

LECTURE 1

98-222: INTRODUCTION TO IOS DEVELOPMENT
FALL 2015

Today

- * Introduction
- * Course logistics
- * Course objectives
- * “Grading”
- * Introduction to app development and MVC
- * Homework
- * Attendance

The Waitlist

Don't worry if
you are on the
waitlist!

Course Logistics

- * Instructors: **Ally Sorge**
asorge@andrew.cmu.edu
Sally McNichols
smcnicho@andrew.cmu.edu
- * Time: **Monday's 6:30p - 8:20p**
- * Location: **HH B131**
- * Office Hours: **See course website.**
- * Course Website:
<http://www.andrew.cmu.edu/course/98-222/index.html>
- * Course Forum: **Facebook?**

Course Pre-Reqs

- * You **must** know:
 - * How to code (15-112 or higher).
- * You **should** know:
 - * Object-oriented programming.
 - * What is Model-View-Controller.
- * You are **awesome** if you know:
 - * Functional programming (15-150), Data Structures (15-122), or good software design (15-214).

Equipment / Software

- * You **must** have:

- * Access to a Mac computer running OS X 10.10

- * Xcode 6 (Mac App Store)

- * (Maybe we'll try out Xcode 7 when it's released)

- * You are **awesome** if you have:

- * An iOS device capable of running iOS 8.

What You Will Learn

- * ~~Objective-C~~ **SWIFT!**
- * How to make an iOS app.
- * How to use third-party Swift APIs.
- * How to properly use design patterns such as Model-View-Controller.

Grading

- * 10% Attendance (StuCo Policy!)
- * 20% Periodic Homework Assignments
- * 30% Midterm Project (groups of 1-2)
- * 40% Final Project (groups of 1-2)
- * Midterm and Final projects are apps that you will design and create!

The Course—Summed Up

- * We want this class to be fun, open, and creative!
- * This class is hard for a StuCo. Be ready for it.
- * Class will be interactive and tutorial based
- * Our goal is to make you a competent iOS developer.
- * We'll teach whatever you want to learn (second half of semester).
- * Do not hesitate to contact us with **anything**.

Any questions?

Model-View-Controller



Model



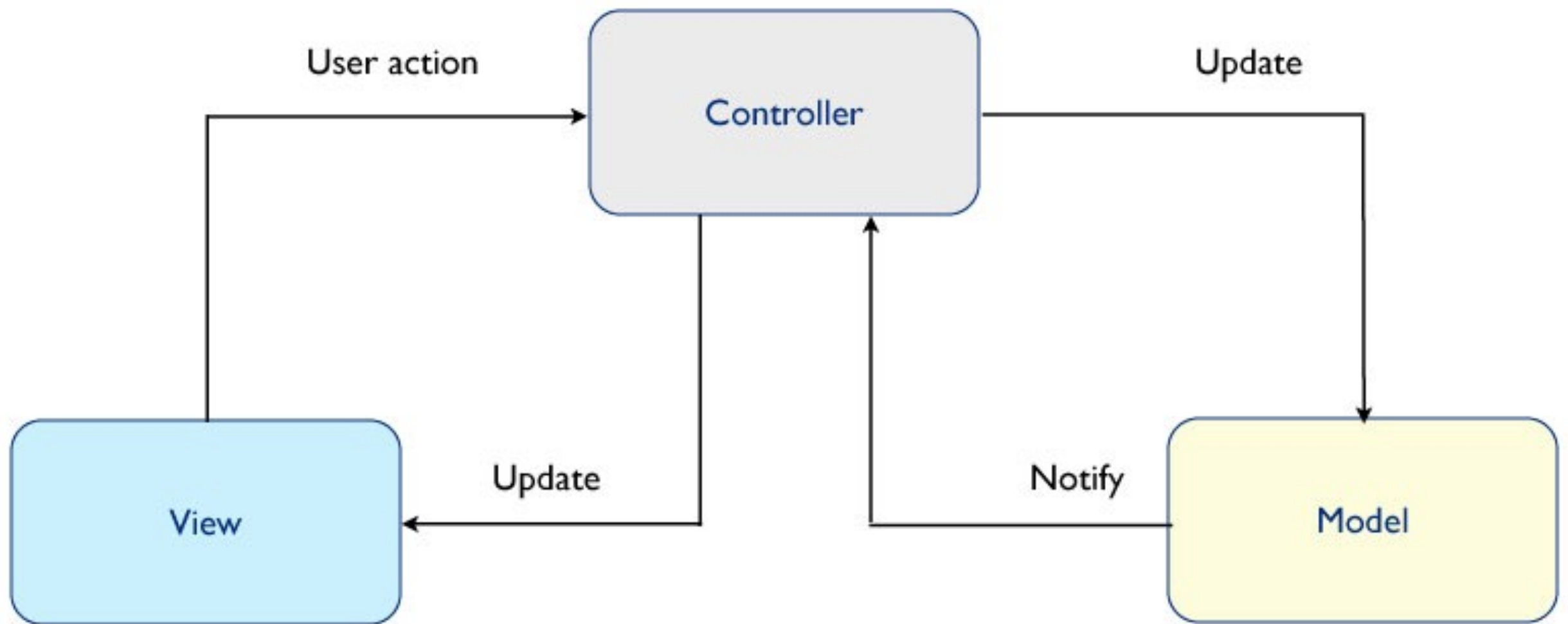
Controller



View

Definitions

- * **Model** - Handles data storage. Stores and retrieves info.
- * **View** - Displays information and takes in user input. That's it. Only displays content and takes input. Also very stupid.
- * **Controller** - The one that's in charge. Communicates between the model and the view. Takes input from the view, processes it, gets data from the model, processes it, gives it to the view to display.



Models

- * Classes that handle state/data. Give data to the Controller and take data from the Controller.
- * A “backend”.
- * Simplest classes to make (they either subclass **NSObject** or nothing at all!)
- * Simplest classes to unit test.
- * Has very little logic.

Views

- * Only considered with displaying content from the Controller and giving input back to the Controller.
- * Typically a subclass of **UIView**.
- * Lots of hierarchy (we need to go deeper).
- * Also has very little logic.
- * The front-end.

(View)Controller

- * The glue between model and view.
- * Typically a subclass of **UIViewController**.
- * In general for iOS development: **One ViewController for every View.**
- * Controllers have hierarchy too.

Questions?

- * Don't worry, we will cover MVC more and show examples in the future if you don't completely get it yet :)

Homework

- * No class next Monday! (Labor day)
- * Due **Monday September 14 before class:**
 - * Download Xcode 6
 - * Join the class Facebook group
 - * Review MVC
 - * Get excited to begin making apps next class :D

Thanks!

- * Sign in attendance on the way out
- * Feel free to ask us any questions