



COORDINATOR Pattern

THE BASICS

Nov 2022



1. Problem solver
2. Coordinator history
3. Basic protocol
4. App and Main Coordinator
5. Basic Code
6. Some Advance tips

Problem Solver

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The best way to introduce Coordinator is probably to introduce the problem it aims to solve.

- **Big ViewControllers(too many responsibilities)**
- **Improve reuse of views**
- **Implementation(navigation stack, data injection)**



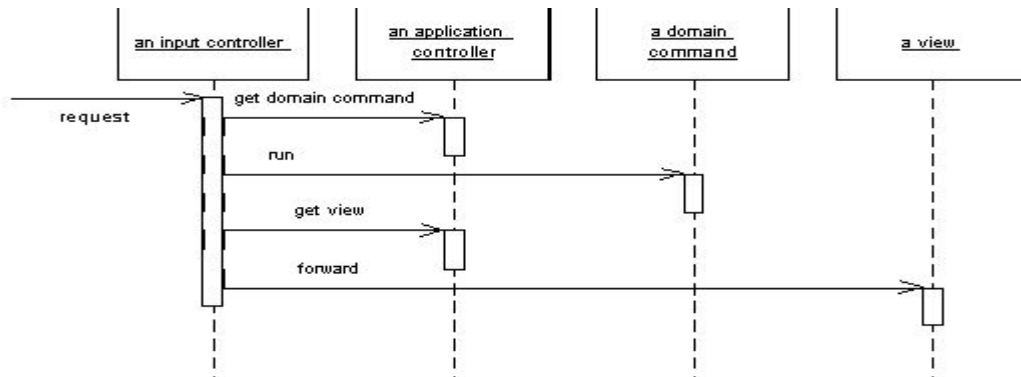
Coordinator History

overview

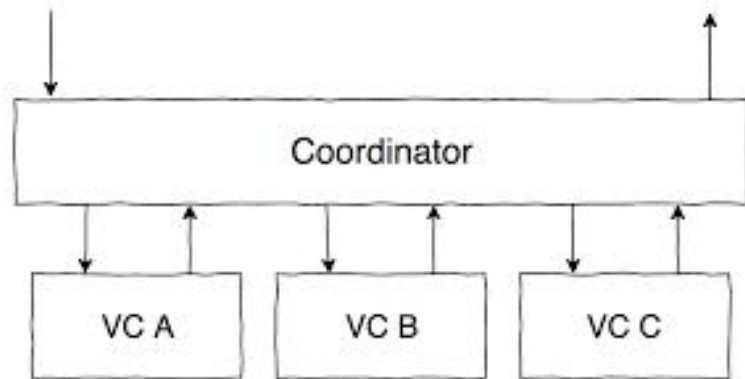
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Martin Fowler in his book “Patterns of Enterprise Application Architecture” called this pattern Application Controller. (2002)



But Soroush Khanlou is considered as its first popularizer in the iOS environment in his speech at the NSSpain conference in 2015.



Coordinator What is it

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Coordinator is a simple but yet powerful protocol.

```
10
11 protocol Coordinator {
12     func start()
13     |
14 }
```



App and Main Coordinator overview

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App Coordinator

```
11 class AppCoordinator: Coordinator {
12     var window: UIWindow?
13
14
15     init(window: UIWindow?) {
16         self.window = window
17     }
18
19     func start() {
20         let navigationController = UINavigationController()
21         window?.rootViewController = navigationController
22         window?.makeKeyAndVisible()
23
24         let mainCoordinator = MainCoordinator(controller: navigationController)
25         coordinate(to: mainCoordinator)
26
27     }
28 }
```



Main Coordinator

```
8 import Foundation
9 import UIKit
10
11 protocol StartFlow: AnyObject {
12     func goToTabMainController()
13     func goToRedViewController()
14     func goToBlueViewController()
15     func goToYellowViewController()
16     func backToRoot()
17 }
18
19 class MainCoordinator: Coordinator, StartFlow {
20
21     let Controller: UINavigationController
22
23     init(controller: UINavigationController) {
24         self.Controller = controller
25     }
26
27     func start() {
28         Controller.dismiss(animated: false) {
29             self.goToTabMainController()
30         }
31     }
32
33     // MARK: - Flow Methods
34     func goToTabMainController() {
35         let vc = MainController()
36         vc.coordinator = self
37         Controller.setViewControllers([vc], animated: false)
38     }
```



Tips and Links

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Tips and Links

[Medium coordinator pattern](#)

[Hacking with Swift coordinator pattern](#)

[Hacking with Swift advance coordinator pattern](#)

[Presenting Coordinators - Soroush Khanlou](#)

