

FlowCoordinators for Reusable Navigation in iOS

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Hola!

- Ricardo Pramana Suranta (Edo)
- iOS Engineer for 5+ years



Hola!

- Ricardo Pramana Suranta (Edo)
- iOS Engineer for 5+ years
- Might act silly, sometimes



Navigation in iOS

```

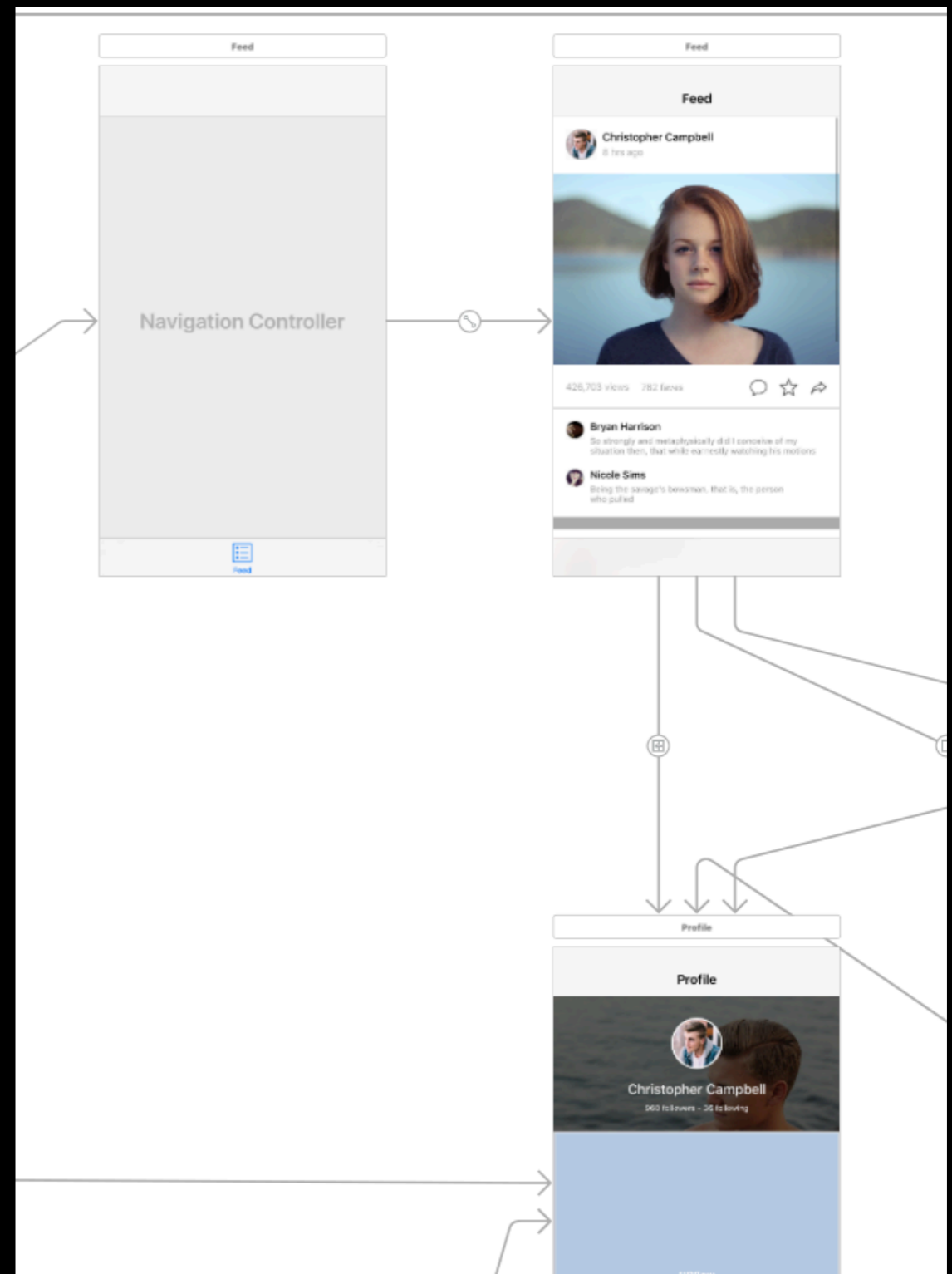
nc navigateToMissionList() {
    shownMissionListViewController = getShownMissionListViewController()
    if(navigationController?.popToViewController(animated: true)) {
        return nil
    }
    missionListViewController = MissionListViewController()
    navigationController?.setViewControllers([missionListViewController], animated: true)
}

nc getShownMissionListViewController() -> MissionListViewController? {
    let viewControllerStack = self.navigationController?.viewControllers
    return nil

    for viewController in viewControllerStack {
        if viewController is MissionListViewController {
            return viewController as? MissionListViewController
        }
    }
    return nil
}

```

Code



Storyboard
(image from matteomanferdini.com)

Navigation Code in View Controllers (duh)

```
func doneButtonTapped() {
    let vc = NextViewController(prepareNecessaryState())

    if Device.isIPad() {
        navigationController.pushViewController(vc, animated: true, completion: nil)
    } else {
        var nav = UINavigationController(rootViewController: vc)
        nav.modalPresentationStyle = UIModalPresentationStyle.Popover
        var popover = nav.popoverPresentationController
        popoverContent.preferredContentSize = CGSizeMake(500, 600)
        popover.delegate = self
        popover.sourceView = self.view
        popover.sourceRect = CGRectMake(100, 100, 0, 0)

        presentViewController(nav, animated: true, completion: nil)
    }
}
```

(Taken from merowing.info)



Krzysztof Zabłocki

<http://merowing.info/2016/01/improve-your-ios-architecture-with-flowcontrollers/>

FlowCoordinators

MVVM-C

C: Coordinators

Why FlowCoordinators?

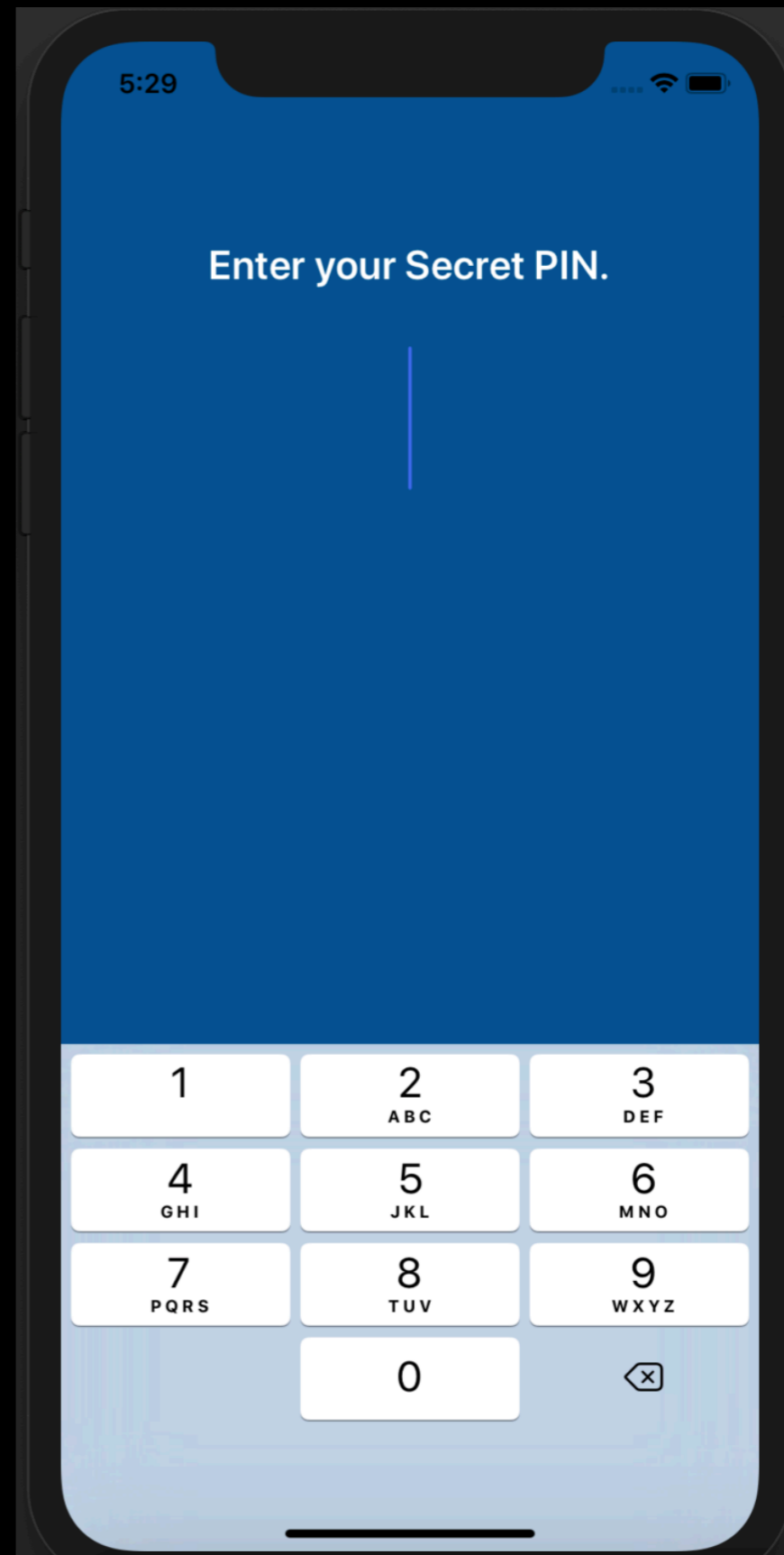
- Single Responsibility Principle for app navigation / flow
- Reusable UIViewControllers (gotchu Storyboard!)
- Reusable navigation flow (Storyboard's good parts)

Sample App Demo

([https://github.com/edopelawi/](https://github.com/edopelawi/FlowCoordinatorPOC)
FlowCoordinatorPOC)

Used on:

- First-time authentication
- Reboot app authentication
- Accept mission



**Refactor to
FlowCoordinators!**

Going further...

- Read Krzysztof's blogpost: <http://merowing.info/2016/01/improve-your-ios-architecture-with-flowcontrollers/>
- Play around with the POC project in GitHub: <https://github.com/edopelawi/FlowCoordinatorPOC>
- Create enum for representing each ViewController in FlowCoordinators
- Use enum representation to create navigation stack for handling deeplinking / push notification.

Further questions?
GitHub / StackOverflow /
Twitter: @edopelawi

DANA is hiring!

<https://>

danaid.bamboohr.com/jobs/

Gracias! 🙏