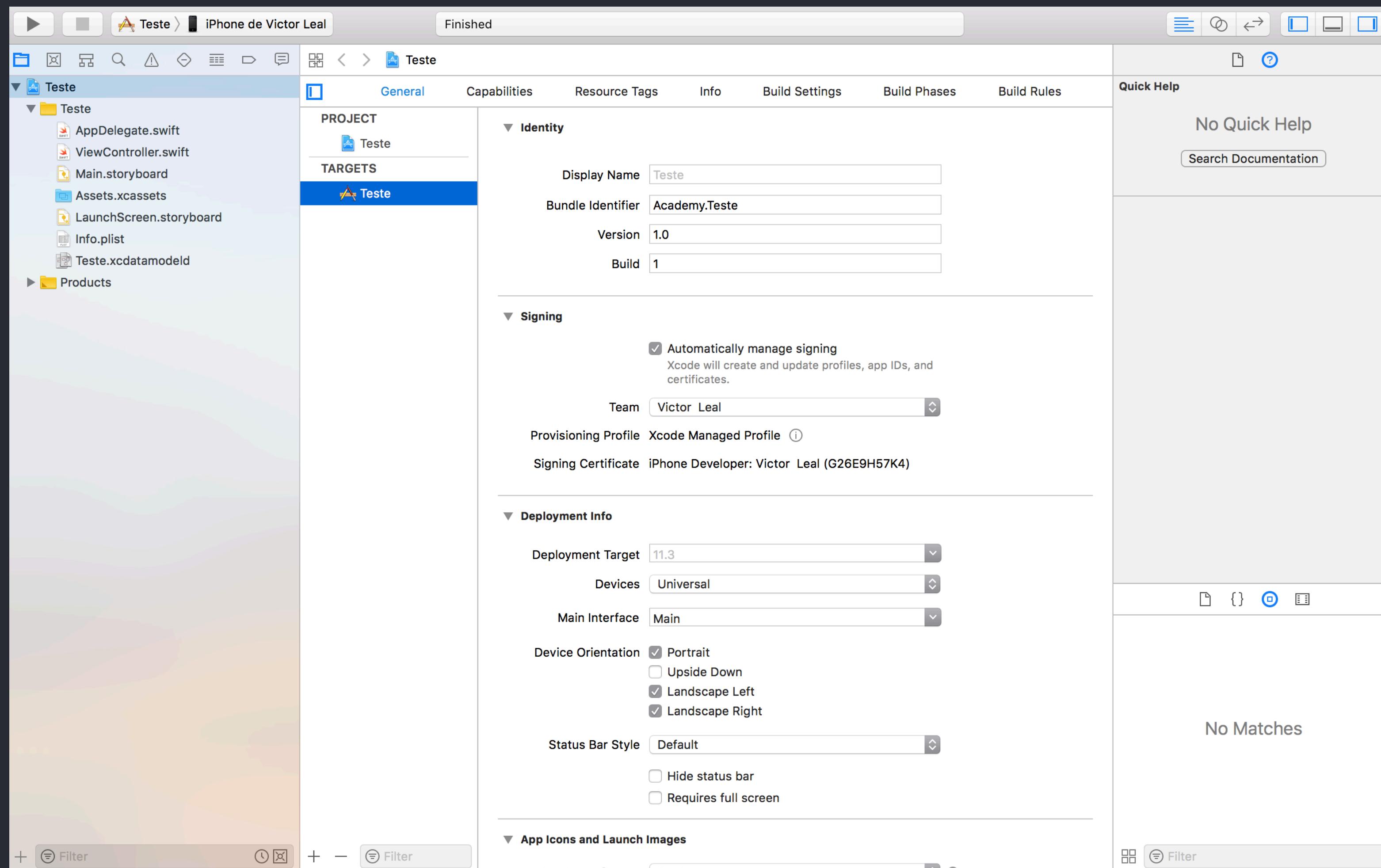
Obrigatórios

Cancel

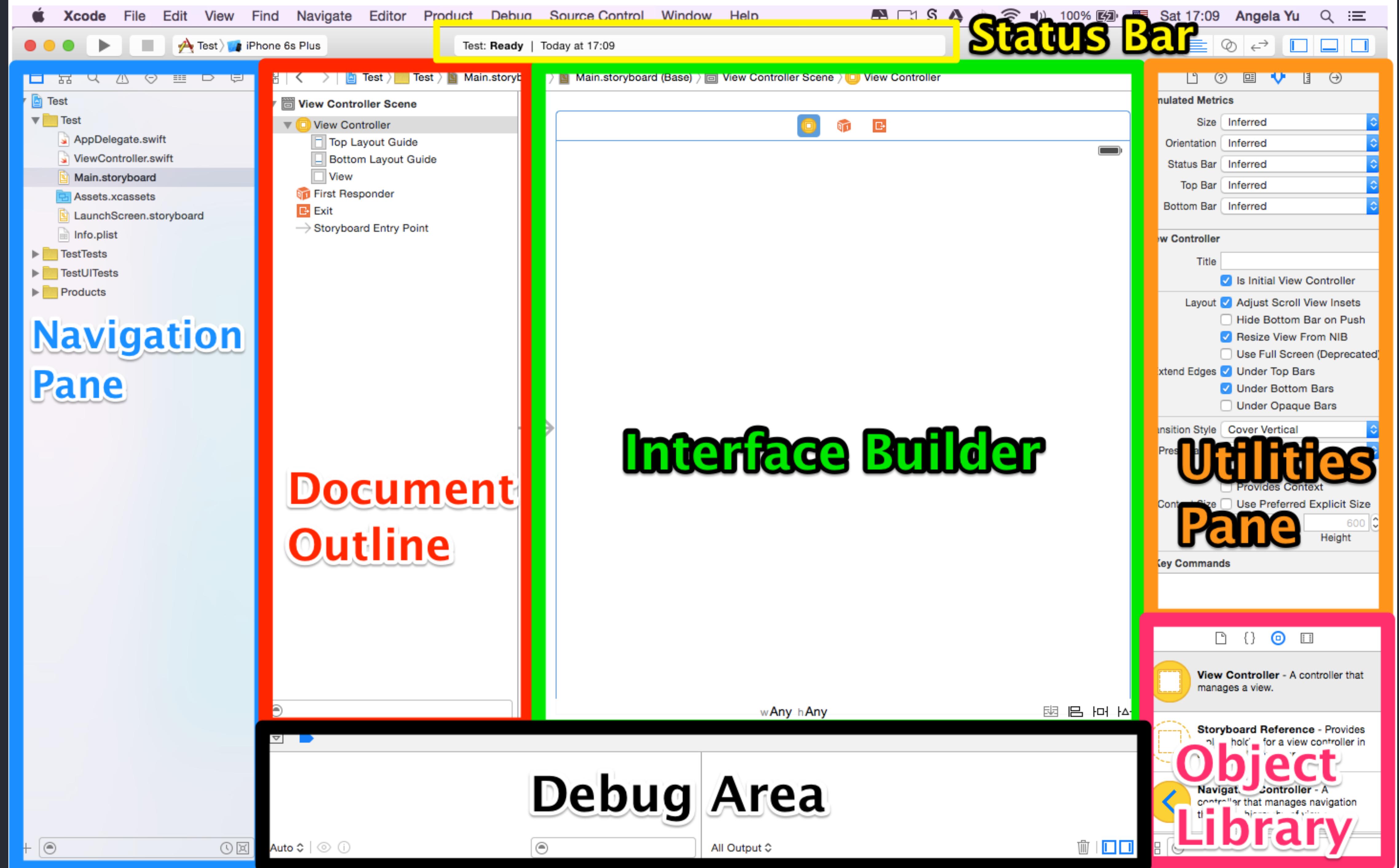
Previous

Next

Todos aqui?

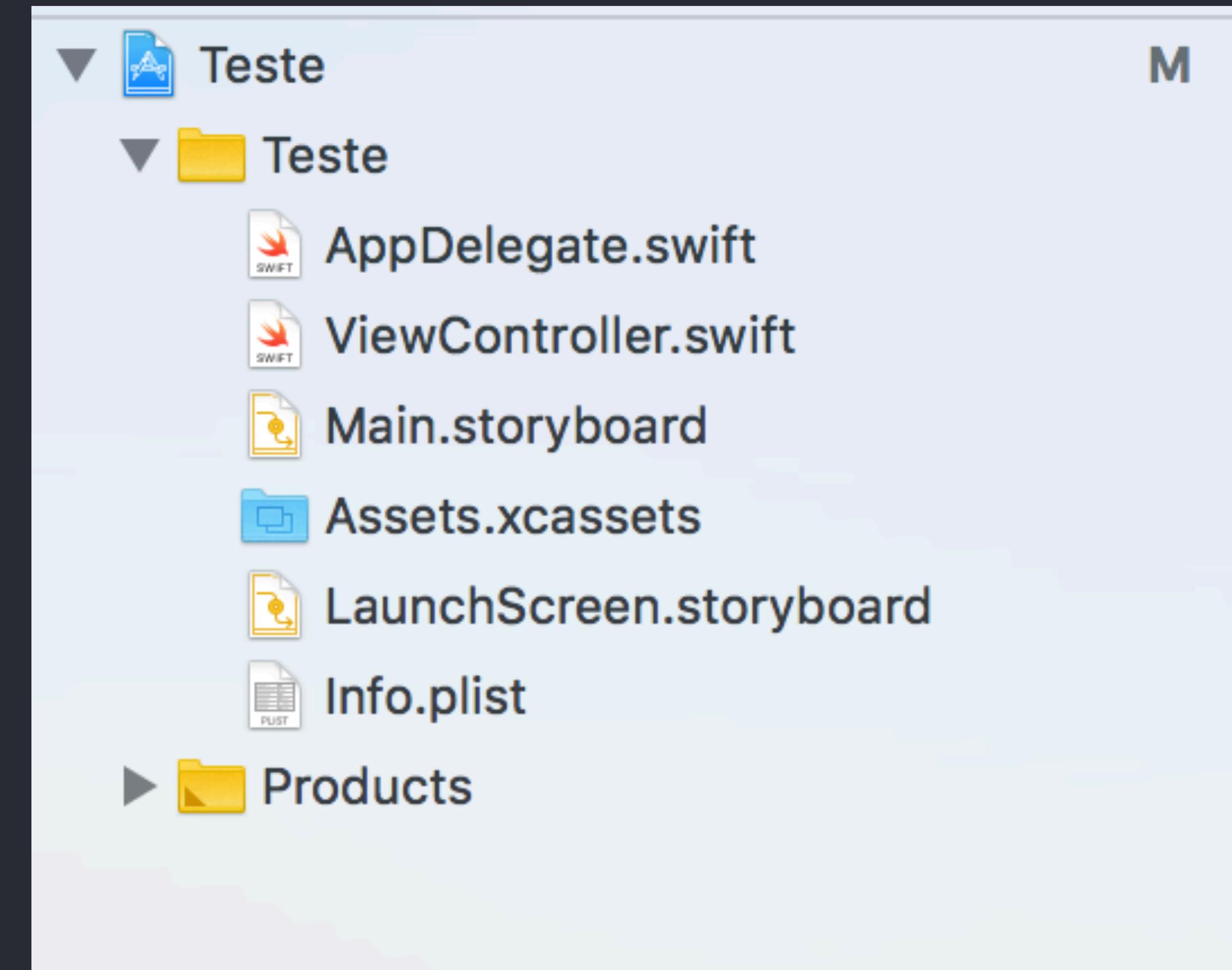


Entendendo os painéis da Interface



Mas o que são esses
arquivos na Navigator Pane?

- AppDelegate
 - ViewController
 - Main.storyboard
 - Assets.xcassets
 - LaunchScreen.storyboard
- Info.plist



- AppDelegate

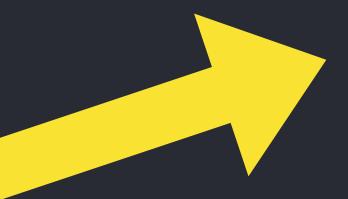
- ViewController

- Main.storyboard

- Assets.xcassets

- LaunchScreen.storyboard

Info.plist

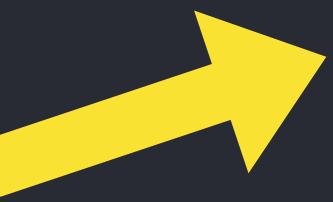


Lugar do código

Lugar da interface

Lugar das imagens

- ViewController



Lugar do código

- Main.storyboard



Lugar da interface

- Assets.xcassets



Lugar das imagens

Revisando

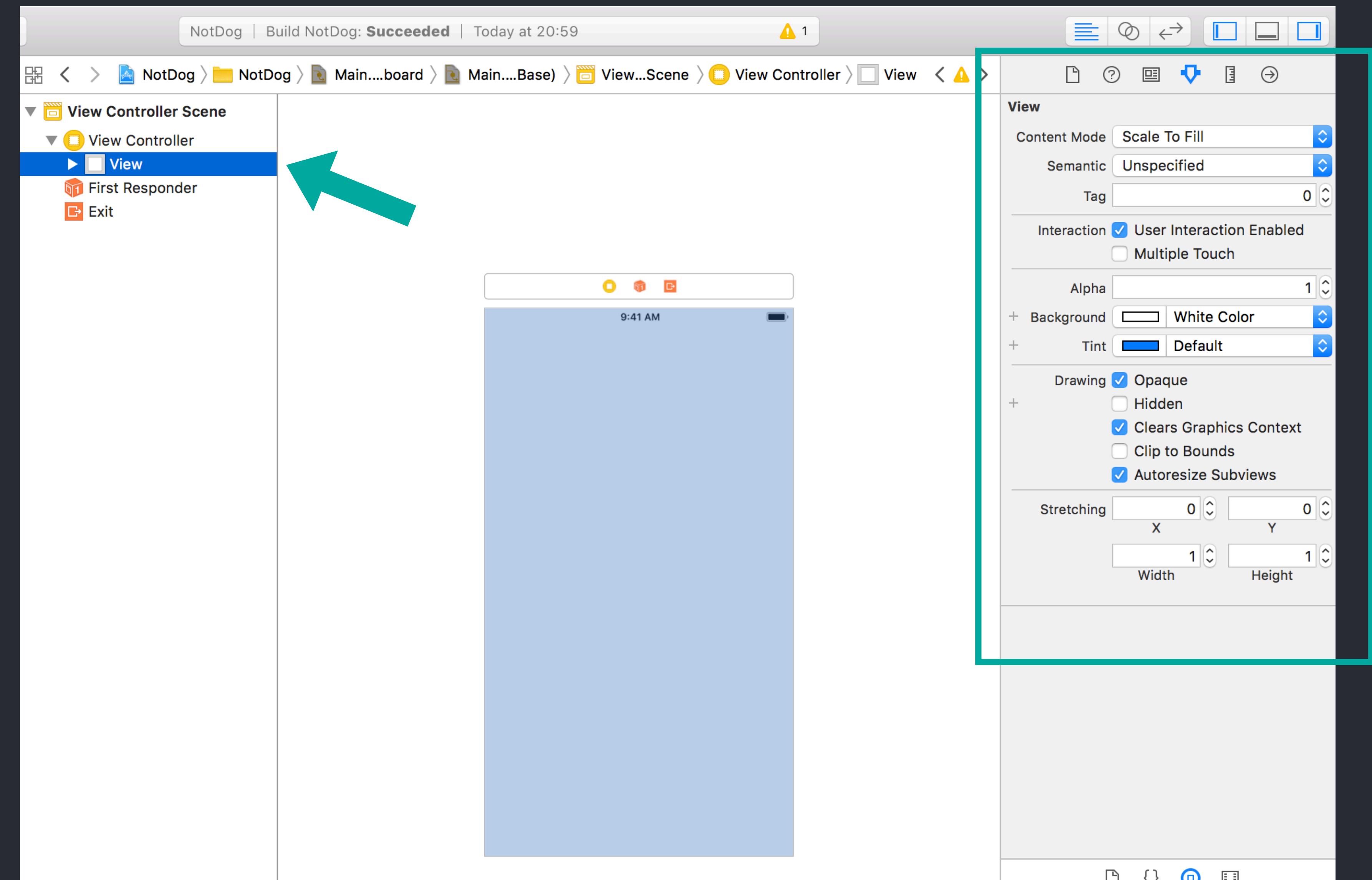


1. Conhecemos o Xcode ✓
2. Vimos como criar um novo projeto ✓
3. Para o que serve cada área do Xcode ✓
4. Os tipos de arquivo ✓

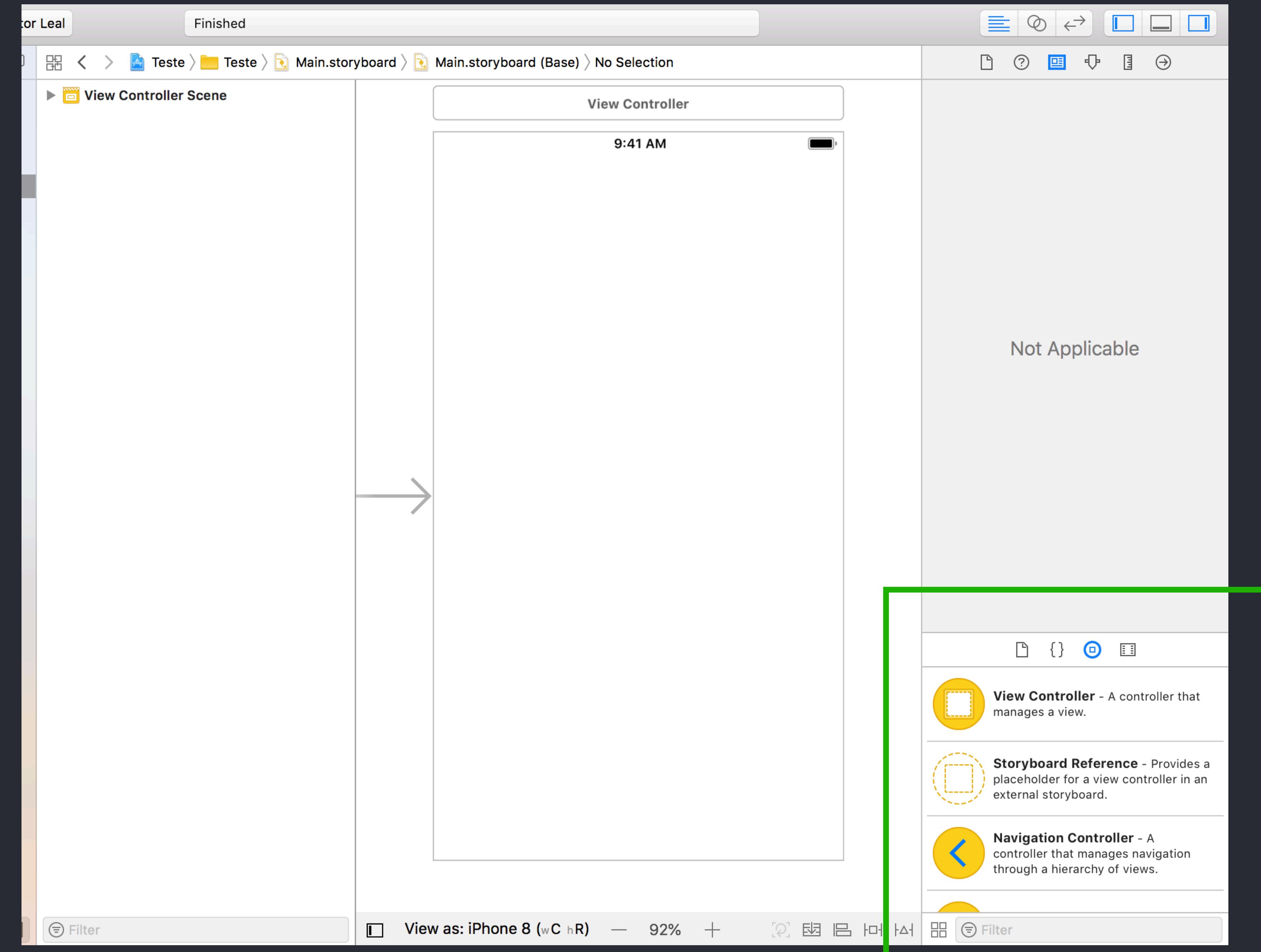
Elementos de Interface no Storyboard



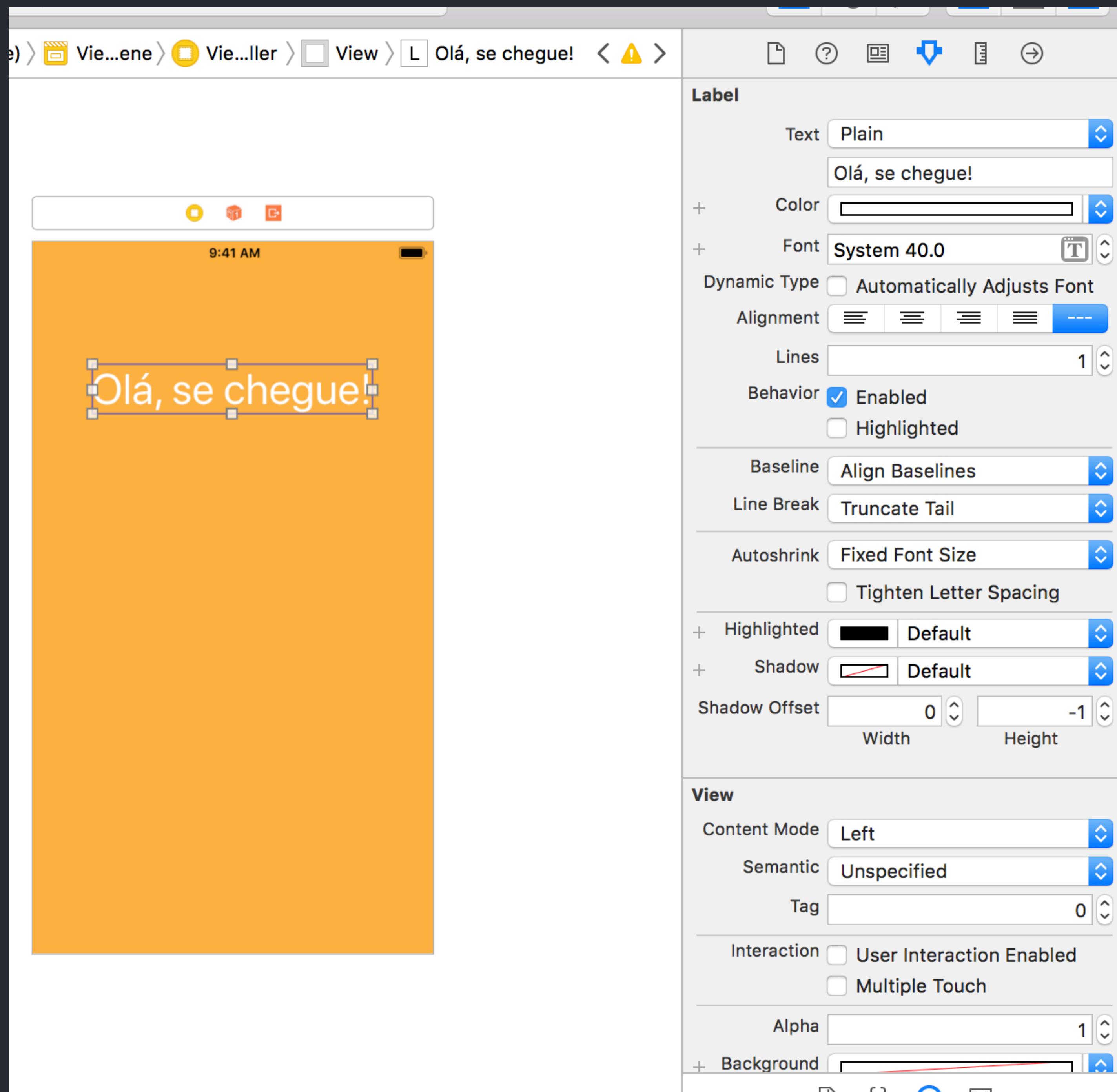
1. View



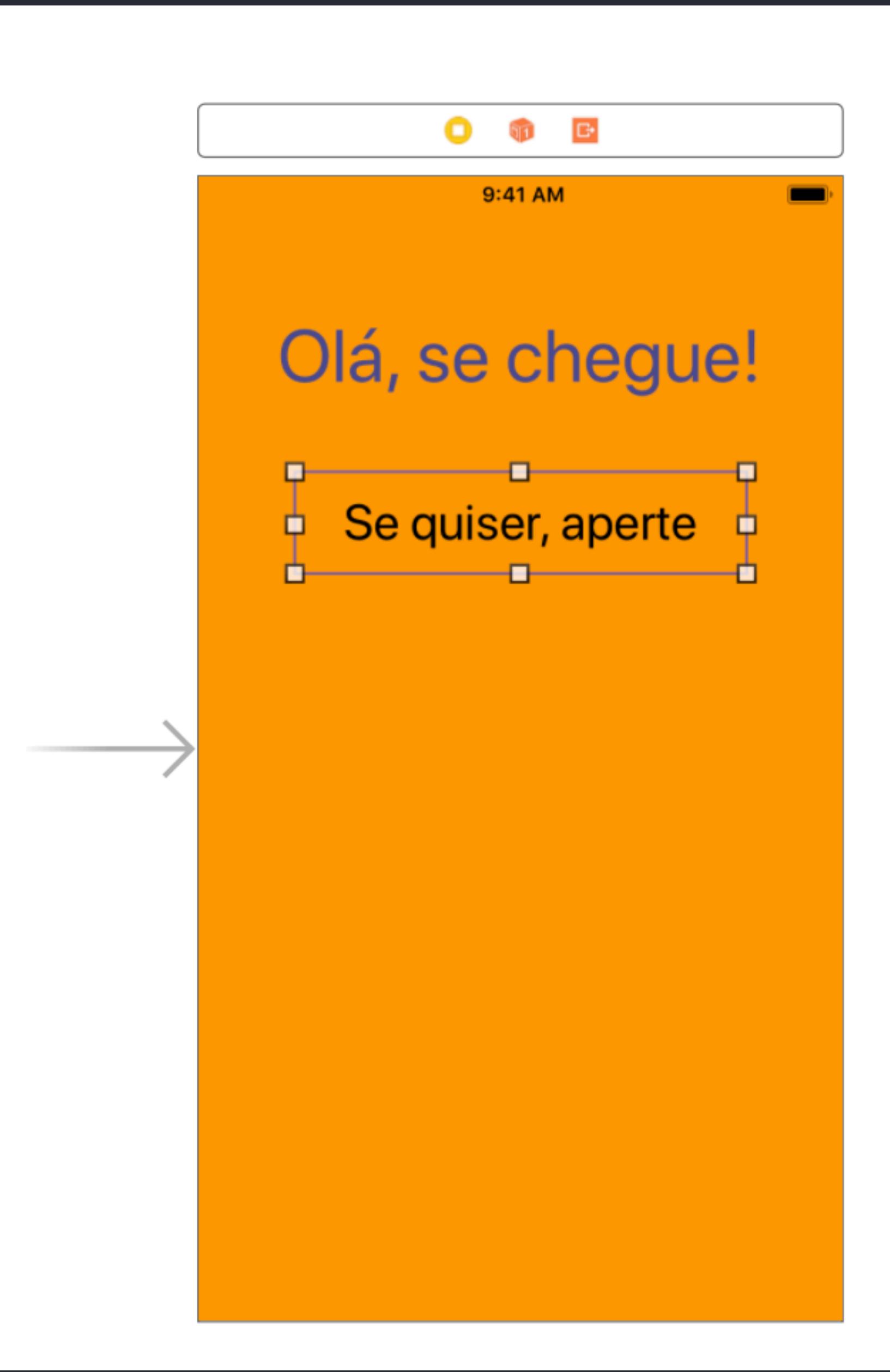
2. UILabel (texto)



Edite
como
quierer



3. UIButton (botões)

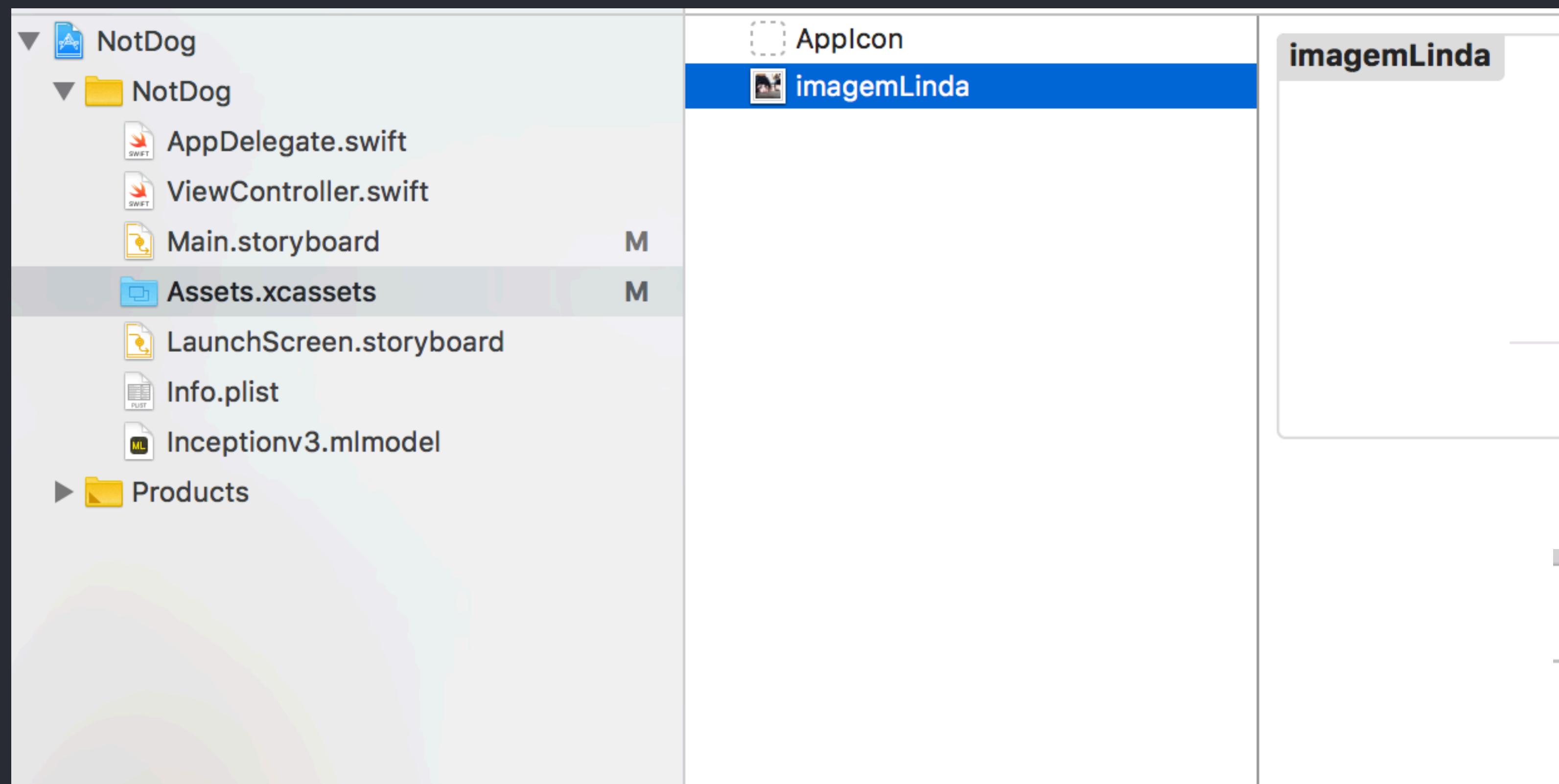


4. UIImage (imagens)

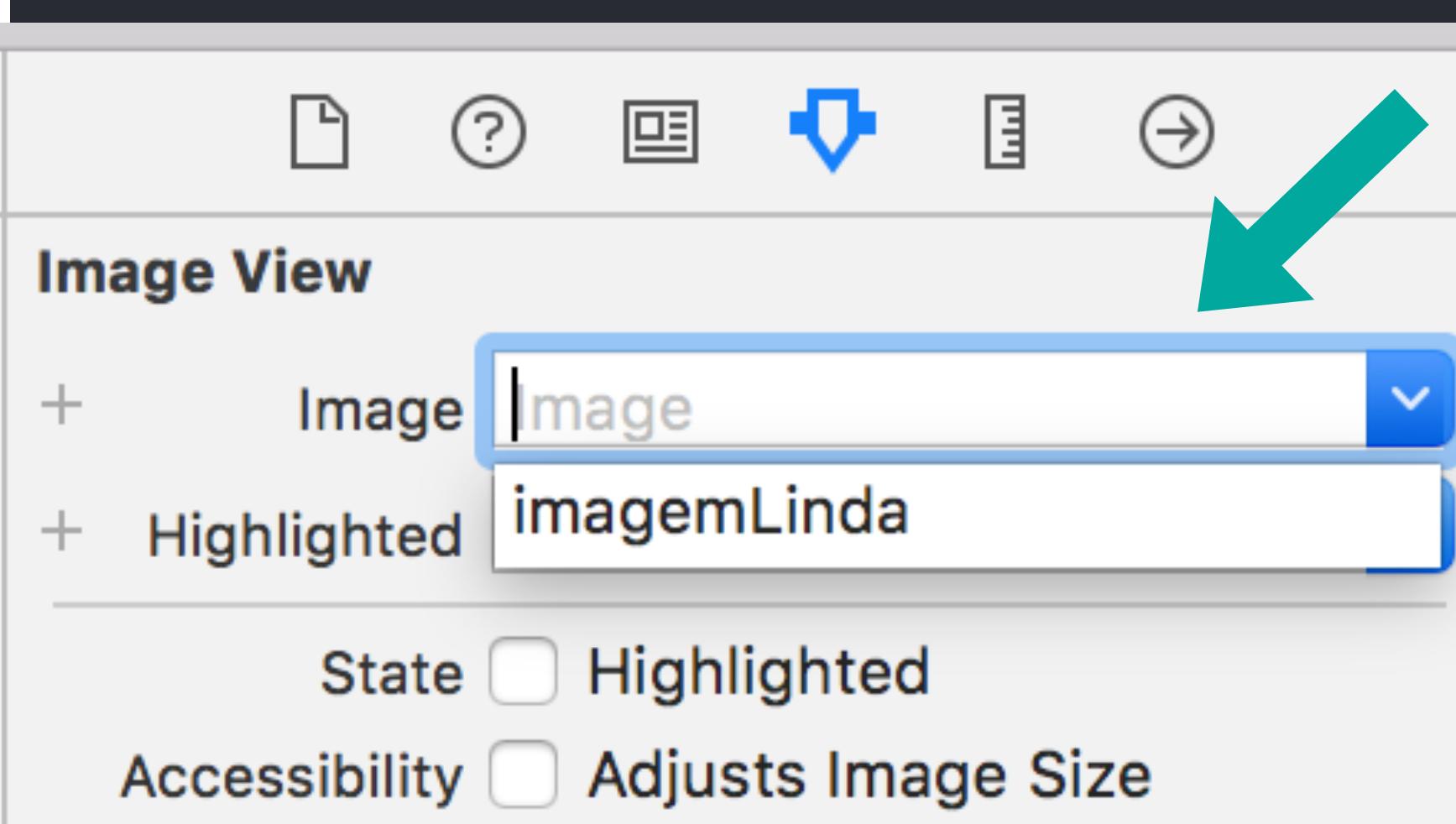


Pegue uma imagem no Google e
coloque no "lugar das imagens"

1.



2.





Pra finalizar...

4. UITextField (caixa de texto)



Revisando

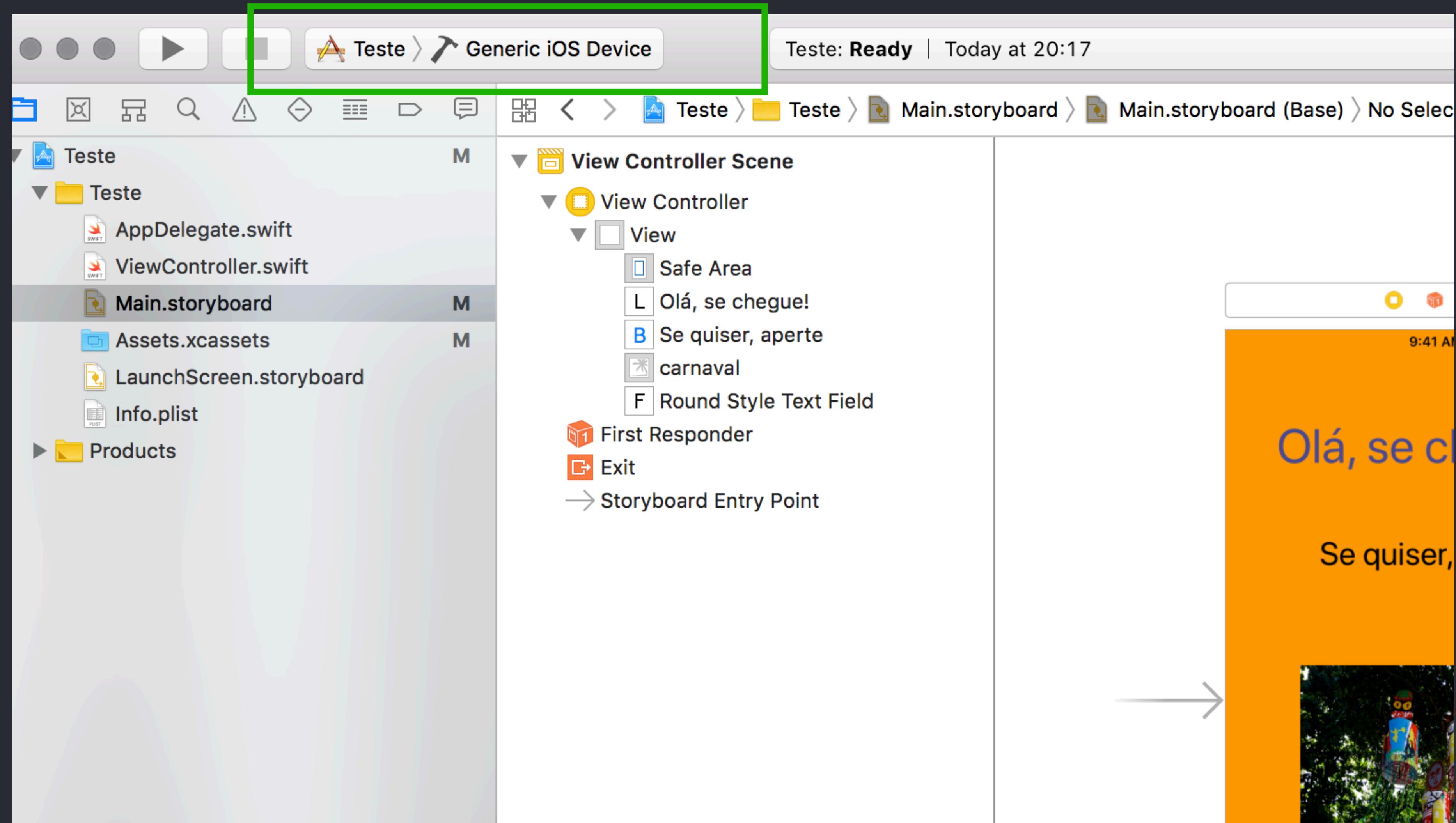


1. Conhecemos o Storyboard ✓
2. Colocamos uma imagem no projeto ✓
3. Usamos Label, Button, Image e TextField ✓

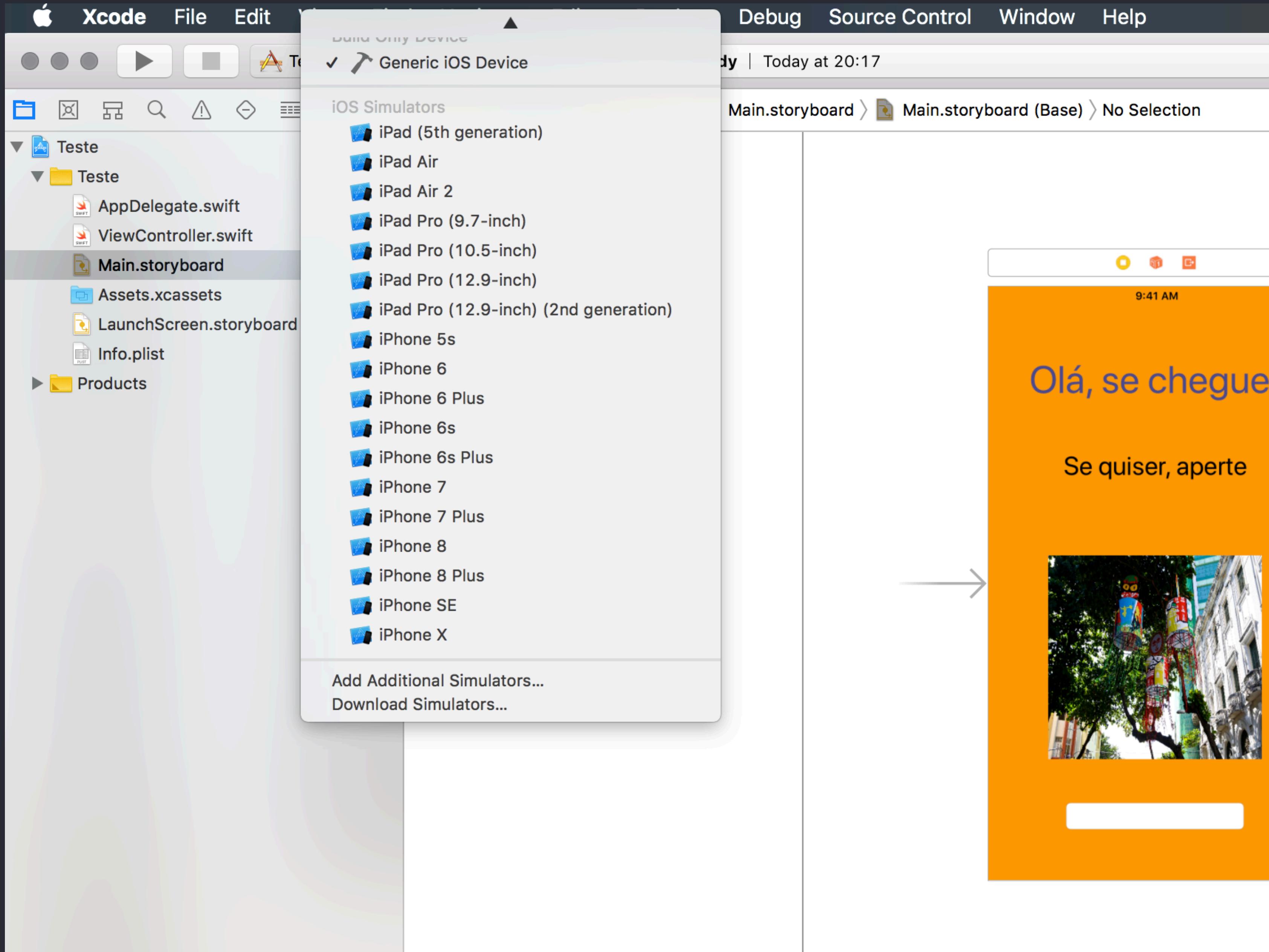
Rodando Apps no Simulador

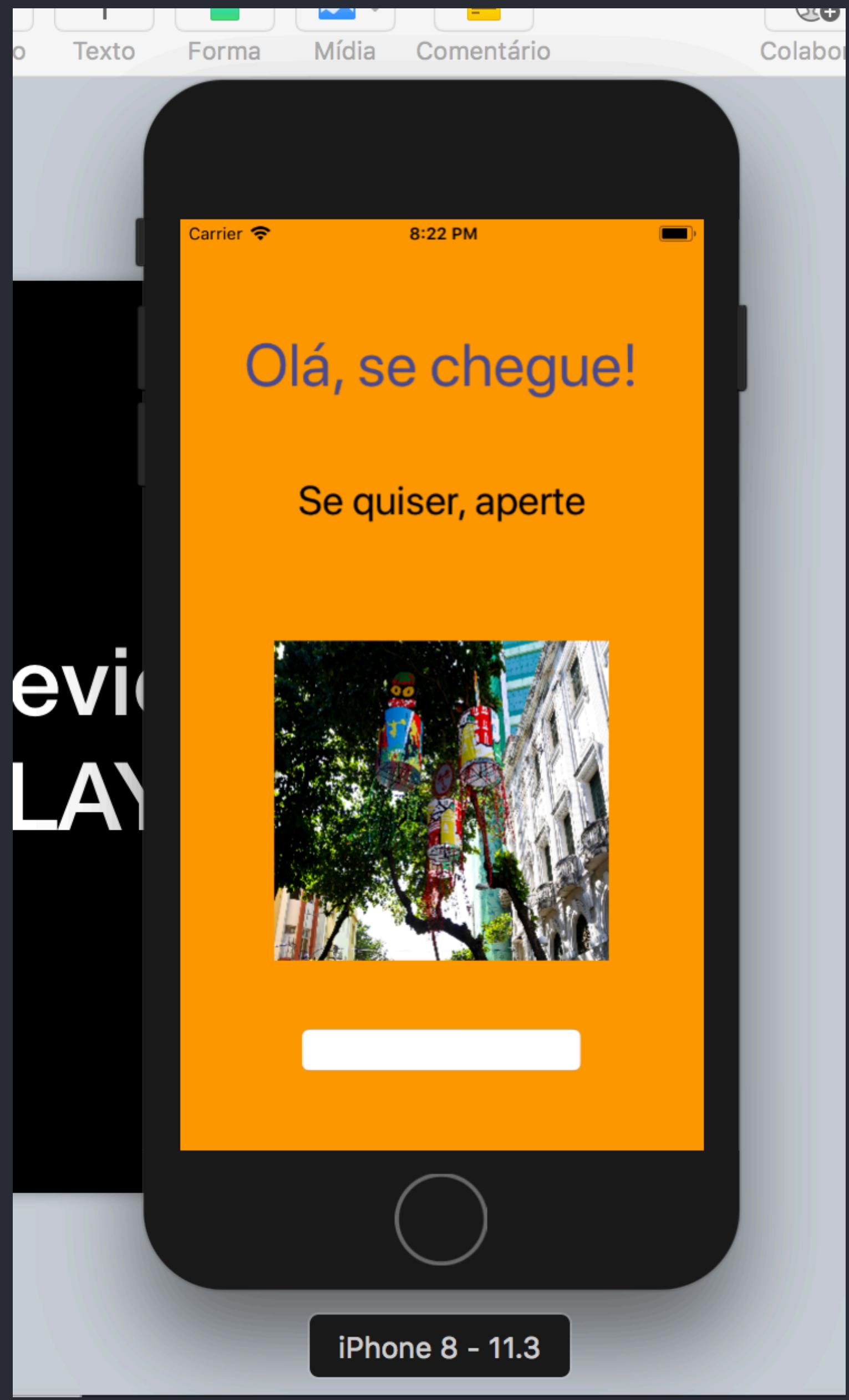


Hora de ter o seu primeiro
app rodando em um iPhone



Escolha o simulador e aperte Play





PARABÉNS!

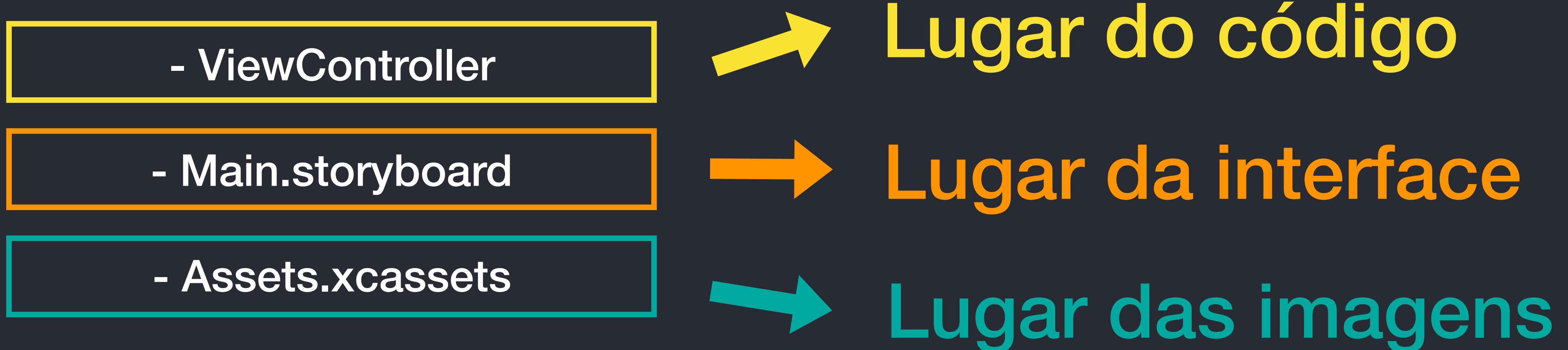
Seu primeiro app iOS 😊

mas ainda não faz nada 😞

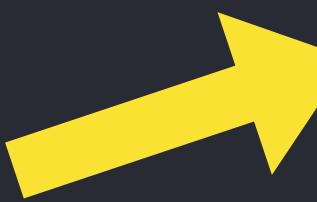
A dark, moody photograph showing a person's hands holding a smartphone. The phone's screen is lit up, displaying a grid of app icons typical of an iOS device, including Mail, Calendar, Photos, Camera, and others. The background is dark and out of focus.

Ligando Design ao Código

Relembrando...



- ViewController



Lugar do código

The screenshot shows the Xcode interface with the following details:

- Title Bar:** Shows "Teste" and "iPhone 8". A message "Finished running Teste on iPhone 8" is displayed.
- Project Navigator:** Shows the project structure with files like AppDelegate.swift, Main.storyboard, Assets.xcassets, LaunchScreen.storyboard, Info.plist, and ViewController.swift.
- Code Editor:** Displays the content of ViewController.swift:

```
1 //  
2 // ViewController.swift  
3 // Teste  
4 //  
5 // Created by Victor Leal Porto de Almeida Arruda on  
6 // 15/08/2018.  
7 // Copyright © 2018 Academy. All rights reserved.  
8  
9 import UIKit  
10  
11 class ViewController: UIViewController {  
12  
13     override func viewDidLoad() {  
14         super.viewDidLoad()  
15         // Do any additional setup after loading the view,  
16         // typically from a nib.  
17     }  
18  
19     override func didReceiveMemoryWarning() {  
20         super.didReceiveMemoryWarning()  
21     }  
22 }
```
- Debug Area:** Shows the output of the debugger:

```
2018-08-15 20:22:27.401898-0300  
Teste[67795:3111861] [MC] Reading from  
private effective user settings.  
Message from debugger: Terminated due to  
signal 9
```
- Right Sidebar:** Shows "Quick Help" with "No Quick Help" and a search bar.

```
import UIKit

class ViewController: UIViewController {

    override func viewDidLoad() {
        super.viewDidLoad()
        // Do any additional setup after loading the view, typically
from a nib.
    }

}
```

Representa a tela no código

```
import UIKit
```

```
class ViewController: UIViewController {  
  
    override func viewDidLoad() {  
        super.viewDidLoad()  
  
    }  
  
}
```

iPhone 8

Finished running Teste on iPhone 8

Teste

Main.storyboard

View Controller Scene

View Controller

View

Safe Area

Olá, se chegue!

Se quiser, aperte

carnaval

Round Style Text Field

First Responder

Exit

Storyboard Entry Point

Olá, se chegue!

Se quiser, aperte

9:41 AM

View as: iPhone 8 (wC hR)

Filter

Auto Filter

All Output Filter

Automatic

ViewController.swift

No Selection

```
1 // ViewController
2 // Teste
3 // Created by Vítor Arruda on 15/08/2018.
4 // Copyright © 2018. All rights reserved.
5
6
7 import UIKit
8
9 class ViewController: UIViewController {
10
11     override func viewDidLoad() {
12         super.viewDidLoad()
13         // Do any additional setup after loading the view.
14     }
15
16 }
17
18 }
19
20 }
```

View Controller - A controller that manages a view.

Storyboard Reference - Provides a placeholder for a view controller in an external storyboard.

Navigation Controller - A controller that manages navigation through a hierarchy of views.

D400-4EFD-BE11-1319B747400C/data/containers/Shared/SystemGroup/systemgroup.com.apple.configurationprofiles
2018-08-15 20:22:27.461896-0300 Teste[67795:3111861] [MC] Reading from private effective user settings.
Message from debugger: Terminated due to signal 9

Lugar da interface



Lugar do código



Finished running Teste on iPhone 8

Main.storyboard > Main.storyboard (Base) > No Selection

Automatic > ViewController.swift > No Selection

```
1 //  
2 // ViewController.swift  
3 // Teste  
4 //  
5 // Created by Victor Leal Porto de Almeida  
// Arruda on 15/08/2018.  
6 // Copyright © 2018 Academy. All rights  
reserved.  
7 //  
8  
9 import UIKit  
10  
11 class ViewController: UIViewController {  
12  
13     override func viewDidLoad() {  
14         super.viewDidLoad()  
15     }  
16 }
```

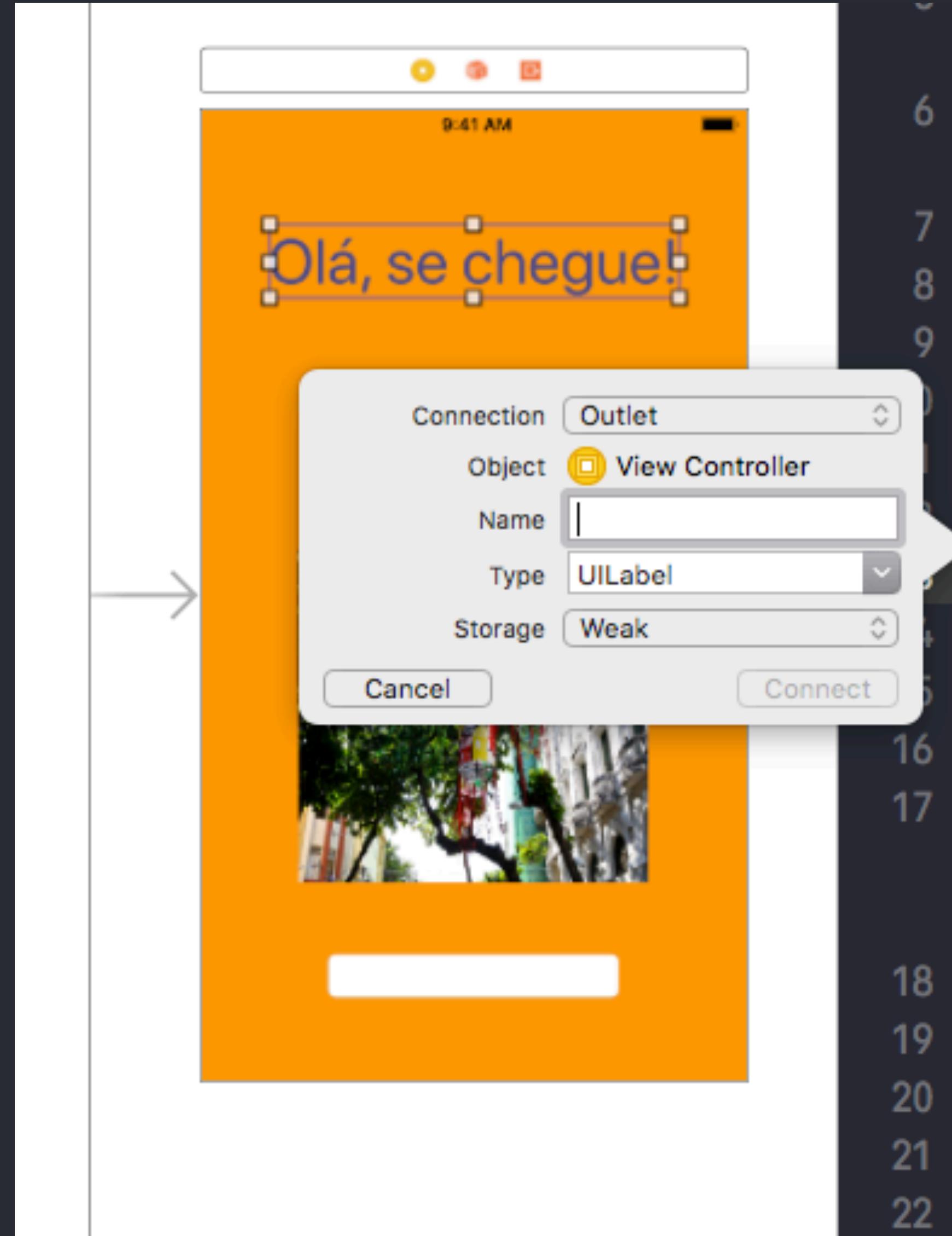
Quick Help
No Quick Help
Search Documentation

Mas como o código vai saber
quais os elementos que coloquei
na minha interface? 🤔

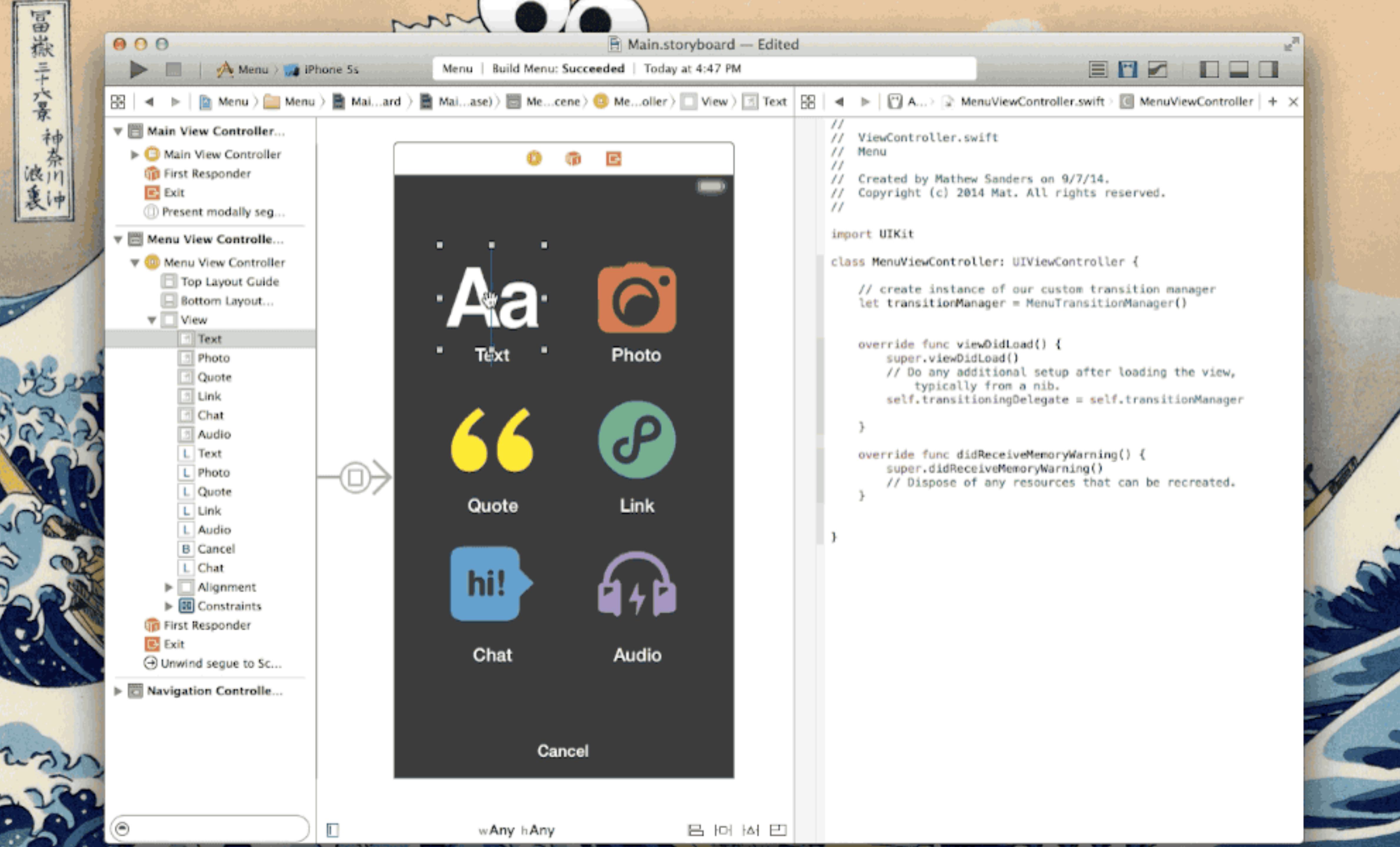
1. IBOOutlet: uma “ligação”
da interface com o código

Vamos criar a representação da UILabel que temos na interface

- 1 - Selecione sua UILabel
- 2 - Segure CONTROL
- 3 - Arraste o cursor para o código, na linha depois
de **class**



```
 5 // 6 // Copyright © 2018 Academy. All rights reserved.  
7 //  
8  
9 import UIKit  
  
class ViewController: UIViewController {  
    override func viewDidLoad() {  
        super.viewDidLoad()  
        // Do any additional setup after loading the view, typically from a nib.  
    }  
}
```



Faça o mesmo para botão e o
textField

Agora temos todos os elementos da interface representados no código...

Mas nosso app continua não fazendo nada 😢

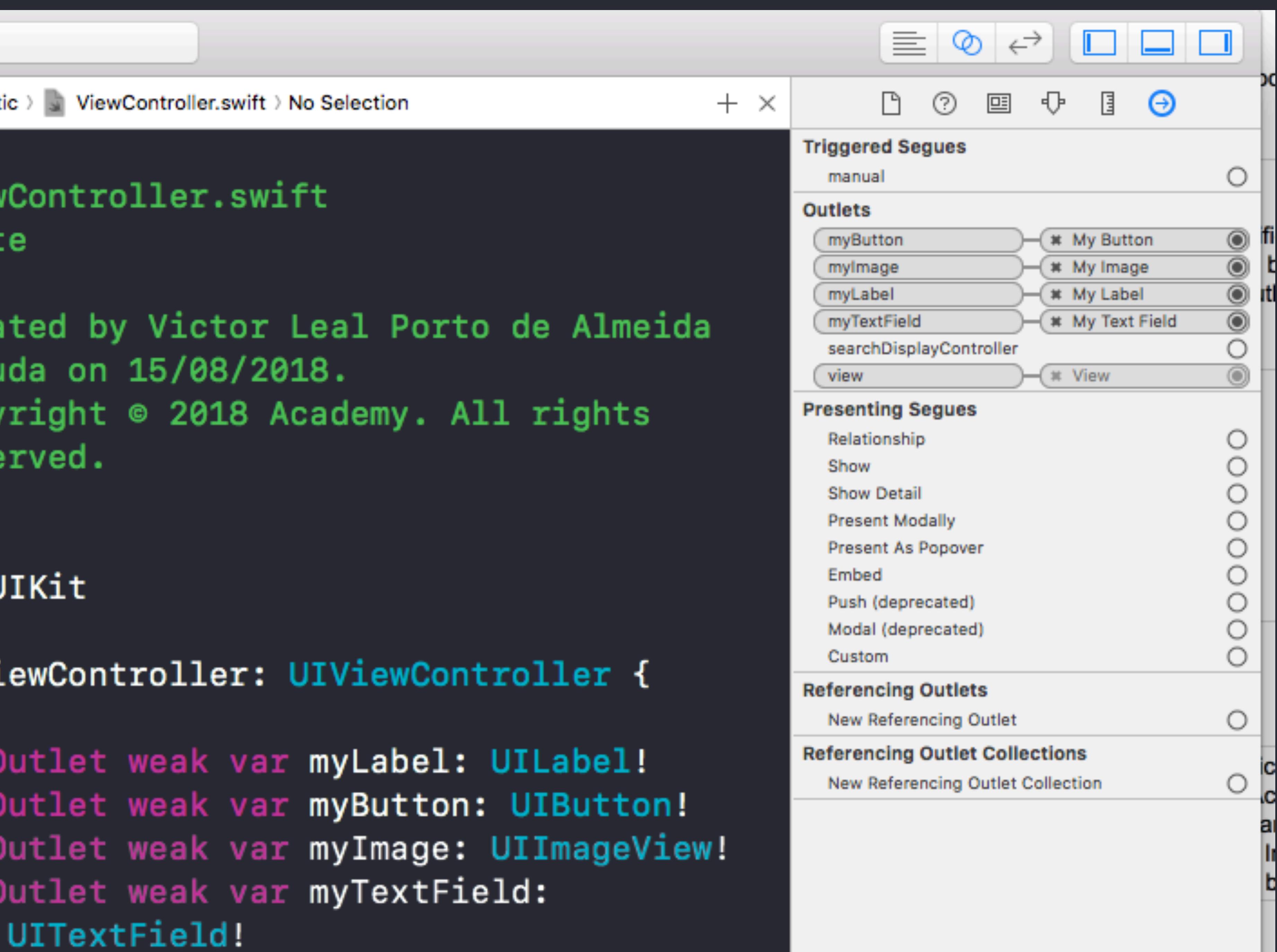
Mas antes de continuar
ALERTAS 

Selezione essas opções

The screenshot shows the Xcode interface with the following components:

- Project Navigator:** Shows the project structure with files like AppDelegate.swift, ViewController.swift, Main.storyboard, Assets.xcassets, LaunchScreen.storyboard, and Info.plist.
- Document Outline:** Shows the View Controller Scene and its View Controller object selected.
- Preview:** Displays the storyboard preview with the text "Olá, se chegue!" and "Se quiser, aperte" followed by a placeholder image.
- Code Editor:** Displays the ViewController.swift code:

```
1 // ViewController.swift
2 // Teste
3 // Created by Victor Leal Porto de Almeida
4 // Arruda on 15/08/2018.
5 // Copyright © 2018 Academy. All rights reserved.
6 //
7 //
8 import UIKit
9
10 class ViewController: UIViewController {
11
12     @IBOutlet weak var myLabel: UILabel!
13     @IBOutlet weak var myButton: UIButton!
14     @IBOutlet weak var myImage: UIImageView!
15     @IBOutlet weak var myTextField: UITextField!
16
17
18
19     override func viewDidLoad() {
20         super.viewDidLoad()
21         // Do any additional setup after loading the view, typically from a nib.
22     }
23
24 }
25
26
```
- Utilities:** Shows the Triggered Segues, Outlets, Presenting Segues, Referencing Outlets, and Referencing Outlet Collections sections.
- Documentation:** Shows icons and descriptions for View Controller, Storyboard Reference, and Navigation Controller.
- Output:** Shows the command-line output of the application's run.





Execute nosso
projeto
nossa APP

Tudo *rodando* ok?

Mas não quero mais uma
das IBOutlet...

"então apaga, ué" 

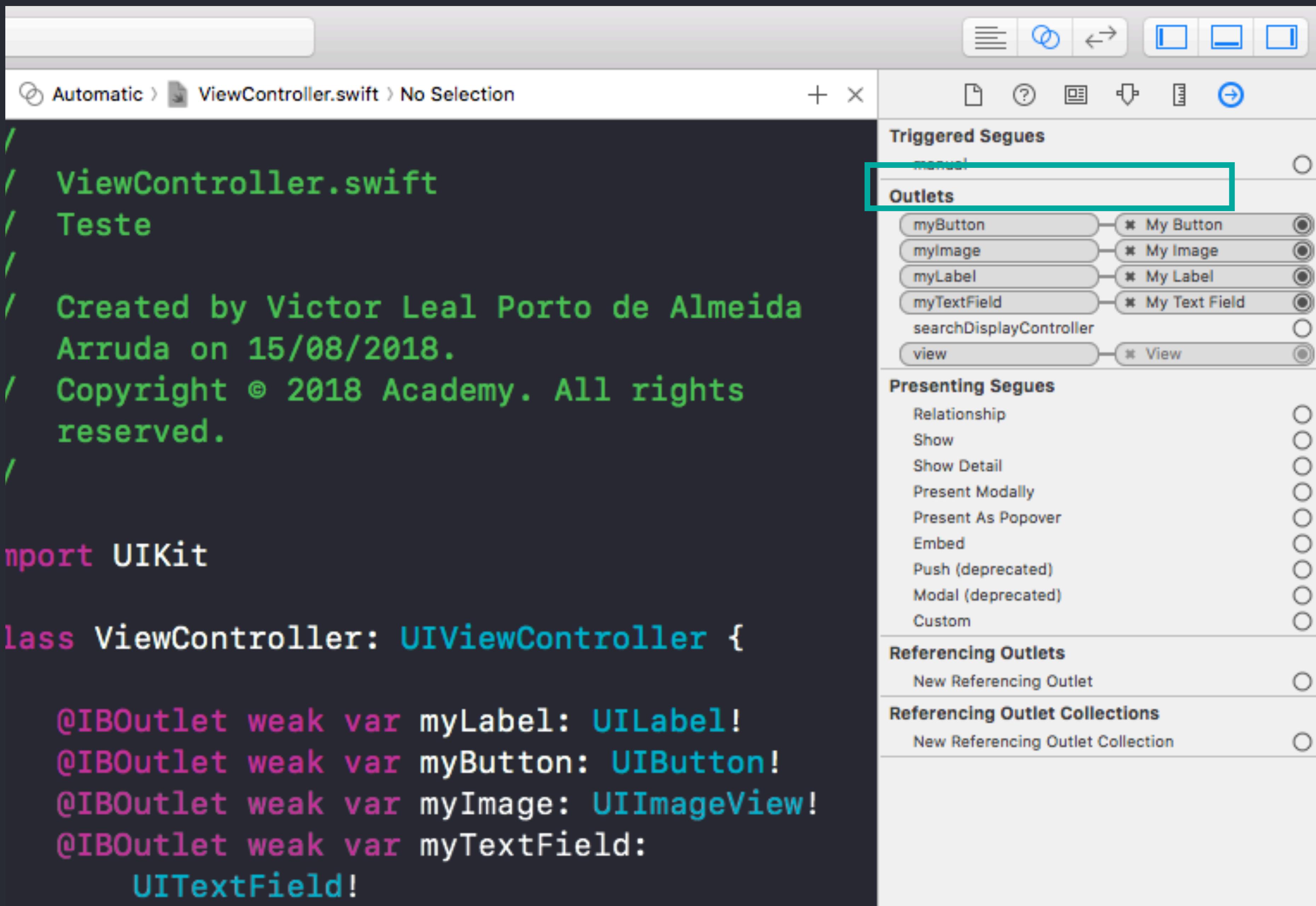
```
      Arruda on 15/08/2018.  
6 // Copyright © 2018 Academy. All rights  
reserved.  
7 //  
8  
9 import UIKit  
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11 class ViewController: UIViewController {  
12  
    @IBOutlet weak var myLabel: UILabel!  
    @IBOutlet weak var myButton: UIButton!  
    @IBOutlet weak var myImage: UIImageView!  
    @IBOutlet weak var myTextField:  
        UITextField!  
17  
18    override func viewDidLoad() {  
19        super.viewDidLoad()  
20        // Do any additional setup after  
21        // loading the view, typically from a  
22        // nib.  
23    }  
24 }
```

```
      Arruda on 15/08/2018.  
7 //  
8  
9 import UIKit  
10  
11 class ViewController: UIViewController {  
12  
    @IBOutlet weak var myButton: UIButton!  
    @IBOutlet weak var myImage: UIImageView!  
    @IBOutlet weak var myTextField:  
        UITextField!  
16  
17  
18    override func viewDidLoad() {  
19        super.viewDidLoad()  
20        // Do any additional setup after  
21        // loading the view, typically from a  
22        // nib.  
23    }  
24 }
```

Rodando...

ou não. 

Mas por que?



A screenshot of the Xcode interface showing the code editor and the Utilities Inspector. The code editor displays a Swift file named ViewController.swift with the following content:

```
Automatic > ViewController.swift > No Selection + X
```

```
ViewController.swift
Teste
Created by Victor Leal Porto de Almeida
Arruda on 15/08/2018.
Copyright © 2018 Academy. All rights reserved.

import UIKit

class ViewController: UIViewController {

    @IBOutlet weak var myLabel: UILabel!
    @IBOutlet weak var myButton: UIButton!
    @IBOutlet weak var myImage: UIImageView!
    @IBOutlet weak var myTextField:
        UITextField!
```

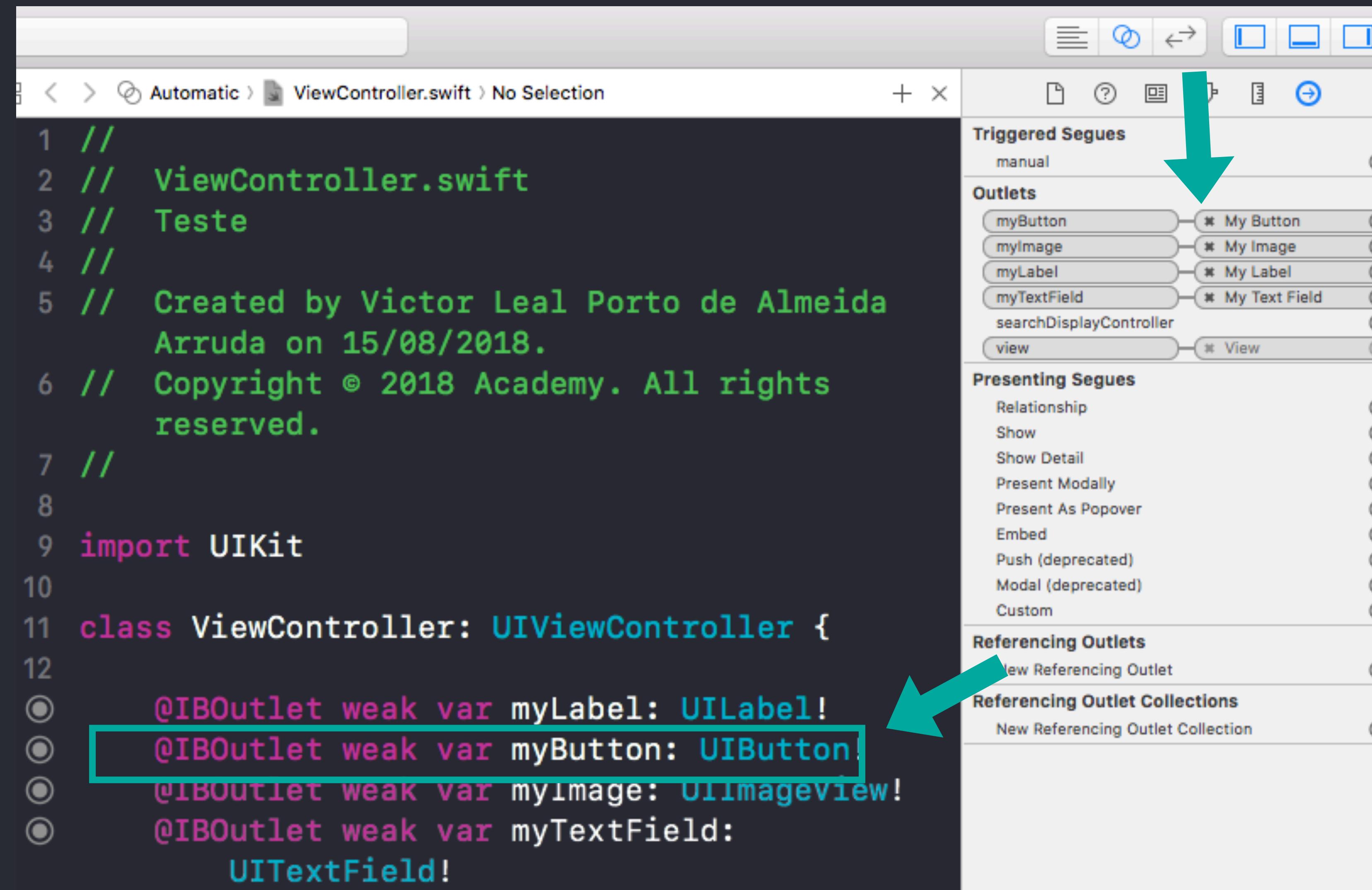
The Utilities Inspector is open on the right side, specifically the Outlets tab under the Connections inspector. This tab lists outlets defined in the code:

- myButton
- myImage
- myLabel
- myTextField
- searchDisplayController
- view

A large green arrow points from the left towards the Outlets tab in the Utilities Inspector.

Mas e se eu quiser mudar só
o nome da minha IBOOutlet? 😬

Deletando outlets



1. clica no x
 2. apaga
- (a ordem não importa ok?)

2. IBActions

Assim como as **IBOutlets**, elas são
“ligações” da interface com o código.

Mas é uma ligação que representa uma
ação.

2. IBActions

A IBAction mais comum é a de um **toque** num **botão**

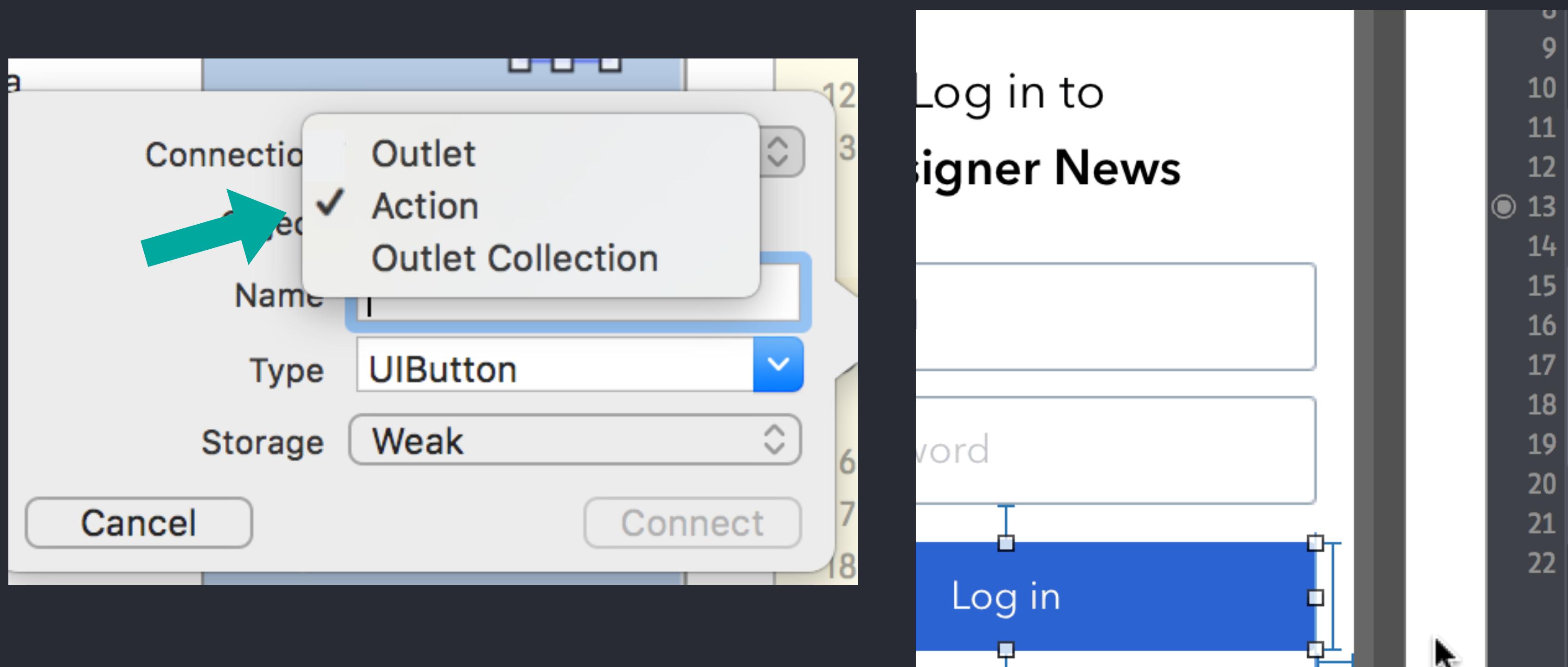
(mas poderia ser numa label,
numa imagem... em **qualquer**
elemento de interface)

2. IBActions

E **toda vez** que alguém apertar no botão que tiver a IBAction uma ação pode ser executada

(agora sim vamos adicionar um pouco de funcionalidade ao app 😎)

O jeito de criar é quase o mesmo das IBOutlets:



```
class ViewController: UIViewController {  
  
    @IBOutlet weak var minhaLabel: UILabel!  
  
    override func viewDidLoad() {  
        super.viewDidLoad()  
    }  
  
    @IBAction func botaoApertado {  
        print("Olá botão")  
    }  
}
```

```
@IBAction func botaoApertado {  
    // Tudo que estiver aqui dentro é  
    // executado quando apertar no botão  
    print("Olá botão")  
}
```

esse comando “print” é
usado para imprimir texto
no console.

Tá... mas cadê a funcionalidade?

```
@IBOutlet weak var minhaLabel: UILabel!
```



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

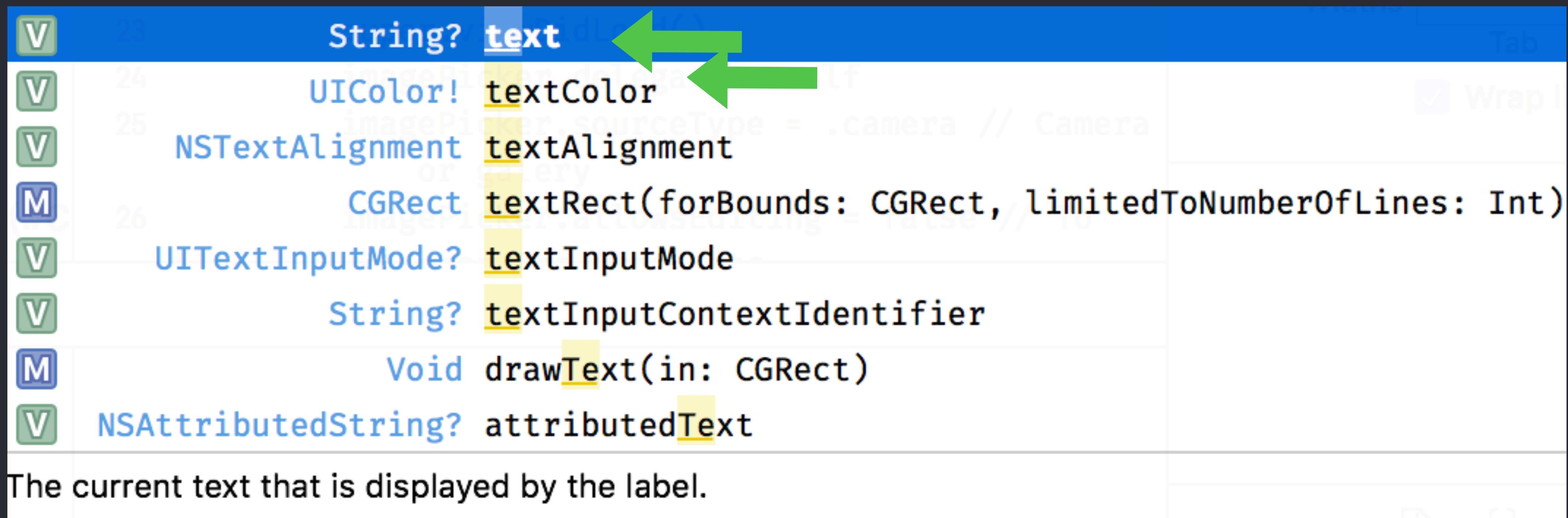
```
@IBAction func botaoApertado {
```

```
    minhaLabel.text = "coxinha"
```



```
}
```

```
@IBAction func botaoApertado {  
    minhaLabel.text = "coxinha"
```



Usando o autocomplete podemos ver outros atributos da label que podemos alterar... Mas cuidado!!

Mudando o texto e a cor

```
@IBAction func botaoApertado {  
    minhaLabel.text = "coxinha"  
    minhaLabel.textColor = .red  
    view.backgroundColor = .orange  
}  
→
```

Também podemos mudar "coisas" da View principal dentro da função 😎

Revisando



1. Aprendemos como fazer conexões da interface no código com IBOutlets ✓
2. E como adicionar funcionalidade ao app com IBActions ✓