

IOS APPS IN ACTION

CS 496 - SPRING 2014

Overview

- * Make an app
 - * Display data from a web service
 - * Use bluetooth for location

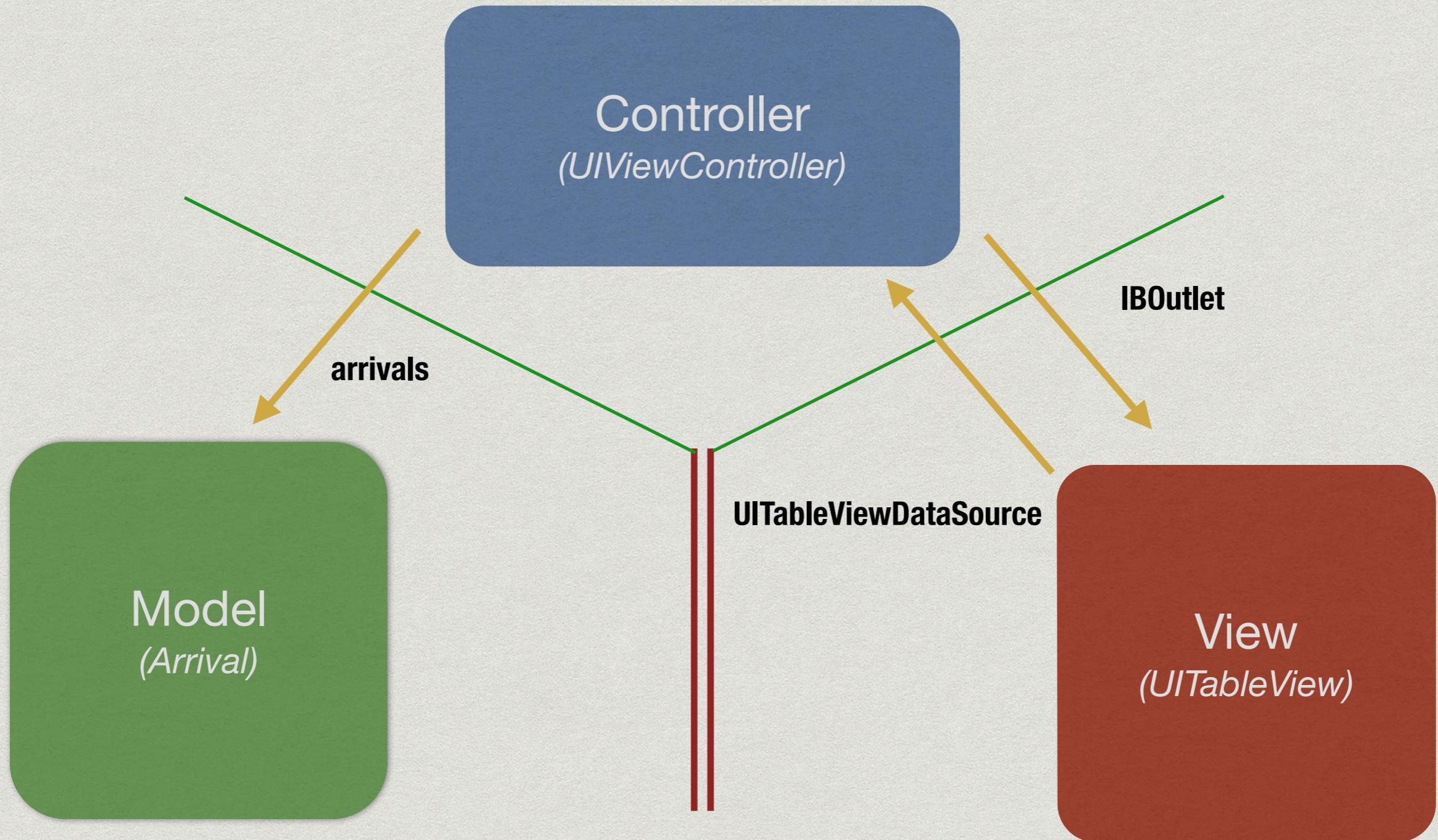
Bus Arrivals

- * Show me the next arrivals when I am at a bus stop
- * Bus API
 - * [http://www.corvallis-bus.appspot.com/arrivals?
stops=12449](http://www.corvallis-bus.appspot.com/arrivals?stops=12449)
 - * Docs: [https://github.com/OSU-App-Club/
corvallis-bus-server](https://github.com/OSU-App-Club/corvallis-bus-server)

iBeacon

- * Low-power Bluetooth: aimed at use for location
- * Apple APIs came out in iOS 7
- * Identifiers: UDID, Major, Minor
- * Proximity: Far, Near, Immediate
- * Class Name: CLBeacon

Model View Controller



Classes we will see

- * UIViewController
- * UITableView
- * NSURLSession (Perform HTTP Request)
- * NSJSONSerialization (Convert JSON into Foundation types)
- * Arrival (Custom data model)
- * CLLocationManager (Manage iBeacons)
- * CLBeacon (Bluetooth beacon)

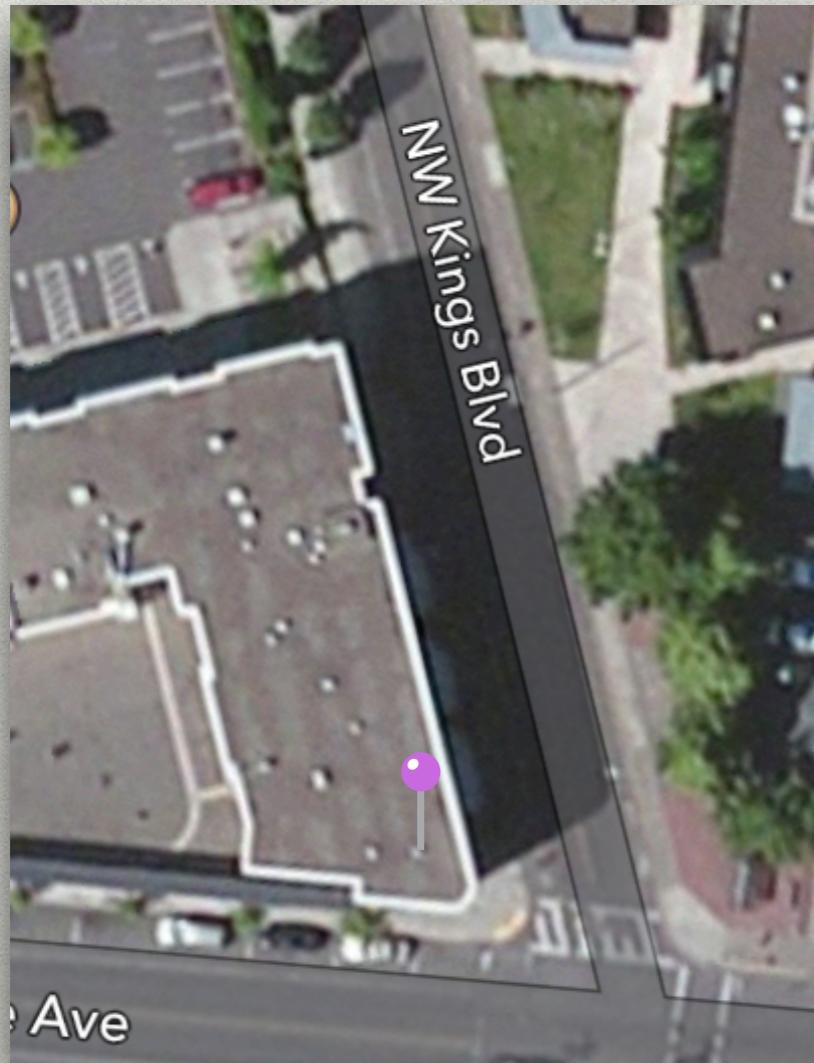
DEMO

Summary

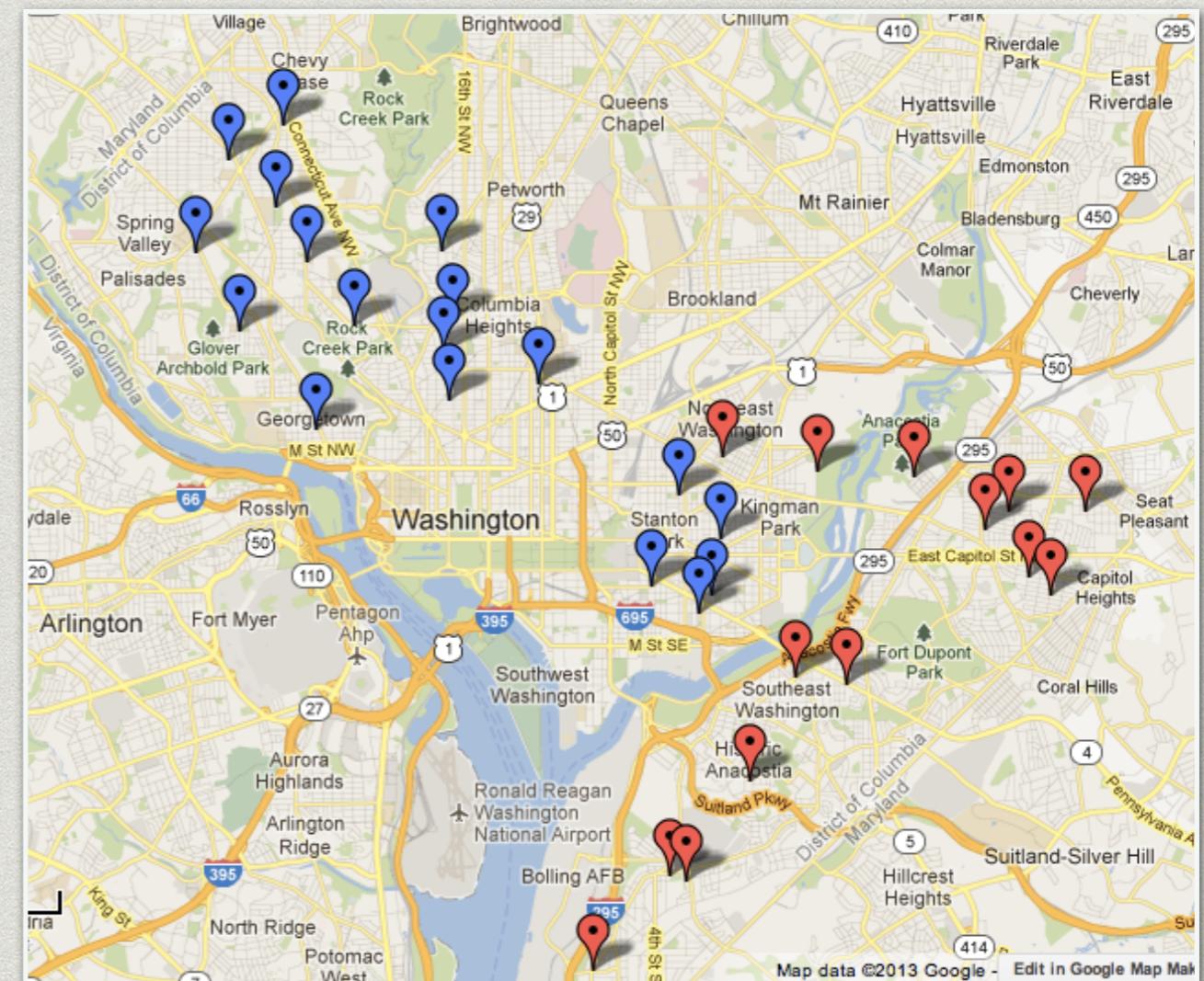
- * Native only
 - * Similarities to Titanium (next week)
- * Easy to prototype (Storyboard)
- * Surprisingly easy
- * Other alternatives (GPS)

Security

- * Unprotected – duplicates
- * Do no share sensitive information



Source: Apple Maps



<https://www.flickr.com/photos/93738963@N05/8527892565/in/photostream/>

Tips & Common Problems

- * Must alloc & init object properties (default: nil)
- * Passing by reference typical – beware global change
- * Check connections between storyboard & code
- * Use breakpoints & debugger – make sure values are what you expect them to be