

Introduction au développement iOS avec Swift

Cours 4 ~ MVC, delegates, notifications



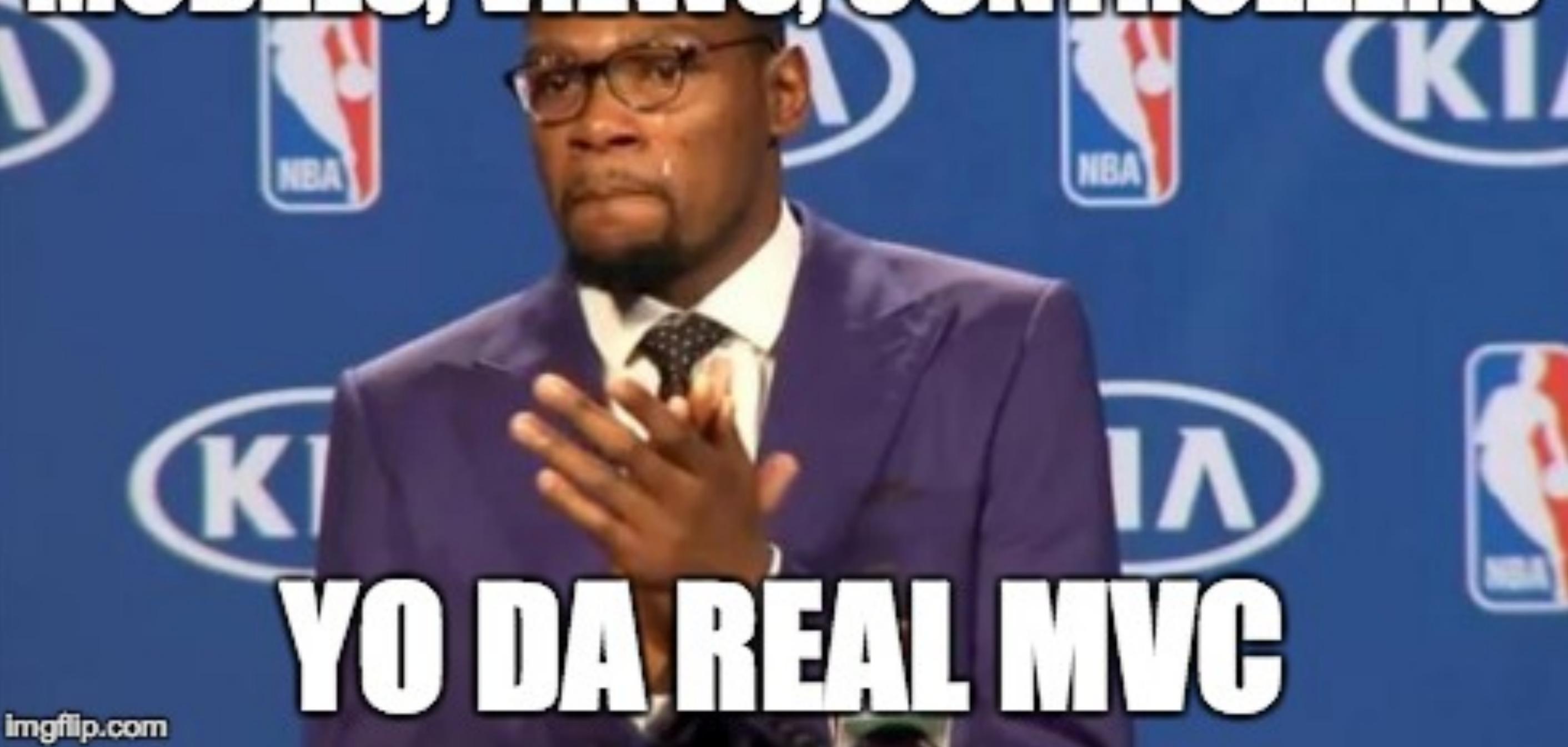
Aujourd'hui

Architecture & API :

- Model — View — Controller
- Delegates & delegation pattern
- Notifications



MODELS, VIEWS, CONTROLLERS



imgflip.com

Model

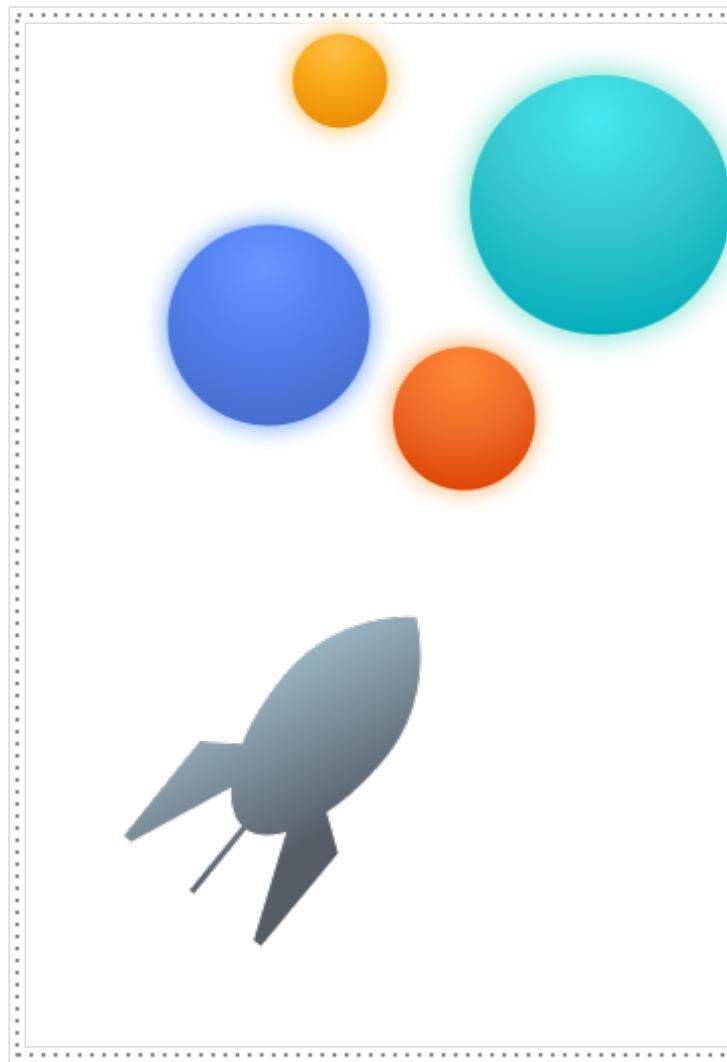
Rocket

Attributes	Behavior
Direction	Turn
Velocity	Accelerate
Color	Deccelerate
Location	Fire Laser

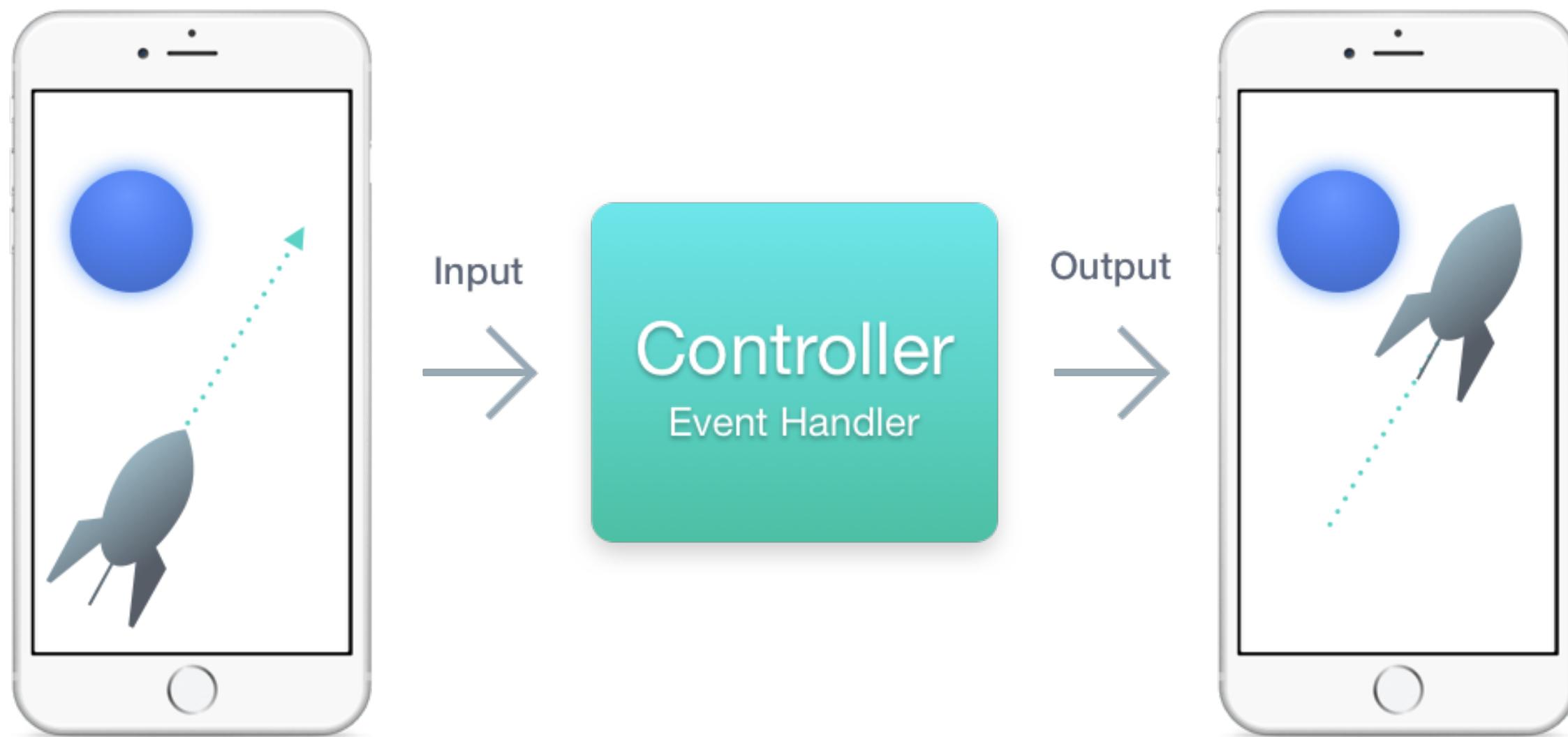
Planet

Attributes	Behavior
Color	Rotate
Radius	Orbit
Rings	Implode
Location	Explode

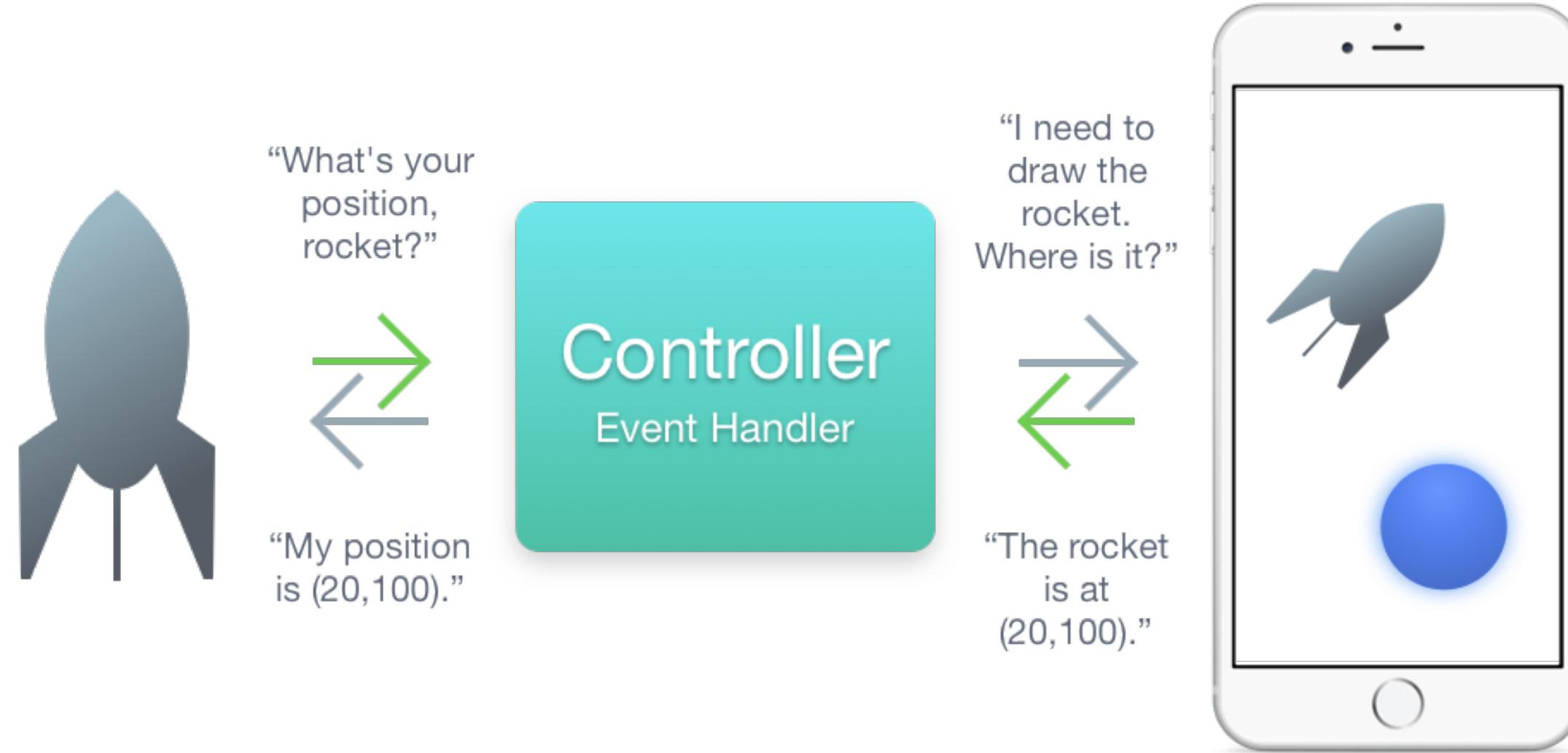
View



Controller



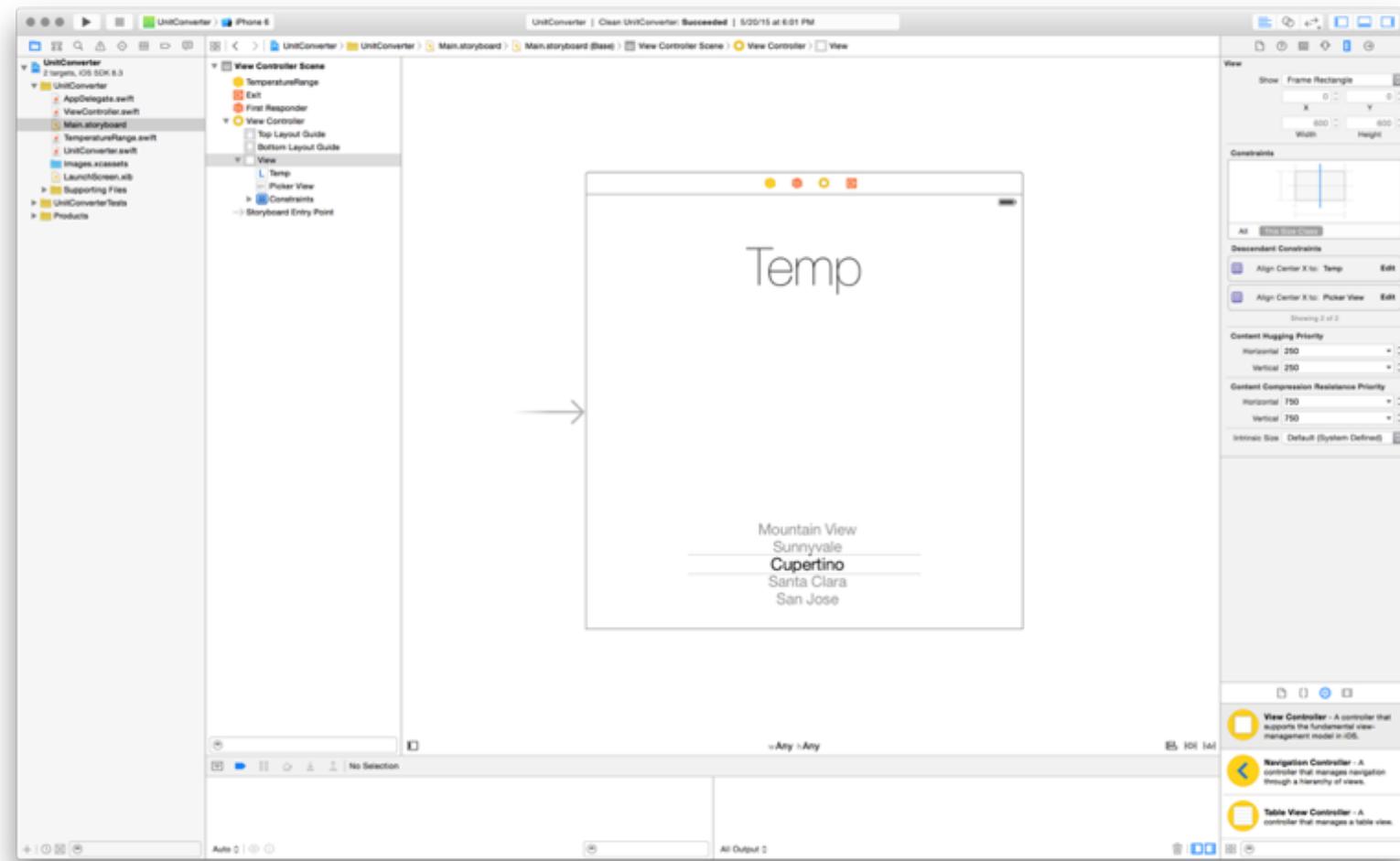
Controller



Model : Une simple classe

```
class Rocket {  
    var direction: Float?  
    var velocity: Double?  
    var color: Color?  
    let location: Location?  
  
    func turn(direction: Direction) { ... }  
    func accelerate() { ... }  
    func decelerate() { ... }  
    func fireLaser() { ... }  
}
```

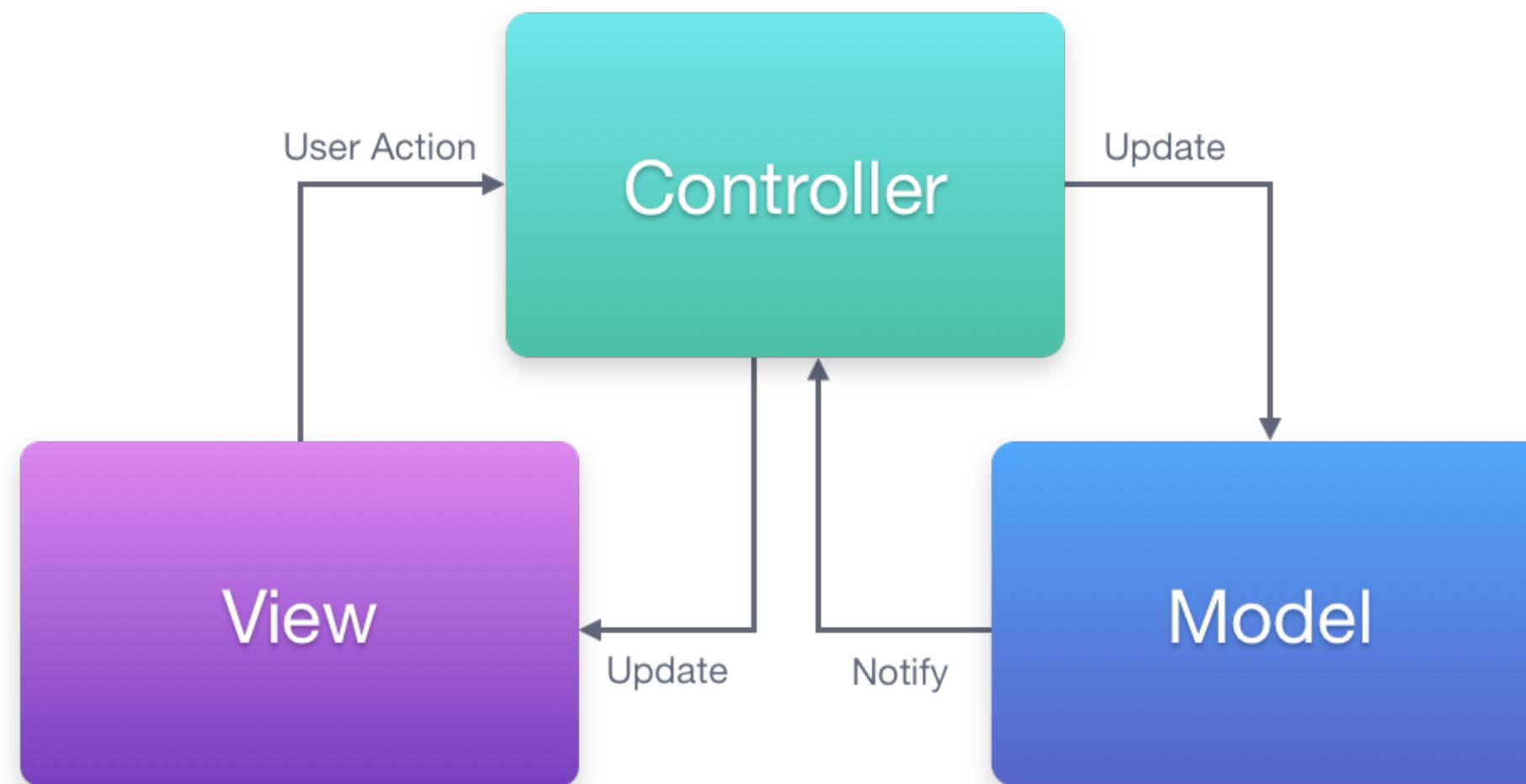
View : Interface Builder



Controller : UIViewController

```
class ViewController: UIViewController {  
    let rocket = Rocket()  
    var planets = [Planet()]  
  
    override func viewDidLoad() {  
        super.viewDidLoad()  
        rocket.prepareForLaunch()  
        generatePlanets(planets)  
    }  
  
    @IBAction func swipe(sender: UISwipeG...  
}
```

Model – View – Controller



I'M DELEGATING

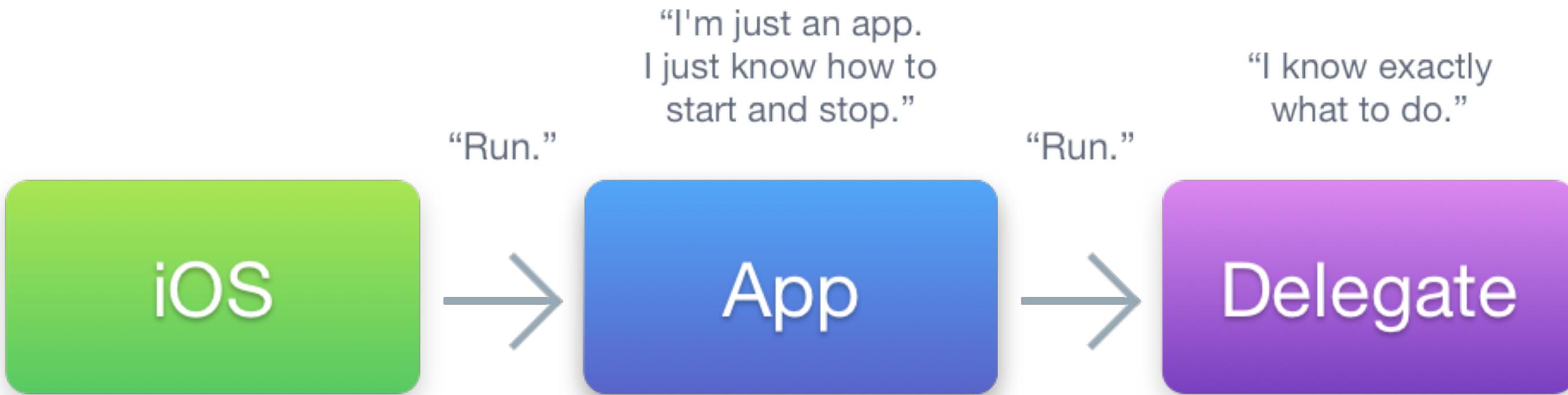


memegenerator.net

Delegate



Delegate

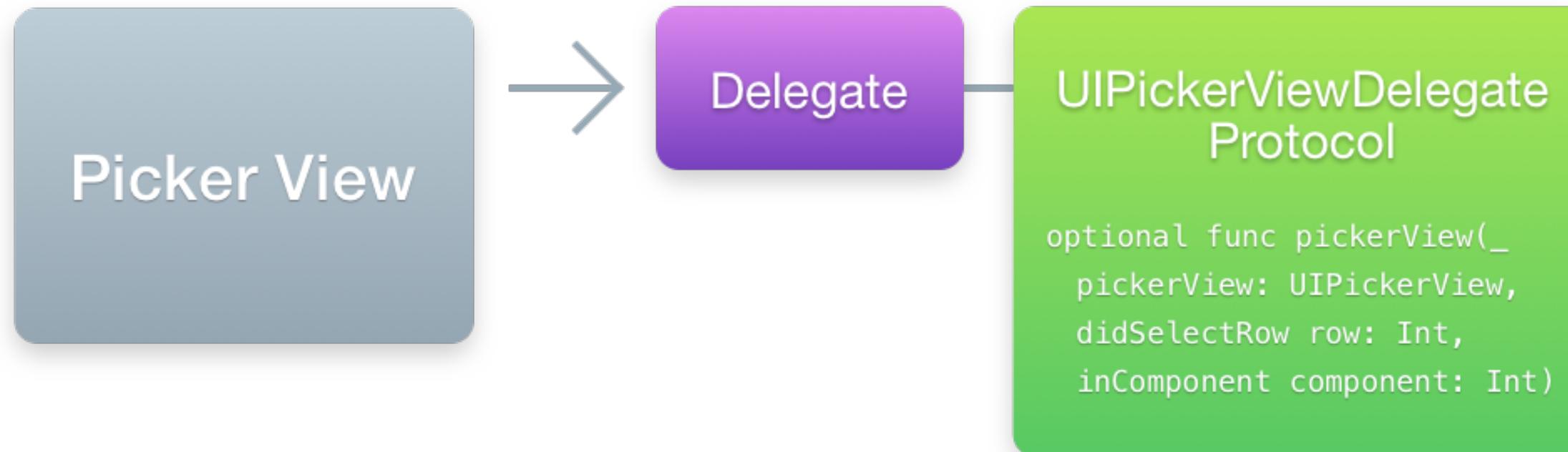


Delegate

"I don't know what to do
when a row is selected.
I'll tell my delegate."

"I could be any object, but
I can answer anything
delegated to me."

"I adopt the
UIPickerViewDelegate
protocol, and promise to
answer to certain messages."





NSNotificationCenter

- The app has become active
- The device has been rotated
- The device has changed location
- The app will quit
- A WiFi network has been found
- ...

NSNotificationCenter

```
NSNotificationCenter
    .defaultCenter()
    .addObserver(self,
                  selector: "didBecomeActive",
                  name: UIApplicationDidBecomeActive,
                  object: nil)
```

NSNotificationCenter

“Hey NSNotificationCenter, appelle la méthode de cet objet quand cet autre objet envoie une notification avec ce nom.”



The end

TP du jour

- **Clock.**
- Voir TP 4 sur adhum.i.fr/teaching

Salle Mac

- Login : m2sar
- Password : sarM2

Ressources (slides, TP, etc.)

- adhumi.fr/teaching