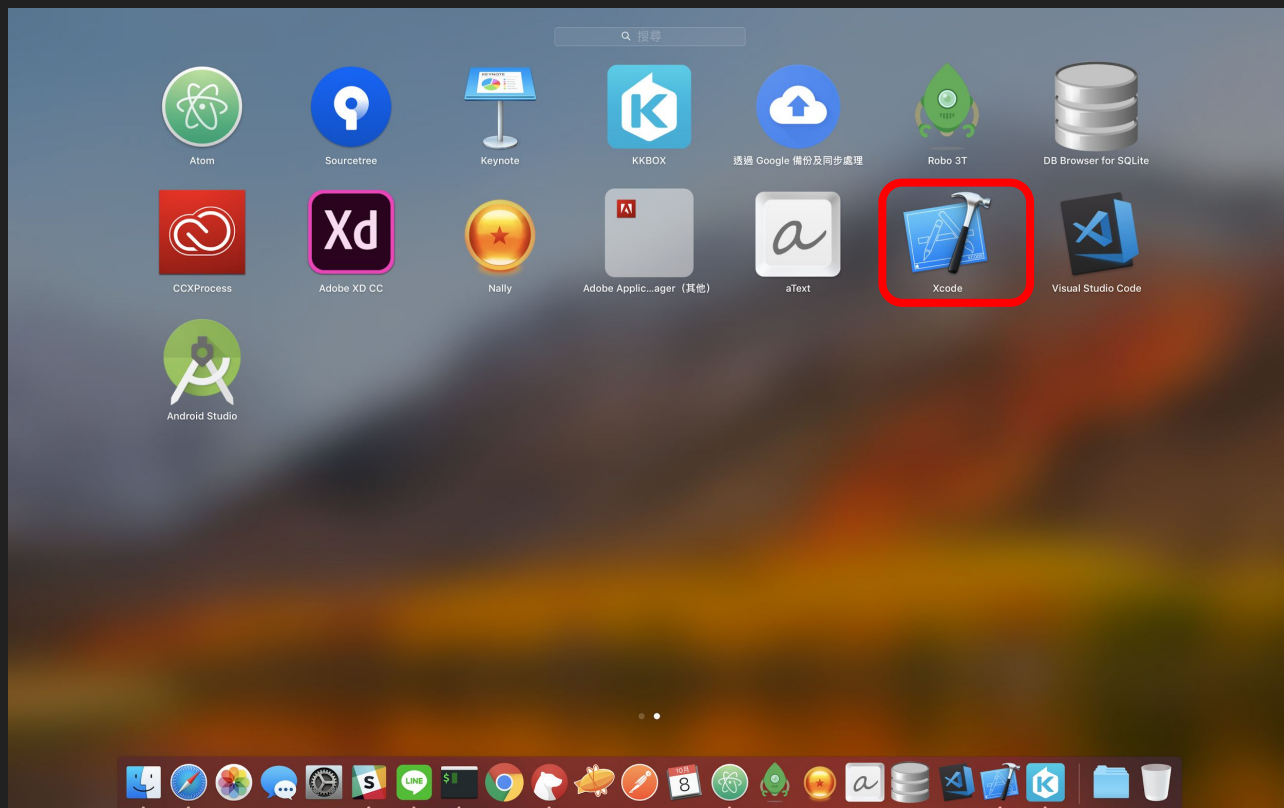
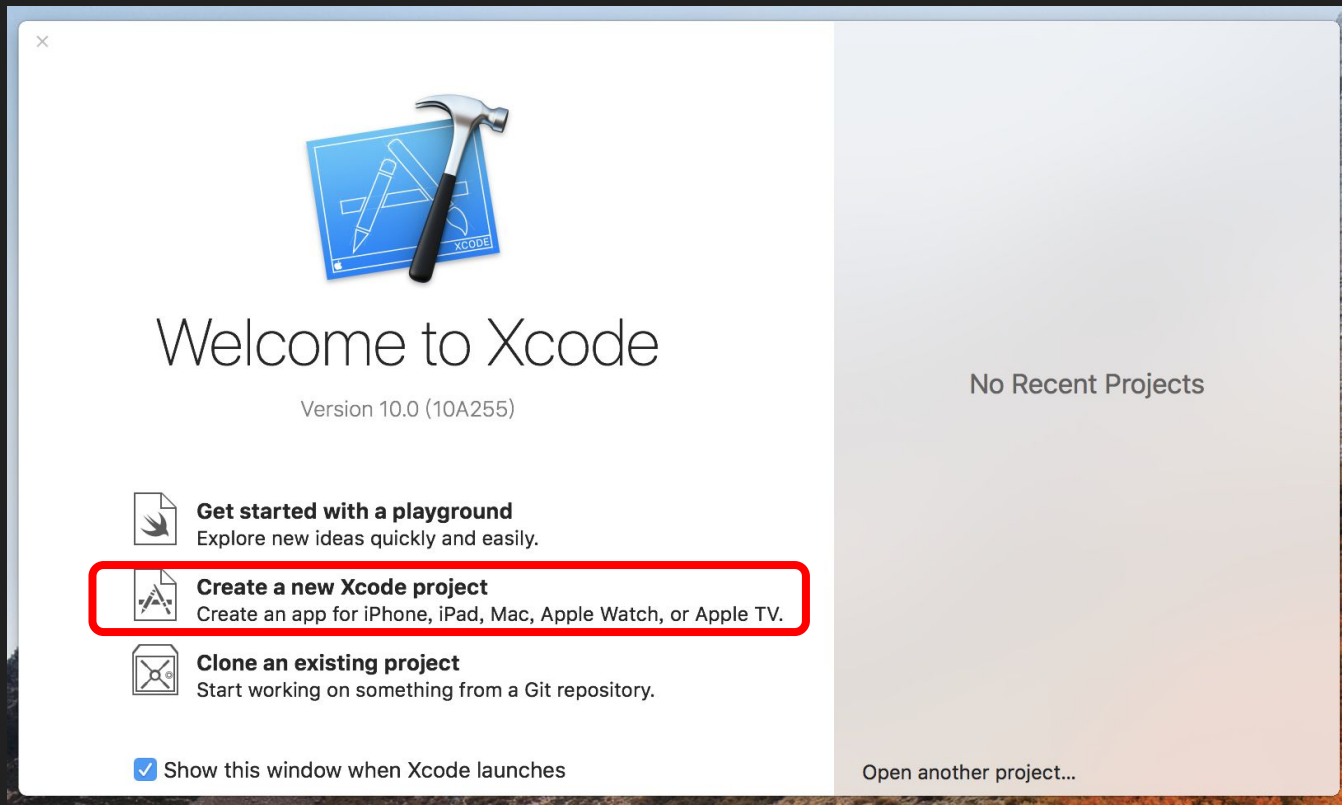


# Xcode 與 Storyboard 簡介

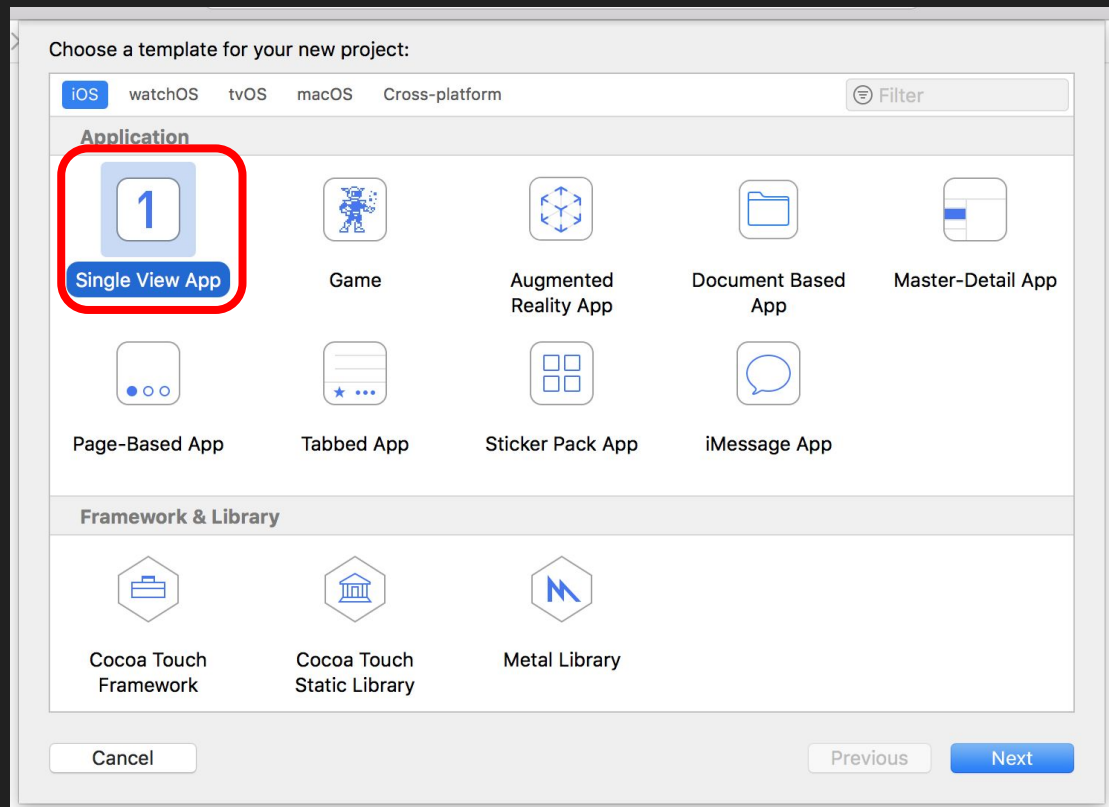
# 在應用程式中找到 Xcode



# Create a new Xcode project



# 選擇 Single View Application



# 填寫 Project 設定

Choose options for your new project:

Product Name: HelloWorld

Team: WU CHIH WEI

Organization Name: WU CHIH WEI

Organization Identifier: LukeWu

Bundle Identifier: LukeWu.HelloWorld

Language: Swift

☐ Use Core Data

☐ Include Unit Tests

☐ Include UI Tests

Cancel Previous Next

Product Name :

專案名稱

Team:

選擇開發者帳號，如沒有開發者帳號，可先選擇 none。

Organization Name :

組織名稱，可先填入英文名字

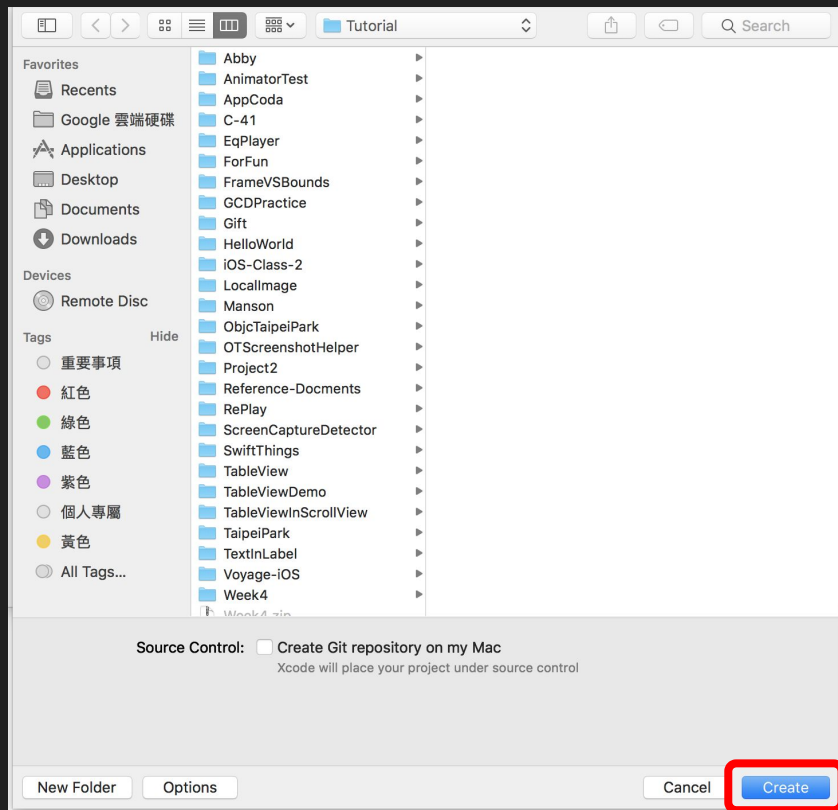
Organization Identifier :

識別組織的文字

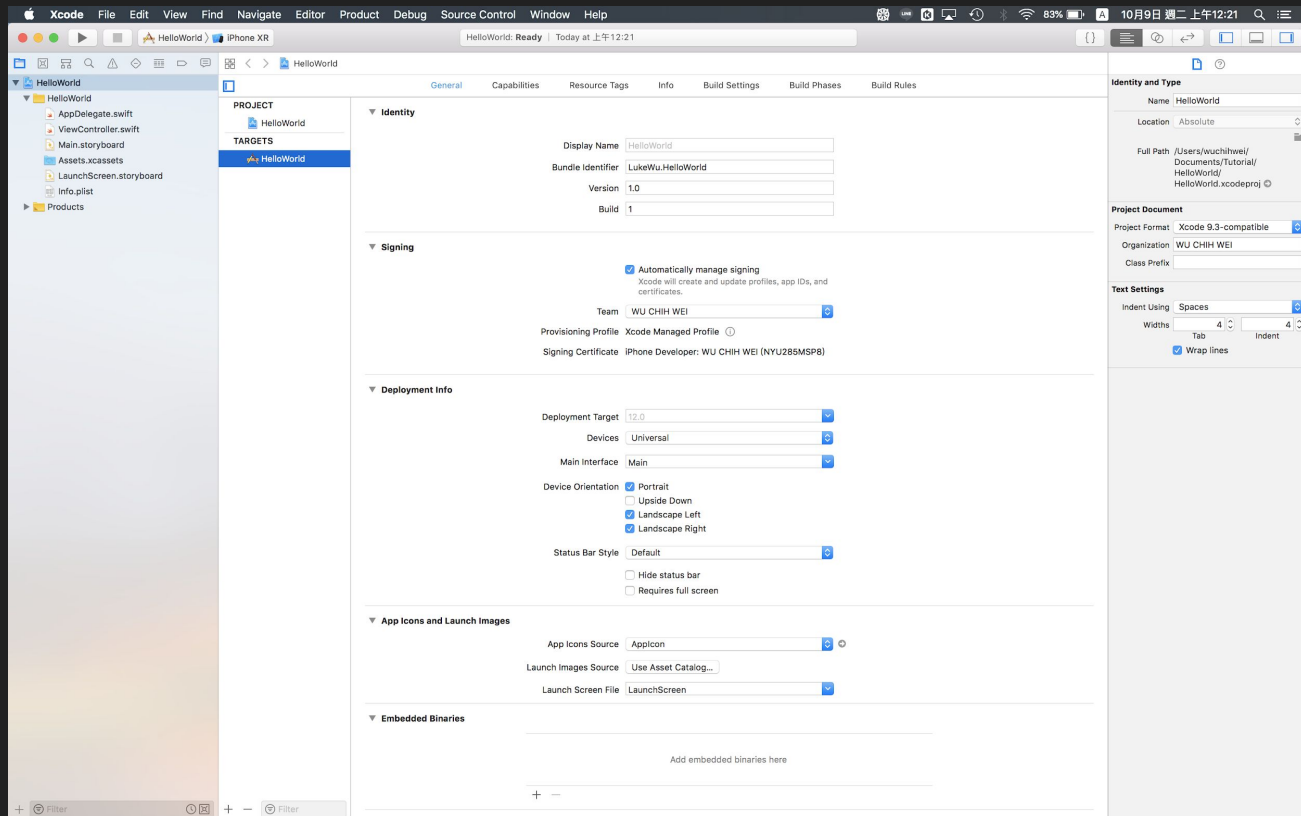
Bundle Identifier :

由 Product Name 與 Organization Identifier 組  
成一個獨一無二的識別文字，用來辨認 App

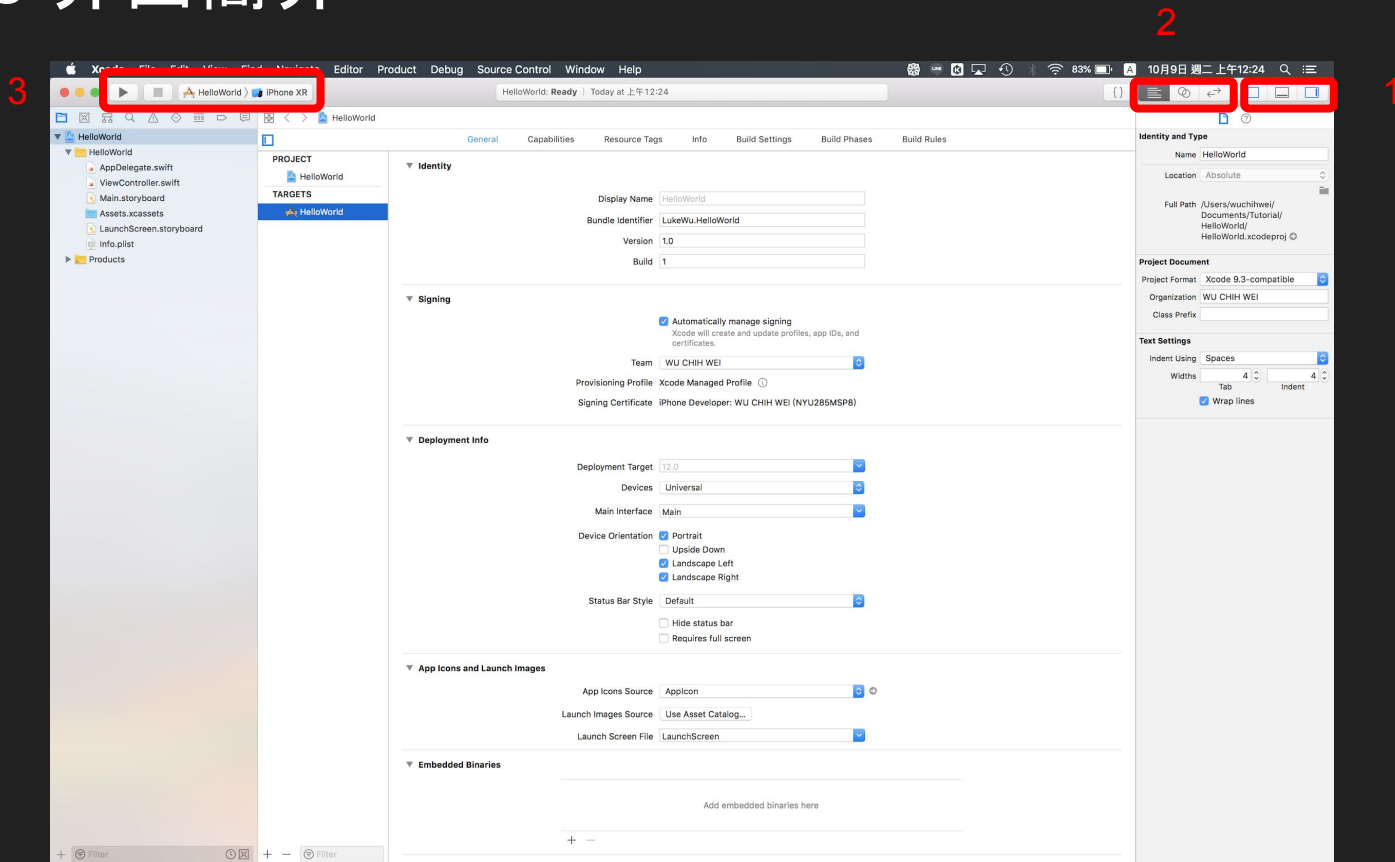
# 選擇完 Project 要儲存的路徑，按下 Create



# 建立好 Project



# Xcode 介面簡介





# Xcode 介面簡介

## 1. 介面收合區

這部分的三個按鈕分別用來收合 Xcode 左方，下方，以及右方的區域，讓我們在必要的時候能夠有更大看 code 的區域。

## 2. 切換不同的編輯模式

由左到右分別為：  
標準模式  
顯示助理編輯器模式  
版本編輯器模式

## 3. 模擬器區域

由左到右分別為：  
執行程式碼  
停止執行程式碼  
設定編譯方案(暫時少用)  
選擇模擬器

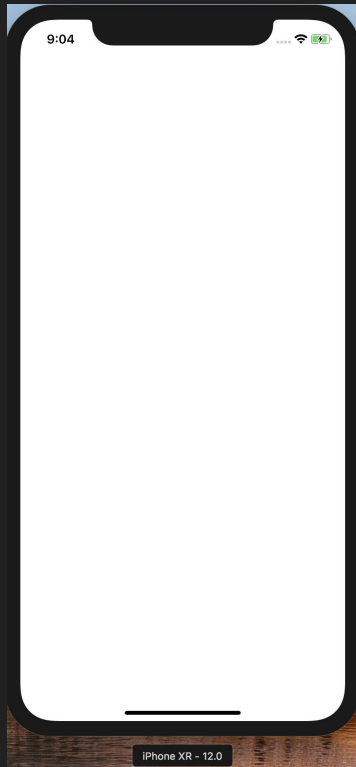
# 執行專案

按下左上角三角形按鈕  
Run, Xcode 會在模擬器  
上執行程式，目前我們尚  
未添加任何東西，會是一  
個空白的畫面。

執行完成, Xcode 上方會顯示下列文字

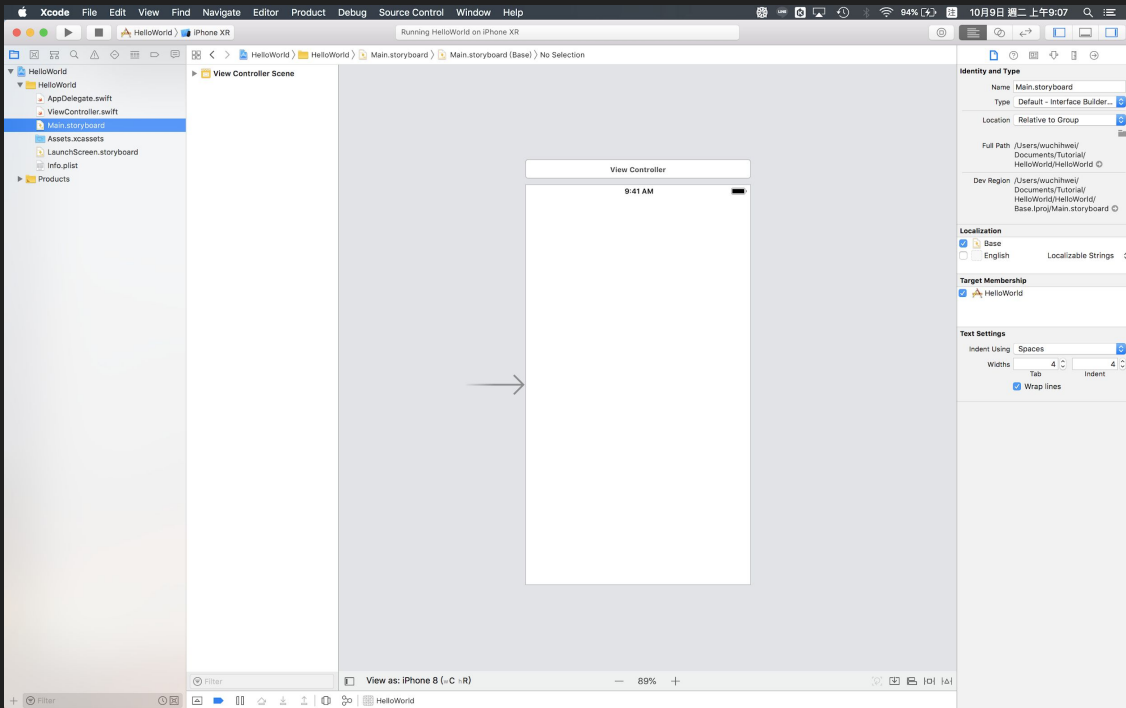
Running HelloWorld on iPhone XR

模擬器畫面



# Storyboard

Storyboard 是 Apple 設計來讓開發者可以快速的建立好使用者頁面，並且透過圖形化介面，讓我們所見即所得。

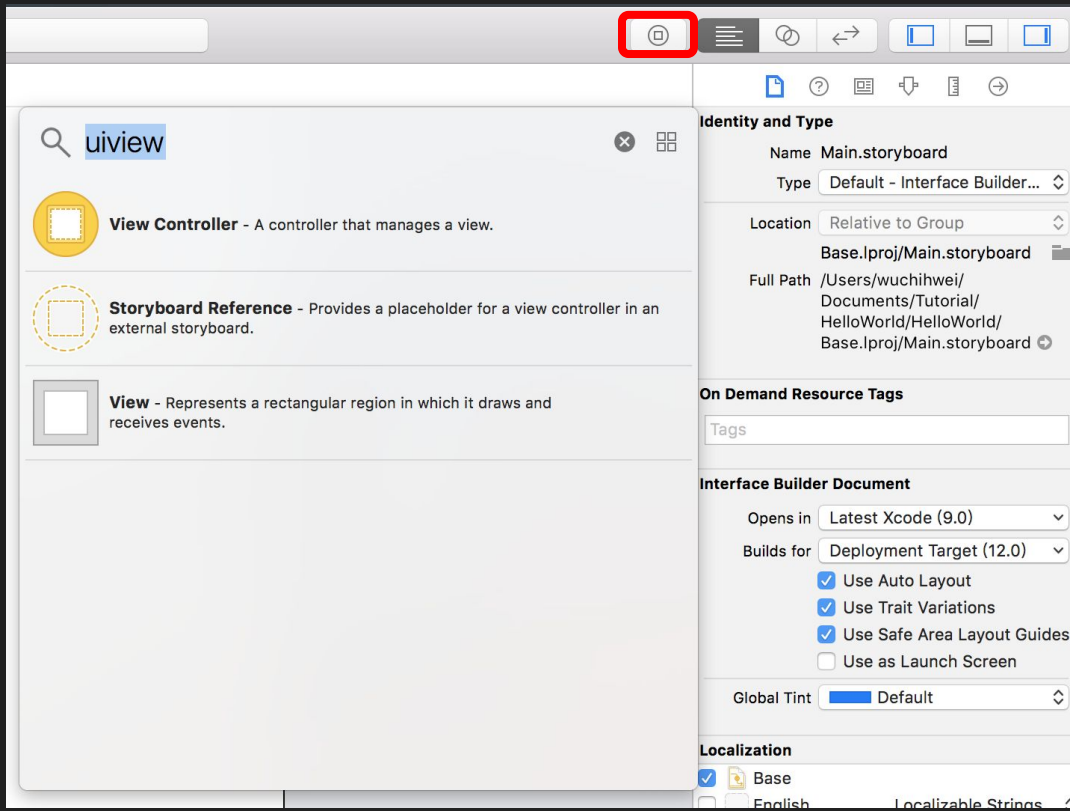


# 拉幾個元件試試

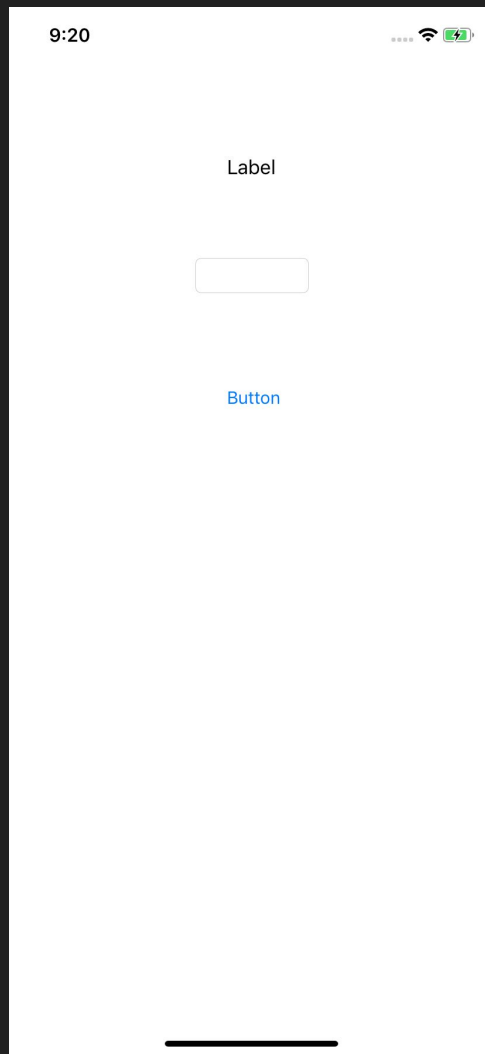
UILabel: 顯示文字

UIButton: 按鈕

UITextField: 文字輸入框



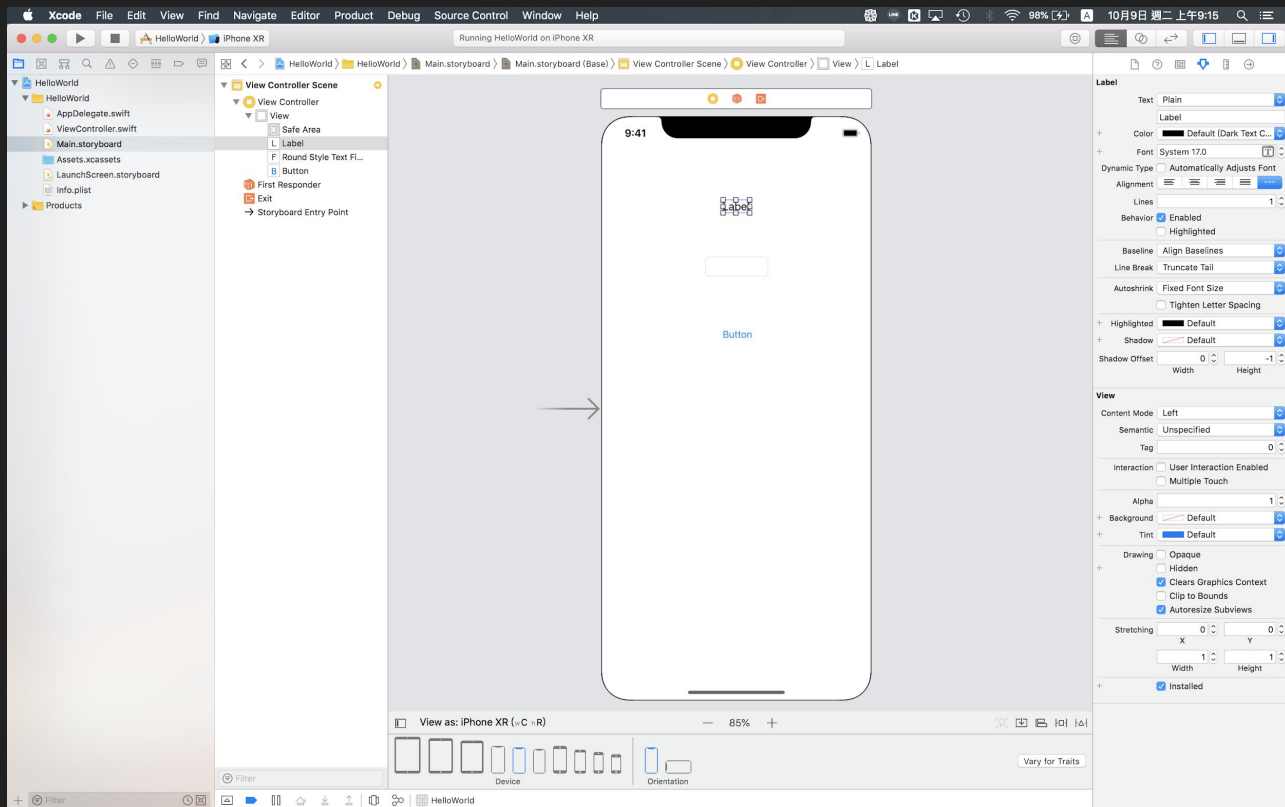
試著拉出右方畫面



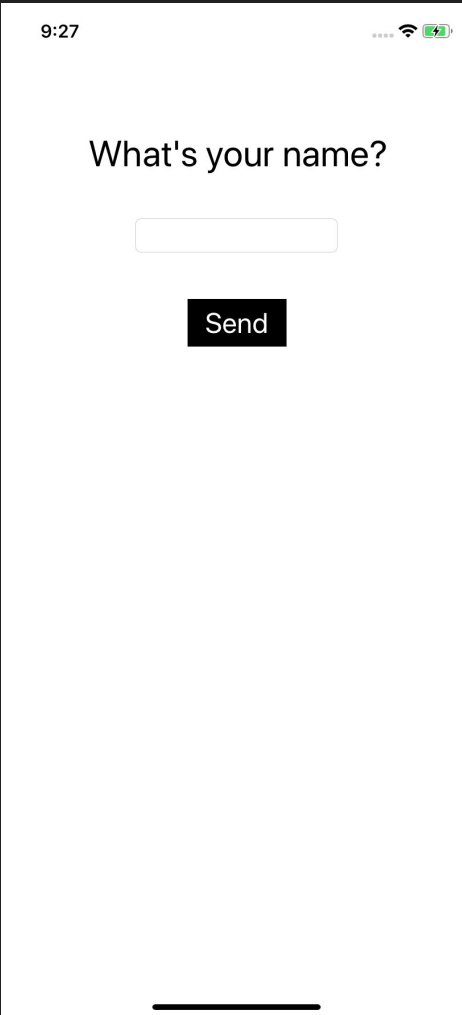
# 調整 UI 設定

1. 選取元件
2. 右邊欄選擇第 4 個 panel

可以在這個 Panel 裡面調整 UI 設計，  
比如說背景顏色，  
文字大小，文字顏色等等。



試著調整成右方畫面

A mobile application interface on a white background. At the top, the status bar shows the time 9:27, signal strength, Wi-Fi, and battery icons. The main content area contains the text "What's your name?" in a black sans-serif font. Below the text is a white rectangular input field with a thin grey border. Underneath the input field is a black rectangular button with the word "Send" in white. At the very bottom of the screen is a thin black horizontal line representing the home indicator.

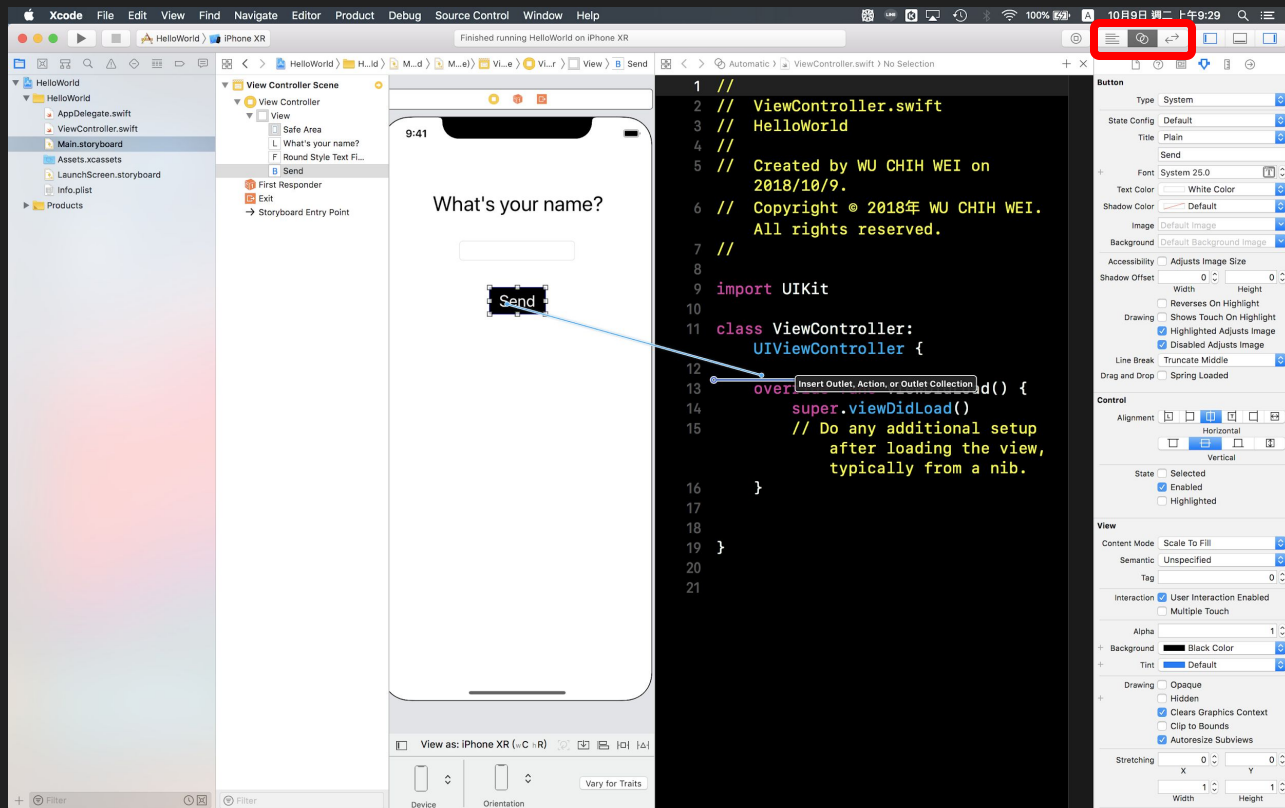
9:27

What's your name?

Send

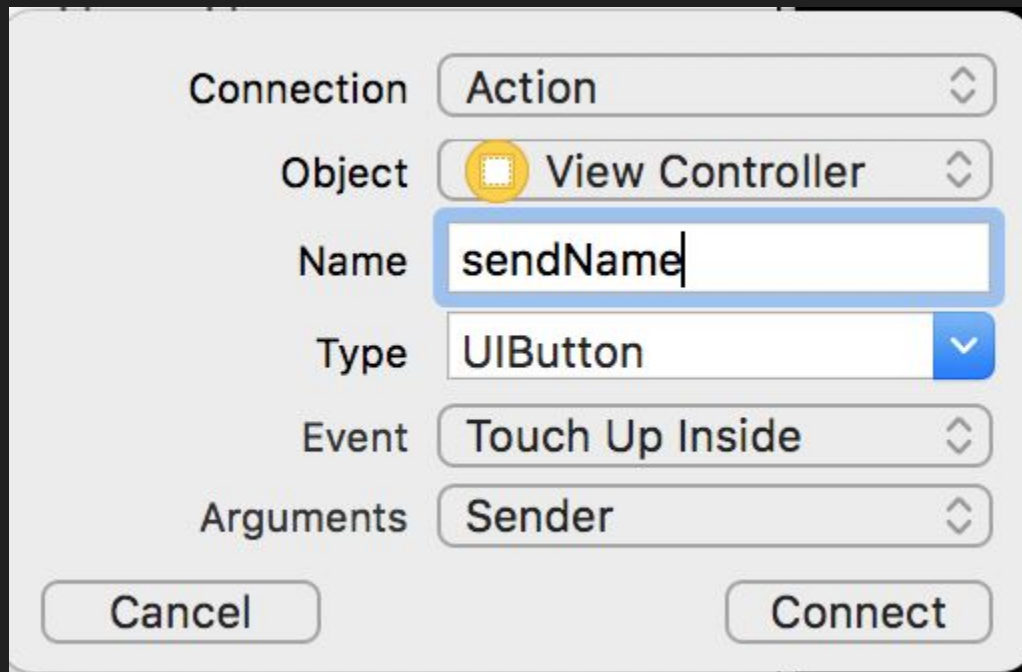
# 回應使用者行為 - IBAction

1. 選取助理編輯器模式
2. Control + 選取元件不放，拖曳到右方程式碼中
3. 看到此畫面後放開 Control 鍵，結束選取元件






## 回應使用者行為 - IBAction



The image shows a screenshot of the 'Respond to Action' dialog box in Xcode. The dialog is a light gray window with rounded corners. It contains several labeled fields and two buttons at the bottom. The 'Name' field is highlighted with a blue border and contains the text 'sendName'. The 'Type' field is a dropdown menu showing 'UIButton'. The 'Object' field shows a yellow square icon with a white square inside, followed by the text 'View Controller'. The 'Connection' field shows 'Action'. The 'Event' field shows 'Touch Up Inside'. The 'Arguments' field shows 'Sender'. At the bottom, there are two buttons: 'Cancel' on the left and 'Connect' on the right.

Connection	Action
Object	 View Controller
Name	sendName
Type	UIButton
Event	Touch Up Inside
Arguments	Sender

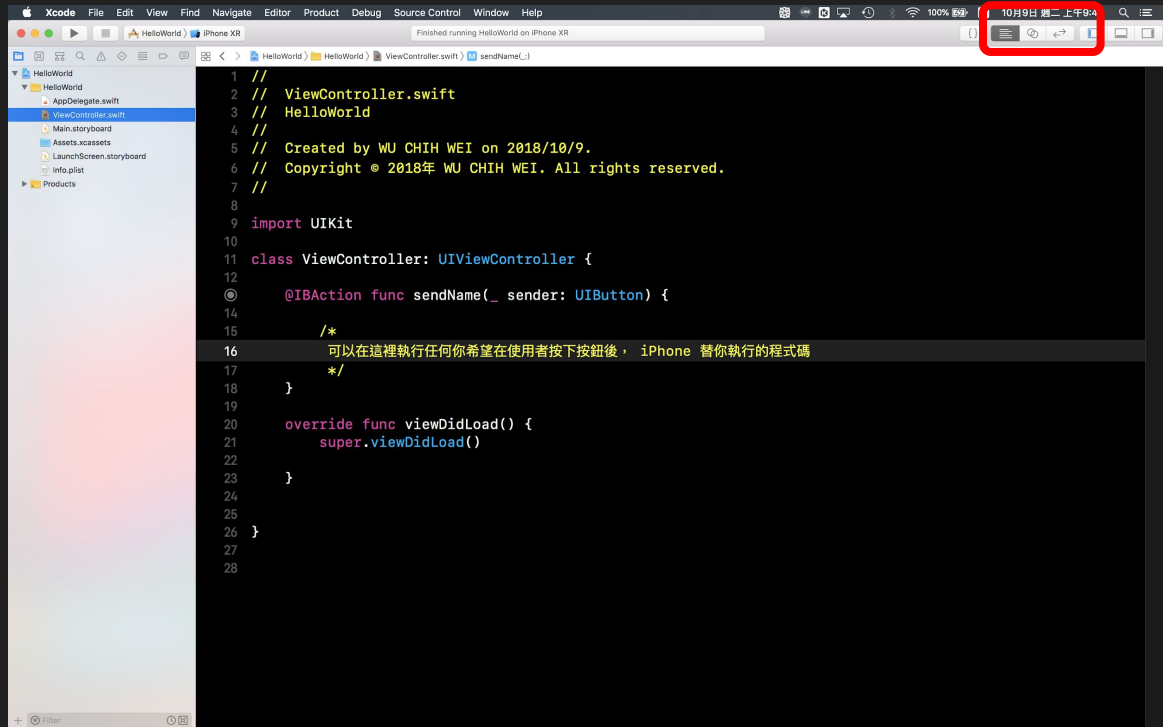
Cancel Connect

# ViewController.swift

1. 切換回標準模式

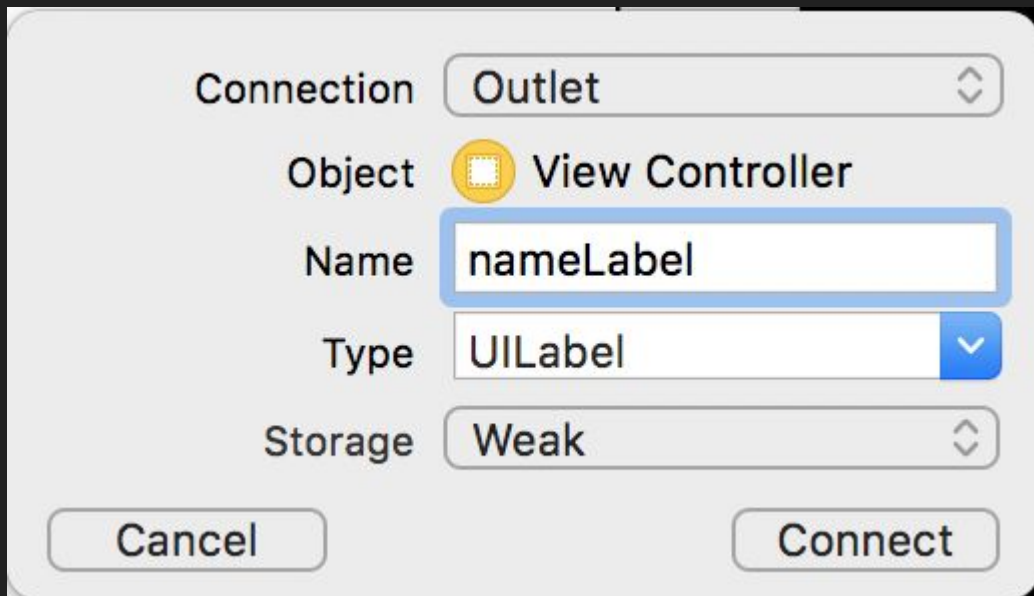
2. 選取

ViewController.swift 檔案



# 改變 UI 元件 - IBOutlet

建立方法與 IBAction 相同，設定如右



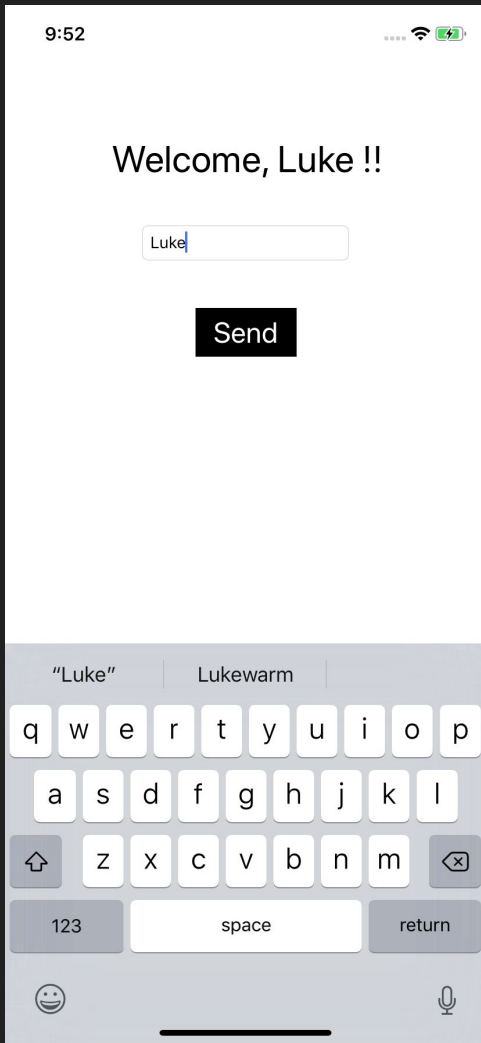
The screenshot shows the IBOutlet configuration dialog in Xcode. The dialog has a light gray background and rounded corners. It contains the following fields and controls:

- Connection:** A dropdown menu with "Outlet" selected and a double arrow icon on the right.
- Object:** A label followed by a yellow square icon with a white square inside, and the text "View Controller".
- Name:** A text field with "nameLabel" entered, highlighted with a blue border.
- Type:** A dropdown menu with "UILabel" selected and a blue arrow icon on the right.
- Storage:** A dropdown menu with "Weak" selected and a double arrow icon on the right.
- Buttons:** "Cancel" and "Connect" buttons at the bottom.

# 完成 App 與使用者互動

範例 code 為 Welcome project

```
@IBAction func sendName(_ sender: UIButton) {  
  
    let name = inputTextField.text!  
  
    nameLabel.text = "Welcome, \(name) !"  
}
```



# 試著完成以下畫面與互動

9:56

How old are you?

Send

9:57

Oh, you are 18 years old!!

18

Send

1	2 ABC	3 DEF
4 GHI	5 JKL	6 MNO
7 PQRS	8 TUV	9 WXYZ
0		< X

# IBAction, IBOutlet

IB: Interface Builder

IBAction: 回應使用者行為

IBOutlet: 將 Storyboard 裡的元件, 連結到程式碼裡, 讓程式碼可以對他做修改

# 練習：猜數字遊戲

1. 在程式碼裡面，我們先指定好一個數字  $b$ ，讓使用者來猜
2. 當使用者輸入數字  $a$  的時候，我們將  $a$  跟  $b$  做比較

如果  $a > b$ ，顯示“你猜得太高了！”

如果  $a == b$ ，顯示“恭喜你猜對了！”

如果  $a < b$ ，顯示“你猜得太低了！”

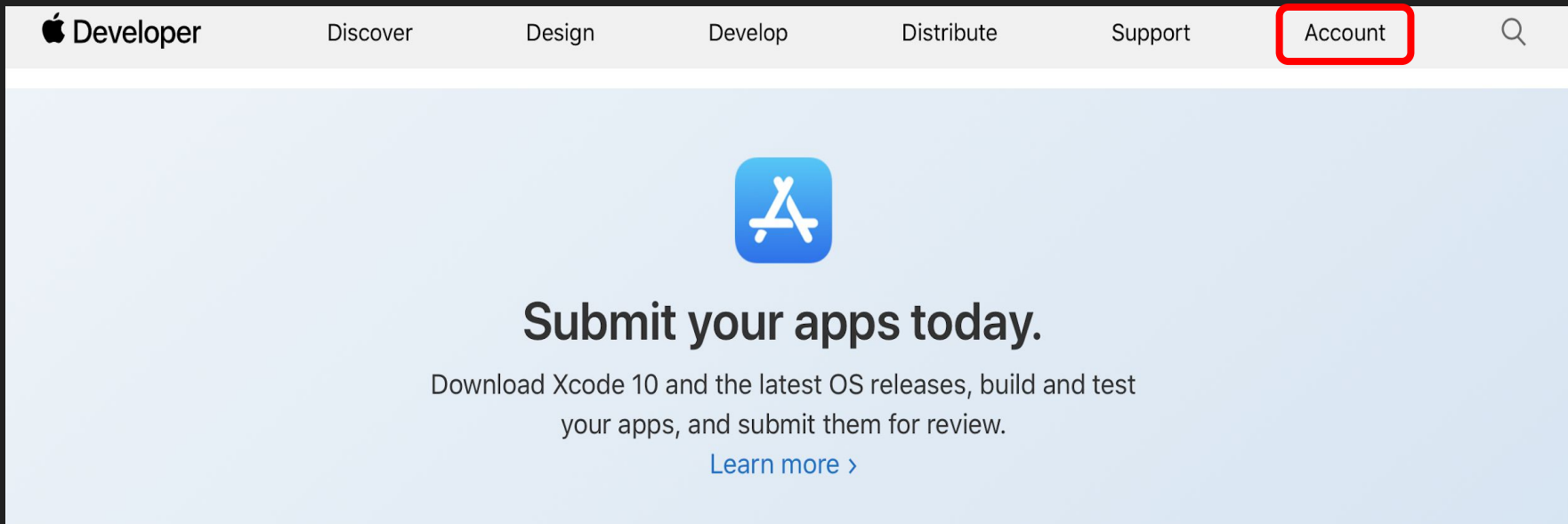
猜猜數字是多少？

Send

# 申請 Apple ID / 開發者帳號 (Optional)

Apple 開發者網站 / Apple Developer WebSite

<https://developer.apple.com/>





# 申請 Apple ID / 開發者帳號 (Optional)



The image shows the Apple Developer sign-in and sign-up interface. At the top, the Apple logo is followed by the word "Developer". Below this, there are two input fields: "Apple ID" and "Password". The "Apple ID" field has a key icon and a dropdown arrow. Below the "Password" field, there are two buttons: "Create Apple ID" and "Sign In". The "Create Apple ID" button is highlighted with a red rectangular border. At the bottom, there is a link that says "Forgot ID or Password?".

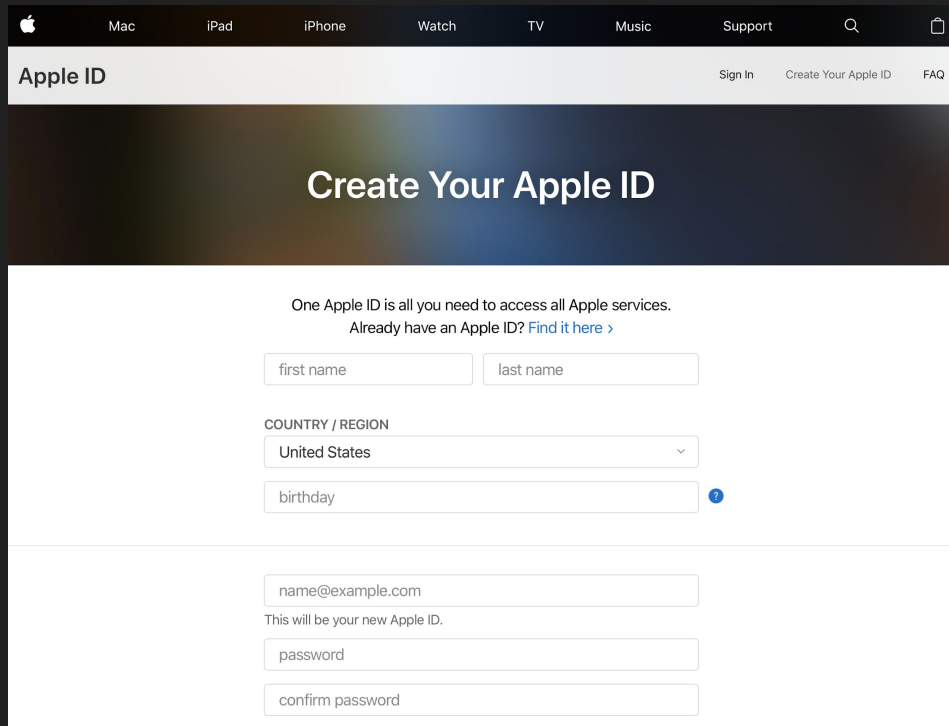
Apple Developer

Apple ID

Password

Create Apple ID Sign In

Forgot ID or Password?



The image shows the "Create Your Apple ID" form. At the top, the Apple logo is followed by the word "Apple ID". Below this, there are links for "Sign In", "Create Your Apple ID", and "FAQ". The main heading is "Create Your Apple ID". Below this, there is a paragraph: "One Apple ID is all you need to access all Apple services. Already have an Apple ID? [Find it here >](#)". Below this, there are two input fields: "first name" and "last name". Below these, there is a dropdown menu for "COUNTRY / REGION" with "United States" selected. Below this, there is an input field for "birthday" with a blue question mark icon. Below this, there is an input field for "name@example.com". Below this, there is a paragraph: "This will be your new Apple ID." Below this, there are two input fields: "password" and "confirm password".

Apple ID

Sign In Create Your Apple ID FAQ

## Create Your Apple ID

One Apple ID is all you need to access all Apple services.  
Already have an Apple ID? [Find it here >](#)

first name last name

COUNTRY / REGION  
United States

birthday ?

name@example.com

This will be your new Apple ID.

password confirm password