



# Intro to Swift and iOS

## EECS 183

MAXIM ALEKSA

[umich.edu/~maximal](http://umich.edu/~maximal)

# Today

Swift

Tic-Tac-Toe in Swift

MVC

Storyboards and User Interface

Connecting User Interface to code

Counter app

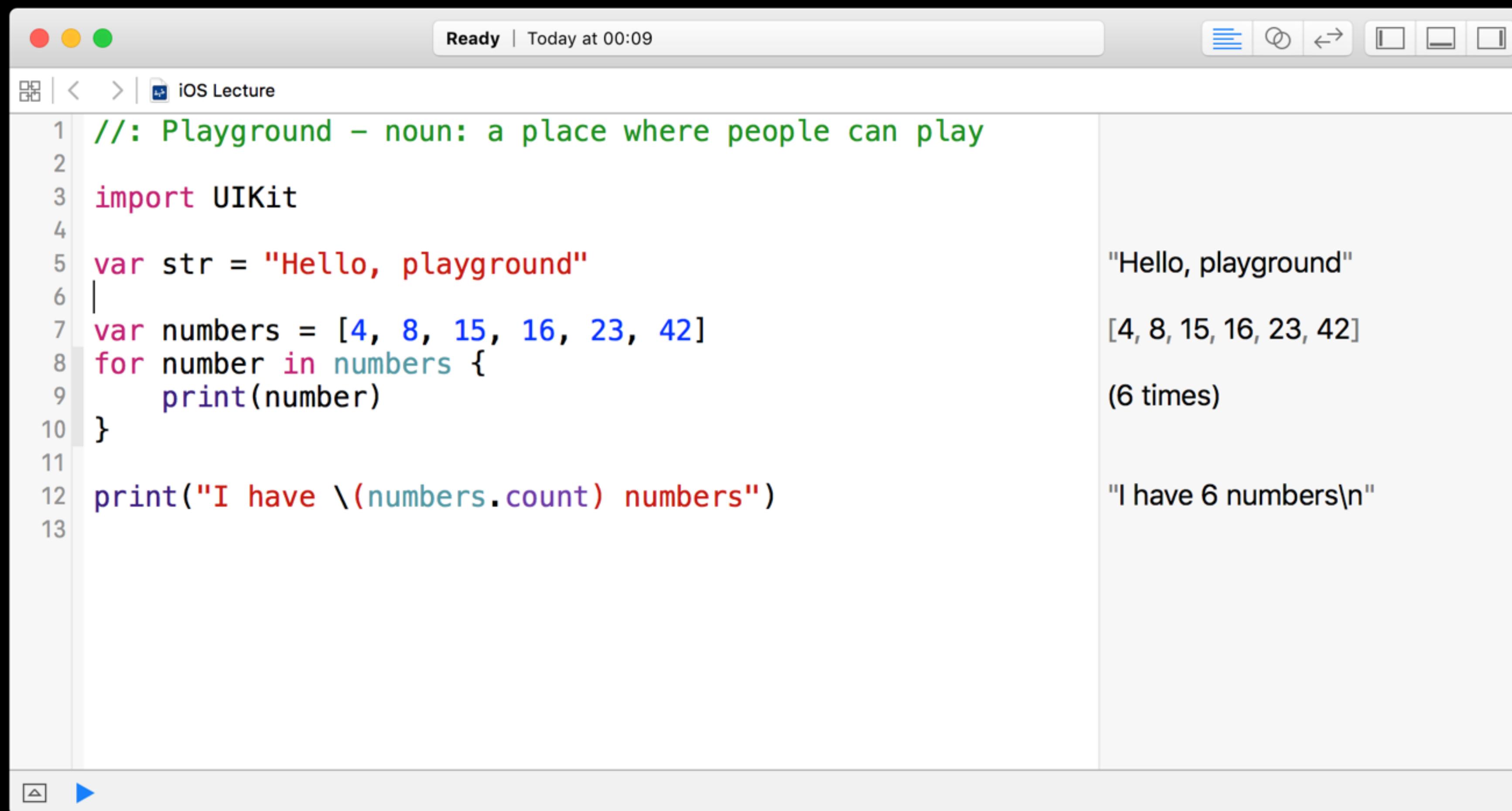
Tic-Tac-Toe app





Swift

# Playground



The screenshot shows an Xcode playground window titled "iOS Lecture". The playground contains the following Swift code:

```
//: Playground - noun: a place where people can play
import UIKit

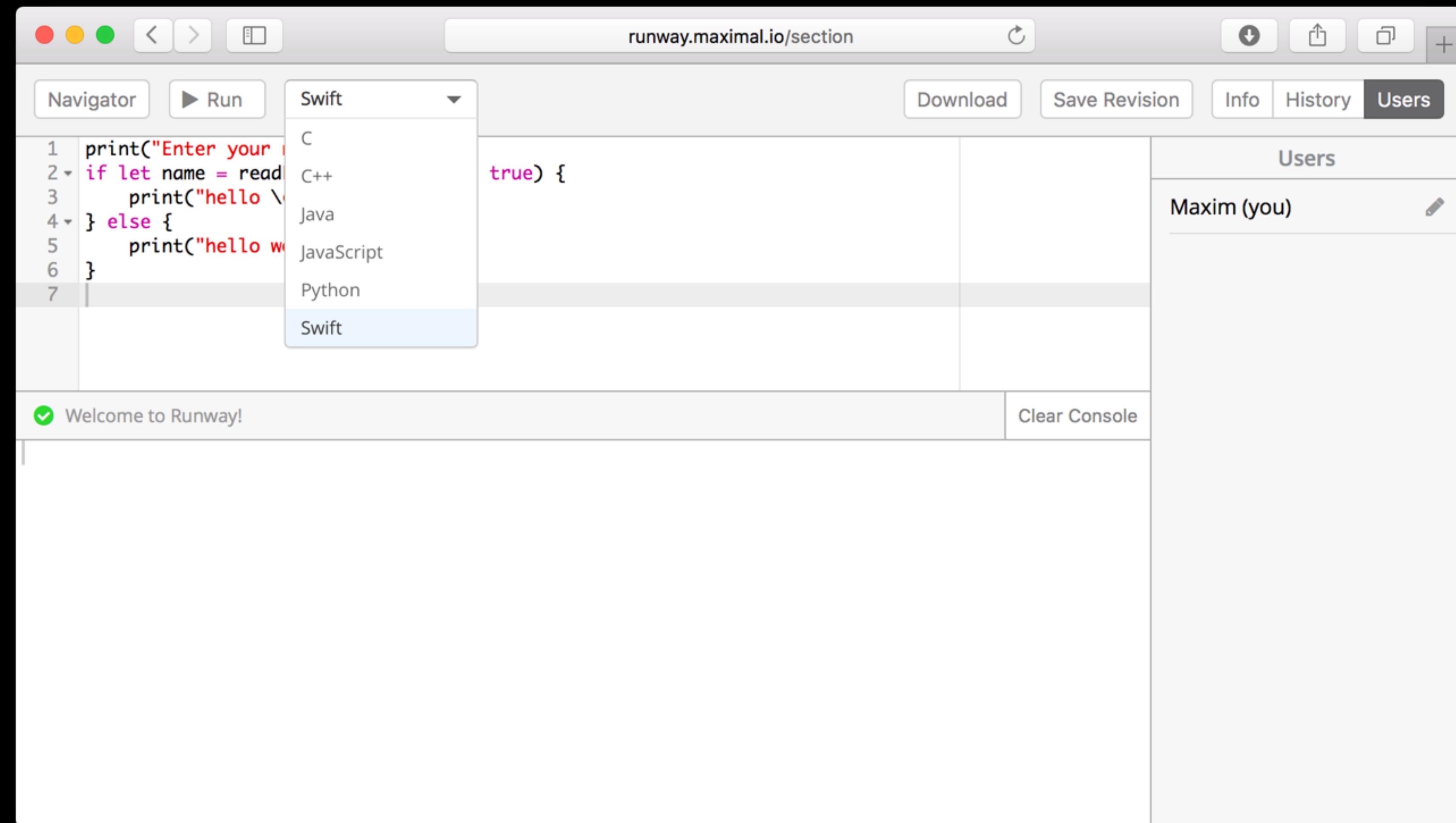
var str = "Hello, playground"
var numbers = [4, 8, 15, 16, 23, 42]
for number in numbers {
    print(number)
}

print("I have \(numbers.count) numbers")
```

The output pane displays the results of the code execution:

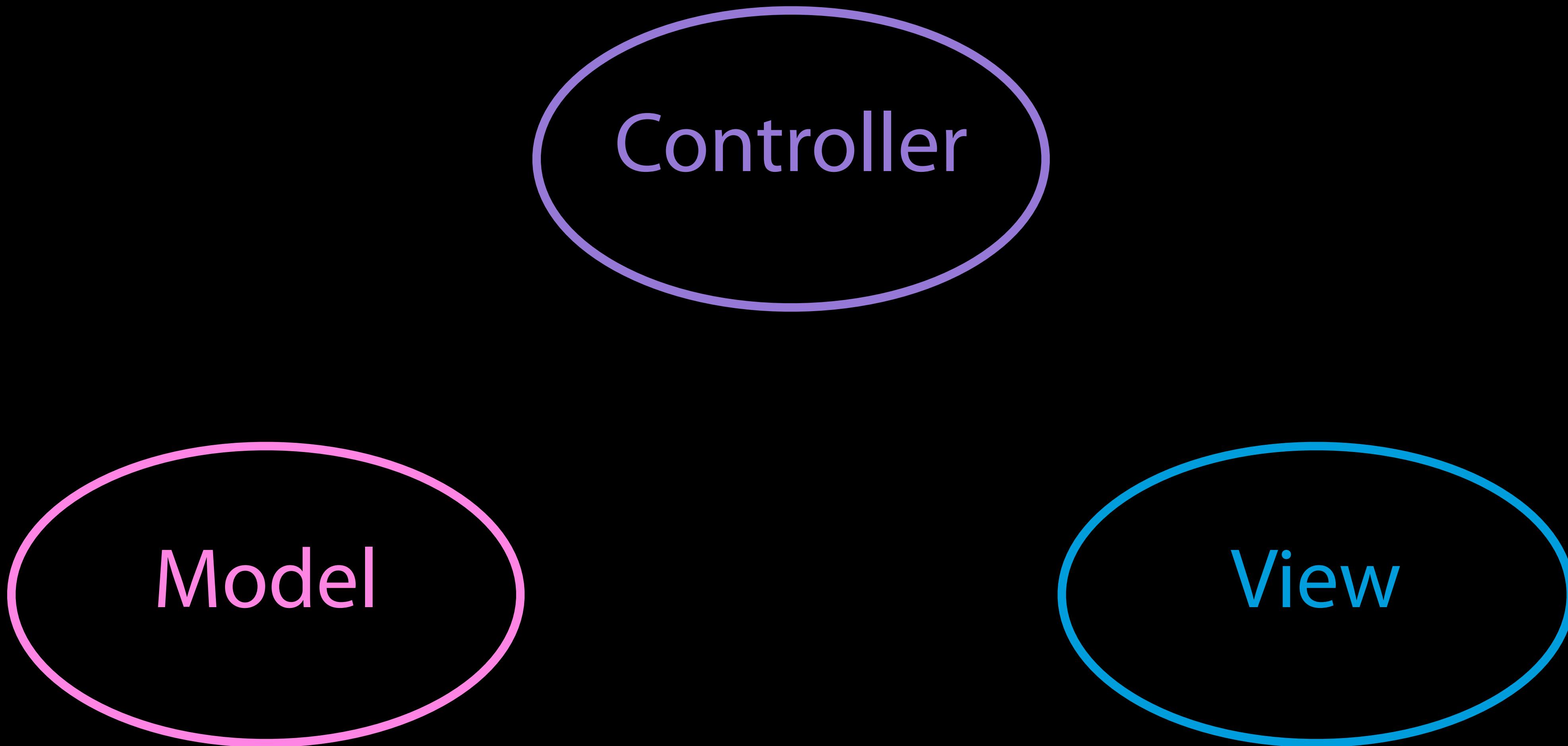
- "Hello, playground"
- [4, 8, 15, 16, 23, 42]
- (6 times)
- "I have 6 numbers\n"

# runway.maximal.io

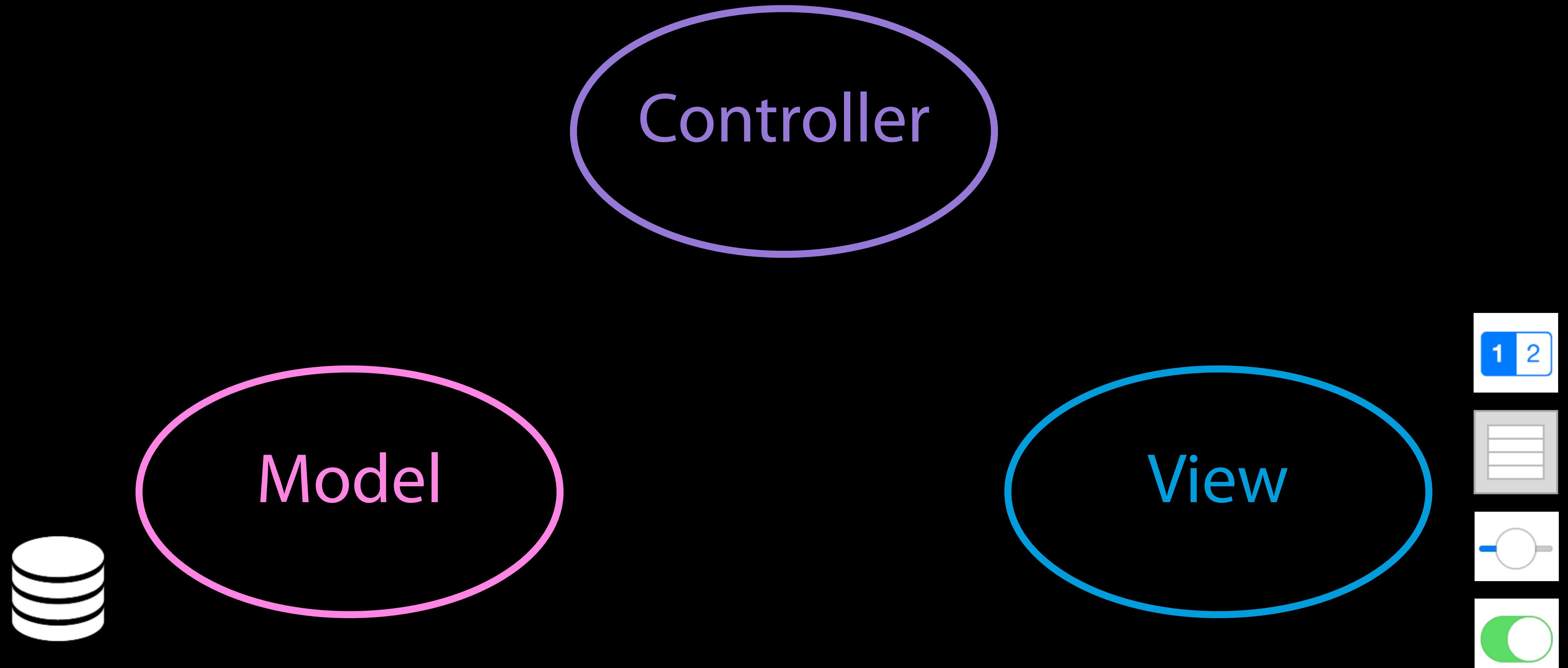


# Swift Demo

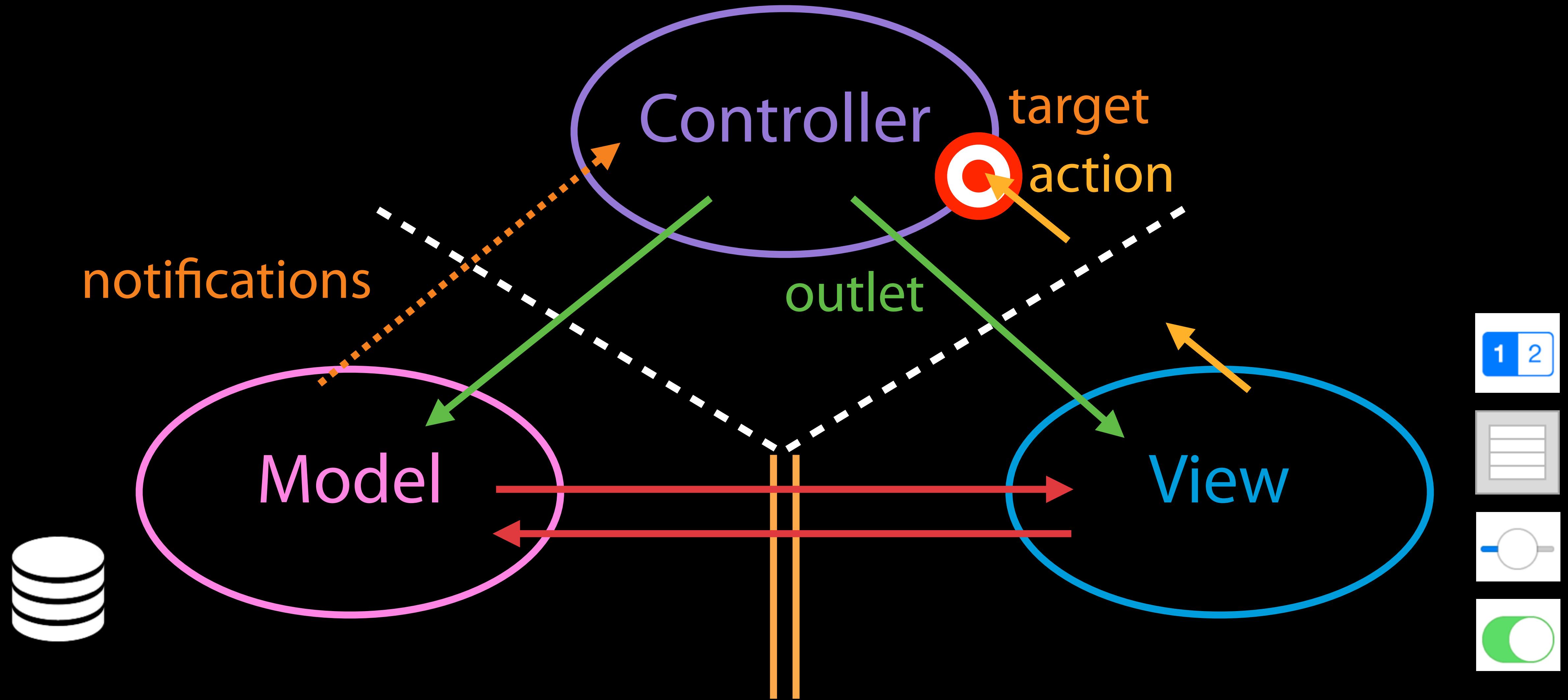
# MVC



# MVC



# MVC

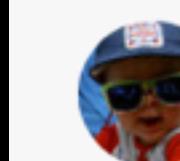


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7	8	9	×
4	5	6	-
1	2	3	+
0	.		=



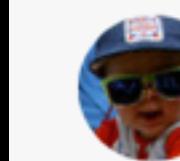
## 183 Social



Ryan Cesiel



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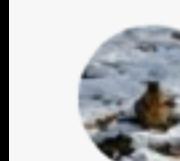


Ryan Cesiel

Spidey in action

5

Tue, 6:08 PM



Anna Rode

She should play connect 4 with batman

5



Send Message...

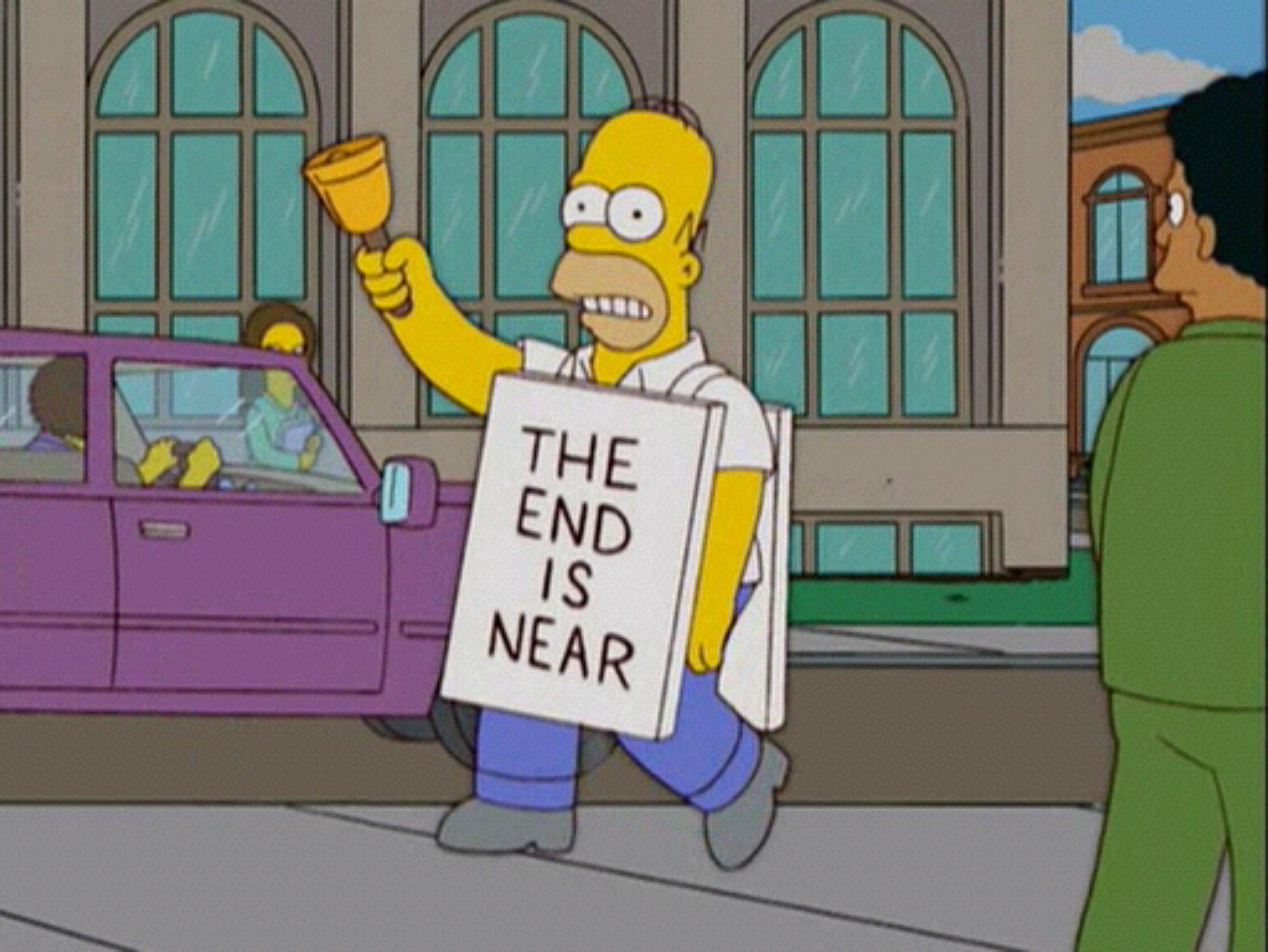


# TicTacToeGame class

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<http://maximal.io/ttt>

# Announcements

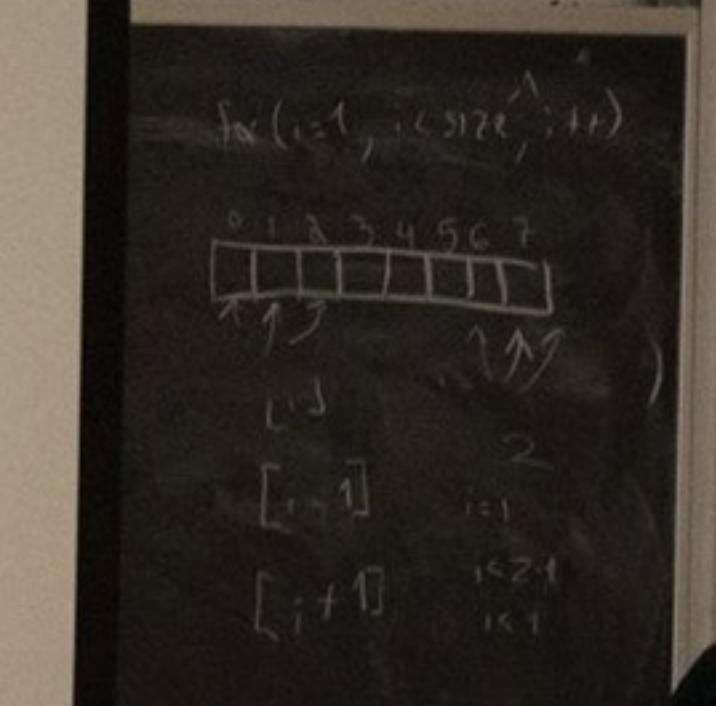
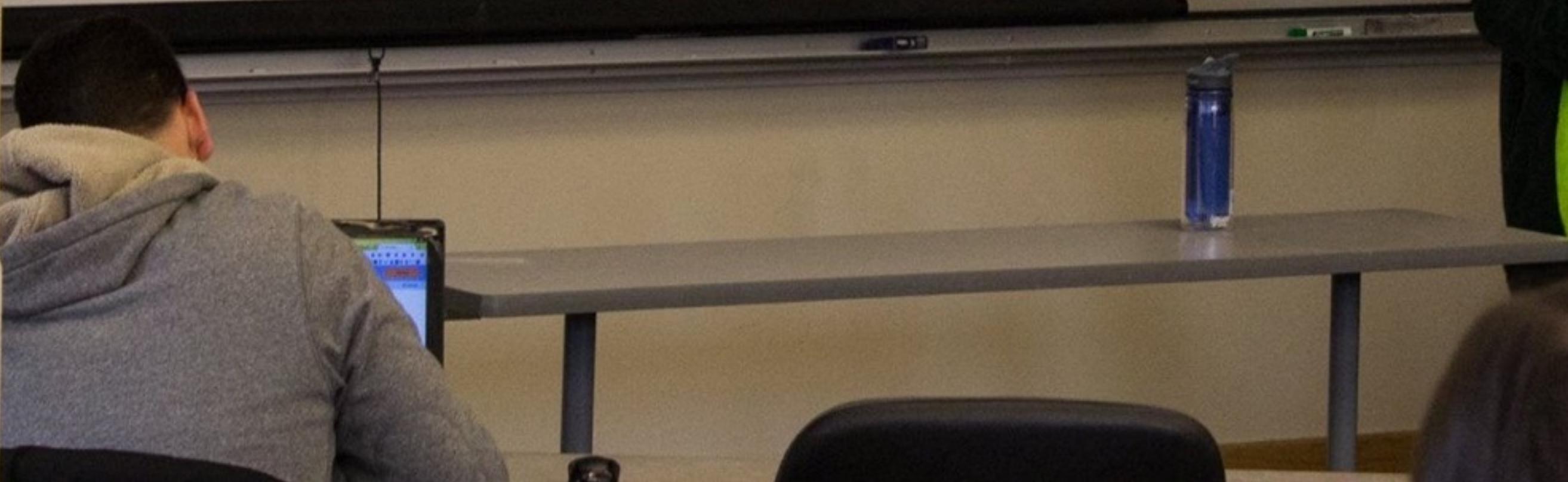




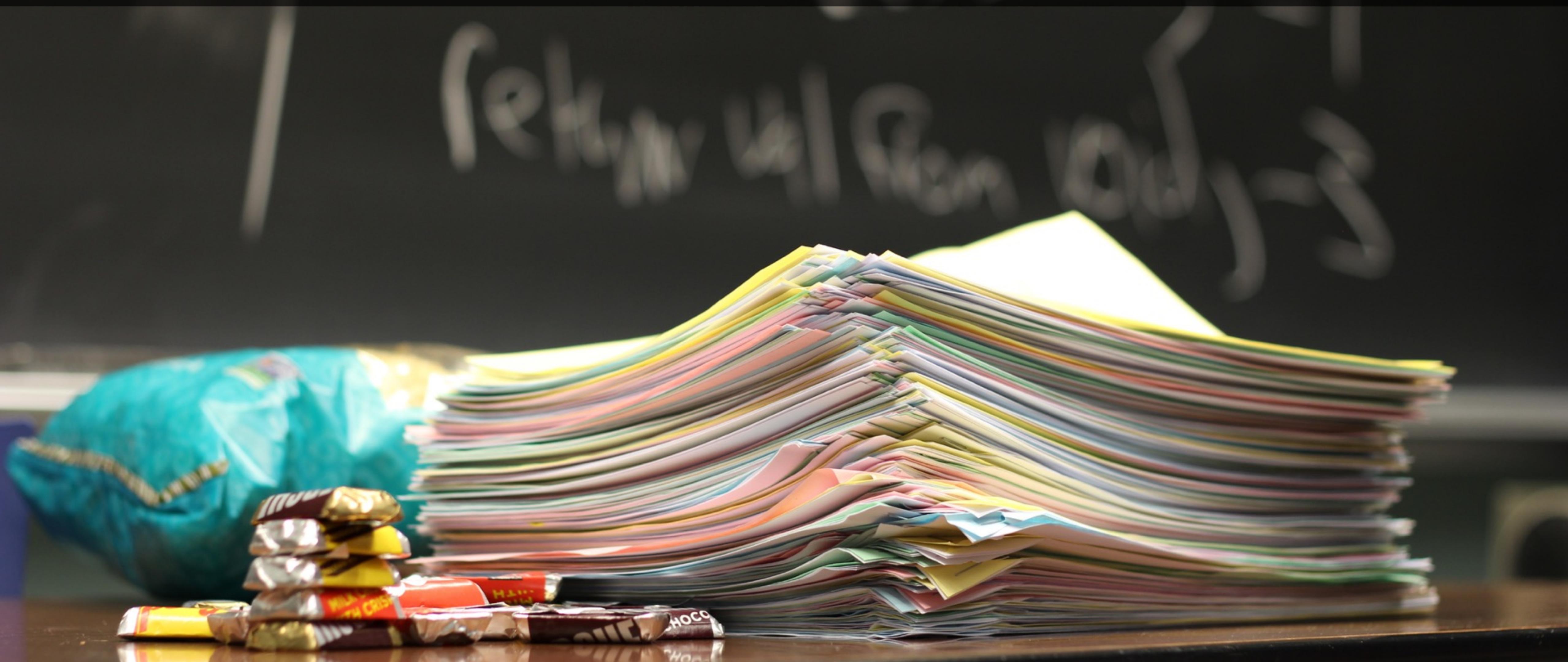
# Discussion sections

## Arrays

```
type name[SIZE];
```



# Counting exams



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Reset

# Running on a device

Select your device in the top-left

Click Run

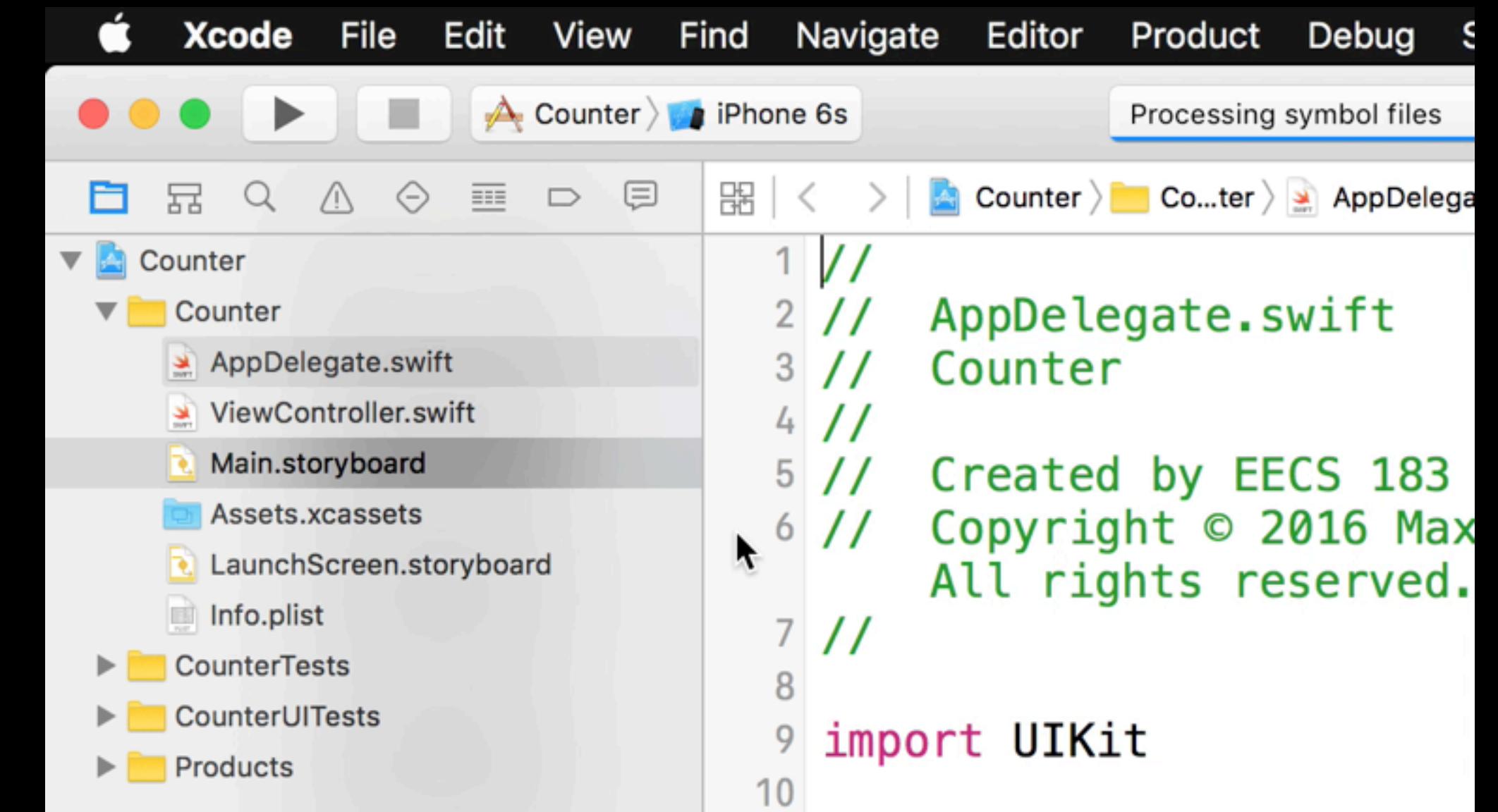
Fix issue when prompted

Enter Apple ID when prompted

Untrusted developer error:

Settings → General → Profile → Your Apple ID → tap Trust

Run again



```
1 // AppDelegate.swift
2 // Counter
3 // Created by EECS 183
4 // Copyright © 2016 Max
5 // All rights reserved.
6
7
8
9 import UIKit
10
```

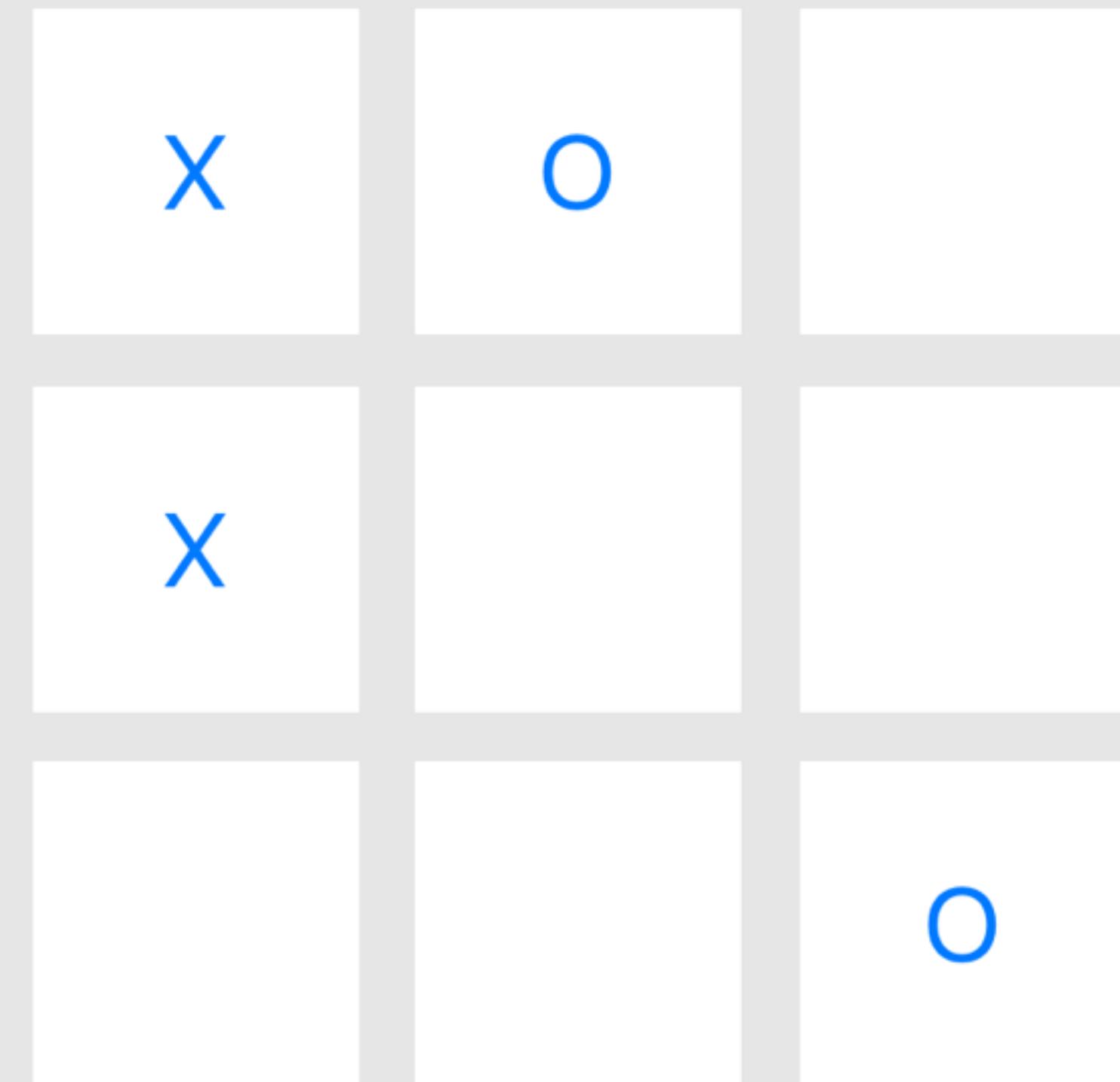


# Tic Tac Toe app

## Tic-Tac-Toe

[Reset](#)

Player X's turn



# Today

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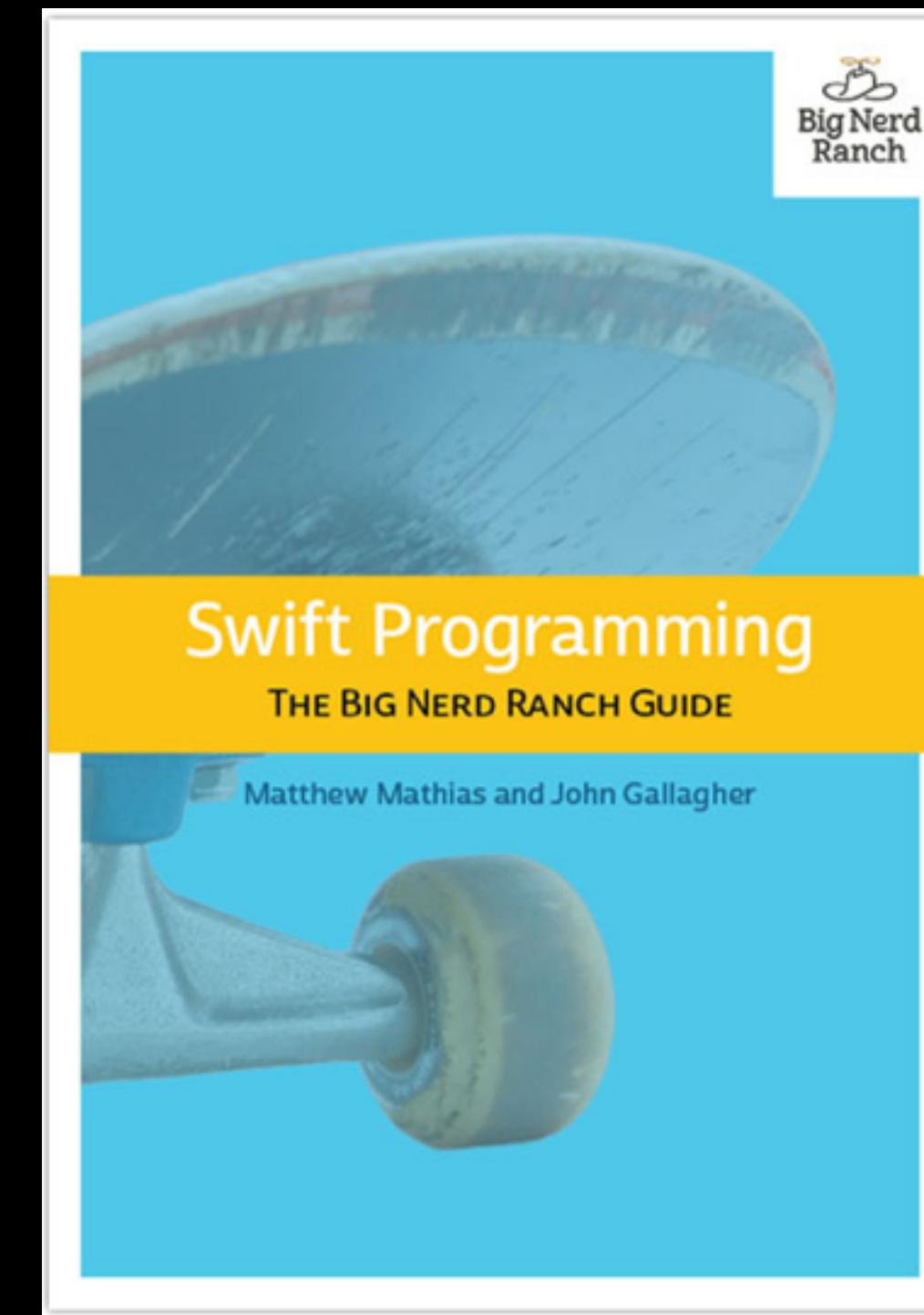
Tic-Tac-Toe app



# Resources on Swift



The Swift Programming Language  
Apple Inc.

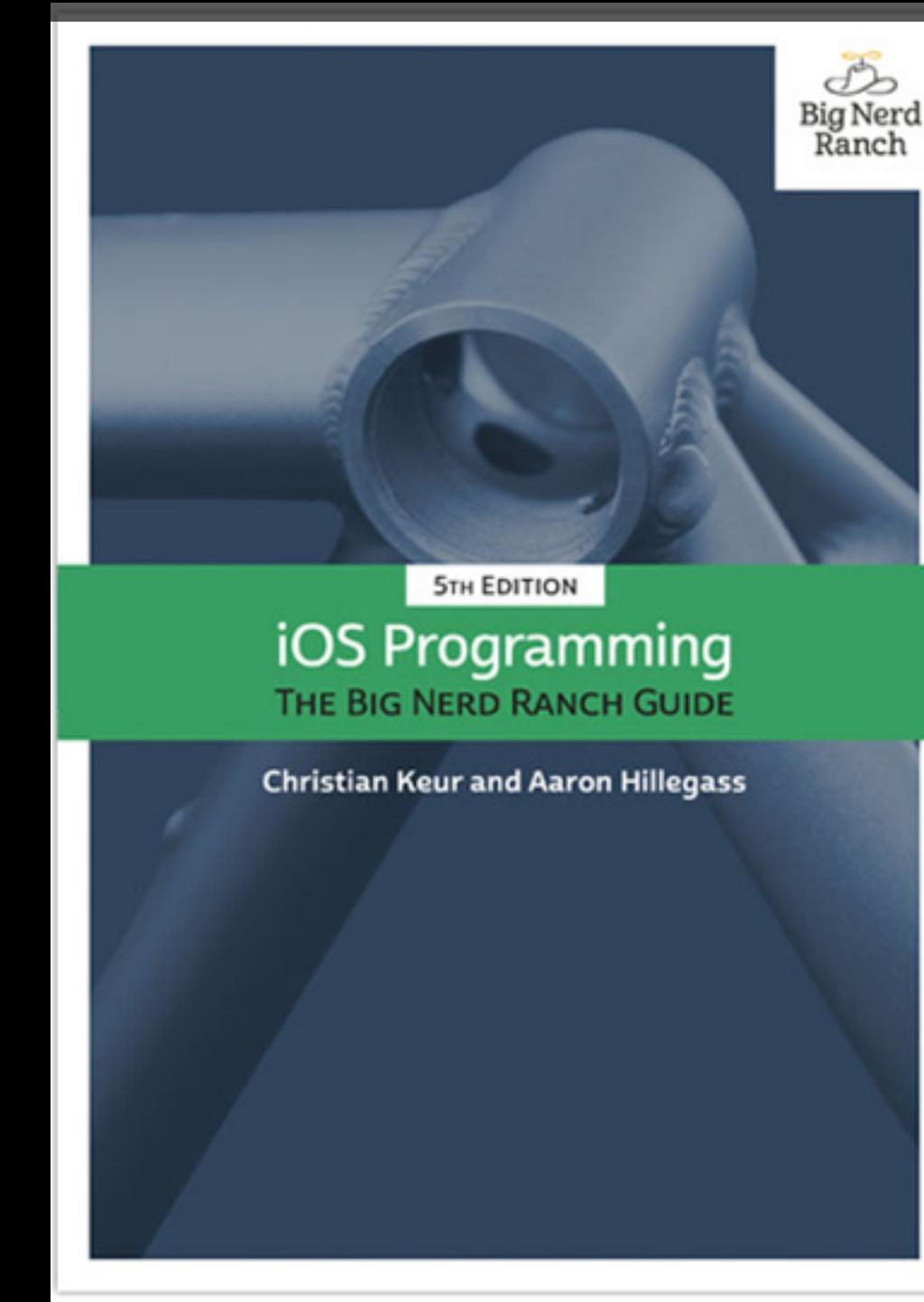


Swift Programming:  
The Big Nerd Ranch Guide  
Matthew Mathias and John Gallagher

# Resources on iOS



CS193P:  
Developing iOS 8 Apps with Swift  
Paul Hegarty (Stanford)



iOS Programming:  
The Big Nerd Ranch Guide  
Christian Keur and Aaron Hillegass

Q&A