

# DESARROLLO DE APLICACIONES MÓVILES

---

Las primeras aplicaciones



# Welcome to Xcode

Version 7.2 (7C68)



## Get started with a playground

Explore new ideas quickly and easily.



## Create a new Xcode project

Start building a new iPhone, iPad or Mac application.



## Check out an existing project

Start working on something from an SCM repository.



Show this window when Xcode launches



## Codigo1.playground

~/Documents/CursoSwift



## Calculadora

~/Documents/CursoSwift



## test0

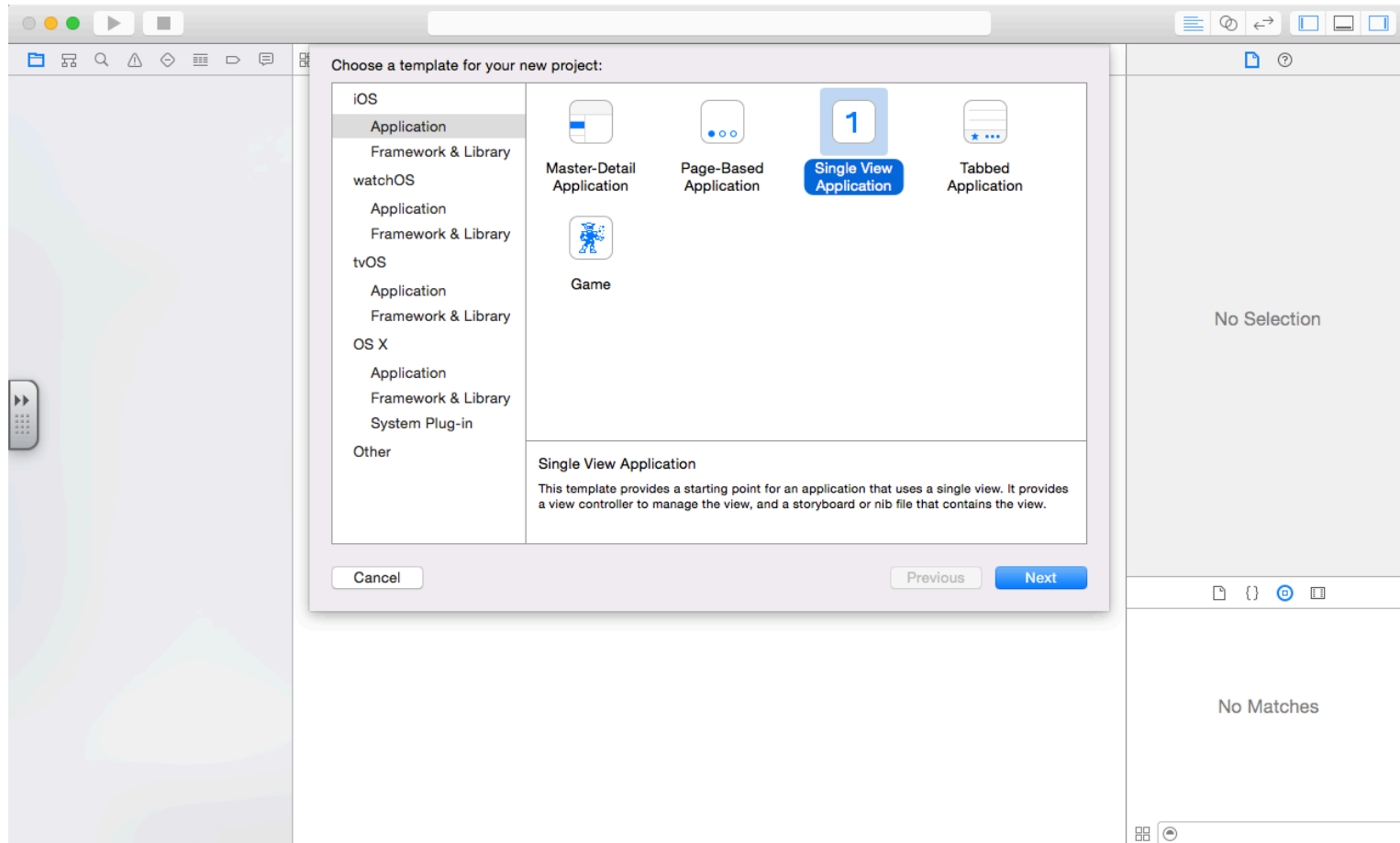
~/Documents/CursoSwift



## MyPlayground3.playground

~/Documents/CursoSwift

Open another project...



- ❑ Opciones para la creación de un nuevo proyecto.
- ❑ Para nuestra primera aplicación elegiremos **Single View Application**.

Choose options for your new project:

Product Name:

Organization Name:

Organization Identifier:

Bundle Identifier:

Language:

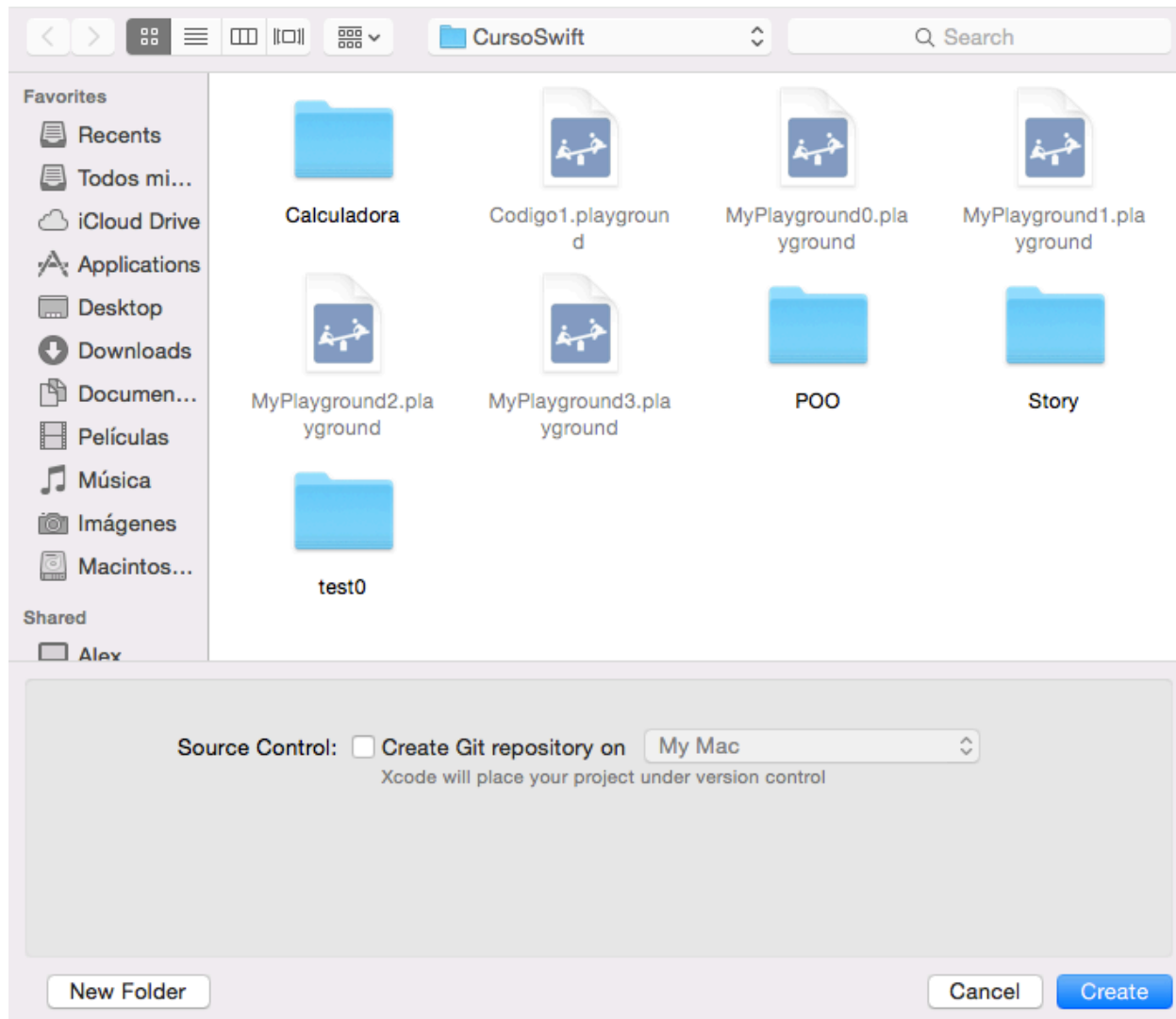
Devices:

☐ Use Core Data

☐ Include Unit Tests

☐ Include UI Tests

- Colocamos el nombre de nuestra aplicación, el dispositivo donde se va a ejecutar y por el momento no seleccionamos ninguna de las tres últimas opciones.



- Crea la carpeta contenedora del proyecto.

The screenshot shows the Xcode IDE with the 'Aplicacion1' project selected. The interface is divided into three main sections: a left sidebar for the project navigator, a central area for the selected target's settings, and a right sidebar for additional settings.

**Project Navigator (Left):** Shows the project structure for 'Aplicacion1', including source files like 'AppDelegate.swift', 'ViewController.swift', 'Main.storyboard', 'Assets.xcassets', 'LaunchScreen.storyboard', and 'Info.plist', as well as a 'Products' folder.

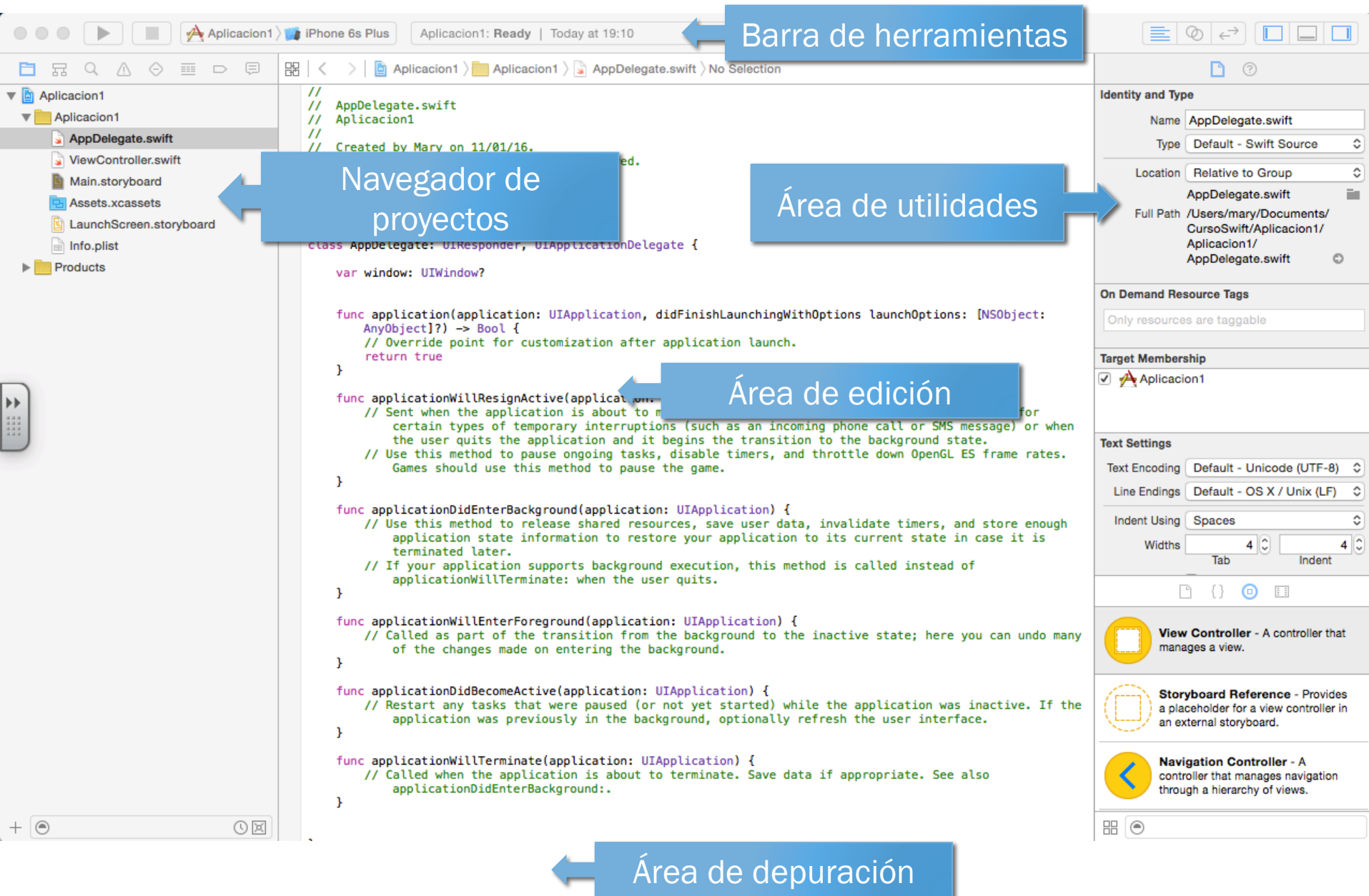
**Central Area (Selected Target: Aplicacion1):**

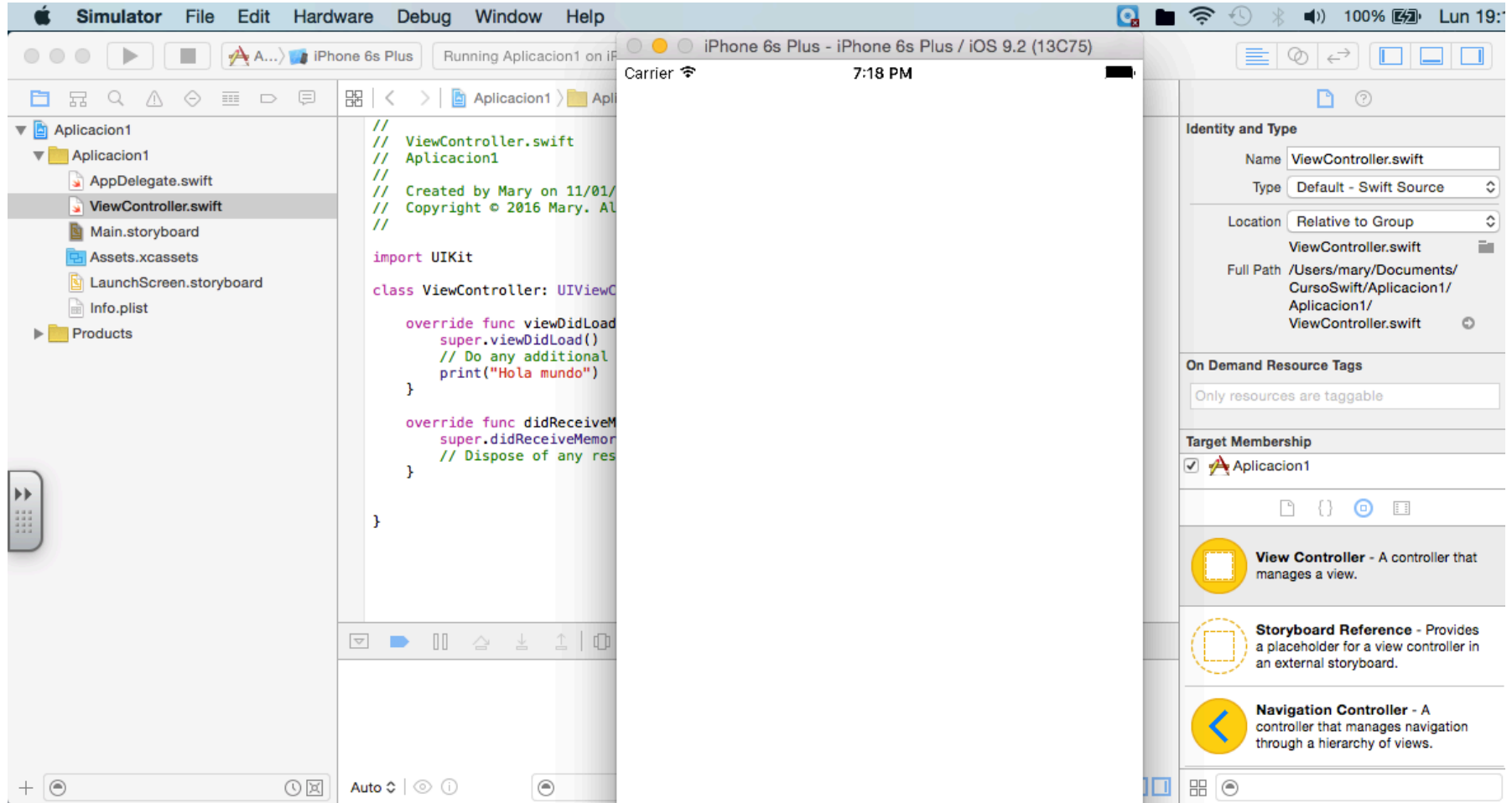
- General Tab:**
  - Identity:** Bundle Identifier is 'MX.Aplicacion1', Version is '1.0', Build is '1', and Team is 'María Antonia Ruiz Diaz (Pers...'. A warning message states: 'No code signing identities found. No valid signing identities (i.e. certificate and private key pair) matching the team ID "FL2RJ32652" were found.' with a 'Fix Issue' button.
  - Deployment Info:** Deployment Target is '9.2', Devices is 'iPhone', Main Interface is 'Main', Device Orientation includes 'Portrait', 'Landscape Left', and 'Landscape Right' (checked), and Status Bar Style is 'Default'.
  - App Icons and Launch Images:** App Icons Source is 'AppIcon', Launch Images Source is 'Use Asset Catalog', and Launch Screen File is 'LaunchScreen'.

**Right Sidebar:**

- Identity and Type:** Name is 'Aplicacion1', Location is 'Absolute', and Full Path is '/Users/mary/Documents/CursoSwift/Aplicacion1/Aplicacion1.xcodeproj'.
- Project Document:** Project Format is 'Xcode 3.2-compatible', Organization is 'Mary', and Class Prefix is empty.
- Text Settings:** Indent Using is 'Spaces', Widths are set to 4 for both Tab and Indent, and 'Wrap lines' is checked.
- Source Control:** Repository, Type, Current Branch, and Version are all set to '--'.

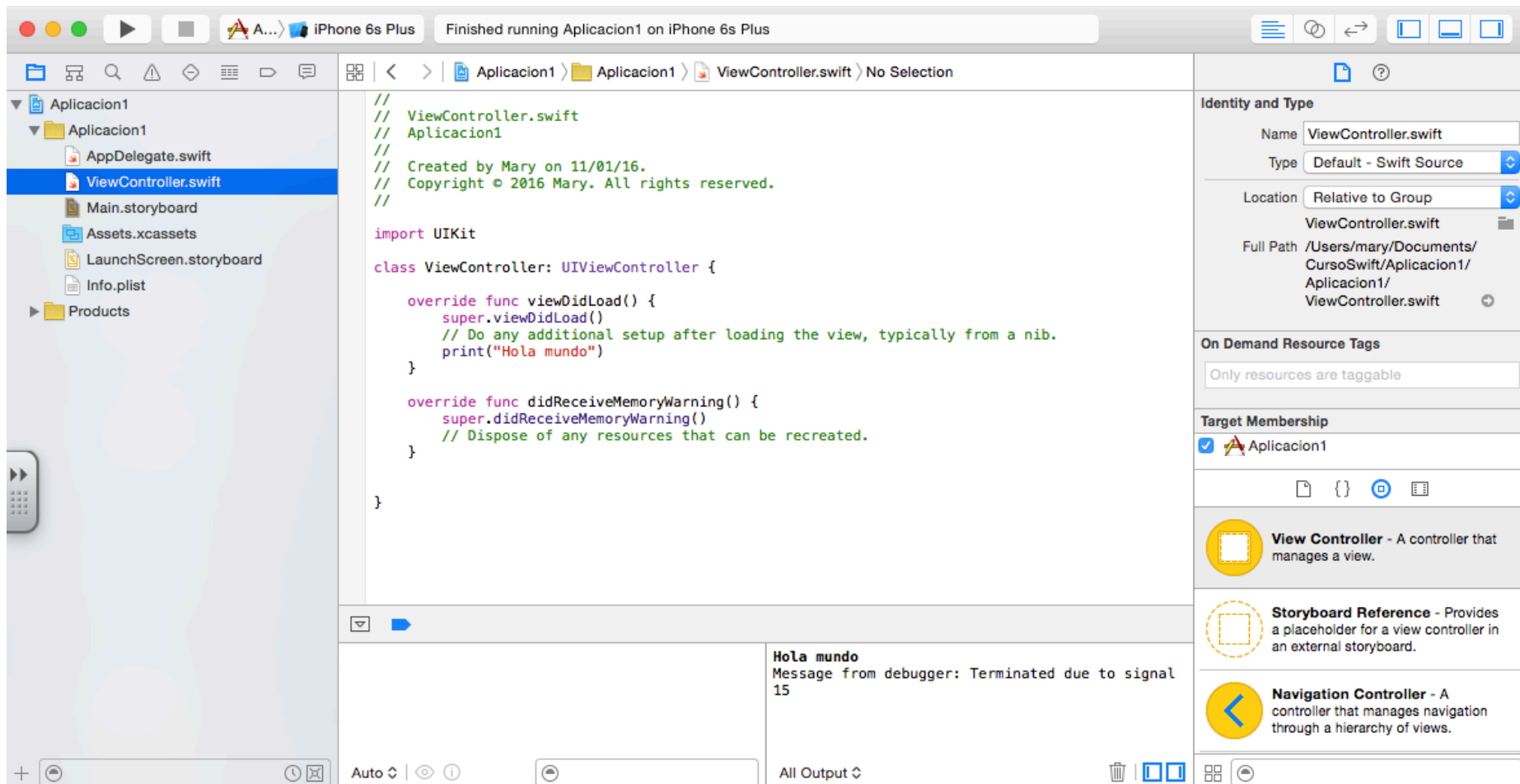
The bottom of the right sidebar shows a search bar with the text 'No Matches'.



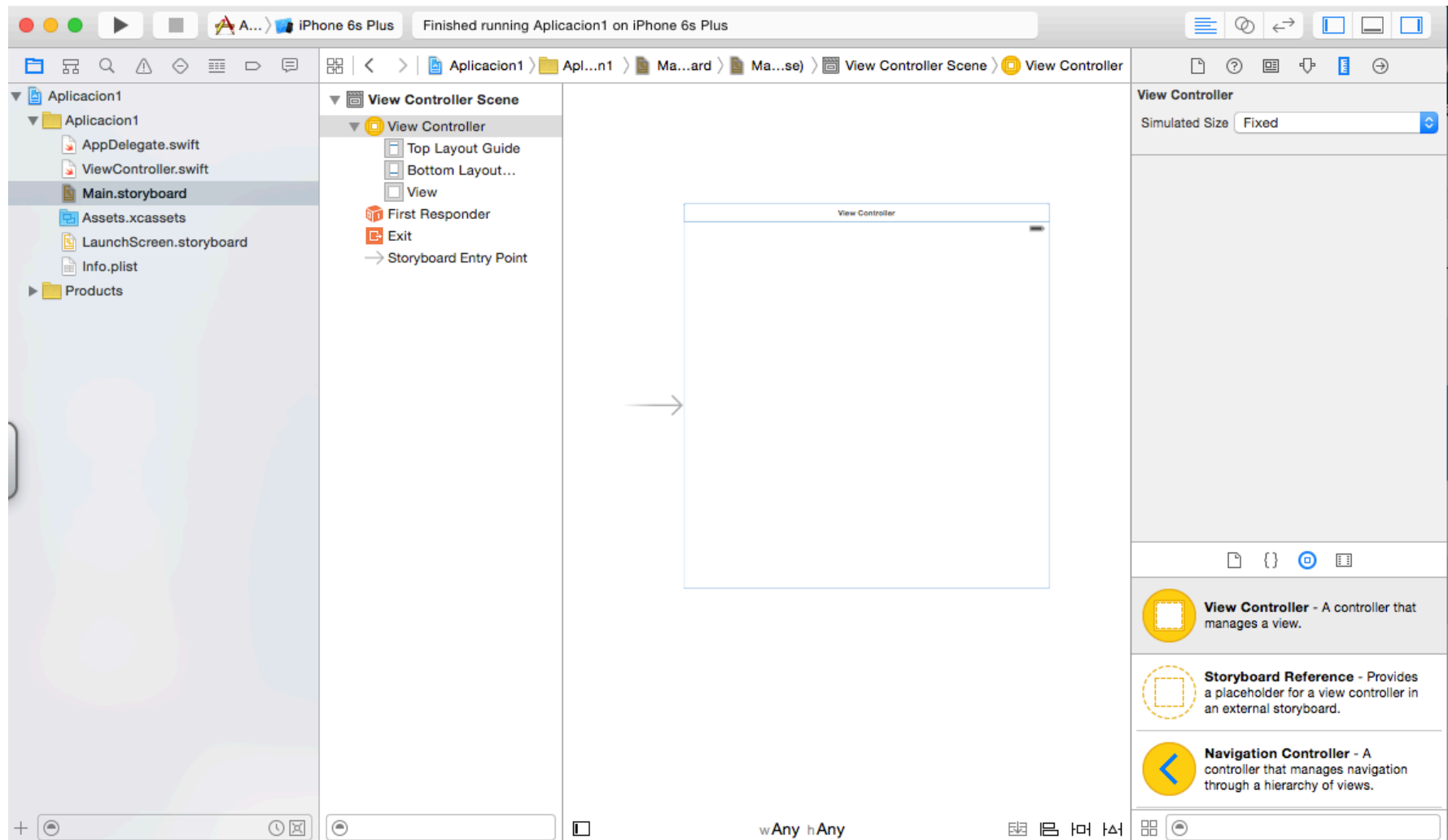


- La clase ViewController, es la clase principal de nuestra aplicación.
- Un clásico: Hola mundo.

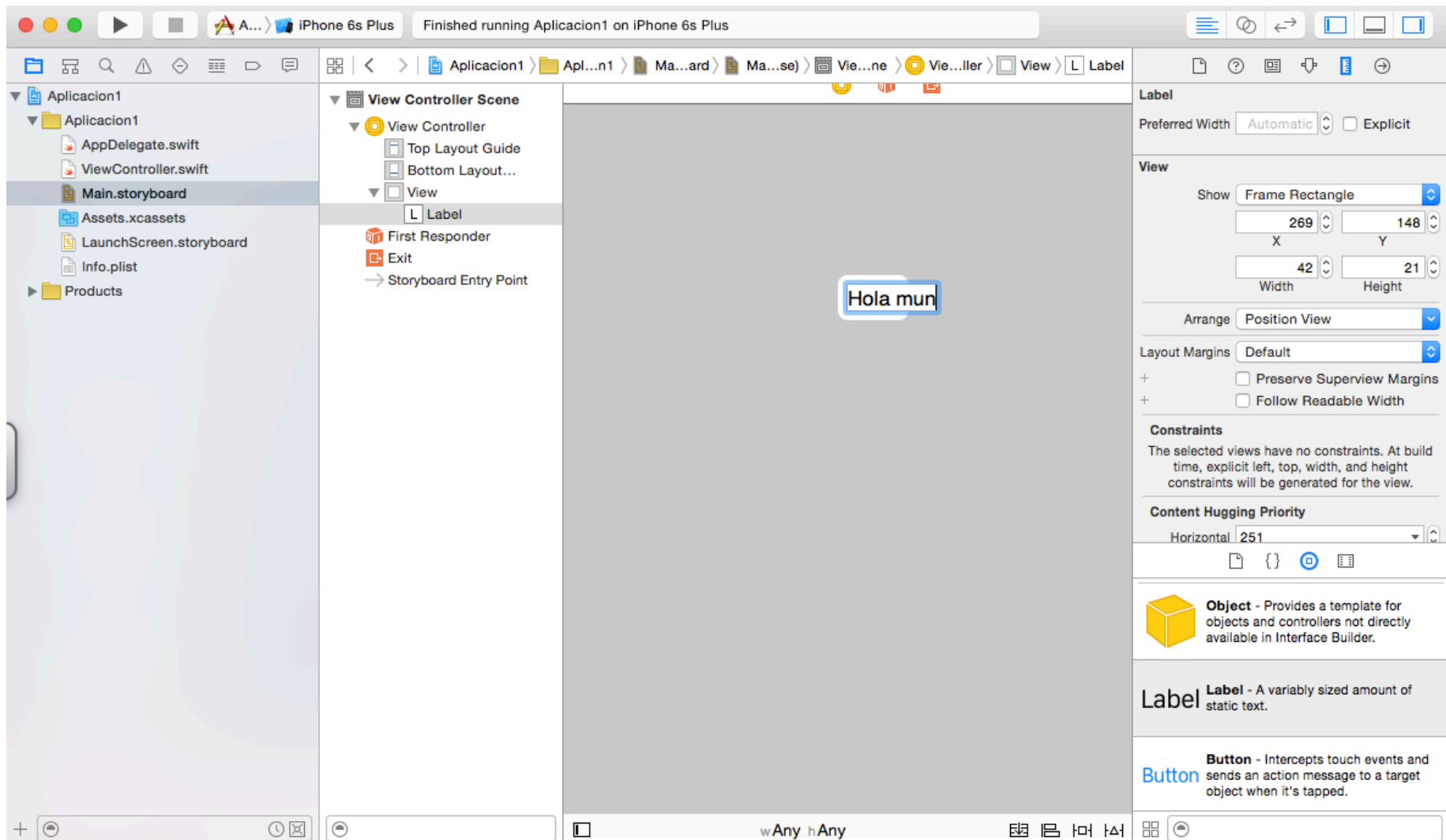




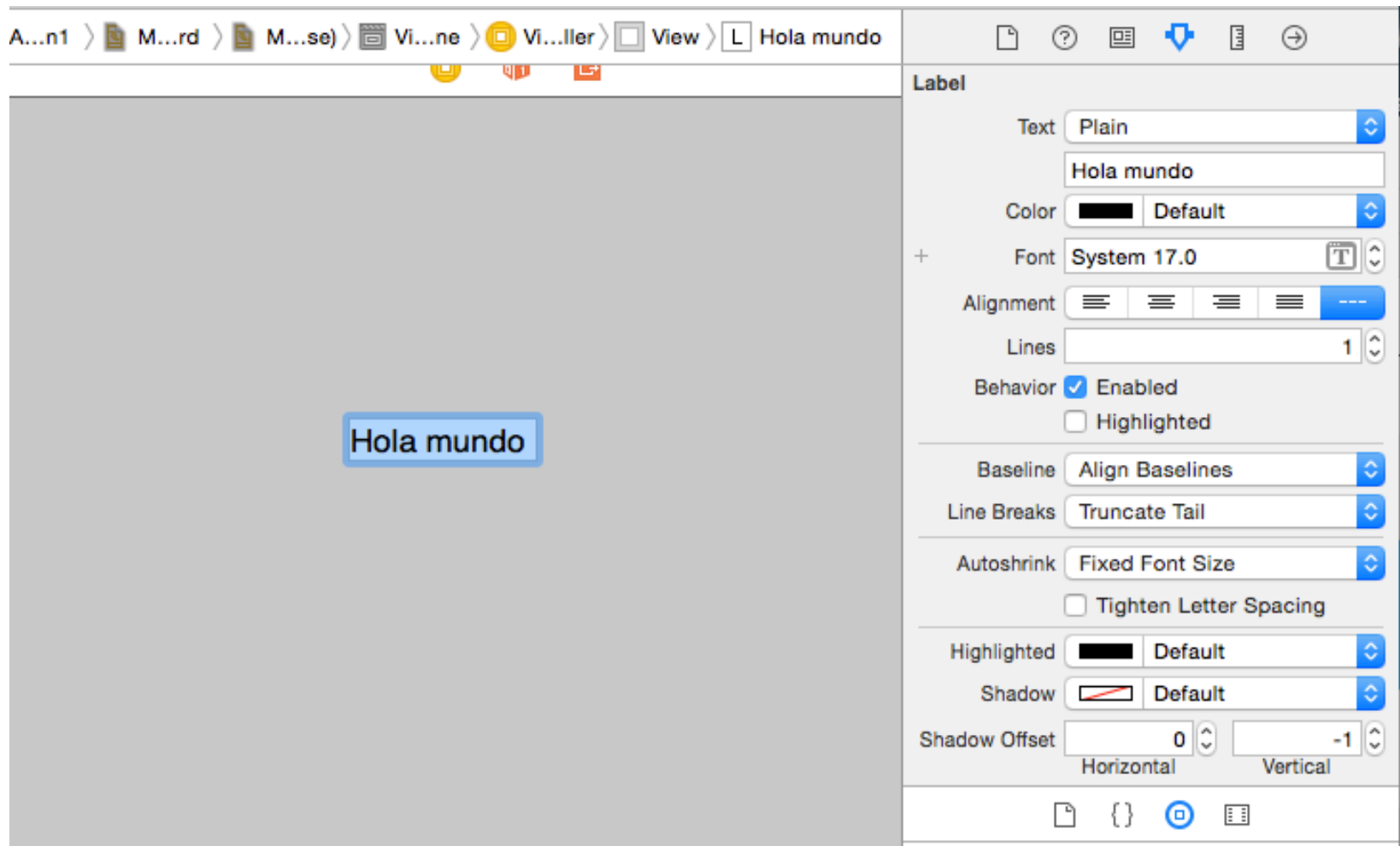
■ Mostrando el mensaje “Hola mundo” en consola.



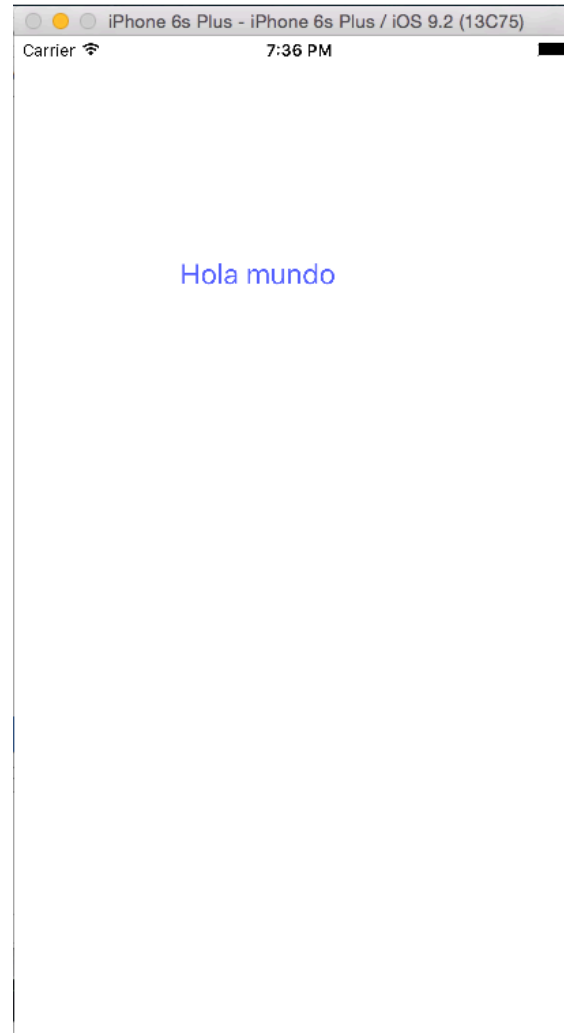
■ Main.storyboard.



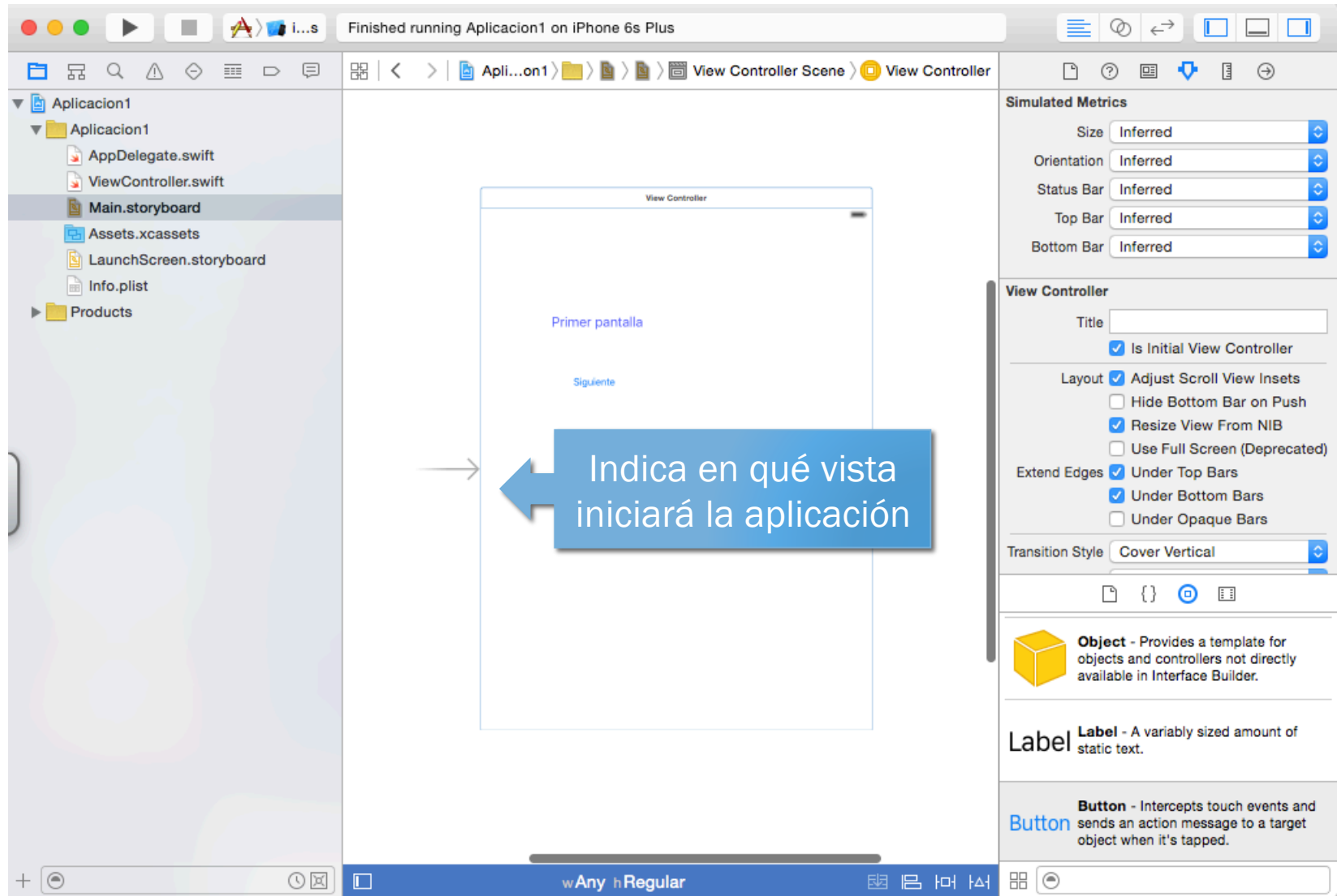
■ Insertando una etiqueta.



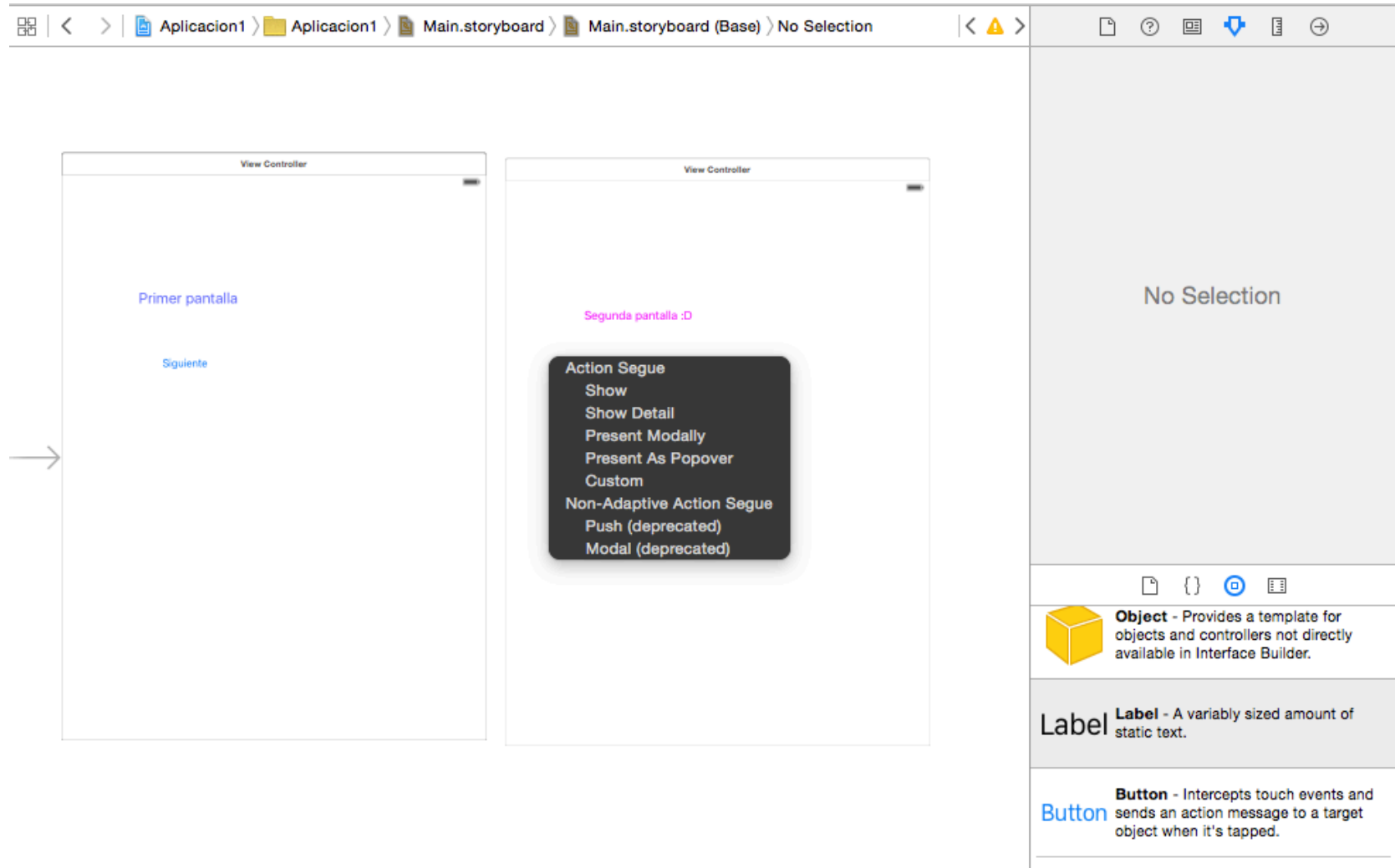
- Modificando las propiedades de la etiqueta.



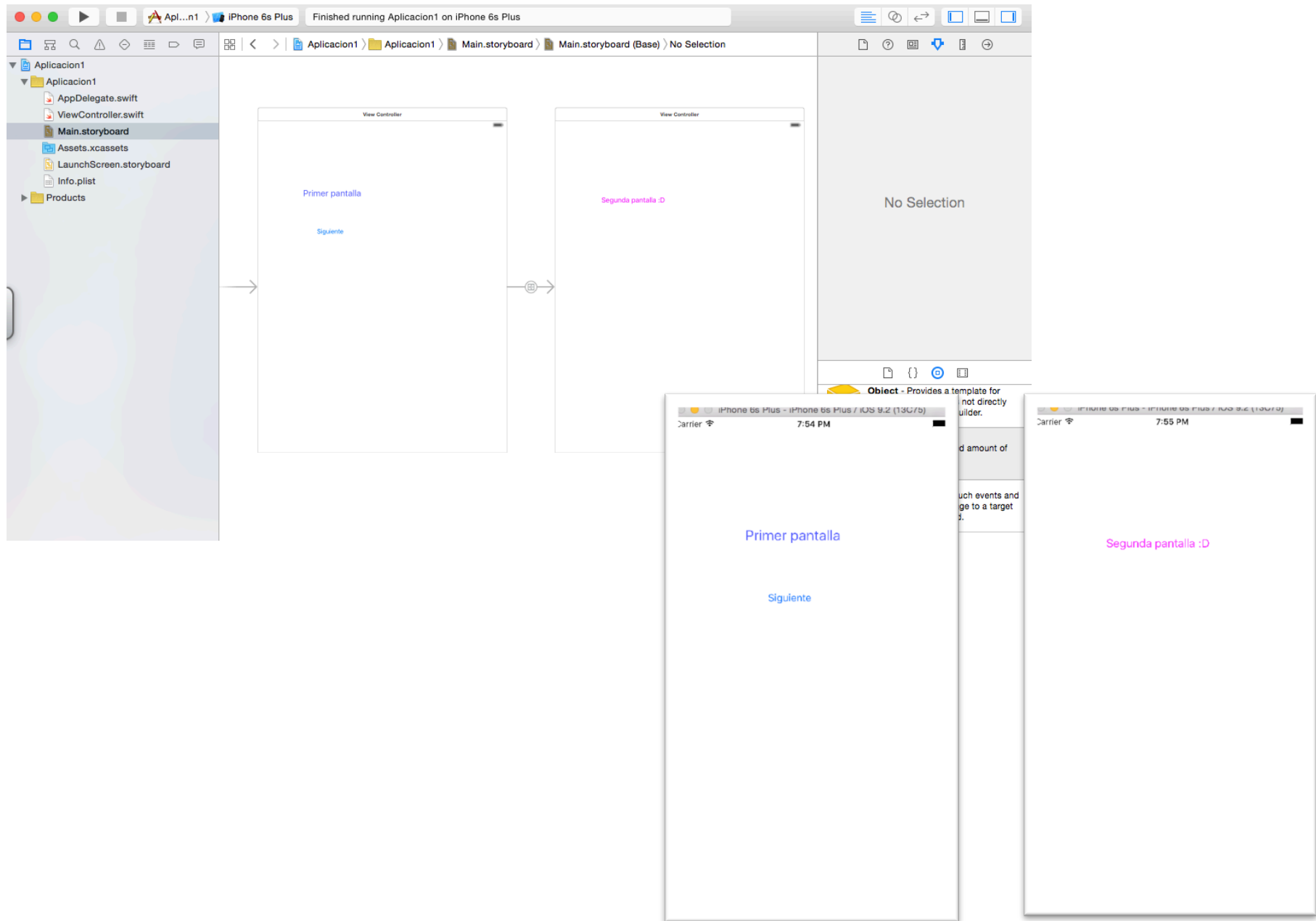
- Hola mundo, simulado en un dispositivo iPhone 6s Plus.



- Modificando el texto y agregando un botón.

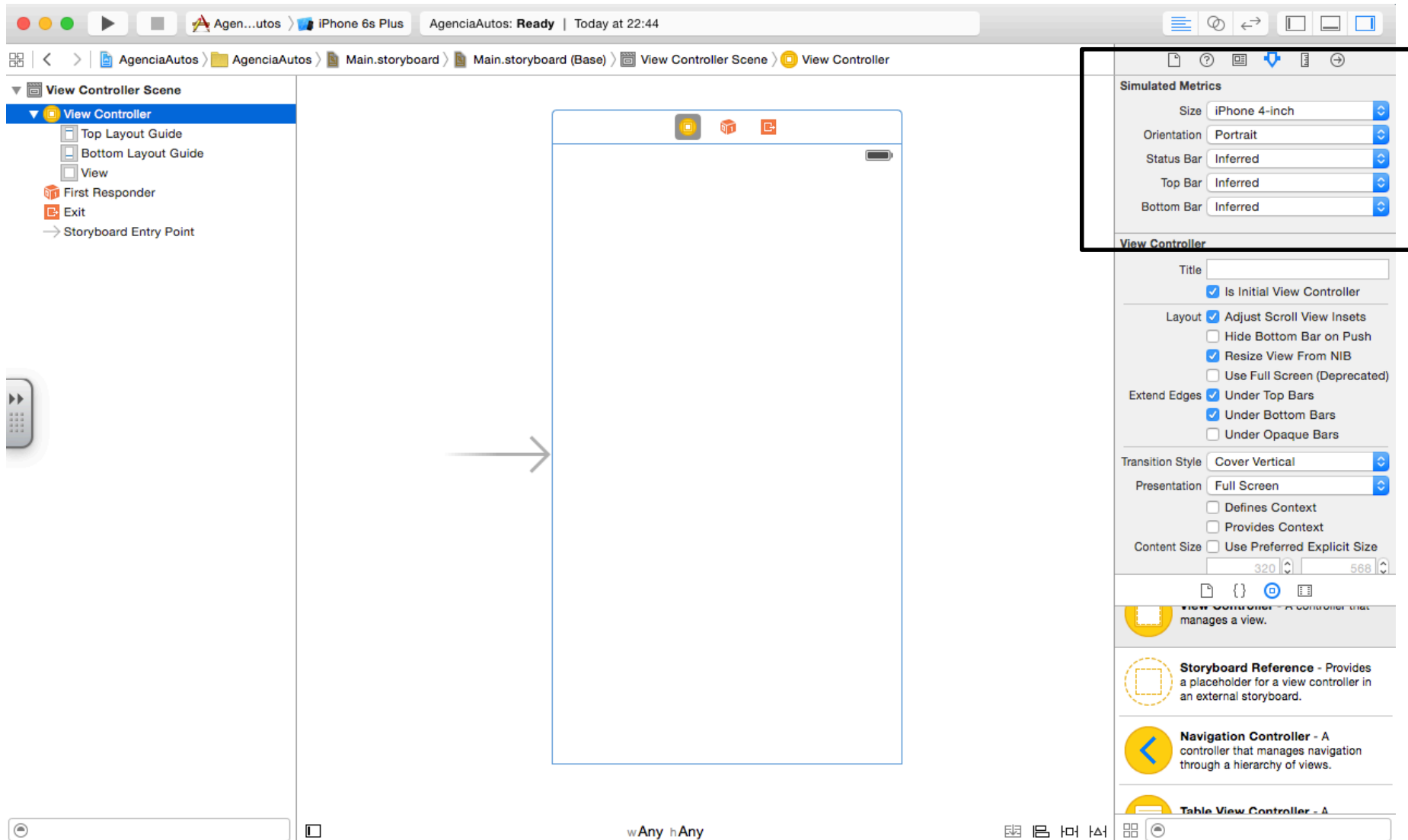


- Insertando un ViewController.
- Colocando el texto, “Segunda pantalla”.
- Oprimiendo la tecla Ctrl, da clic en el botón Siguiete y arrastra hasta el siguiente ViewController.
- Selecciona la opción Show.





# Programación Orientada a Objetos



11/01/16

M.C. María Antonia Ruíz Díaz - Facultad de Ciencias de la Computación - BUAP

19

AgenciaAutos: Ready | Today at 22:56

AgenciaAutos > AgenciaAutos > Main.storyboard > Main.storyboard (Base) > View Controller Scene > View Controller > View

**View Controller Scene**

- View Controller
  - Top Layout Guide
  - Bottom Layout Guide
  - View
    - Agencia de Autos
    - Crear auto
    - Mostrar atributos
    - Encender
    - Acelerar
    - Apagar
  - First Responder
  - Exit
  - Storyboard Entry Point

**View**

Mode: Scale To Fill

Semantic: Unspecified

Tag: 0

Interaction: ☒ User Interaction Enabled

☐ Multiple Touch

Alpha: 1

Background: White Color

Tint: Default

Drawing: ☒ Opaque ☐ Hidden

☒ Clears Graphics Context

☐ Clip Subviews

☒ Autolayout Subviews

Stretching: X: 0 Y: 0

Width: 1 Height: 1

**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.

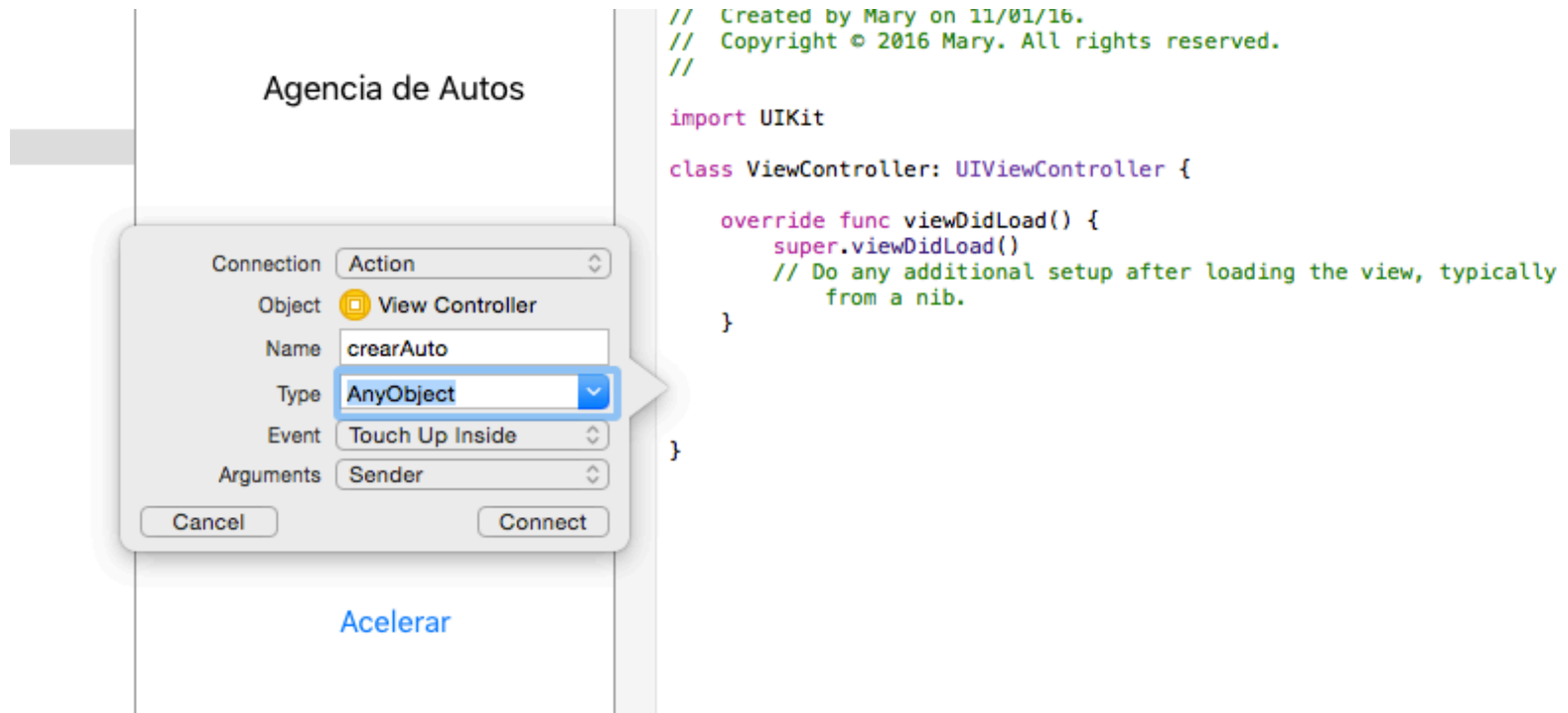
**Segmented Control** - Displays multiple segments, each of which functions as a discrete button.

**Text Field** - Displays editable text

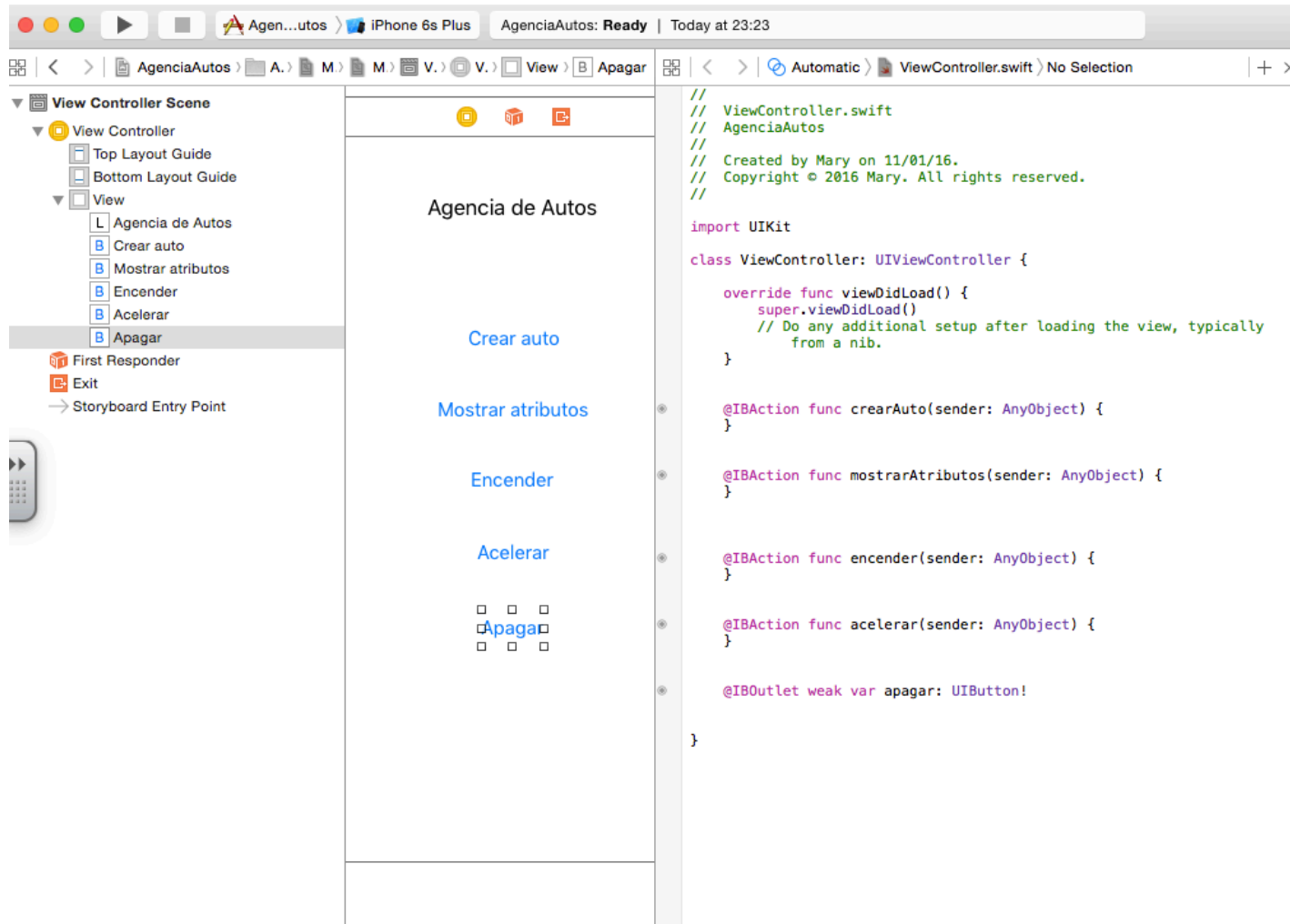
wAny hAny

The screenshot shows the Xcode IDE with the following components:

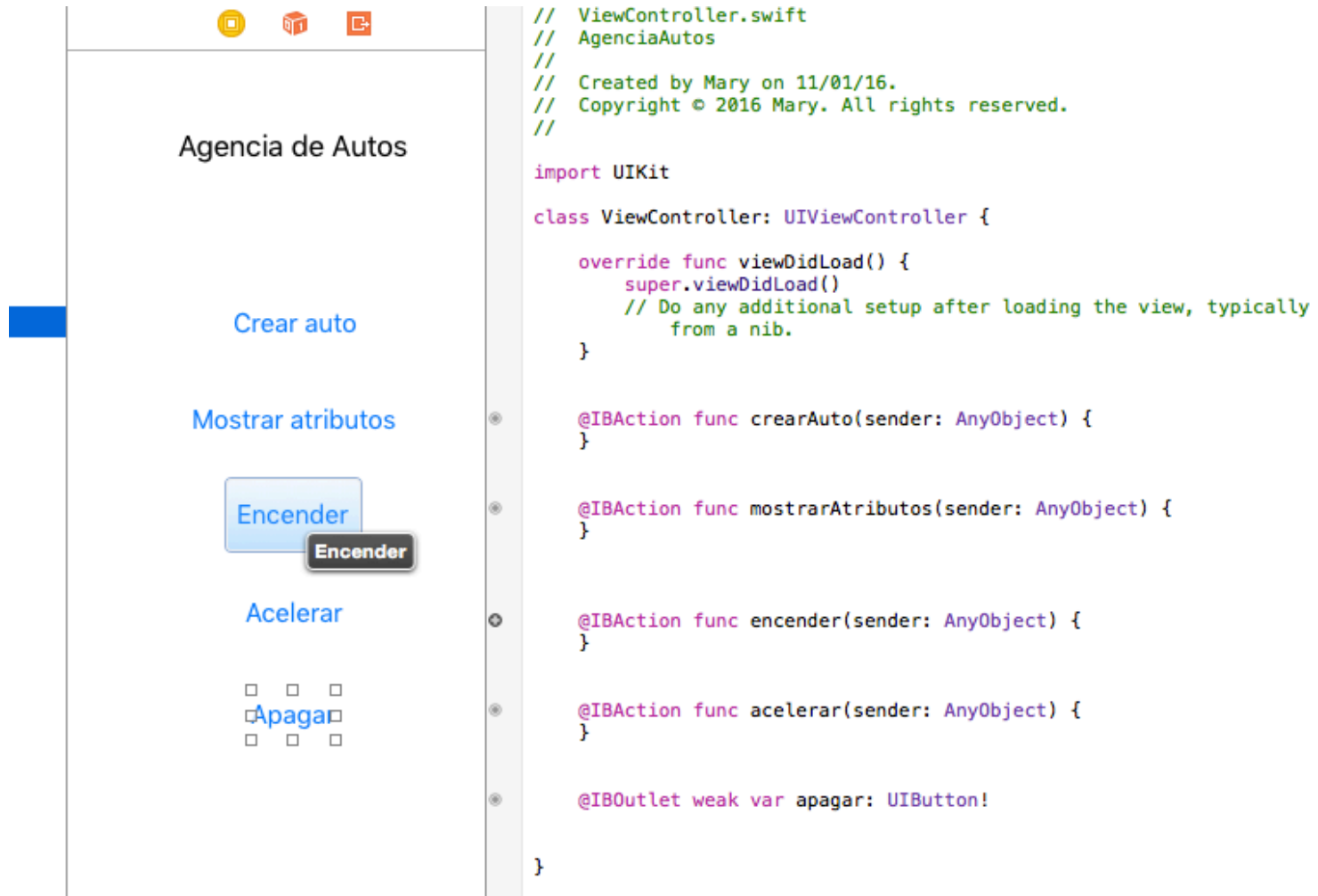
- Top Bar:** Displays the project name 'AgenciaAutos', the device 'iPhone 6s Plus', and the status 'Ready'. The date 'Today at 23:15' is also shown.
- Left Sidebar (Project Navigator):** Shows the project structure under 'View Controller Scene'. It includes a 'View Controller' with a 'Top Layout Guide', a 'Bottom Layout Guide', and a 'View' containing several UI elements: 'Agencia de Autos', 'Crear auto', 'Mostrar atributos', 'Encender', 'Acelerar', and 'Apagar'. There are also 'First Responder', 'Exit', and 'Storyboard Entry Point' options.
- Central Canvas (Storyboard):** Displays a storyboard for 'Agencia de Autos'. It shows a series of blue buttons arranged vertically: 'Crear auto', 'Mostrar atributos', 'Encender', 'Acelerar', and 'Apagar'.
- Right Sidebar (Code Editor):** Shows the Swift code for 'ViewController.swift'. The code includes imports, class declarations, and method overrides. A black box highlights the `override func didReceiveMemoryWarning()` method, which is used to indicate that the app can handle memory warnings by releasing resources.
- Right Sidebar (Documentation Pane):** Displays documentation for various UI components: 'Label', 'Button', 'Segmented Control', and 'Text Field'. Each entry includes a brief description of its function.



- Oprimiendo la tecla Ctrl, da clic sobre el botón crear auto y arrastra el cursor debajo de la función viewDidLoad.
- Rellena los campos que aparecen en la ventana desplegable.



- Repite el mismo proceso, para los botones restantes.



- Posicionarte sobre los círculos te indica con qué elemento de la interfaz gráfica está ligada la función.



Agencia de Autos

Crear auto

Mostrar atributos

Encender

Acelerar

Apagar

```
//
// ViewController.swift
// AgenciaAutos
//
// Created by Mary on 11/01/16.
// Copyright © 2016 Mary. All rights reserved.
//

import UIKit

class Auto: UIViewController {

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

    @IBAction func crearAuto(sender: AnyObject) {

    }

    @IBAction func mostrarAtributos(sender: AnyObject) {

    }

    @IBAction func encender(sender: AnyObject) {

    }

    @IBAction func acelerar(sender: AnyObject) {

    }

    @IBOutlet weak var apagar: UIButton!

}
```

**Custom Class**

Class	ViewController
Module	Auto
identity	GLKViewController
Storyboard ID	UICollectionViewController
Restoration ID	UINavigationController

☐ Use Storyboard ID

**User Defined Runtime Attributes**

Key Path	Type	Value

+ -

**Document**

Label: Xcode Specific Label

Object ID: BYZ-38-t0r

Lock: Inherited - (Nothing)

Notes: [Icons]

No Font

**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.



The screenshot displays the Xcode IDE with a project named "Agencia de Autos" for an iPhone 5 (iOS 9.2). The interface is divided into several panels:

- Storyboard:** Shows a single scene named "Auto Scene" with a view containing the text "Agencia de Autos". Below the text are three buttons labeled "Crear auto", "Mostrar atributos", and "Encender".
- Source Code:** The file "ViewController.swift" is open, showing the following Swift code:

```
//
//  ViewController.swift
//  AgenciaAutos
//
//  Created by Mary on 11/01/16.
//  Copyright © 2016 Mary. All rights reserved.
//

import UIKit

class Auto: UIViewController {

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

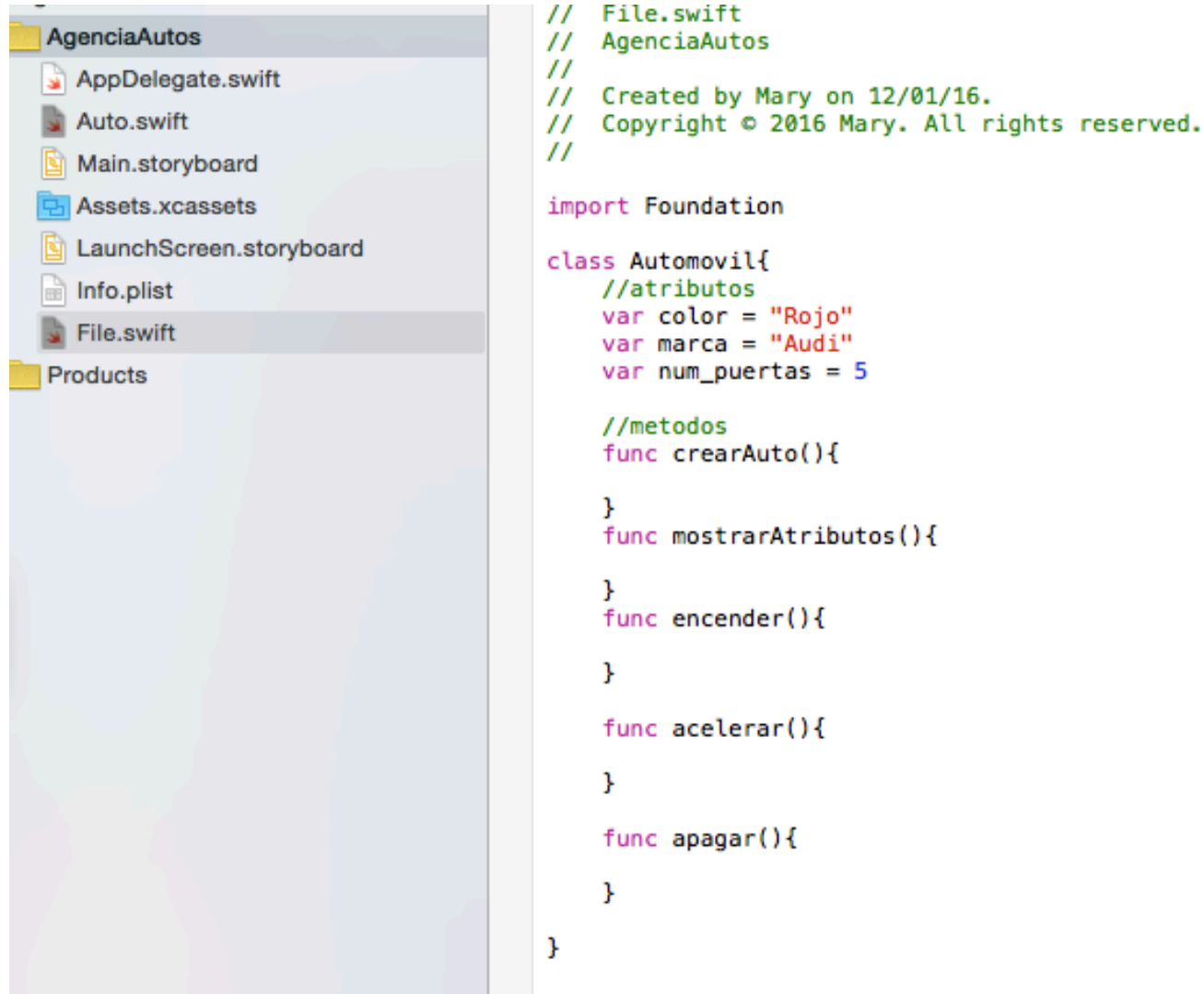
    @IBAction func crearAuto(sender: AnyObject) {
        print("Funcion crear auto")
    }

    @IBAction func mostrarAtributos(sender: AnyObject) {
        print("Funcion mostrar atributos")
    }

    @IBAction func encender(sender: AnyObject) {
        print("Funcion encender")
    }

    @IBAction func acelerar(sender: AnyObject) {
        print("Funcion acelerar")
    }

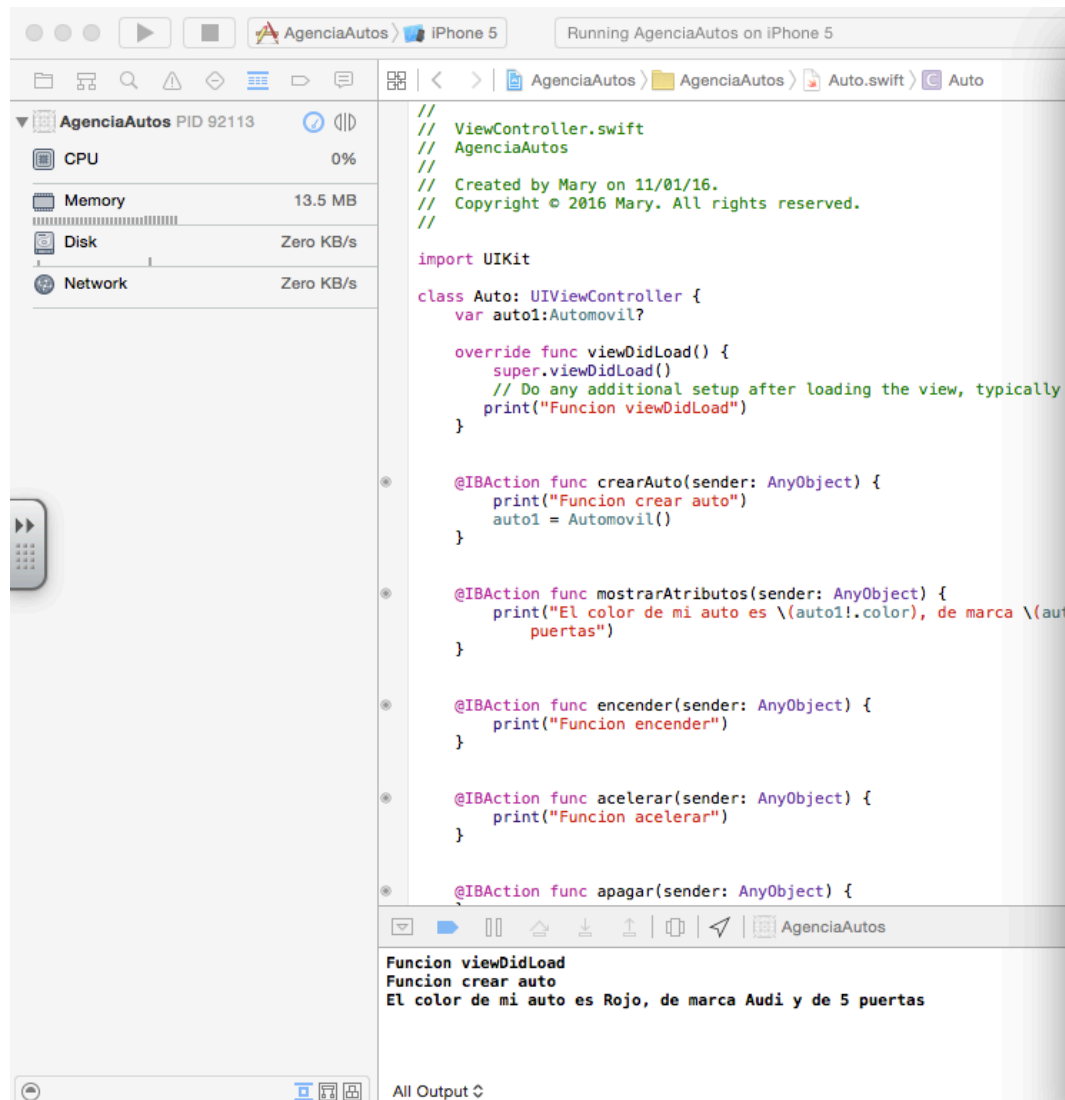
    @IBAction func apagar(sender: AnyObject) {
    }
```
- Quick Help:** Displays documentation for the `print` function, including its declaration, description, and related functions.
- Object Library:** Shows a list of UI elements, including "Object", "Label", and "Button", with brief descriptions of their functions.



- La clase Automovil.

```
//  
  
import UIKit  
  
class Auto: UIViewController {  
    var auto1:Automovil?  
  
    override func viewDidLoad() {  
        super.viewDidLoad()  
        // Do any additional setup after  
        loading the view, typically  
        from a nib.  
        print("Funcion viewDidLoad")  
    }  
}
```

- Declarando un objeto: class auto1:Automovil?



## Agencia de Autos

Crear auto

Mostrar atributos

Encender

Acelerar

Apagar