

What's New in Storyboards

Mapping the flow of your app

Session 215

Kyle Sluder UIKit Frameworks

Tony Ricciardi Development Technologies

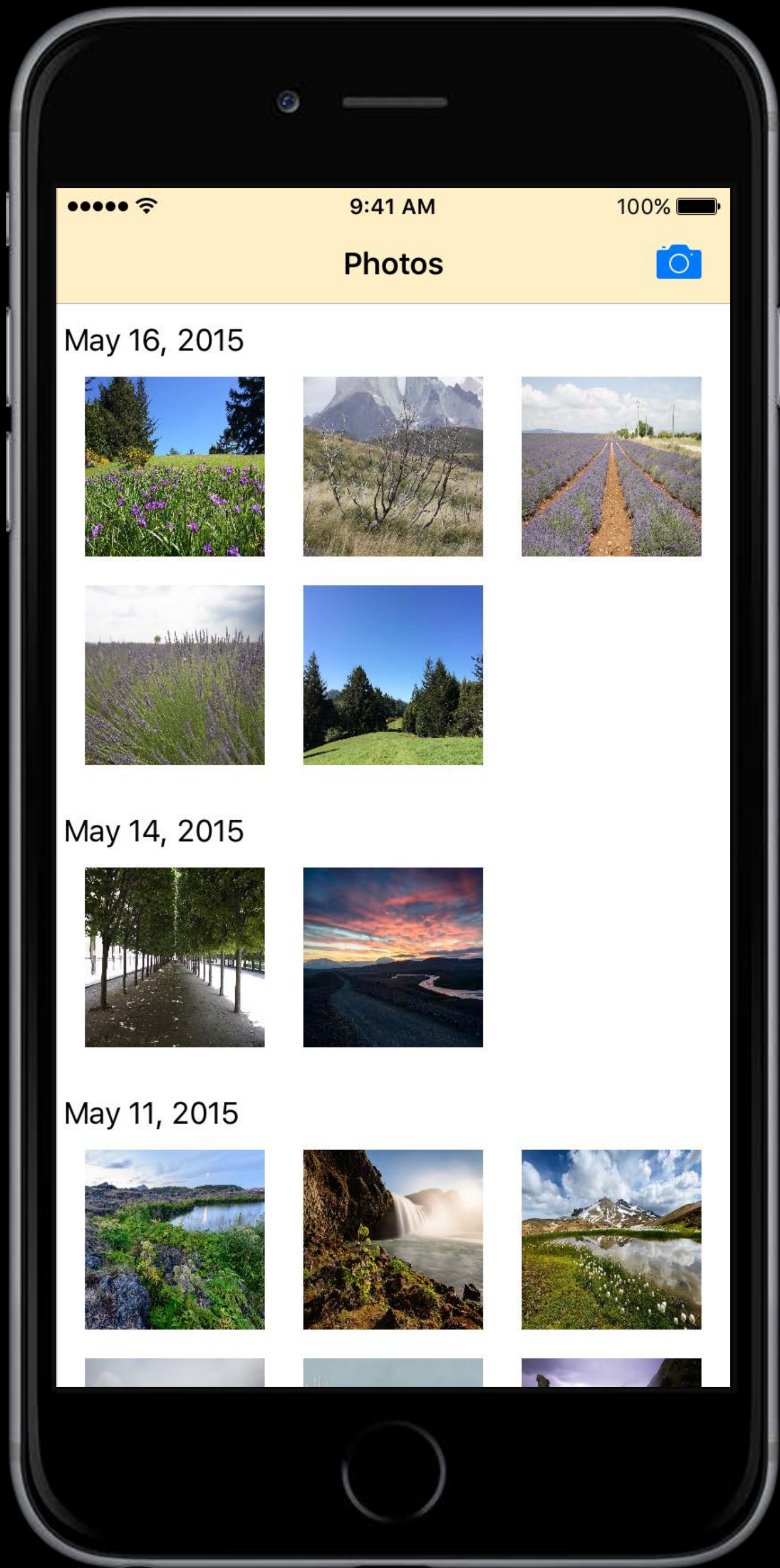
What's New

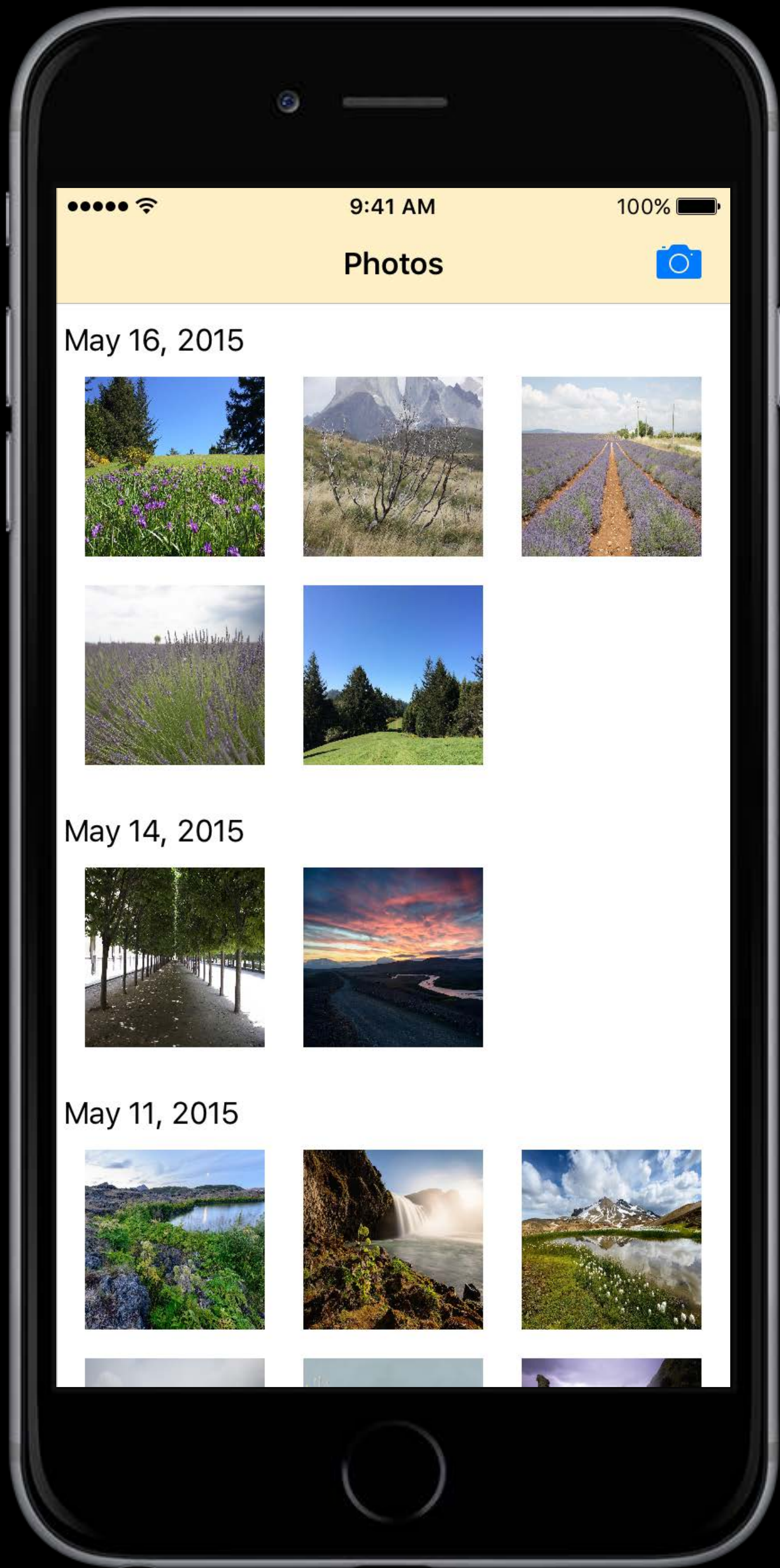
Organizing Your Storyboards

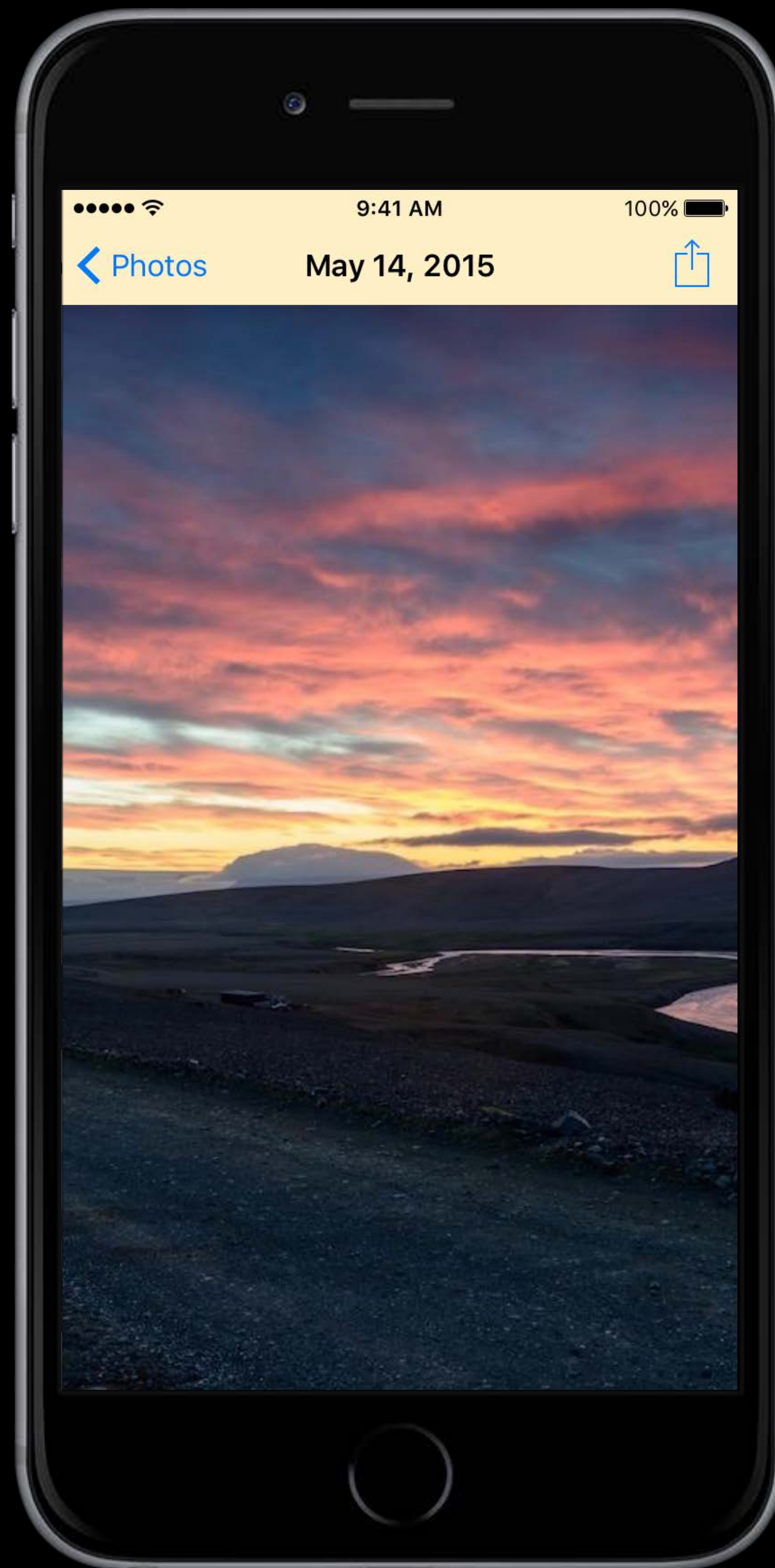
Customizing Standard Segues

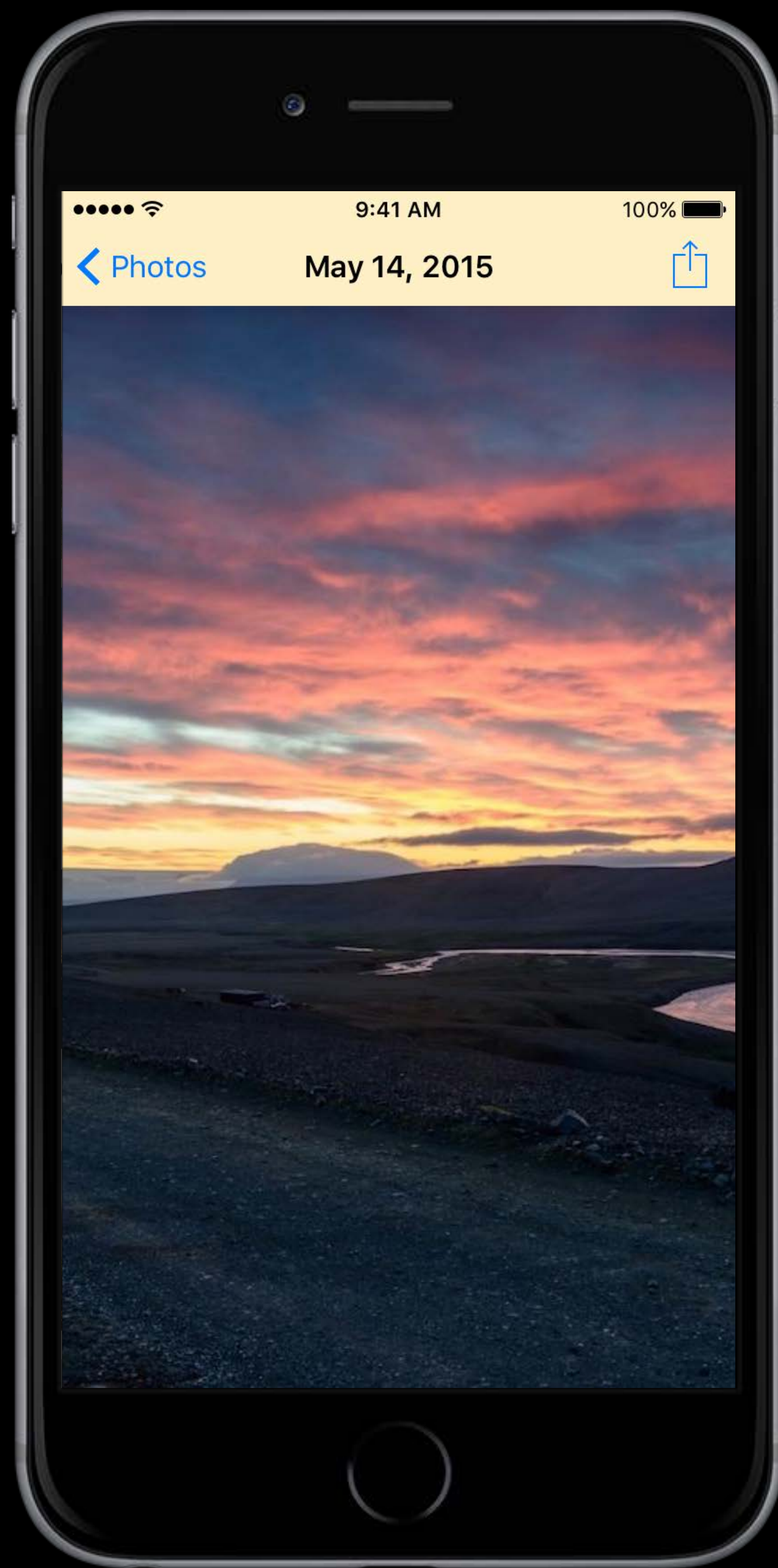
Unwind Segues and Custom Containers

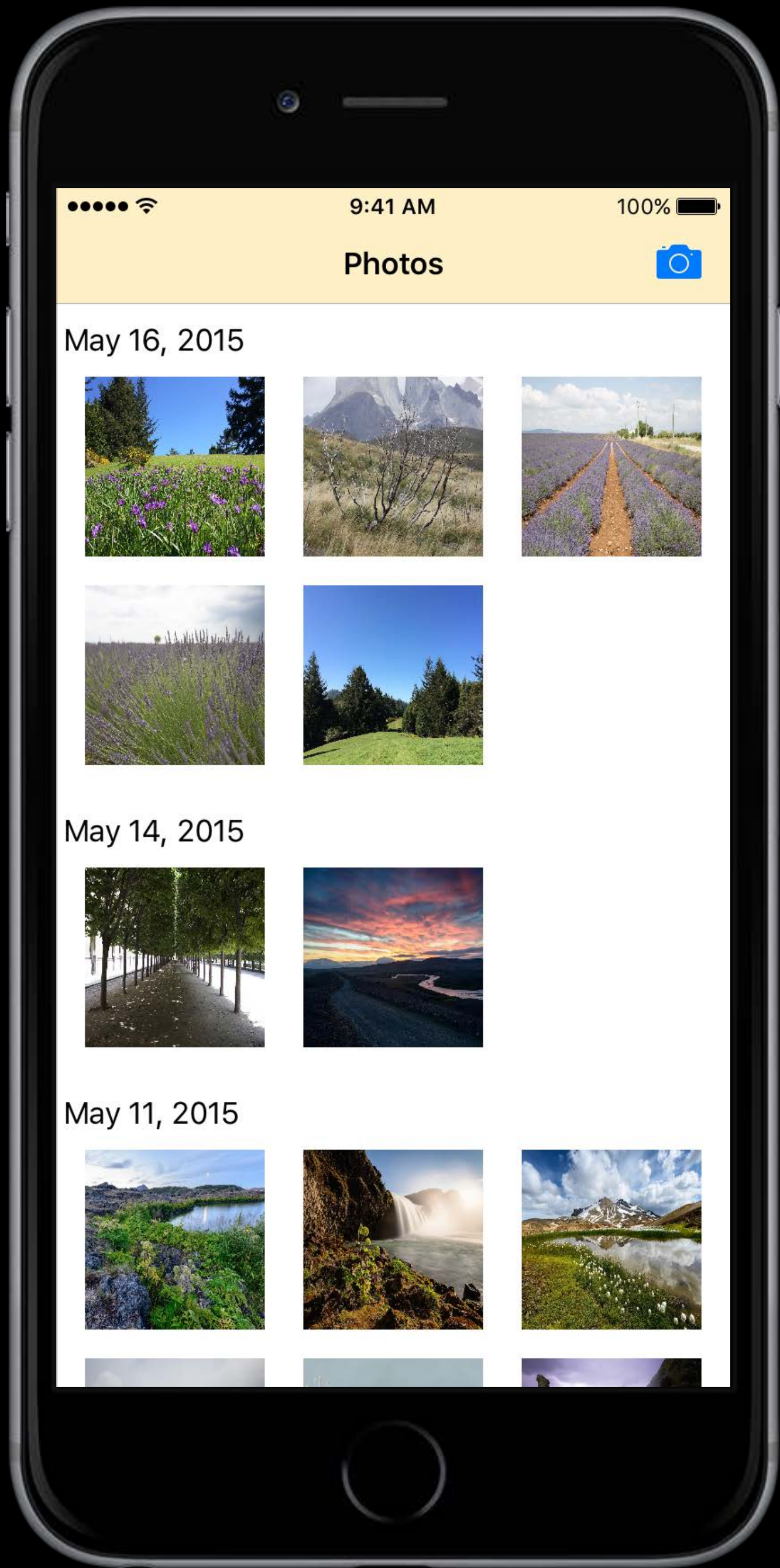
Organizing Your Storyboards

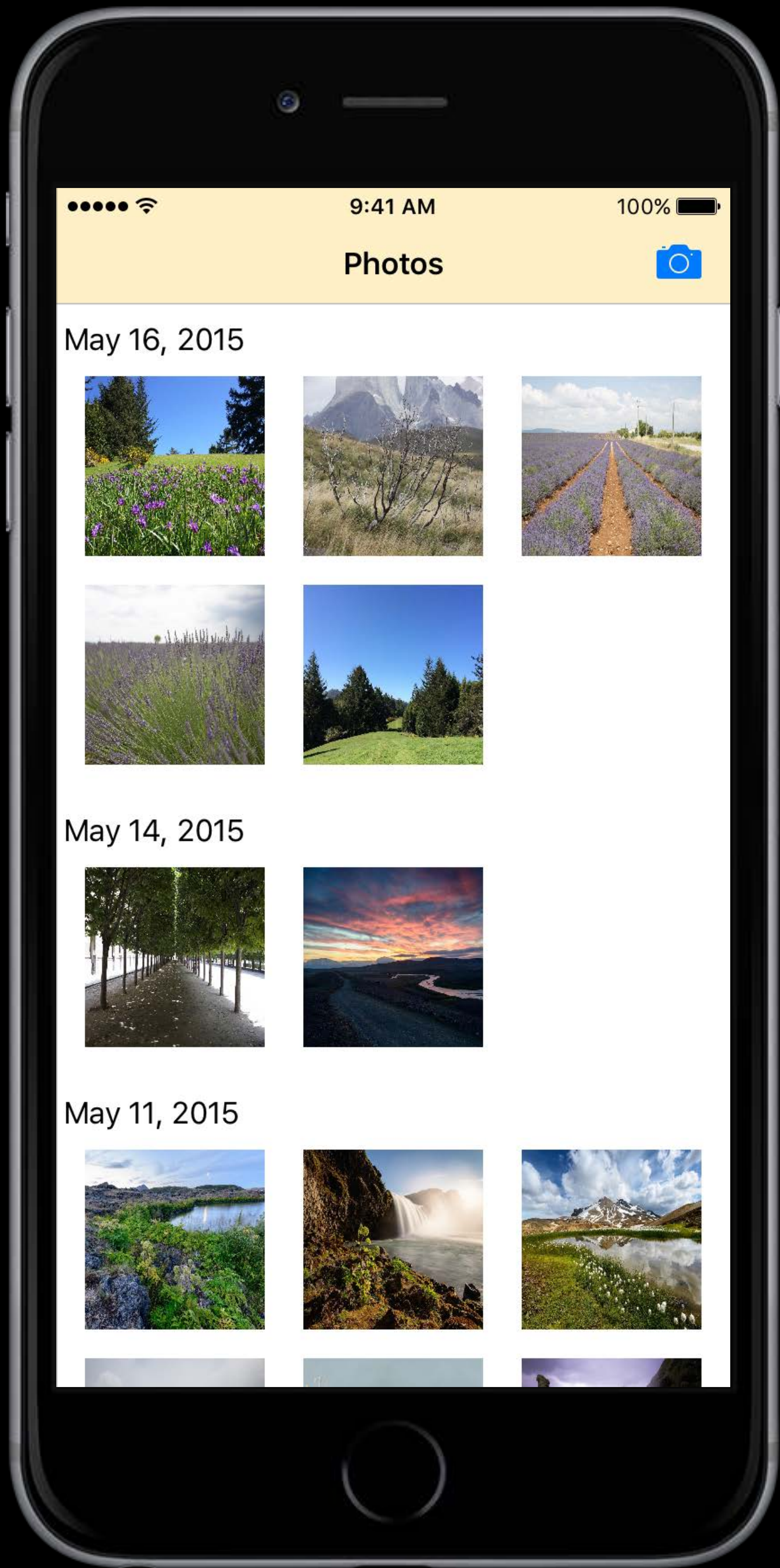


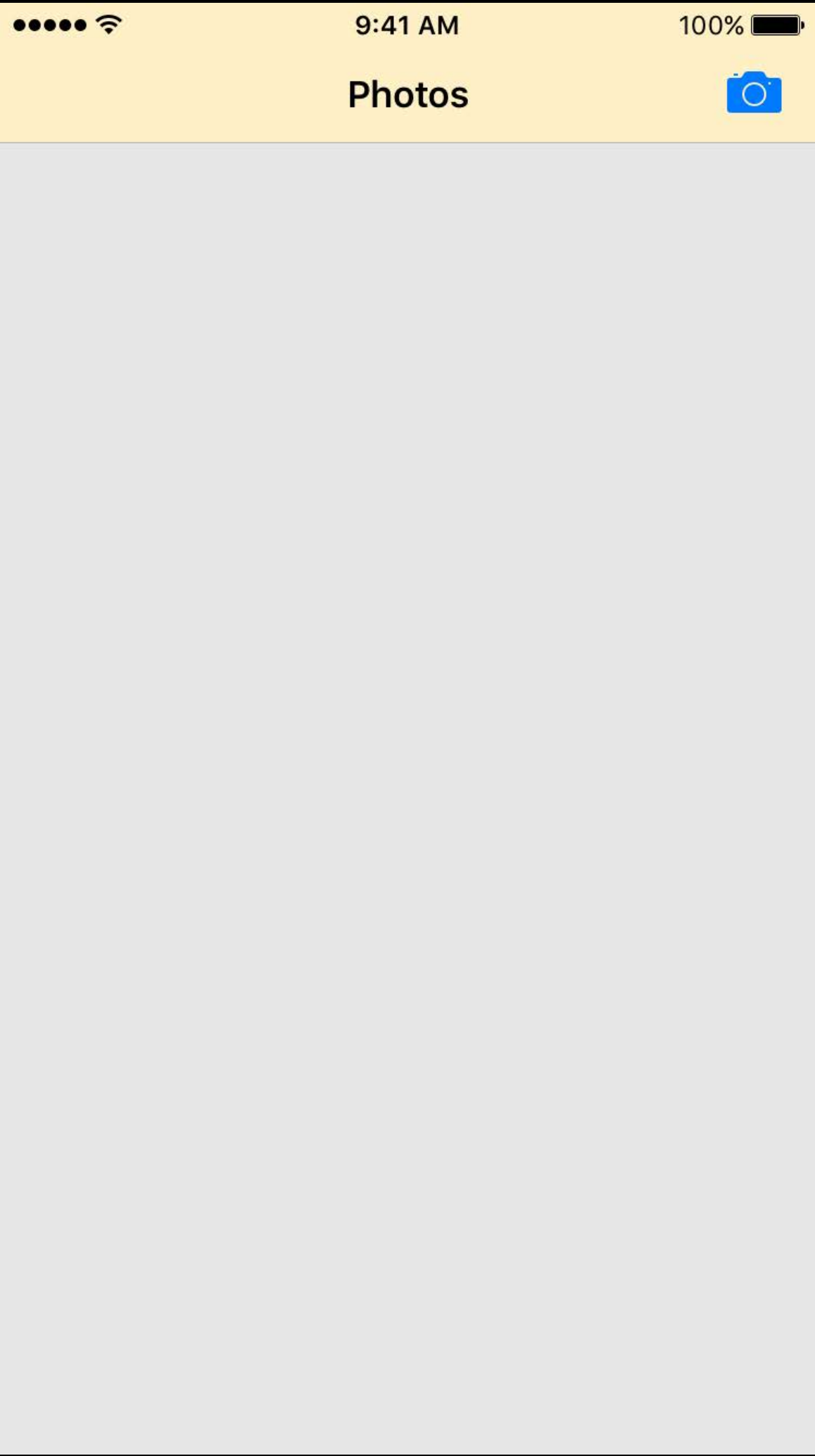












May 16, 2015

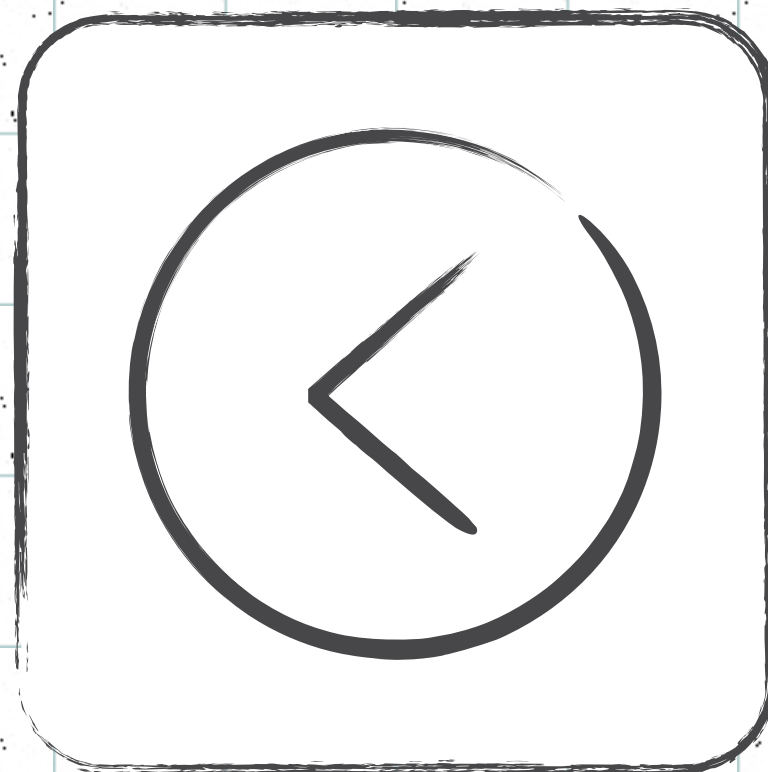


May 14, 2015

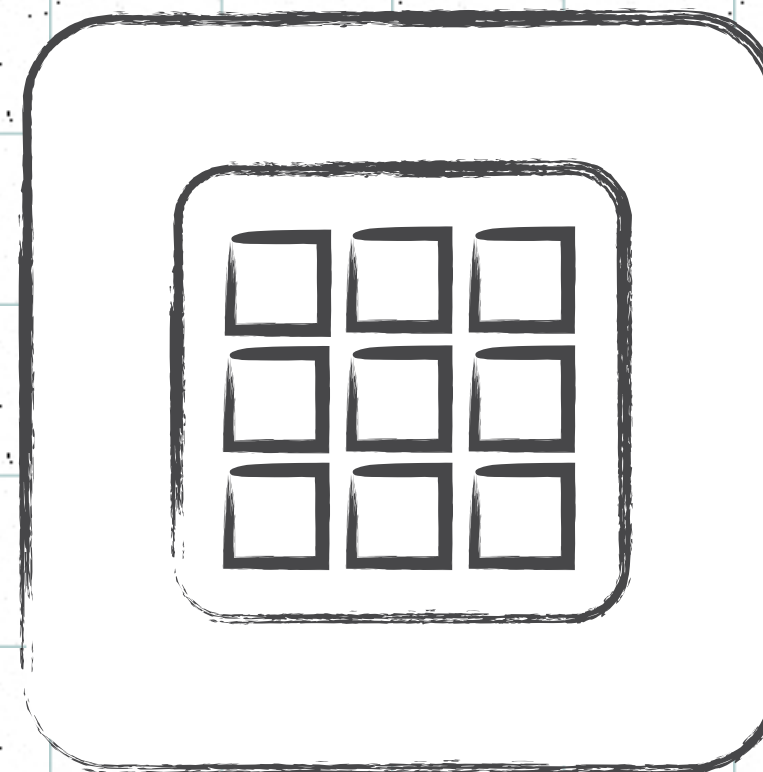


May 11, 2015

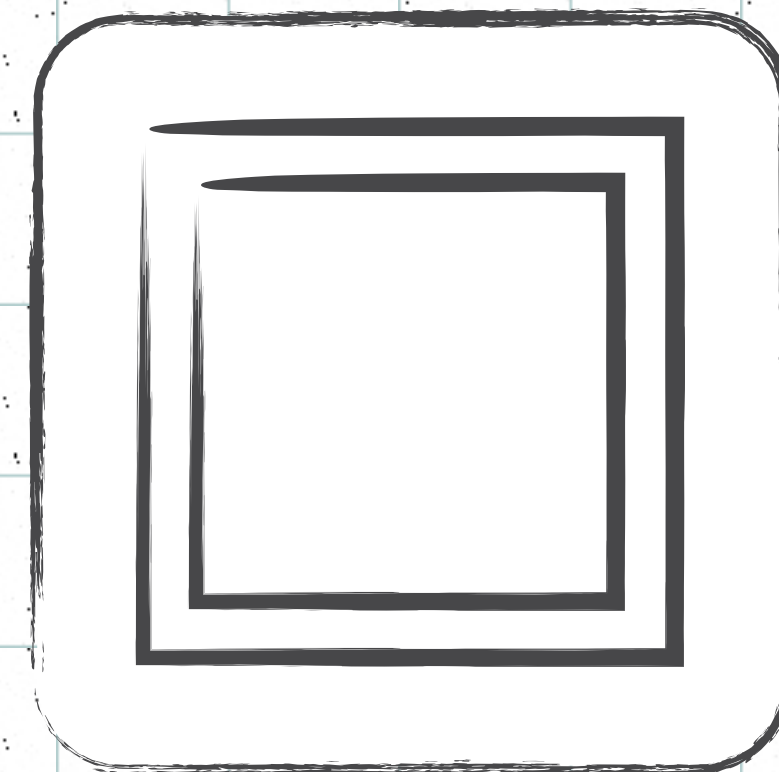




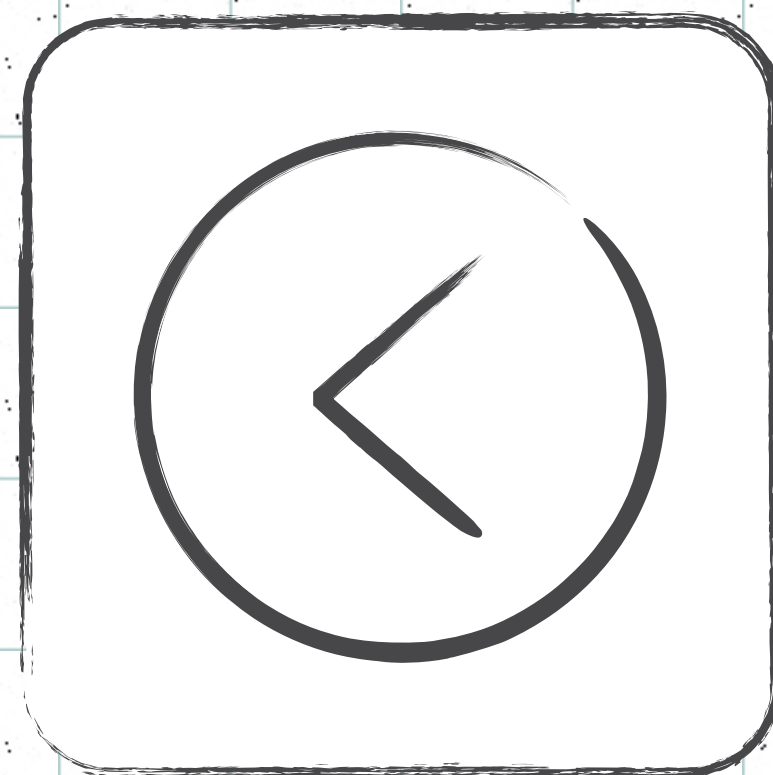
**Navigation
Controller**



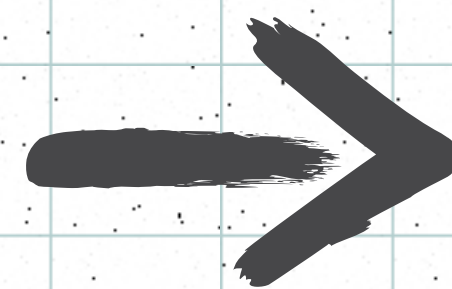
**Collection View
Controller**



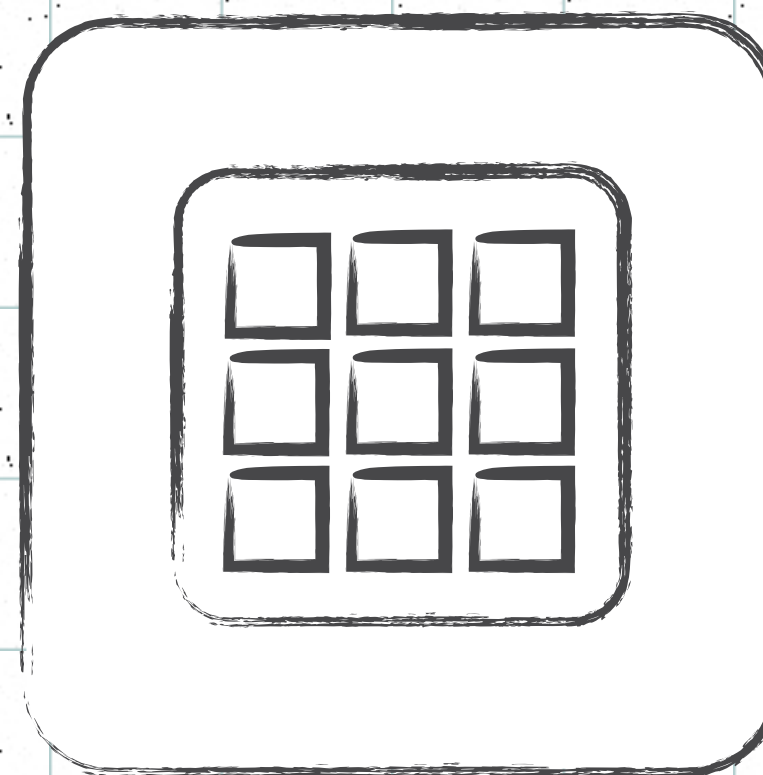
**Photo View
Controller**



**Navigation
Controller**



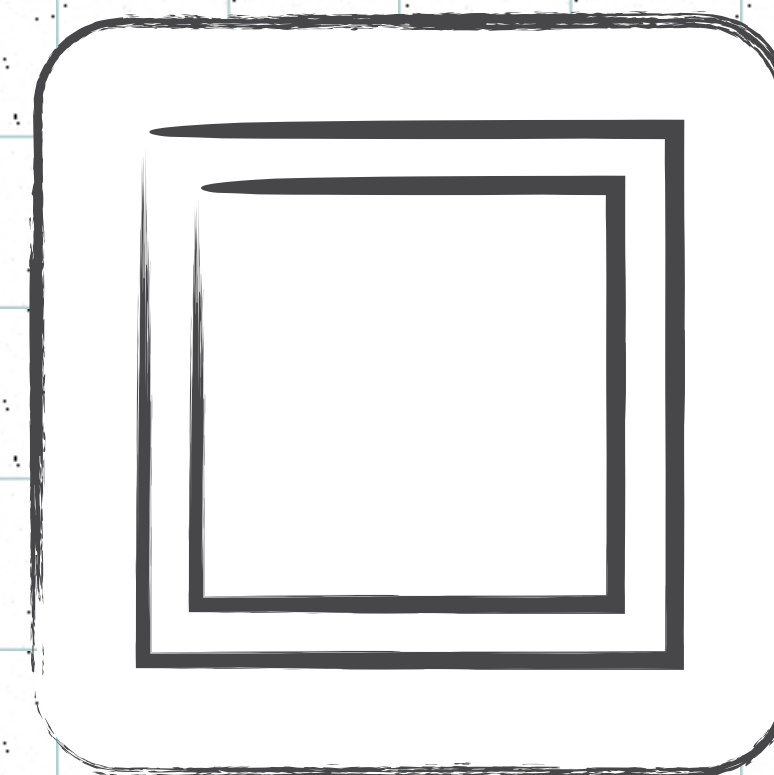
contains



**Collection View
Controller**

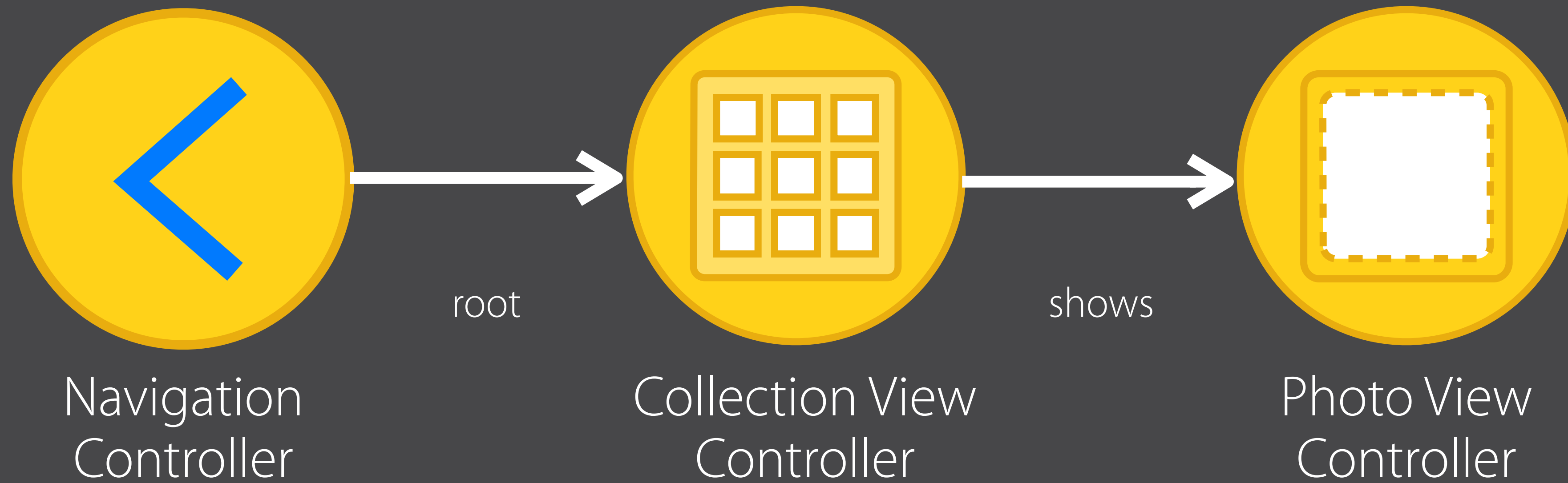


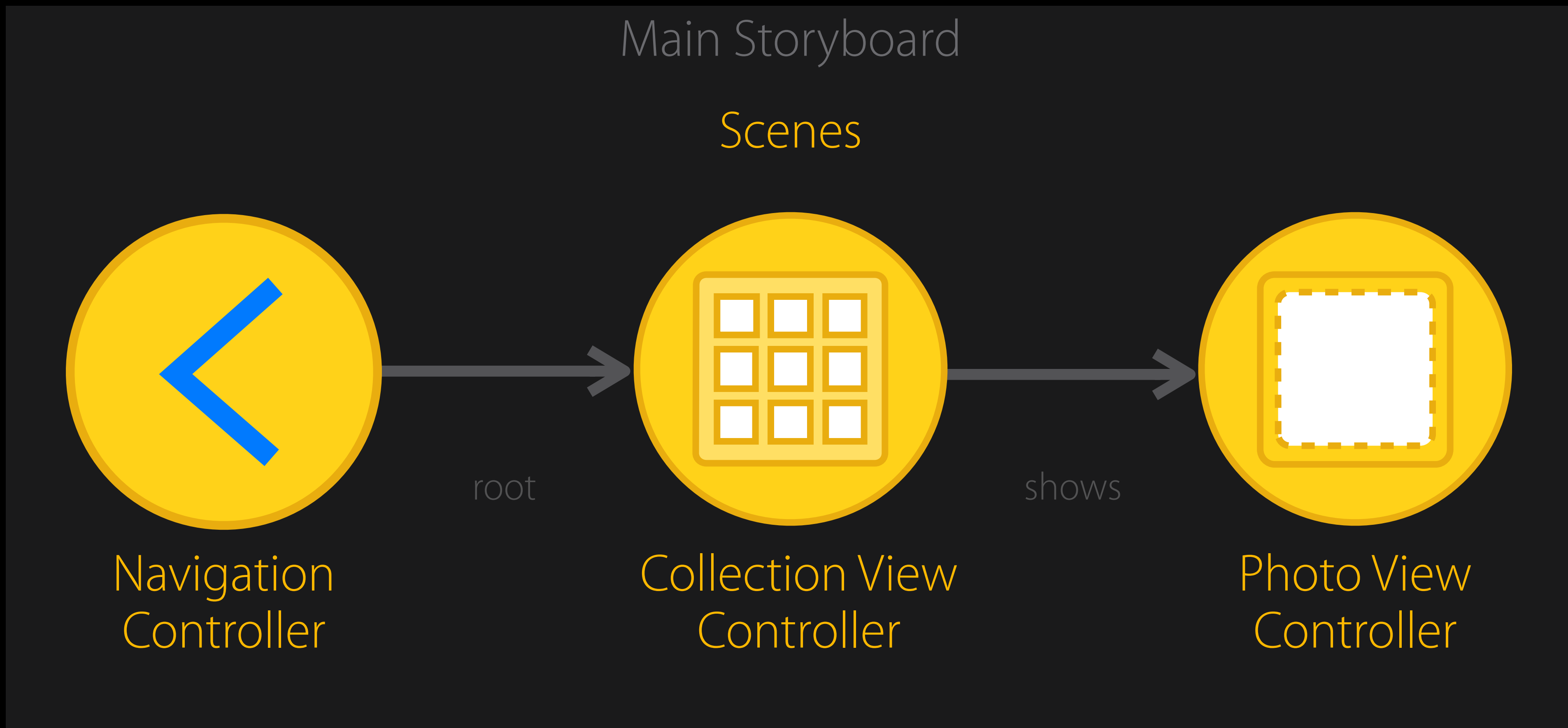
shows

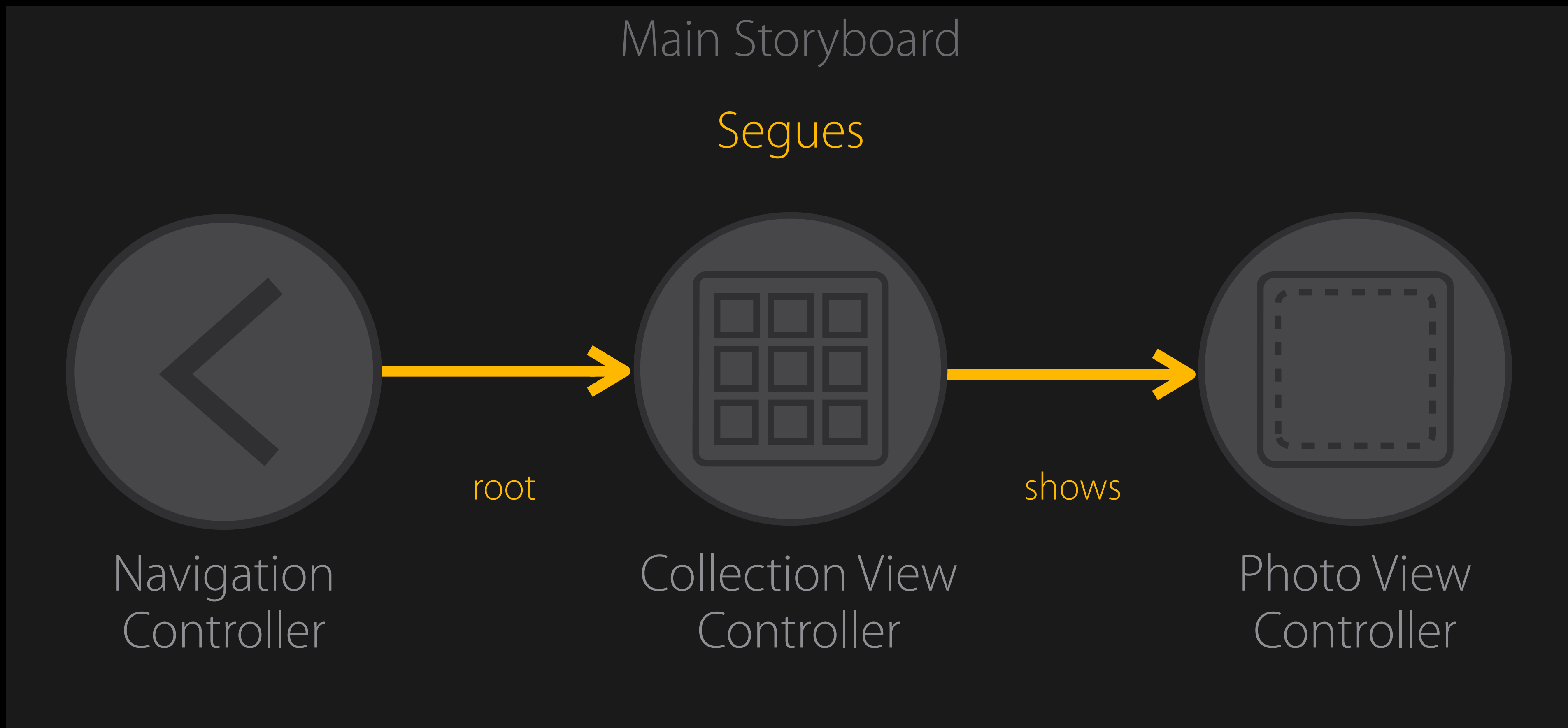


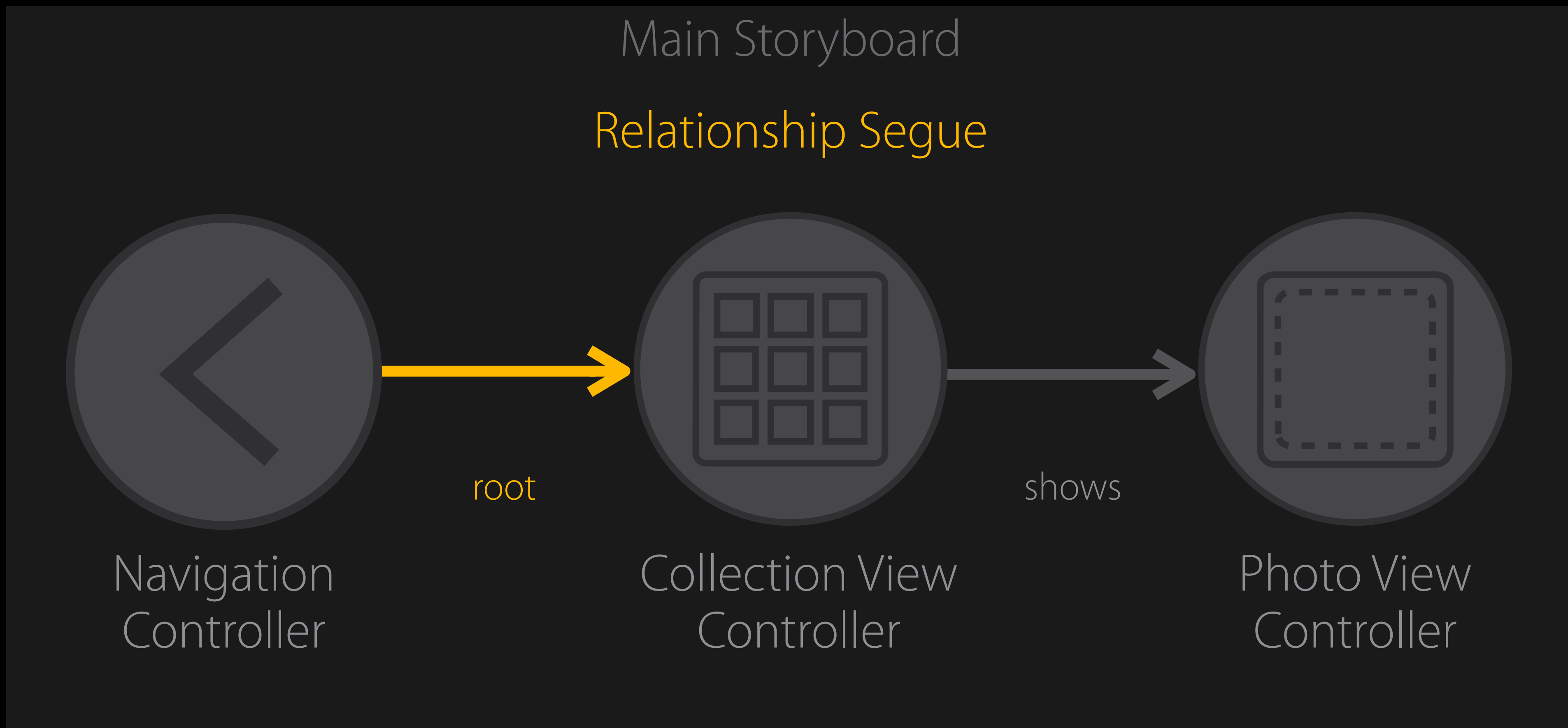
**Photo View
Controller**

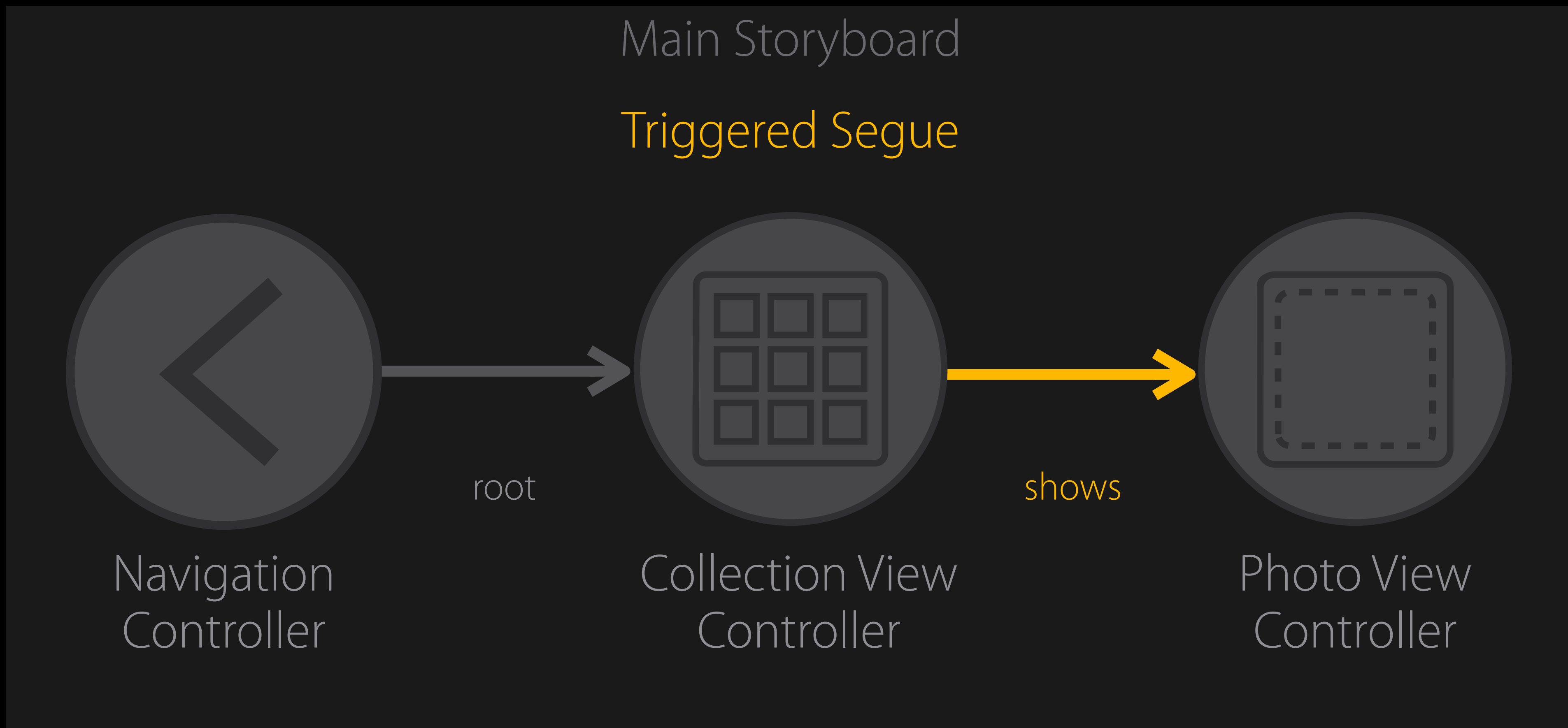
Main Storyboard



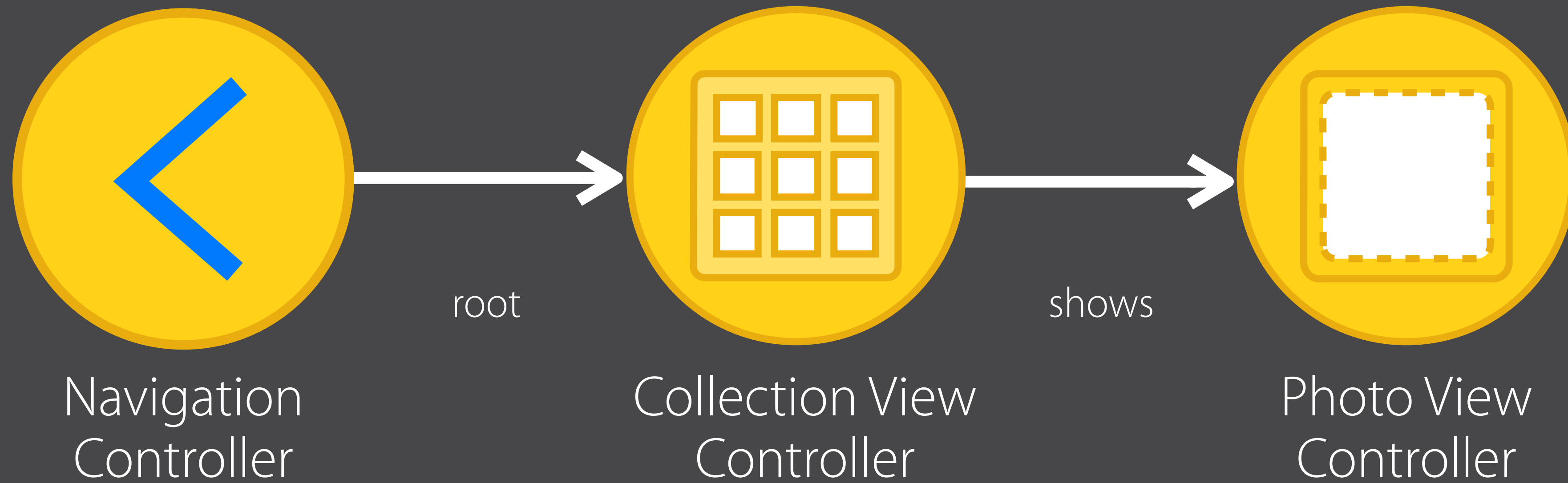






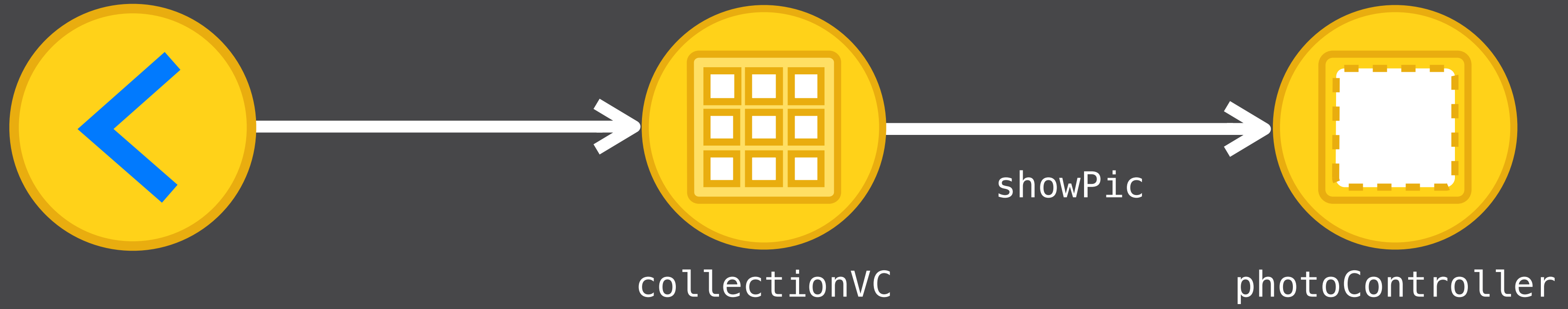


Main Storyboard

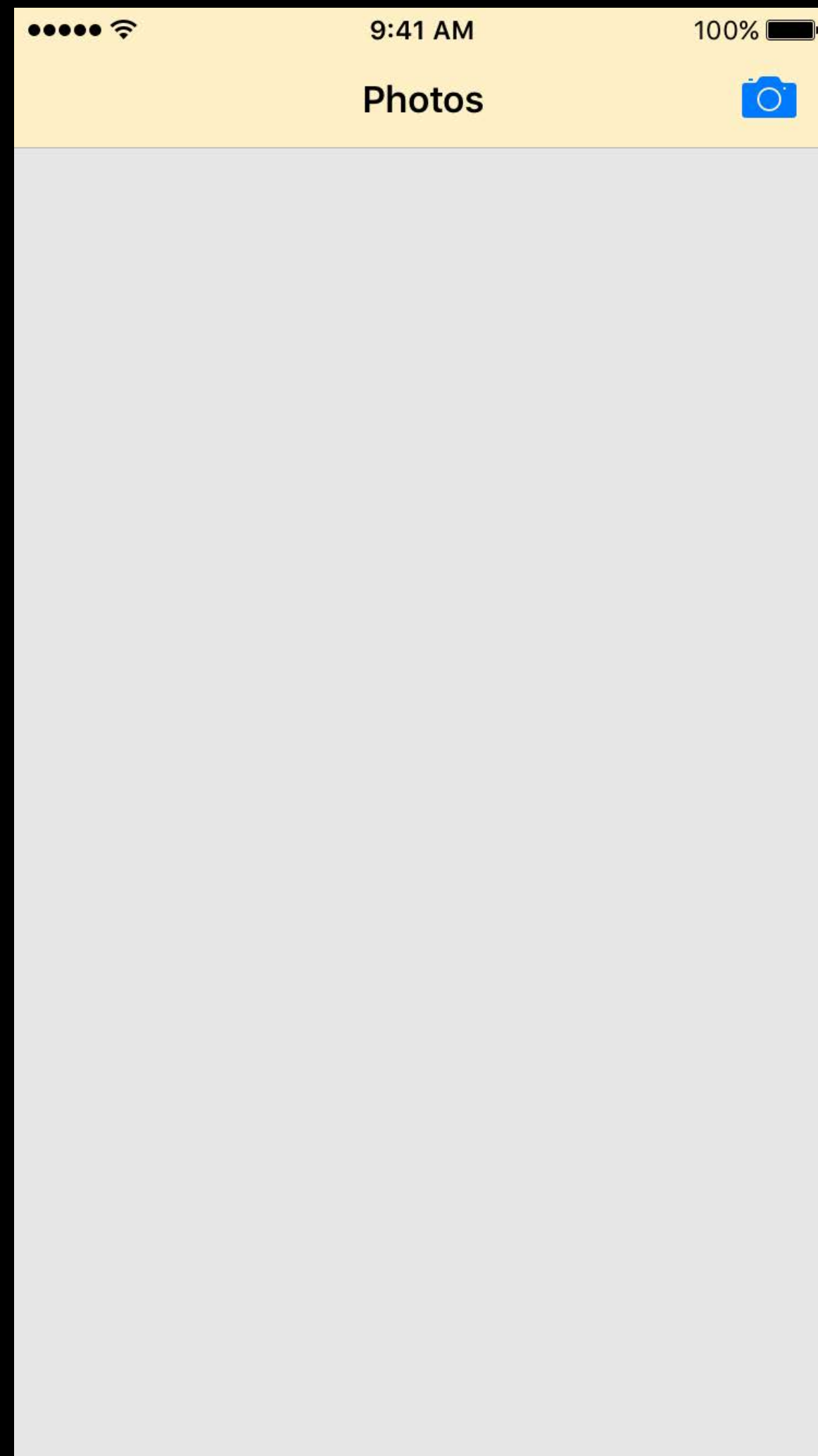
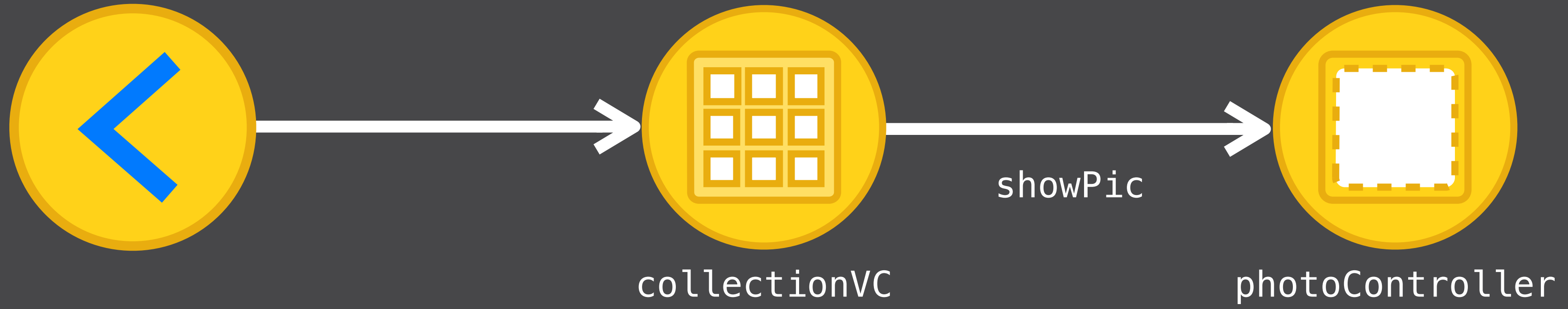




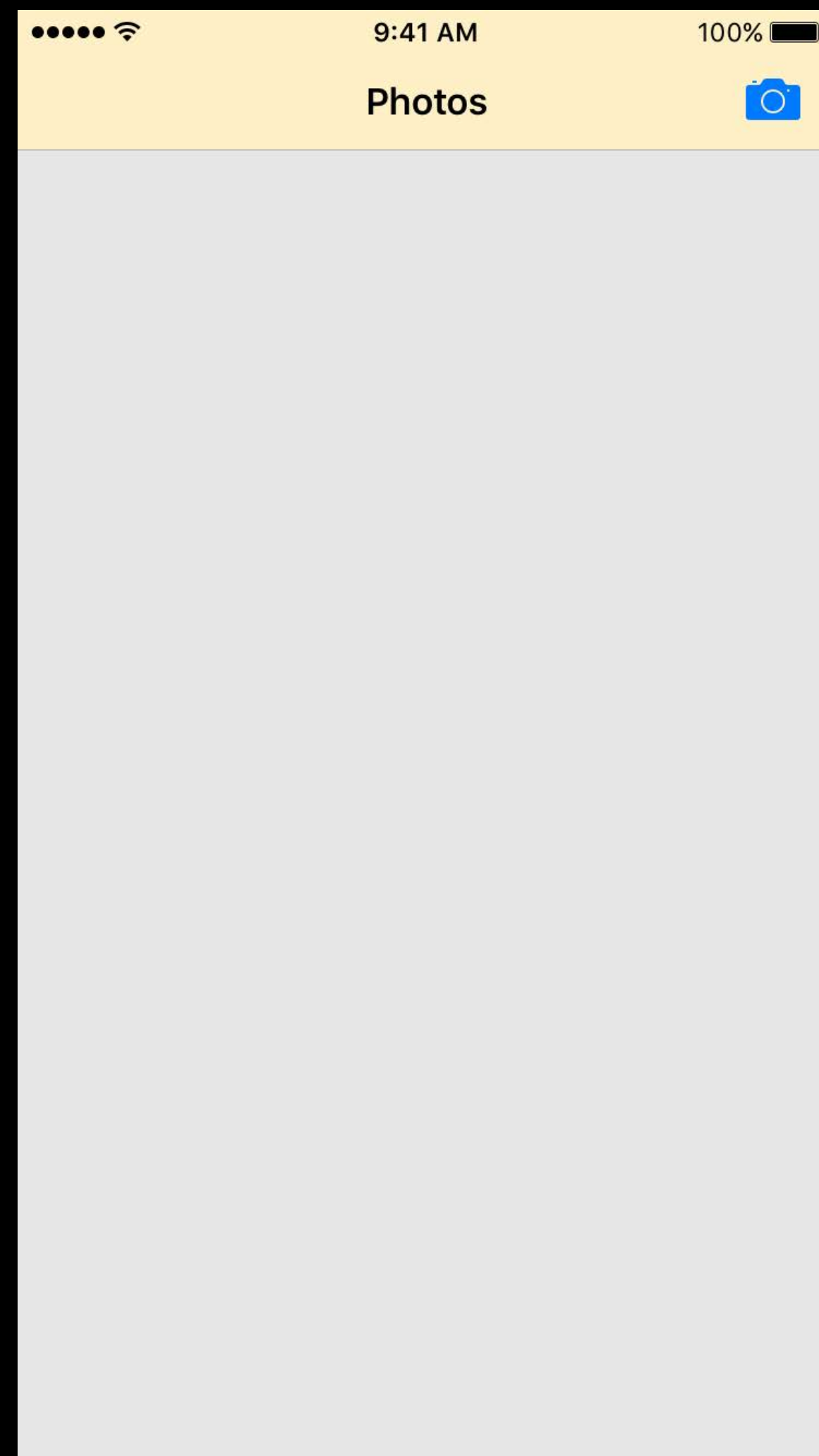
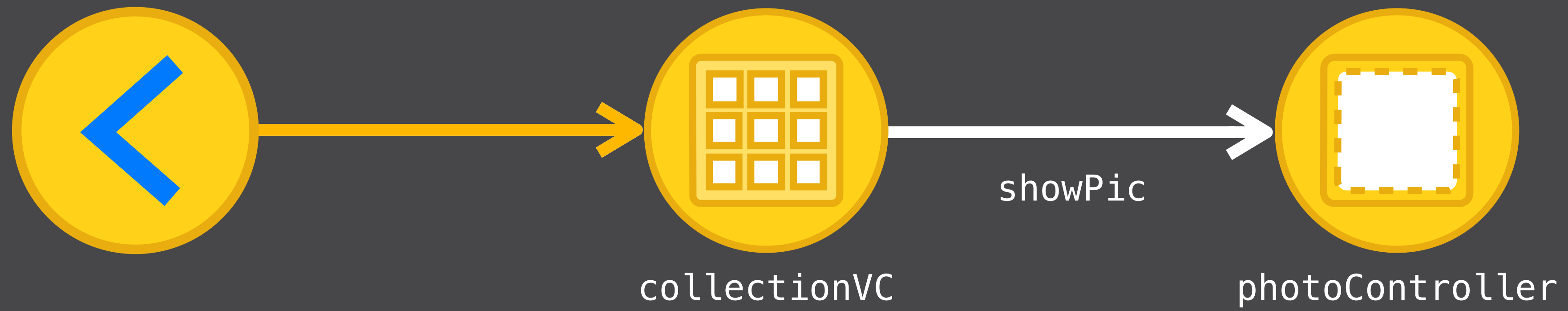
Main.storyboard



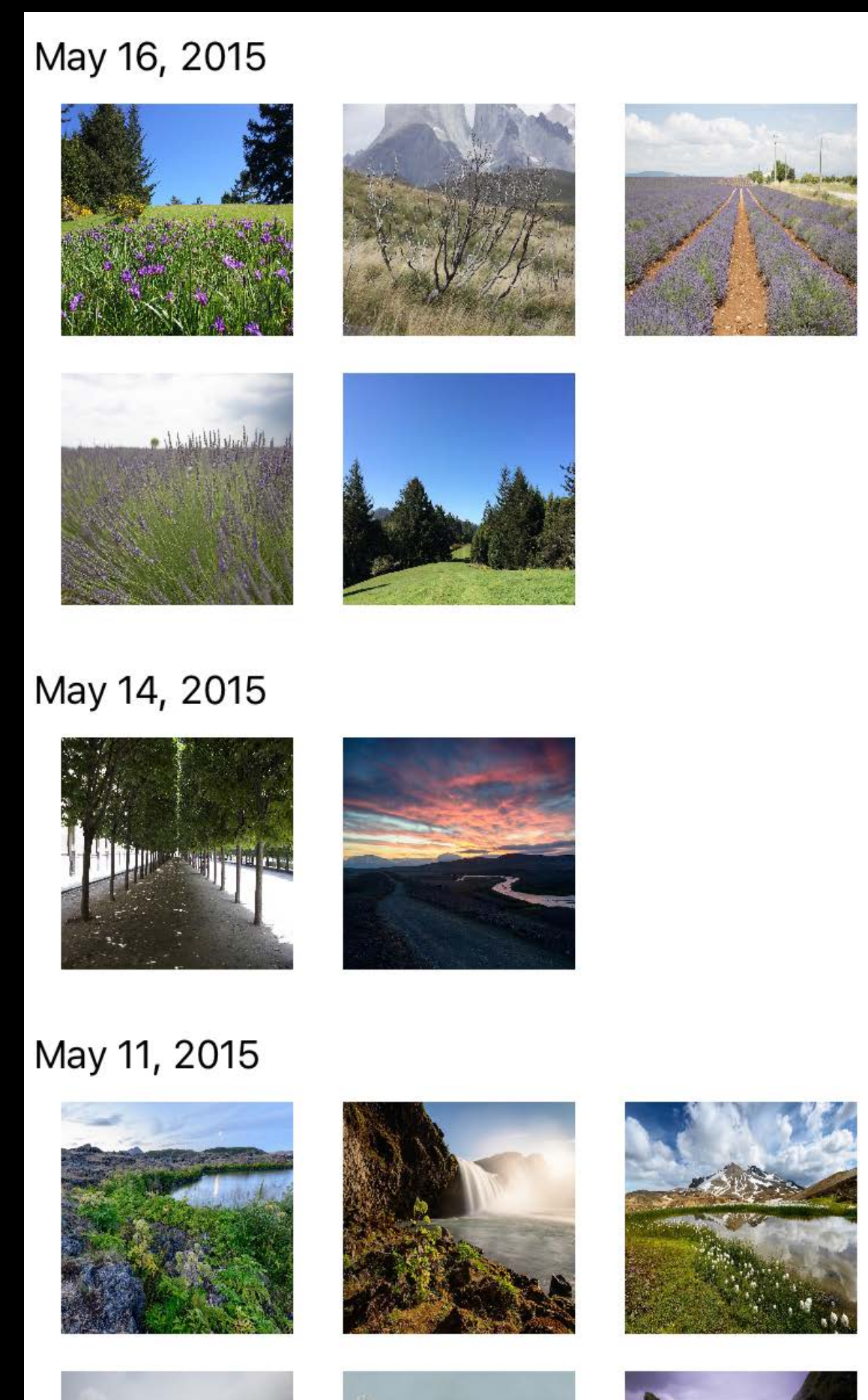
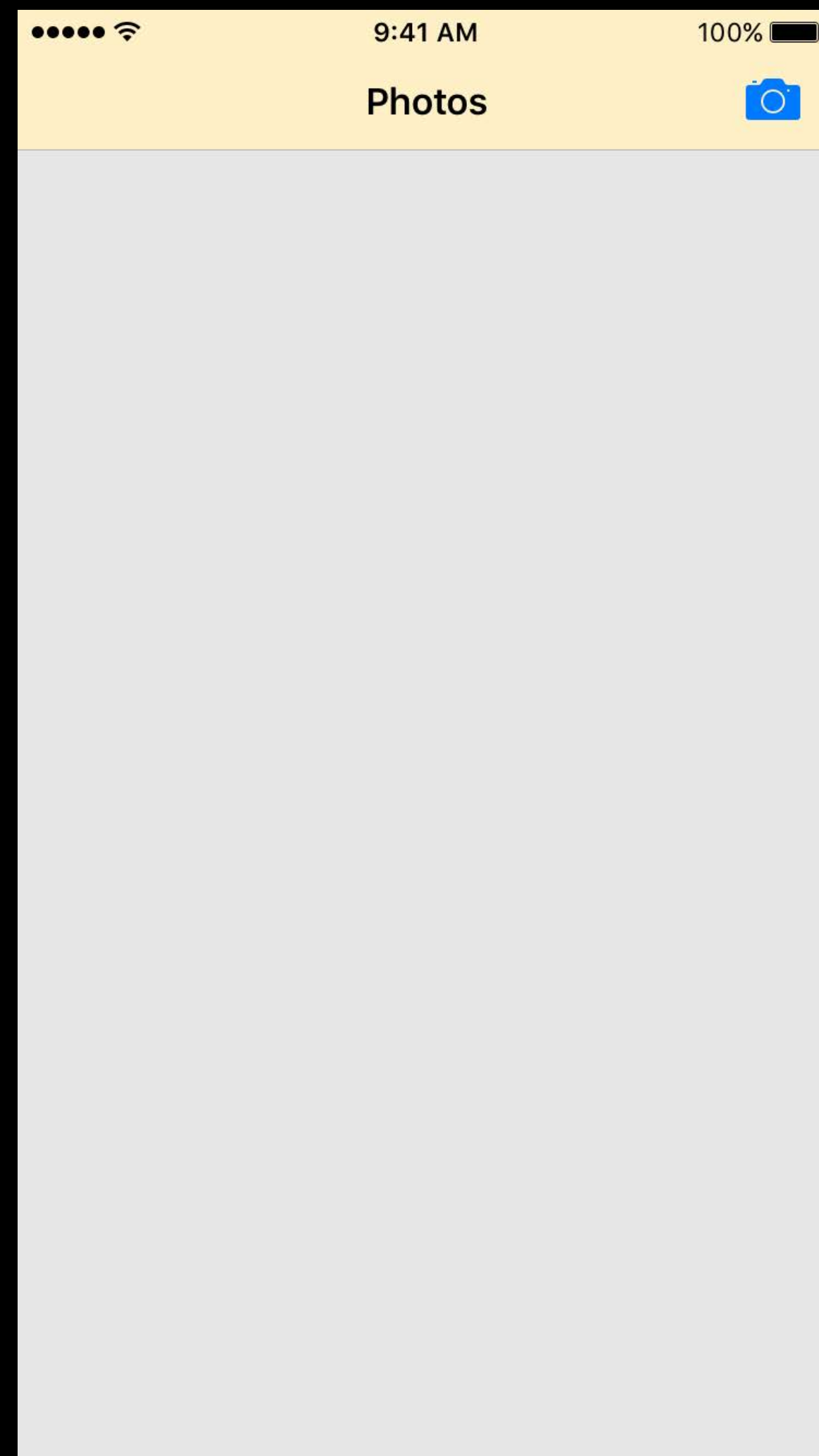
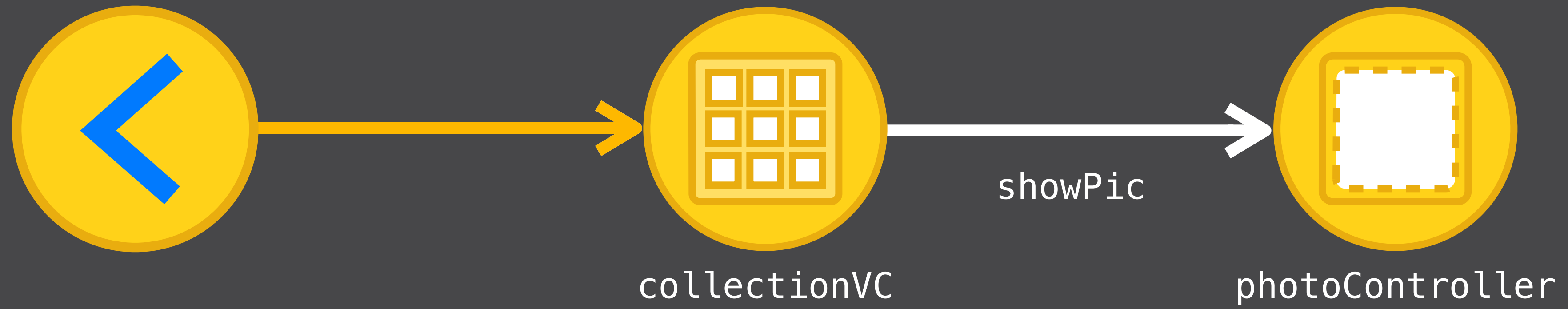
Main.storyboard



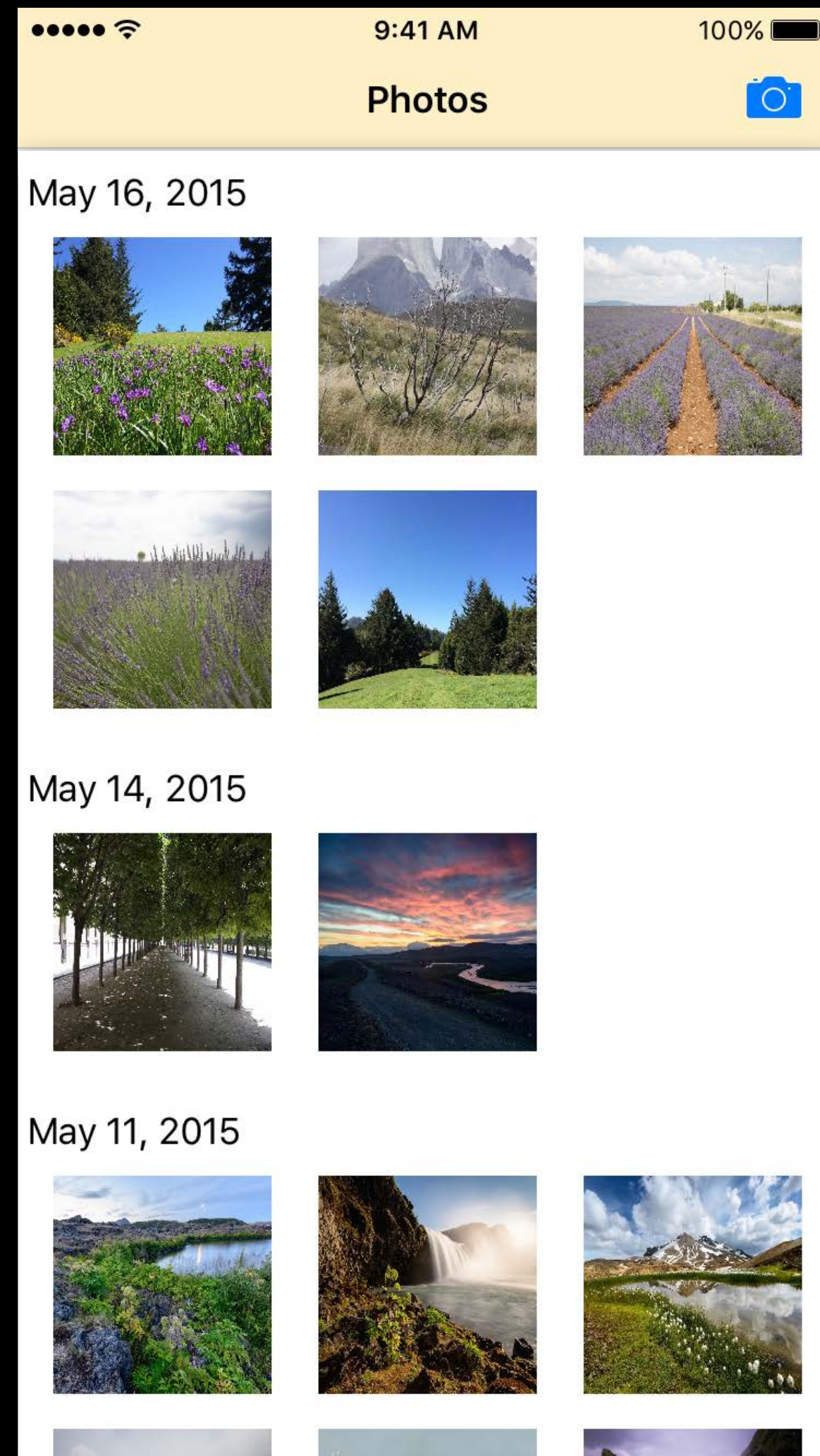
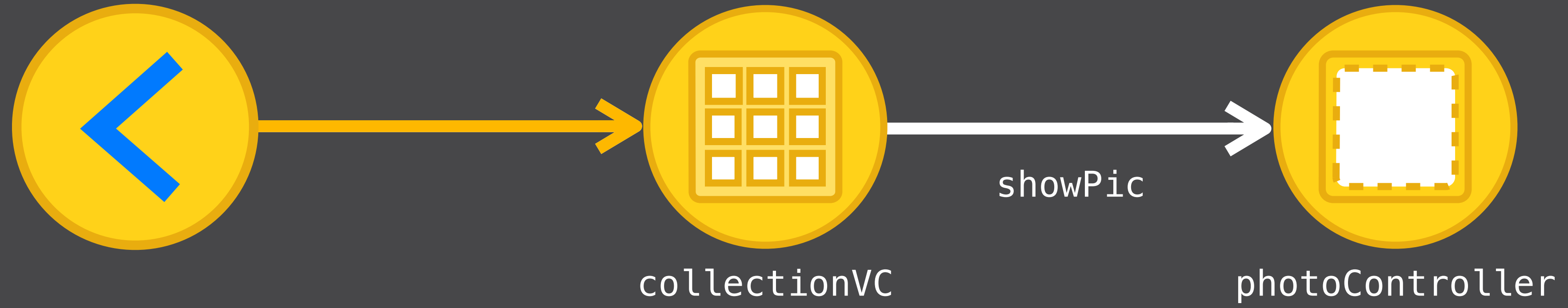
Main.storyboard



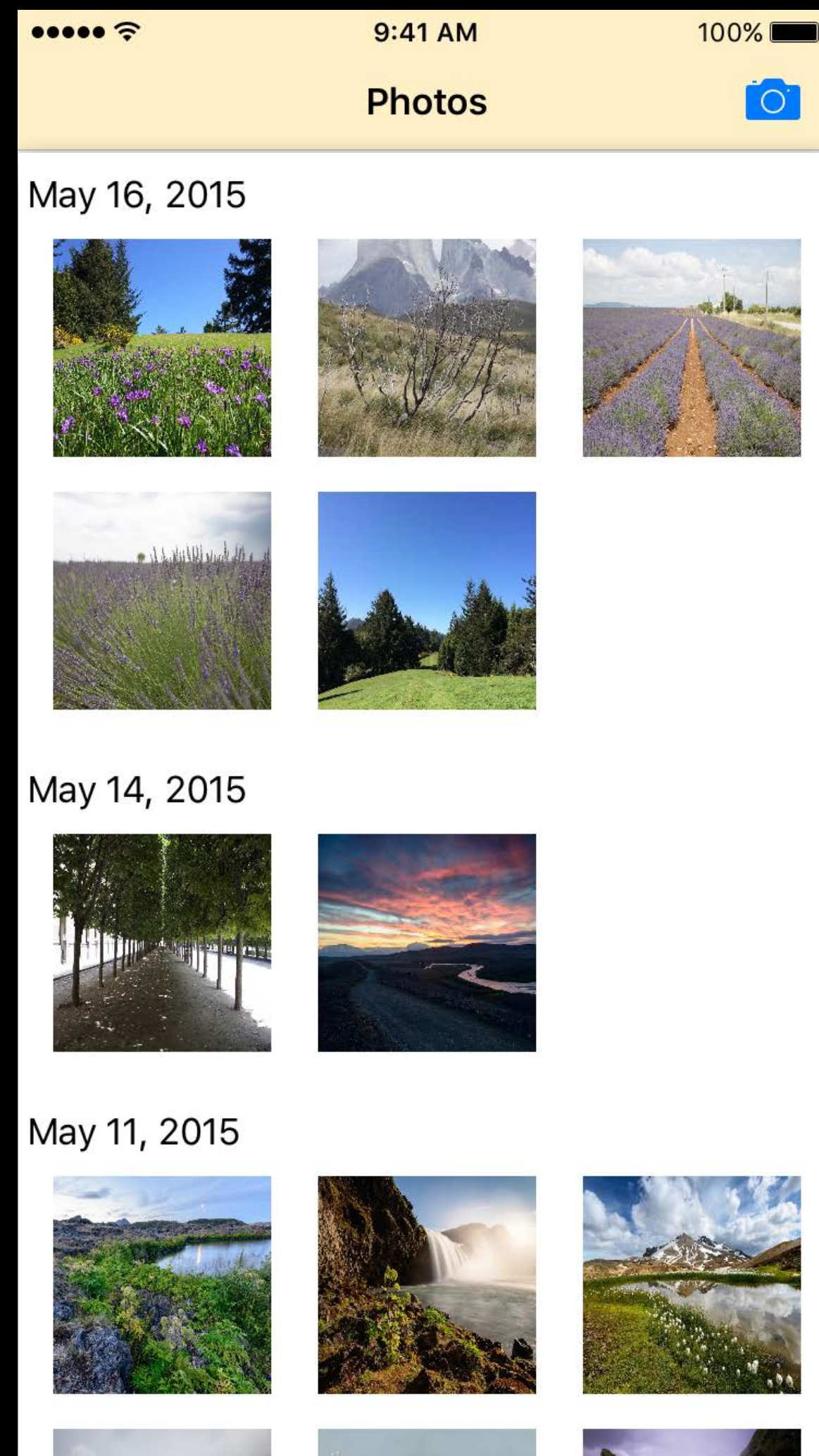
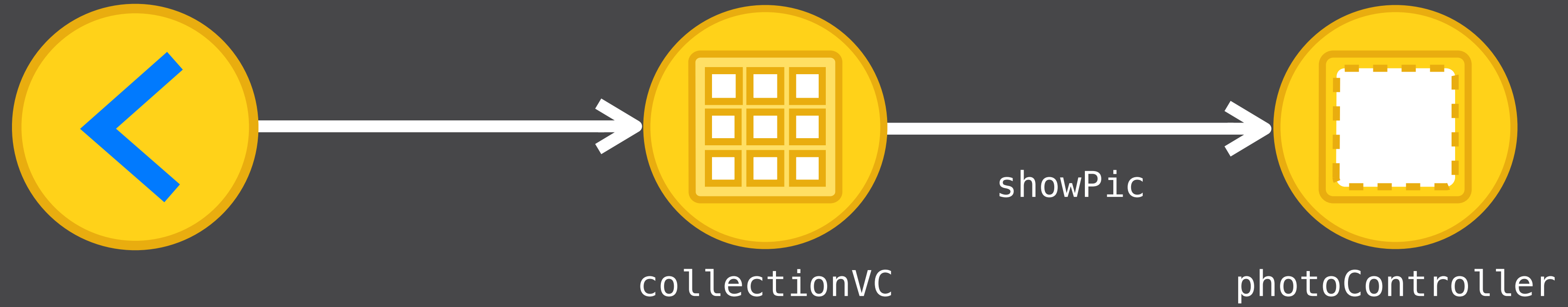
Main.storyboard



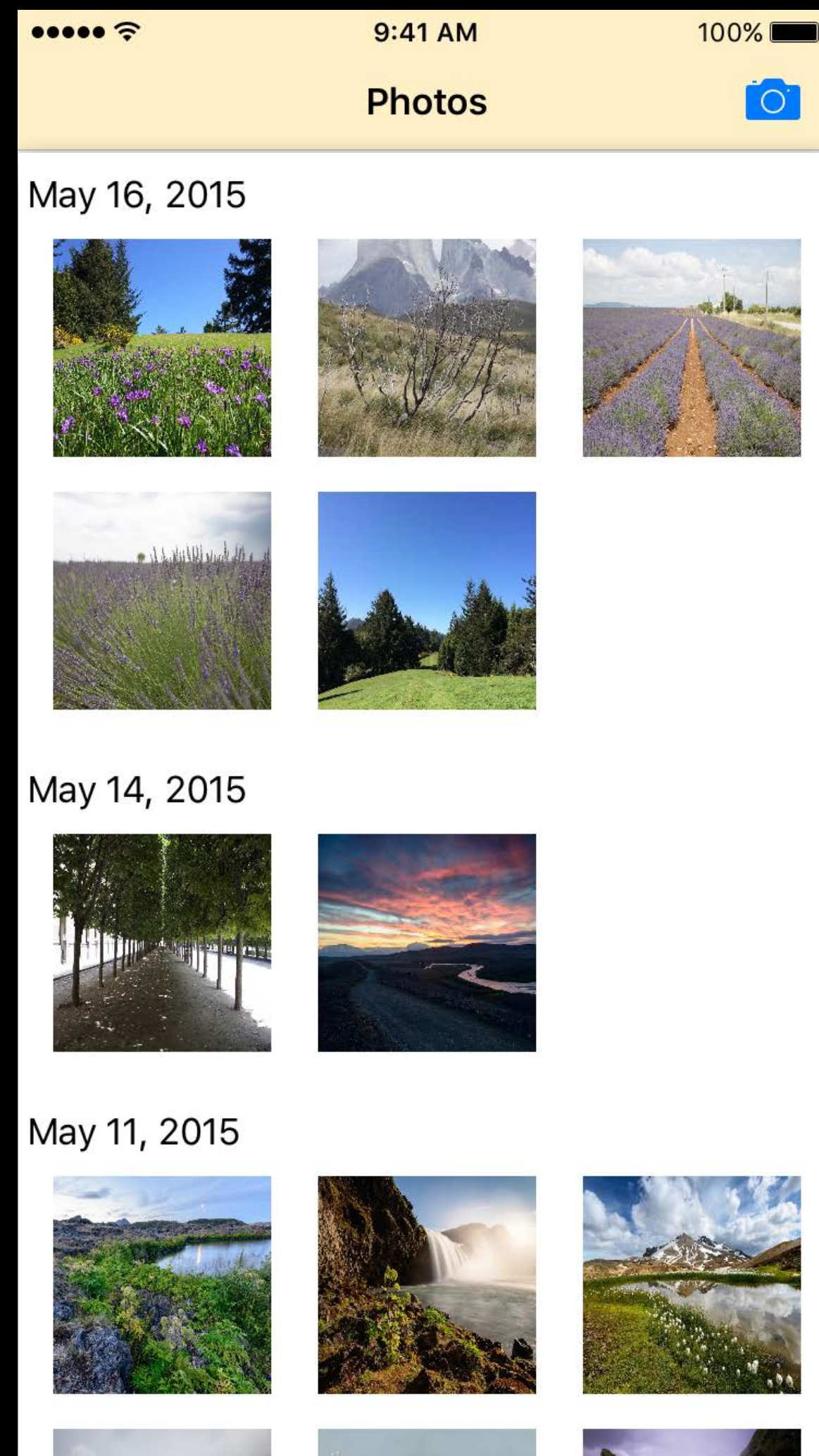
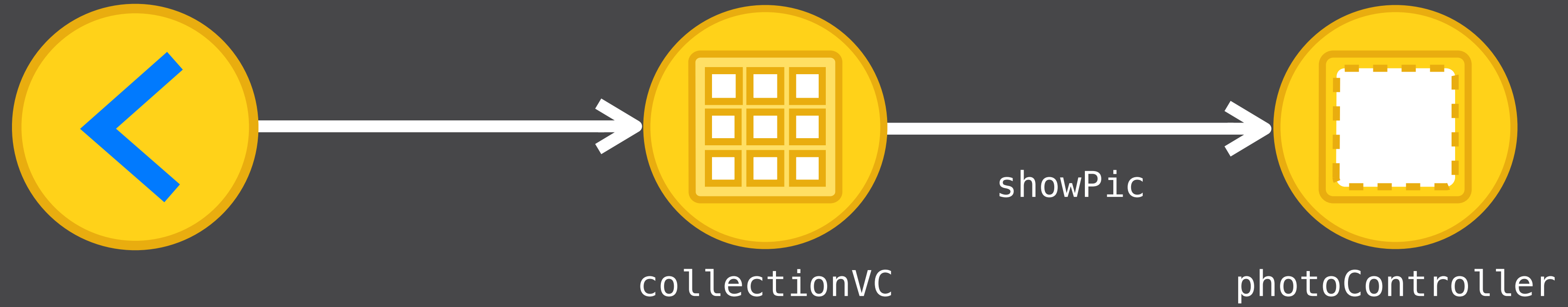
Main.storyboard



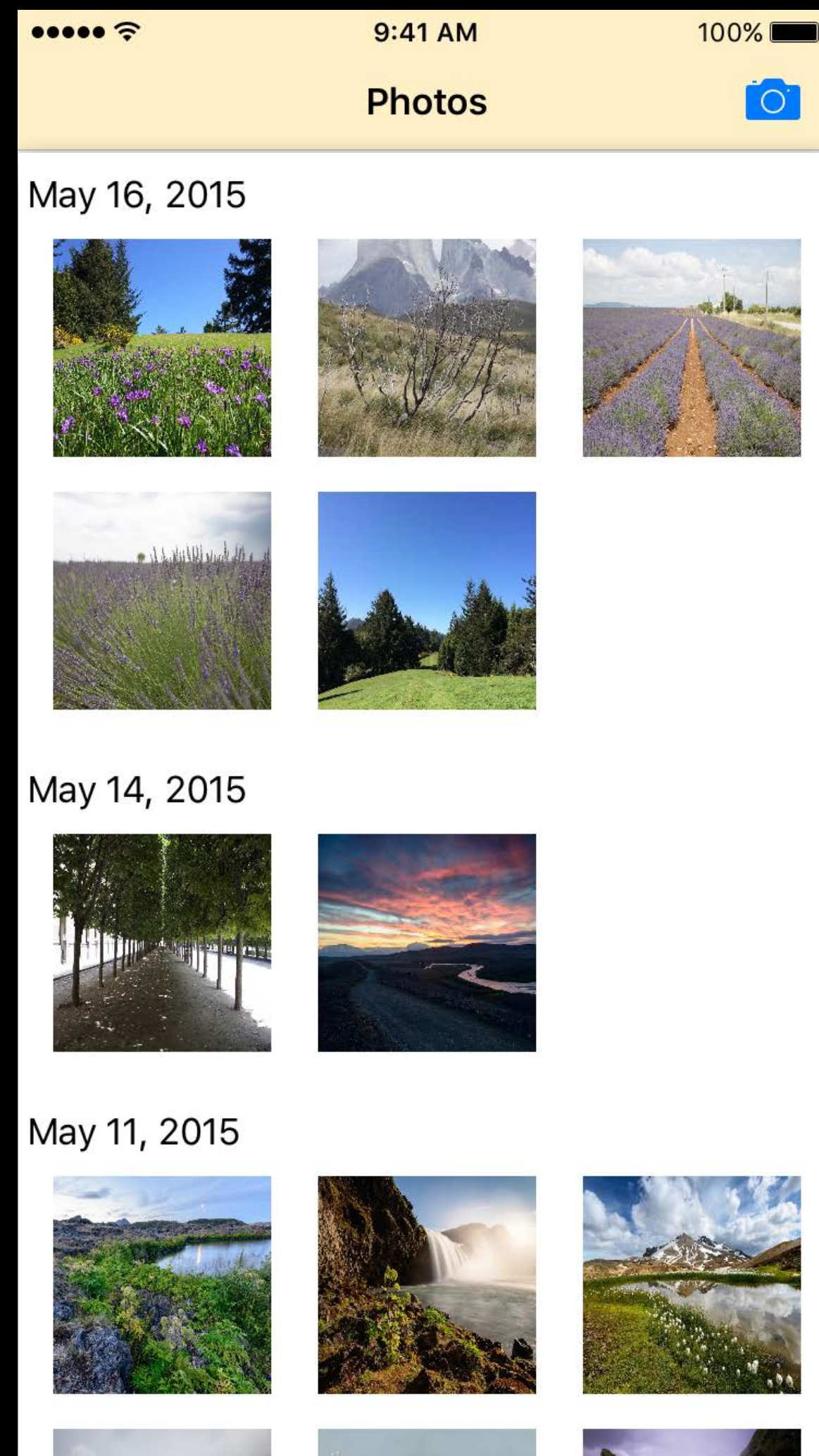
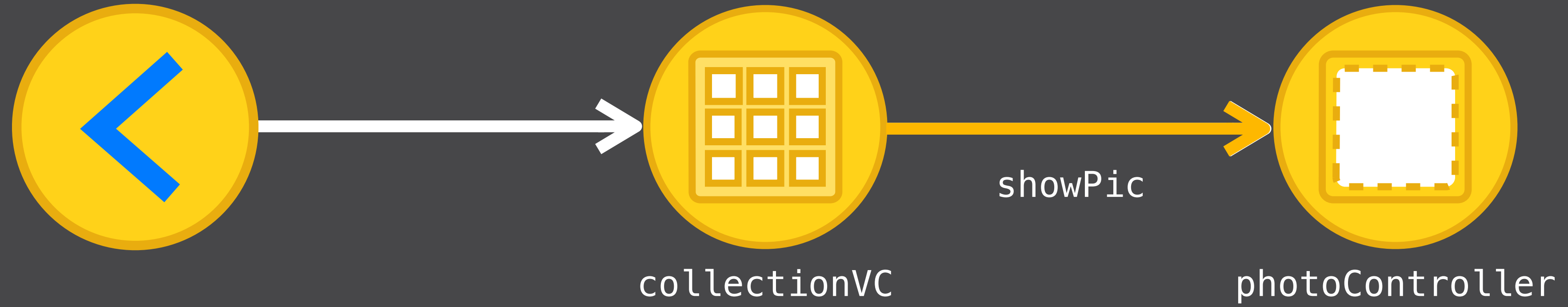
Main.storyboard



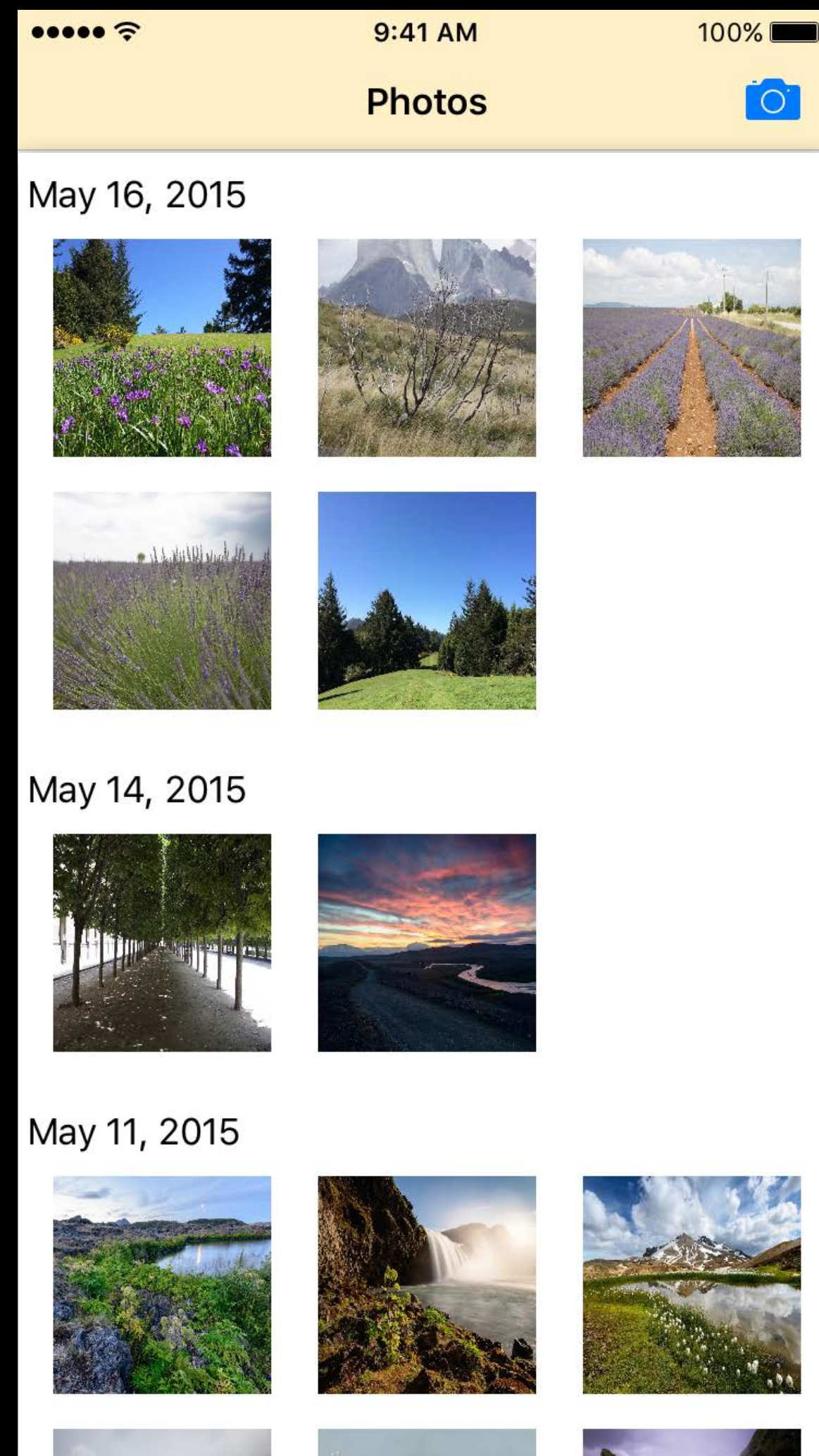
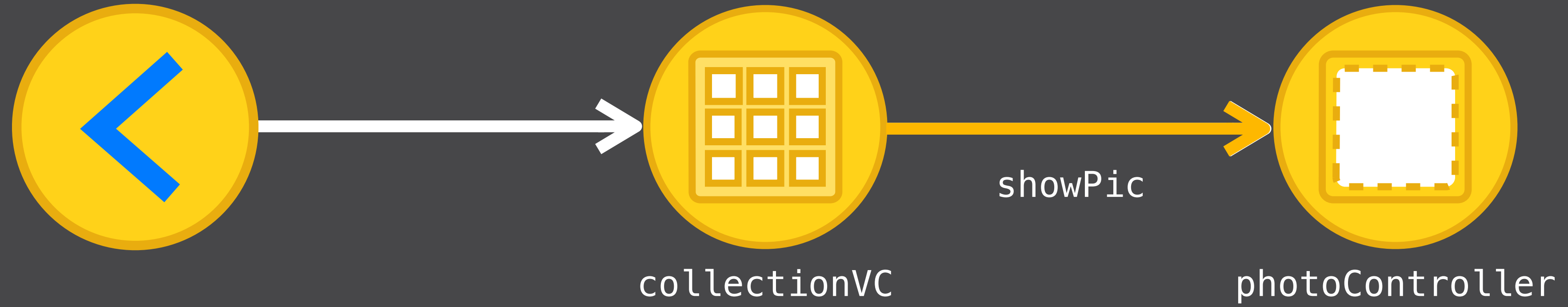
Main.storyboard



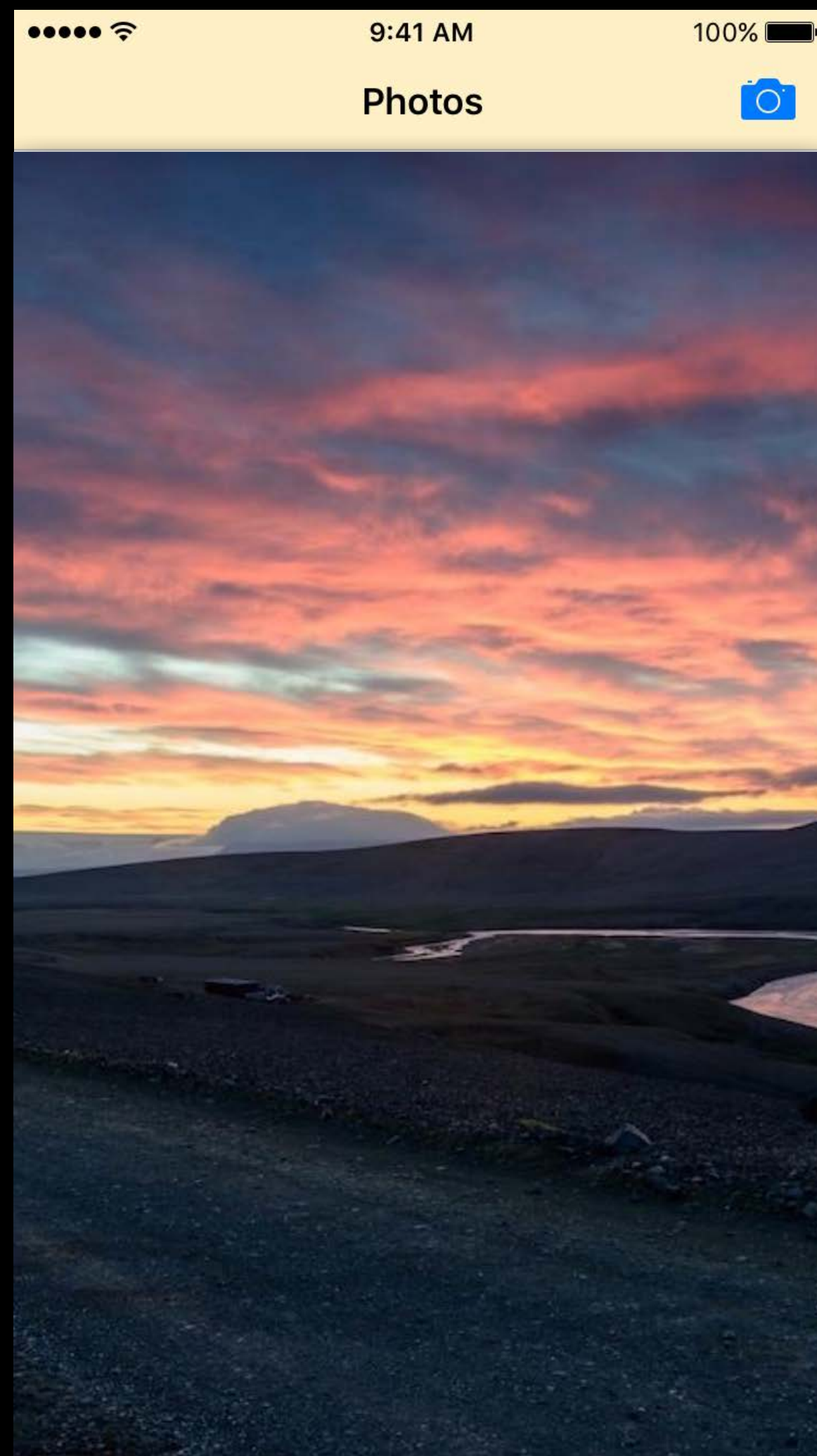
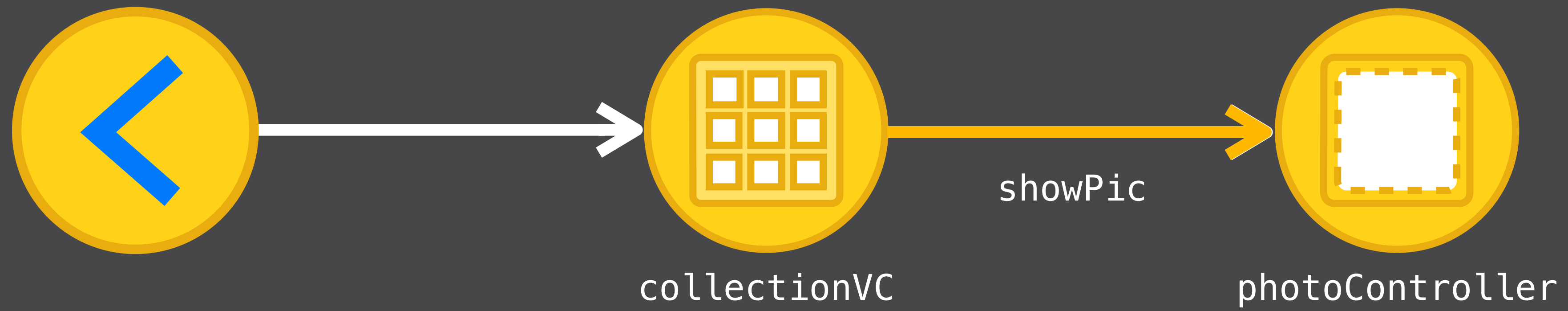
Main.storyboard



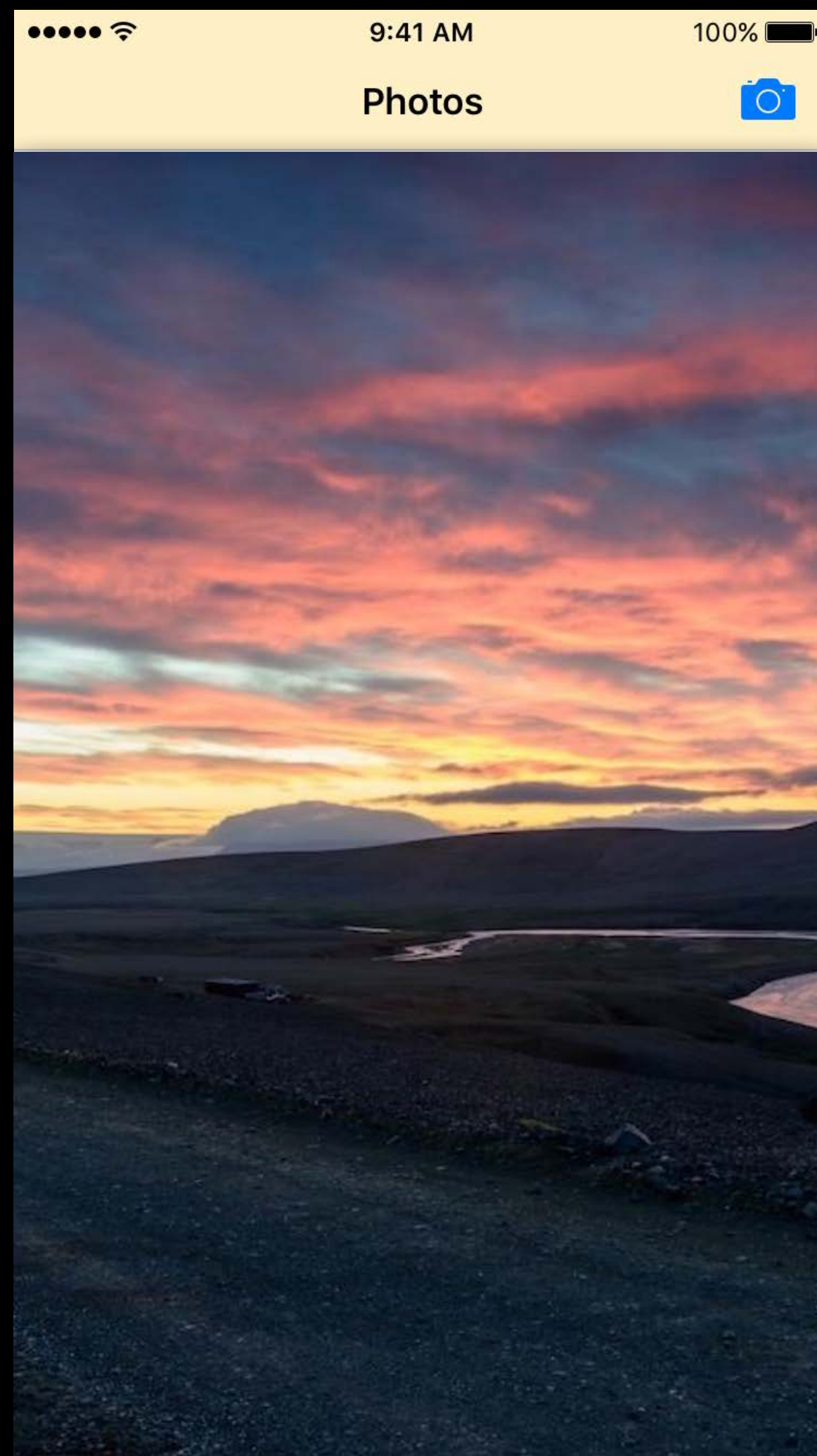
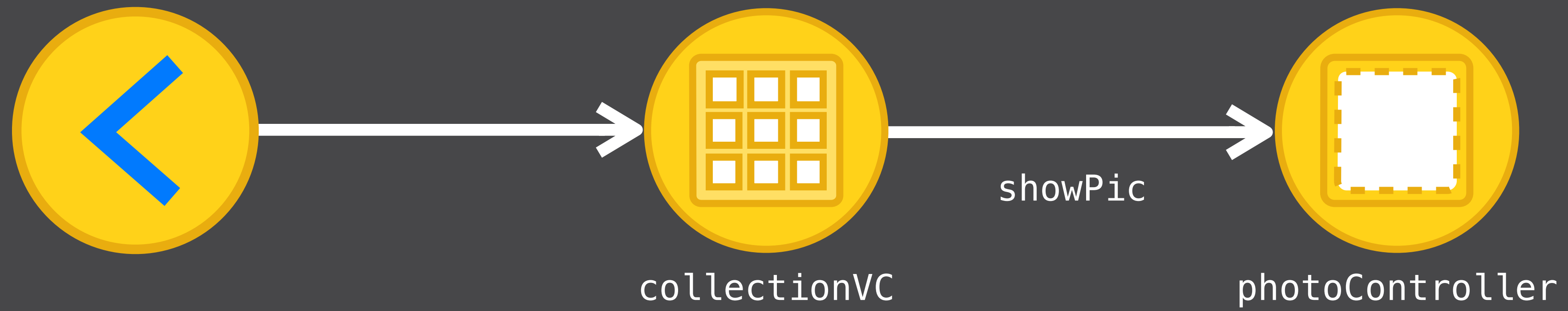
Main.storyboard



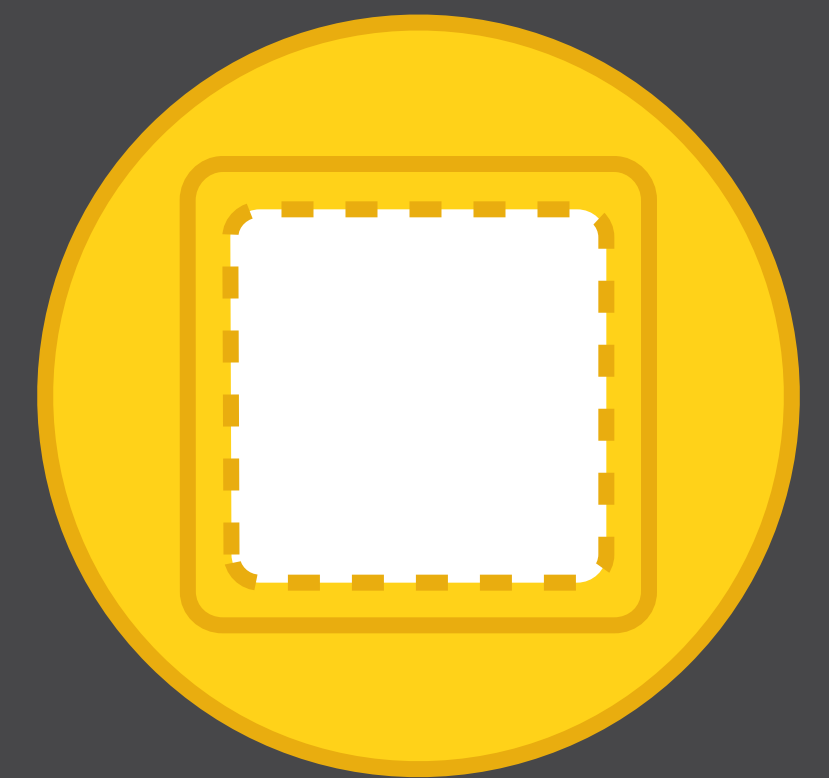
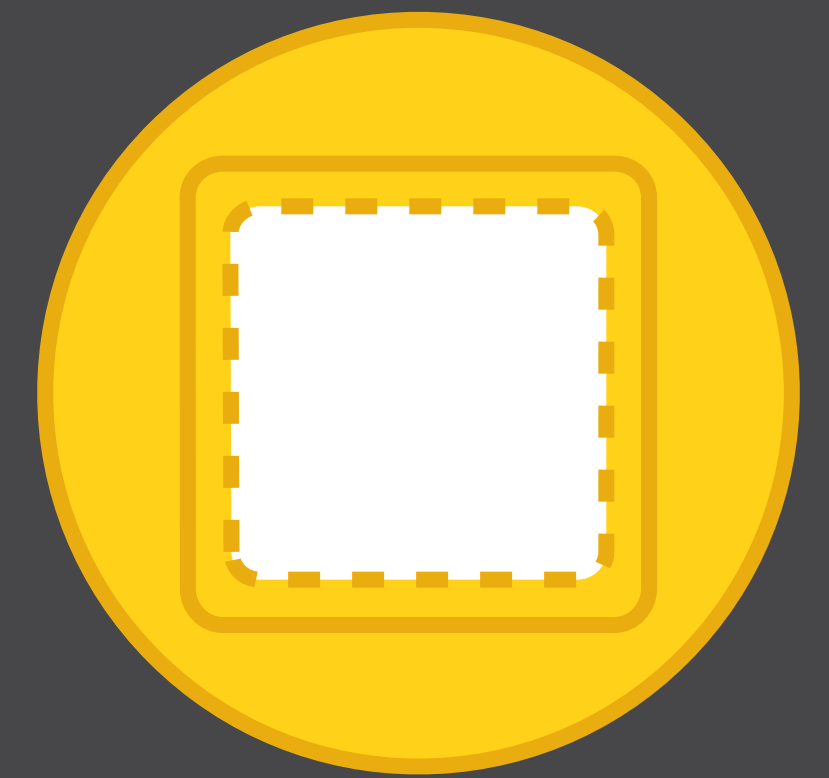
Main.storyboard

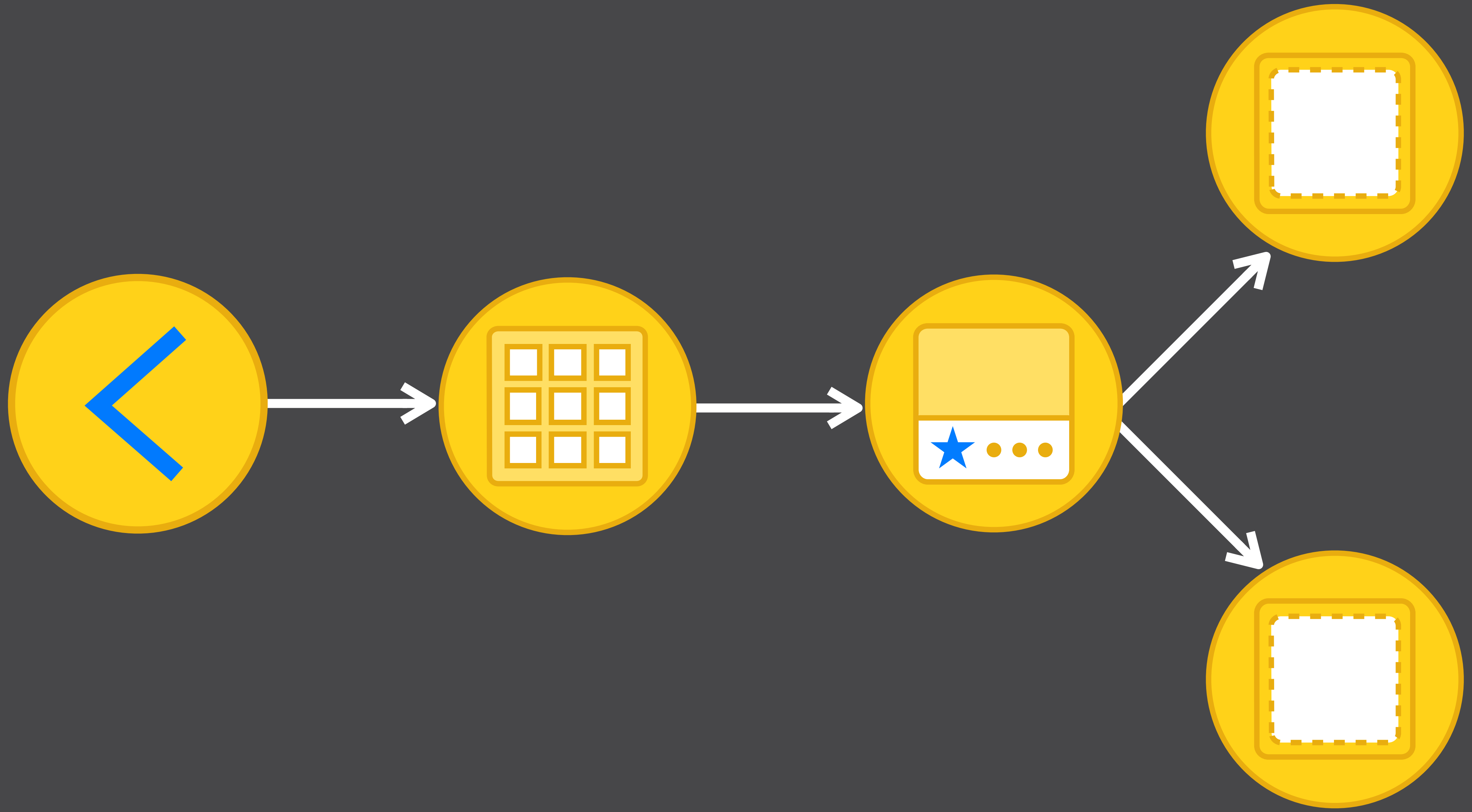


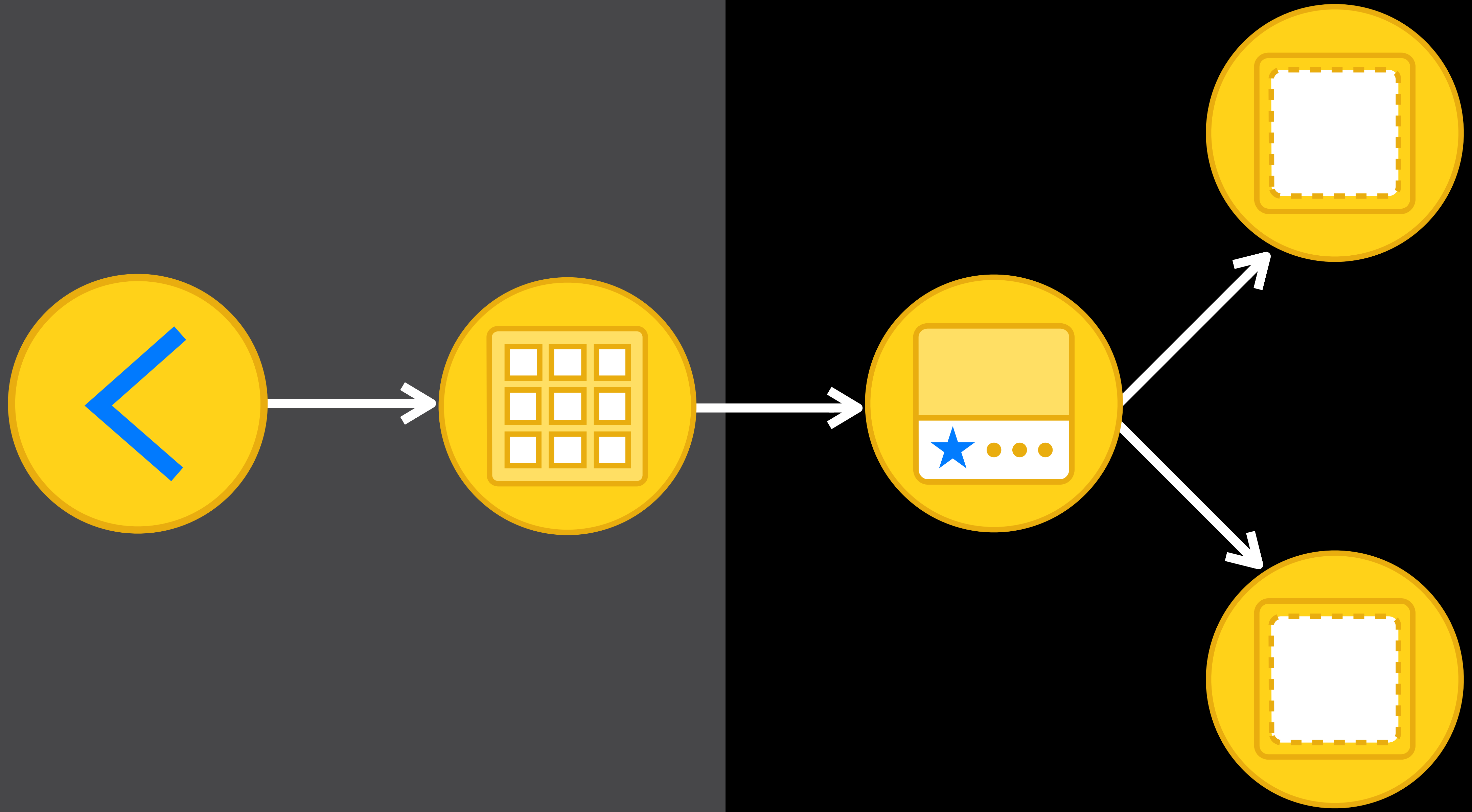
Main.storyboard

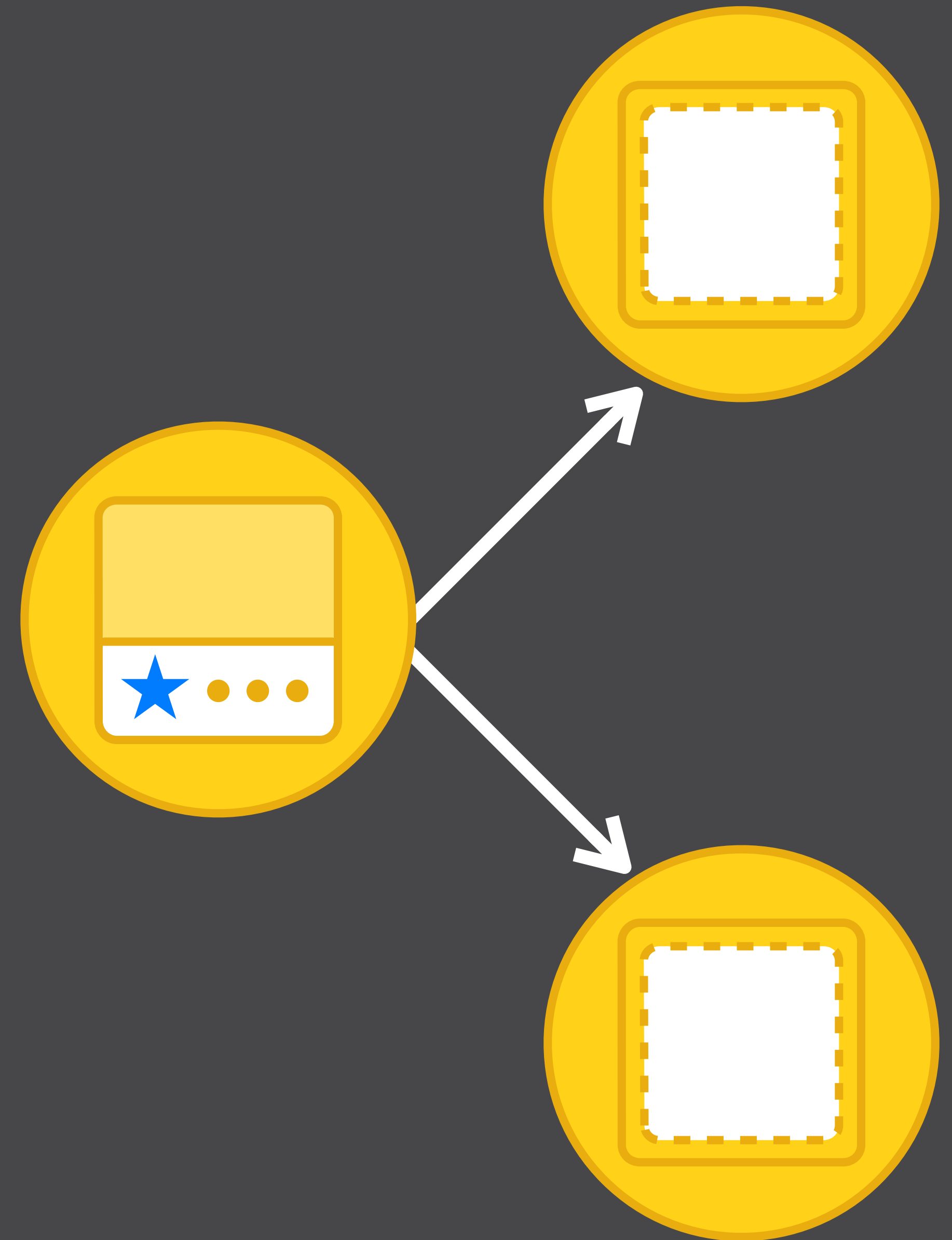
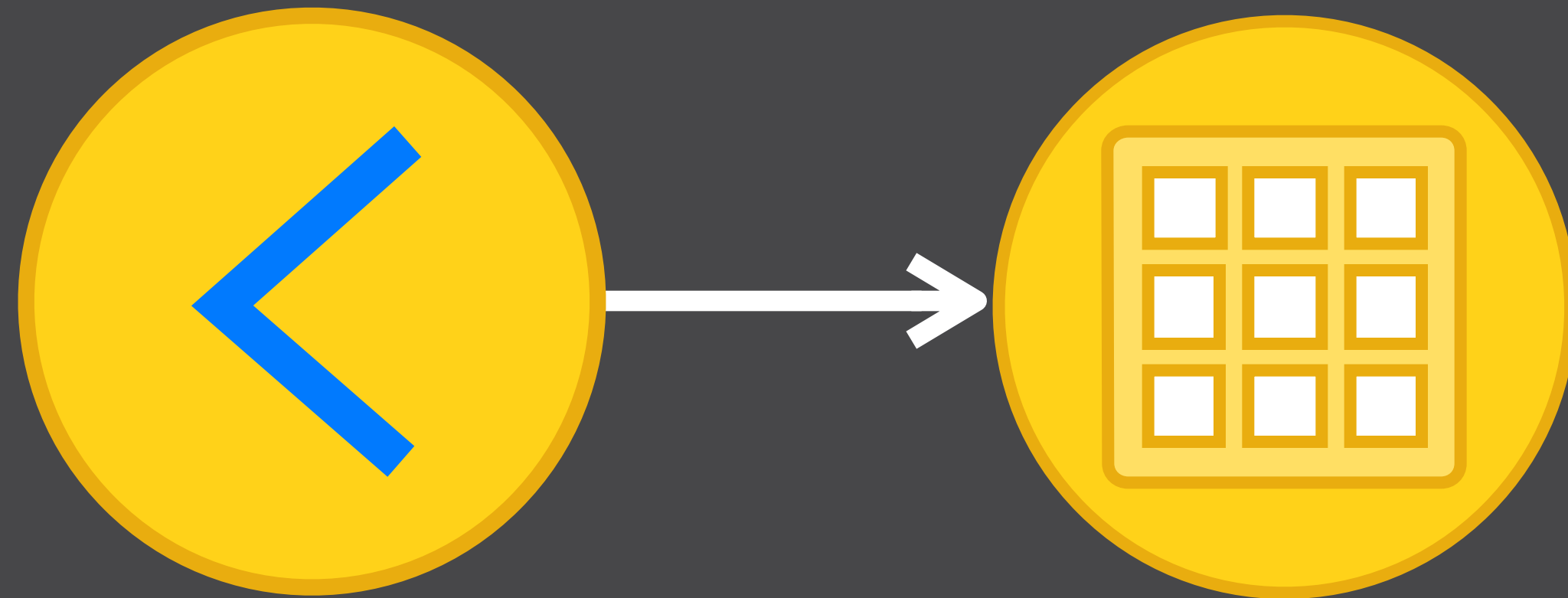




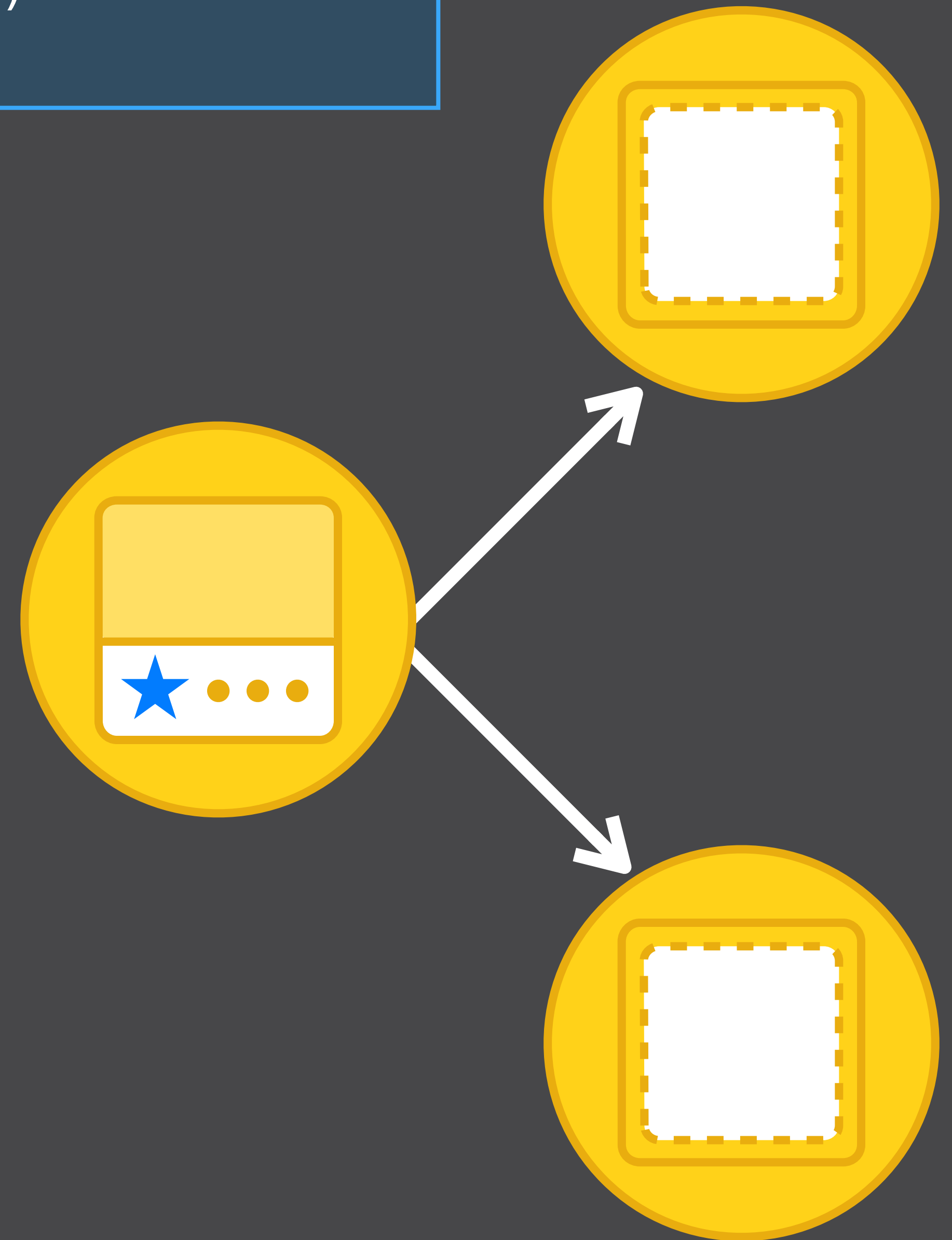
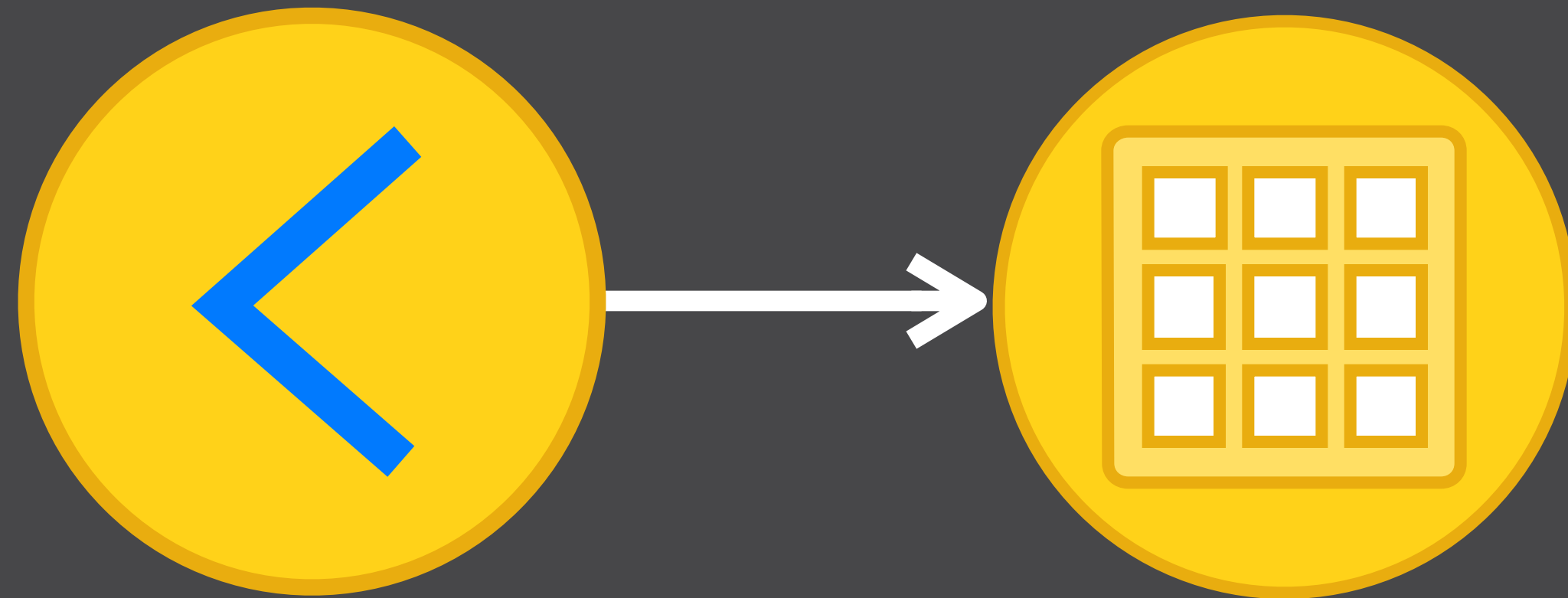




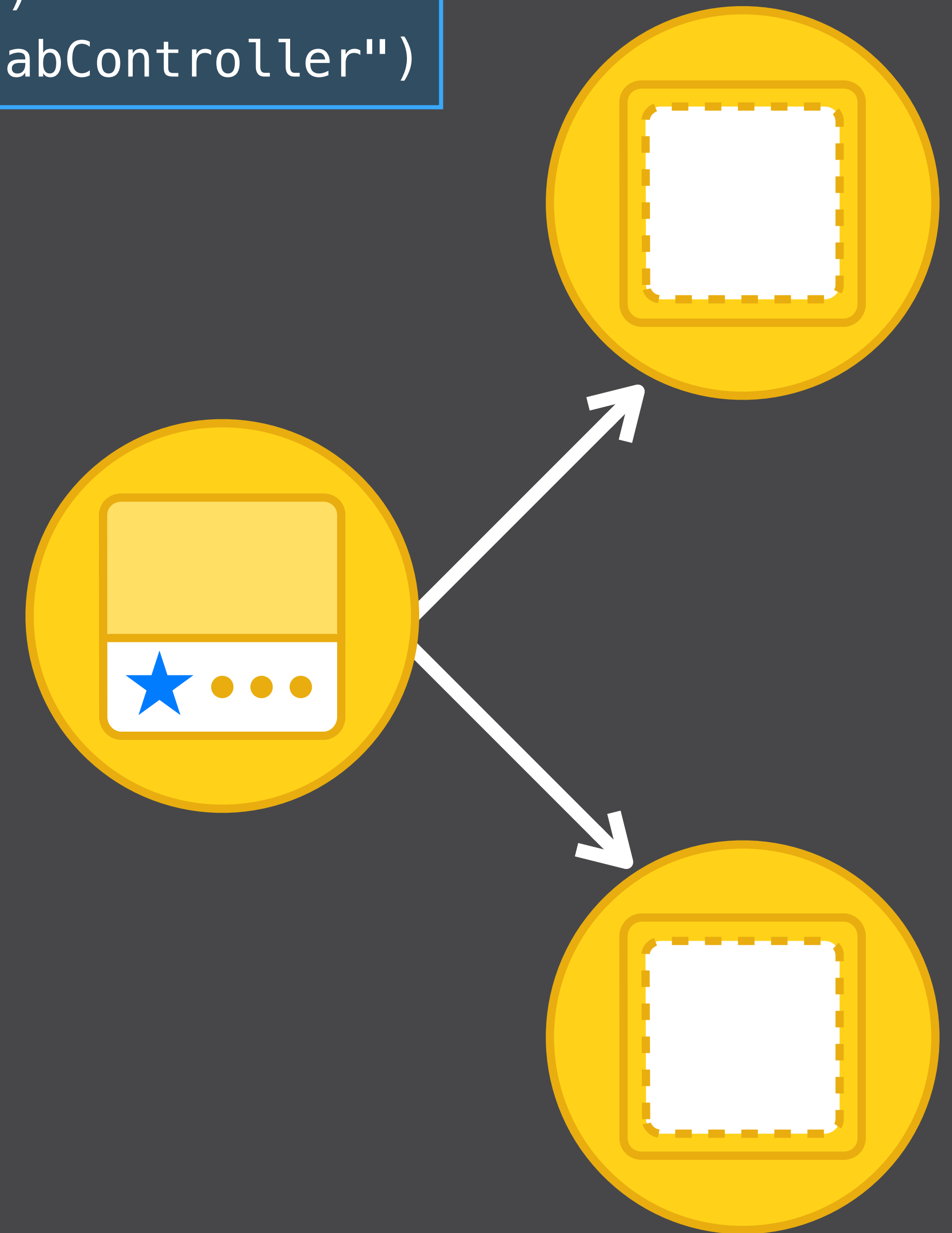
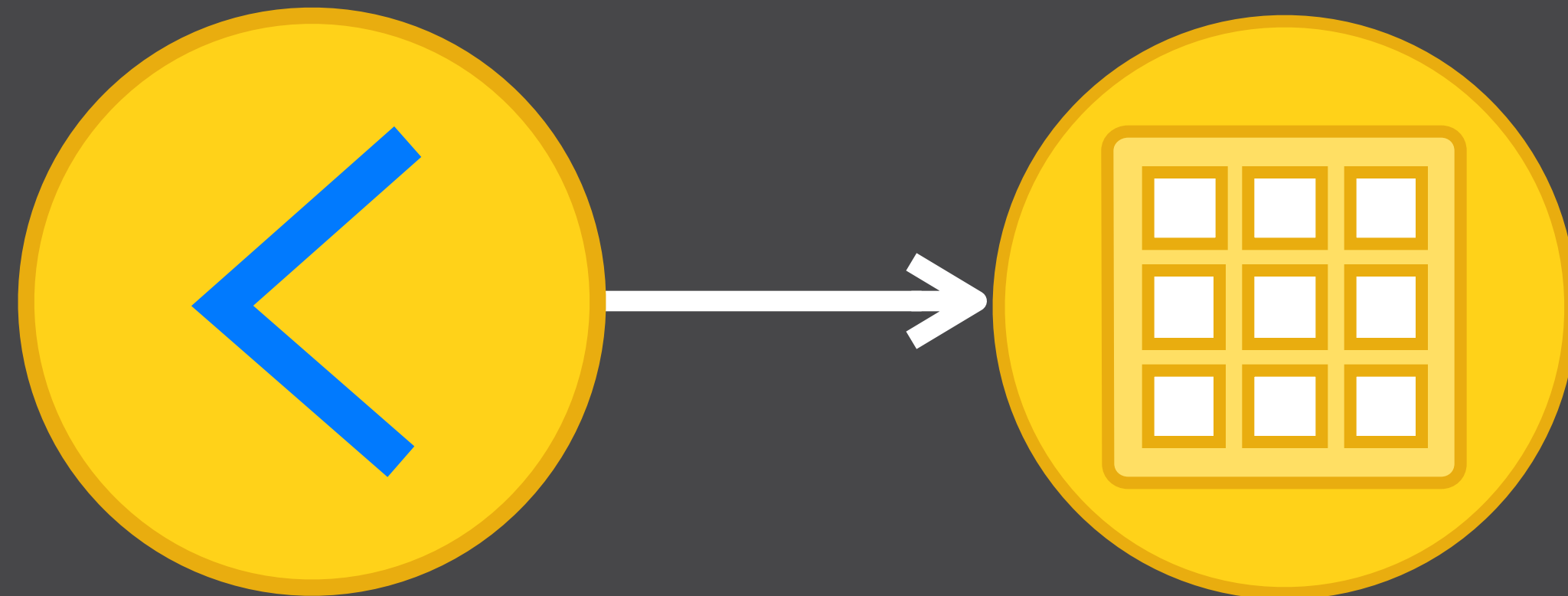


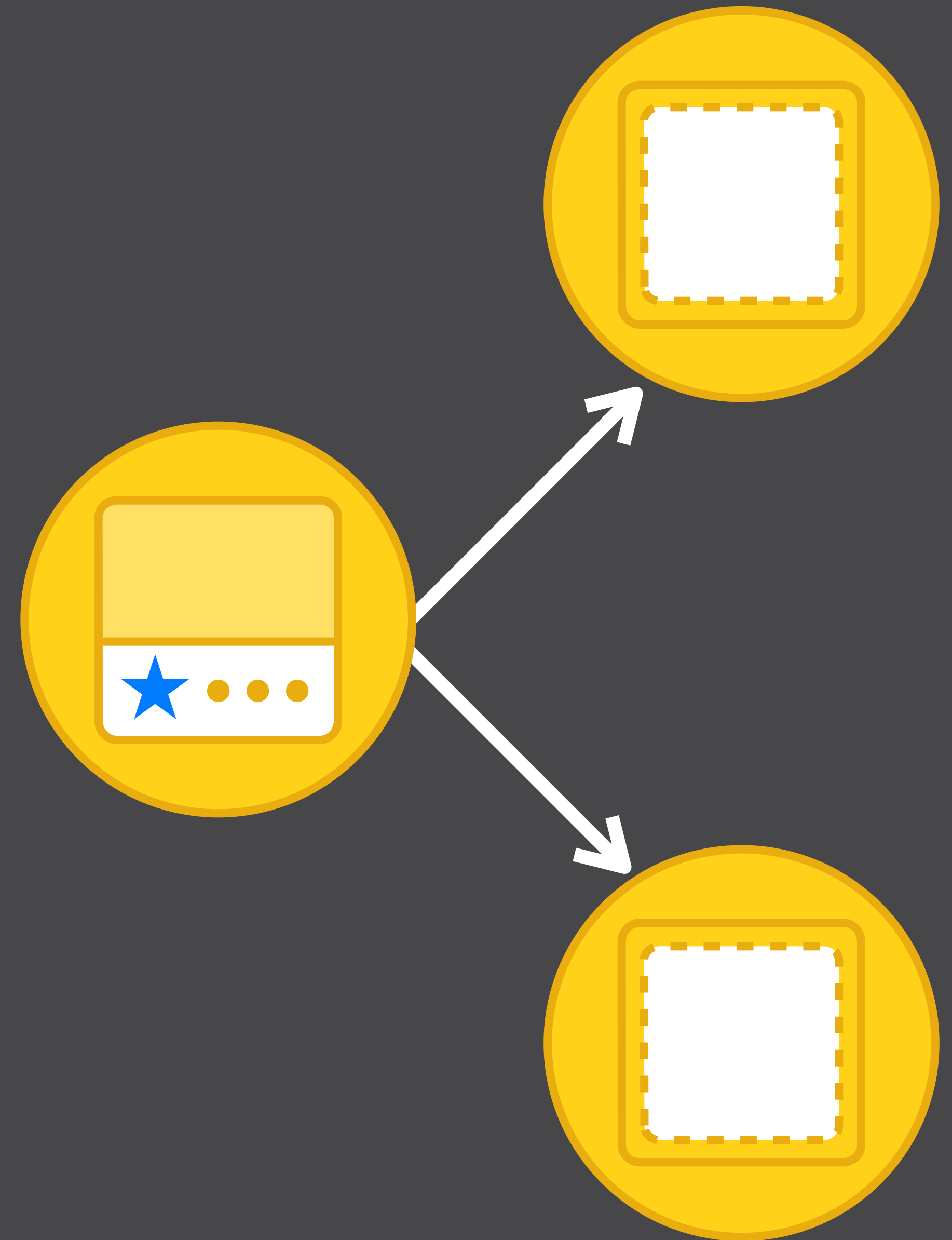
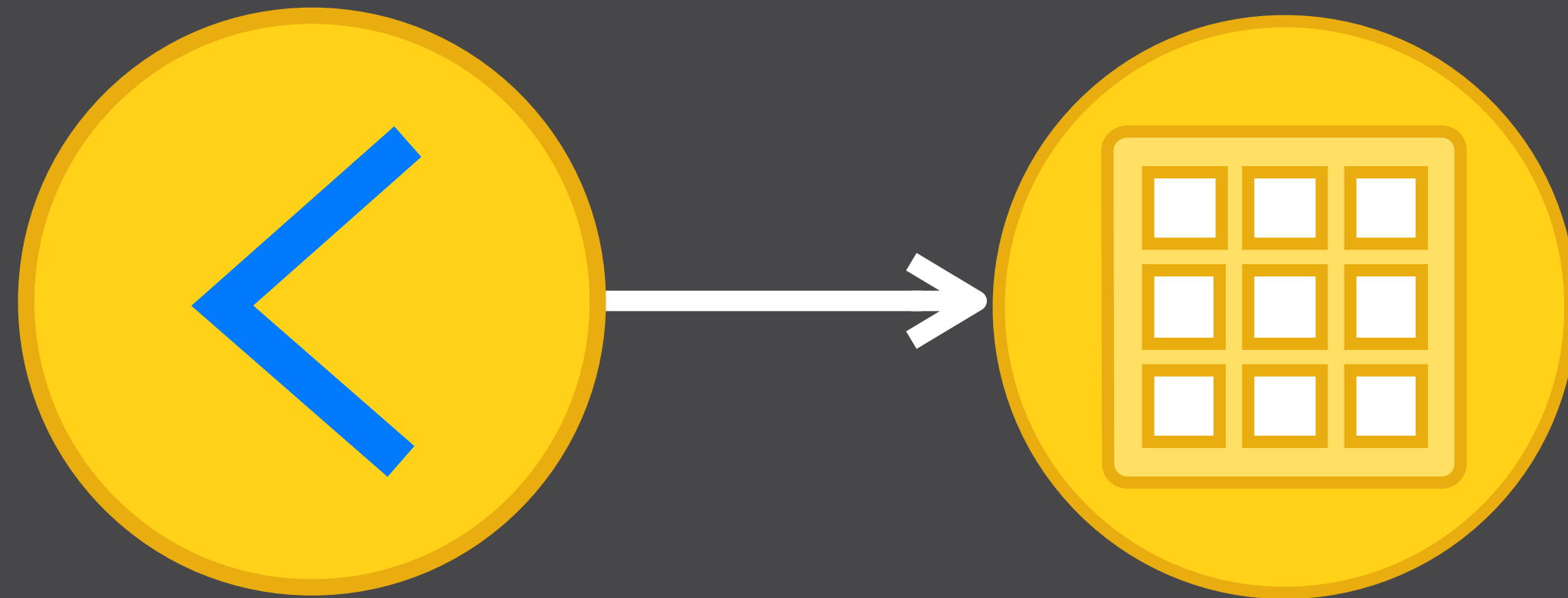


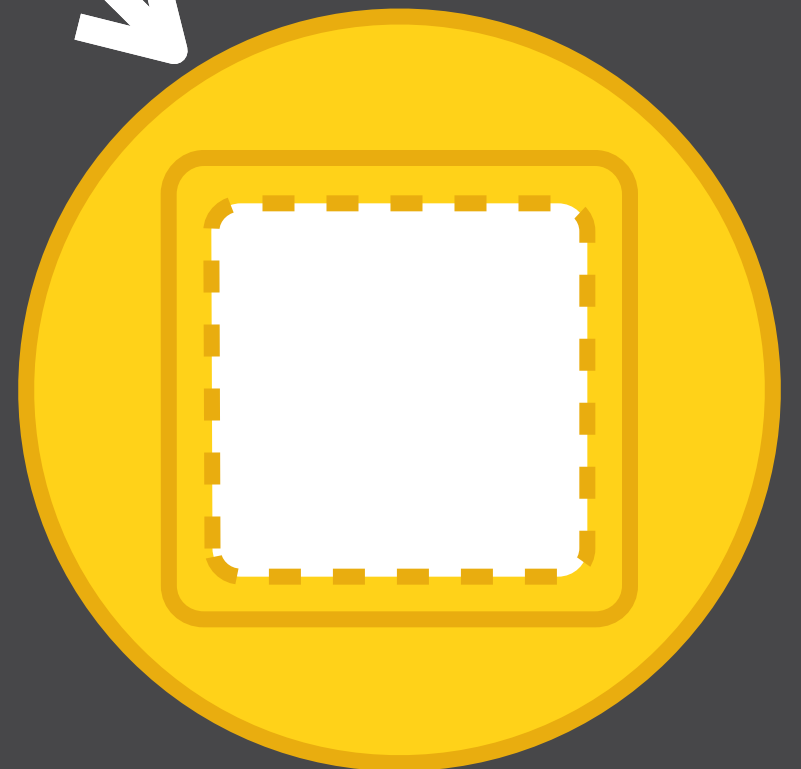
UINavigationController(name: "Secondary")



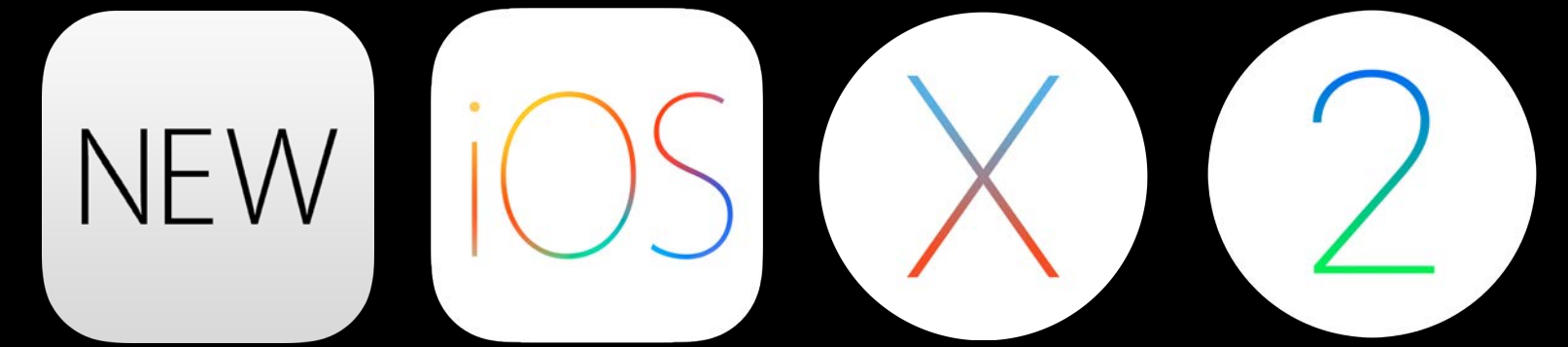
```
UINavigationController  
  .pushViewController(withIdentifier: "Secondary")
```







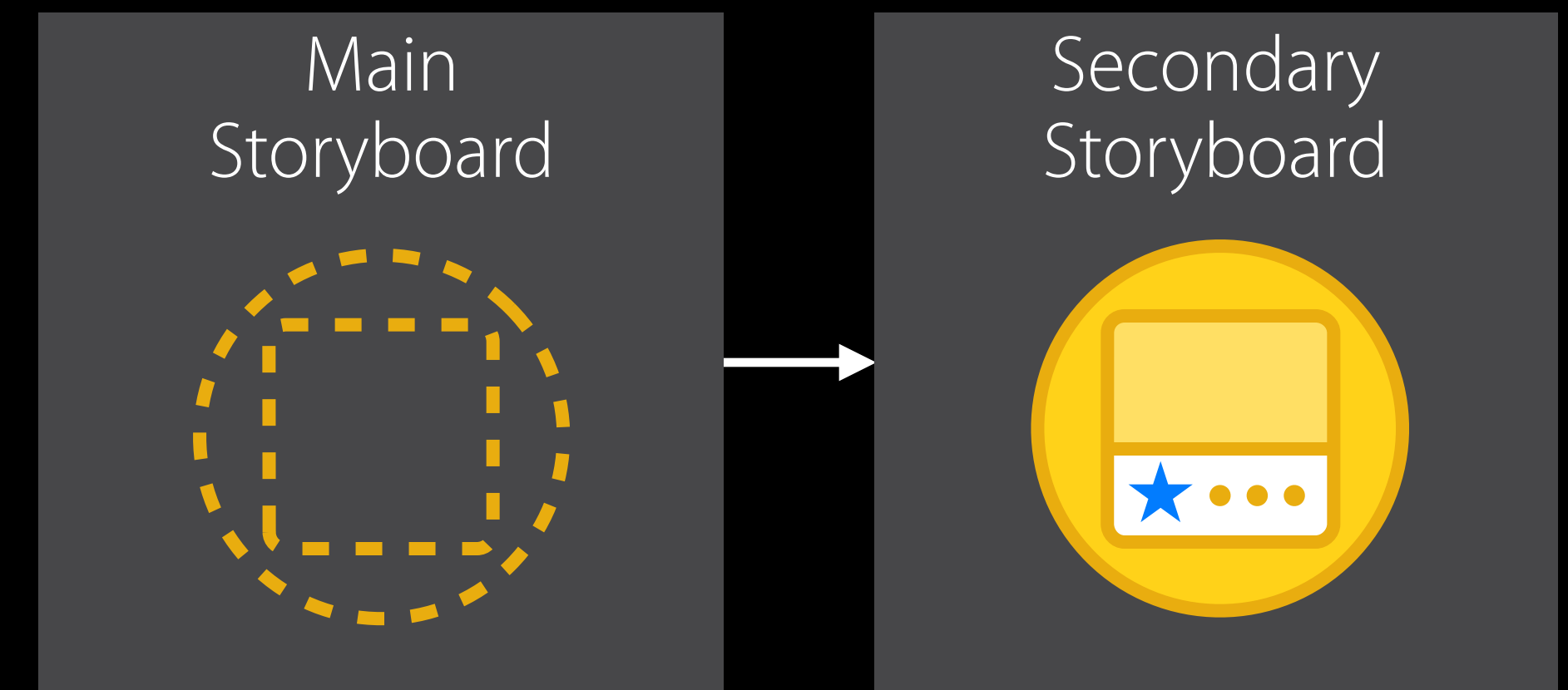
Storyboard References



Stands in for another scene

Can be destination of Relationship or
Triggered Segue

Reference can be in same storyboard or
another storyboard



Demo

Using storyboard references

Customizing Standard Segues



Table View
Controller

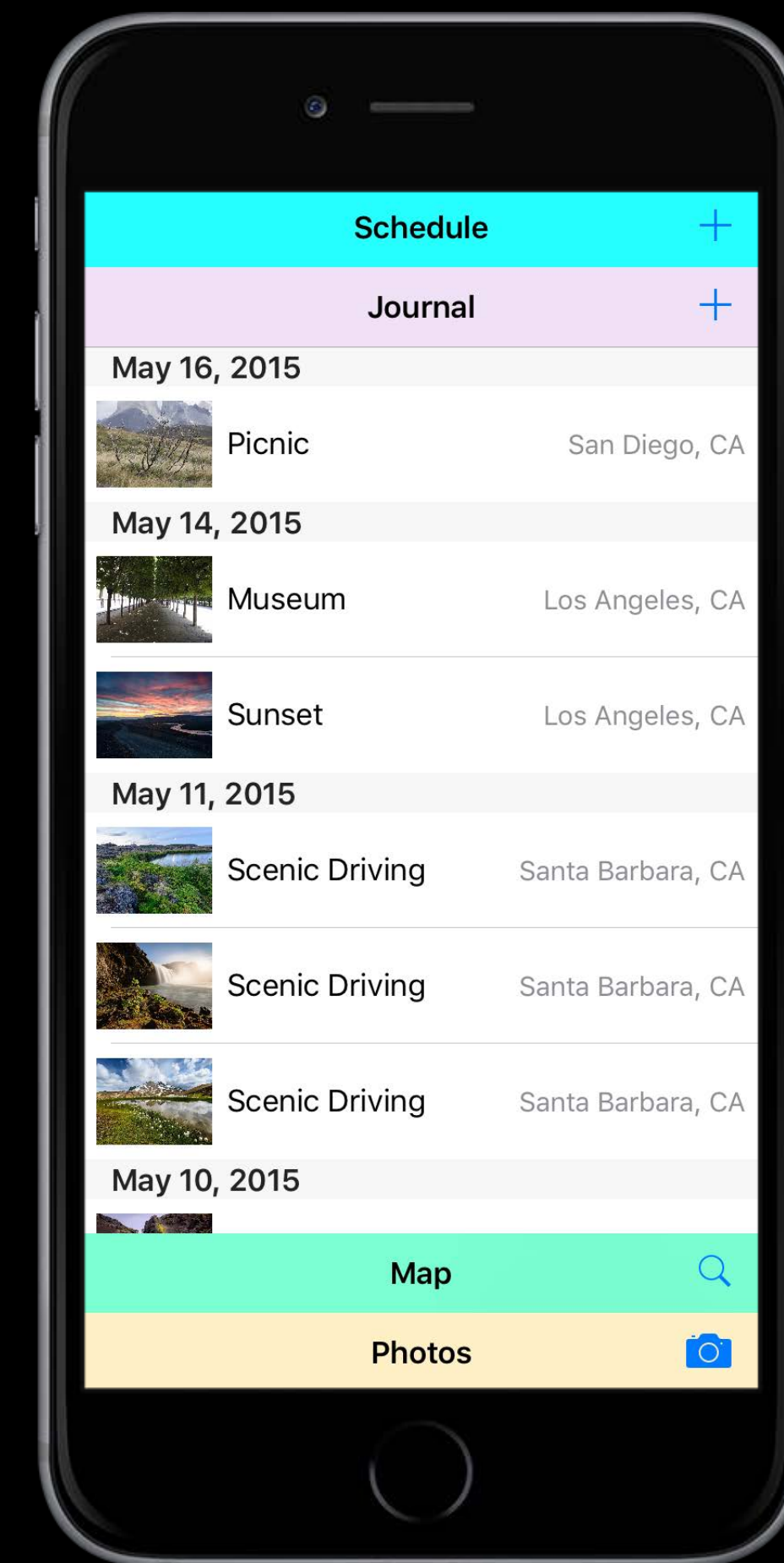
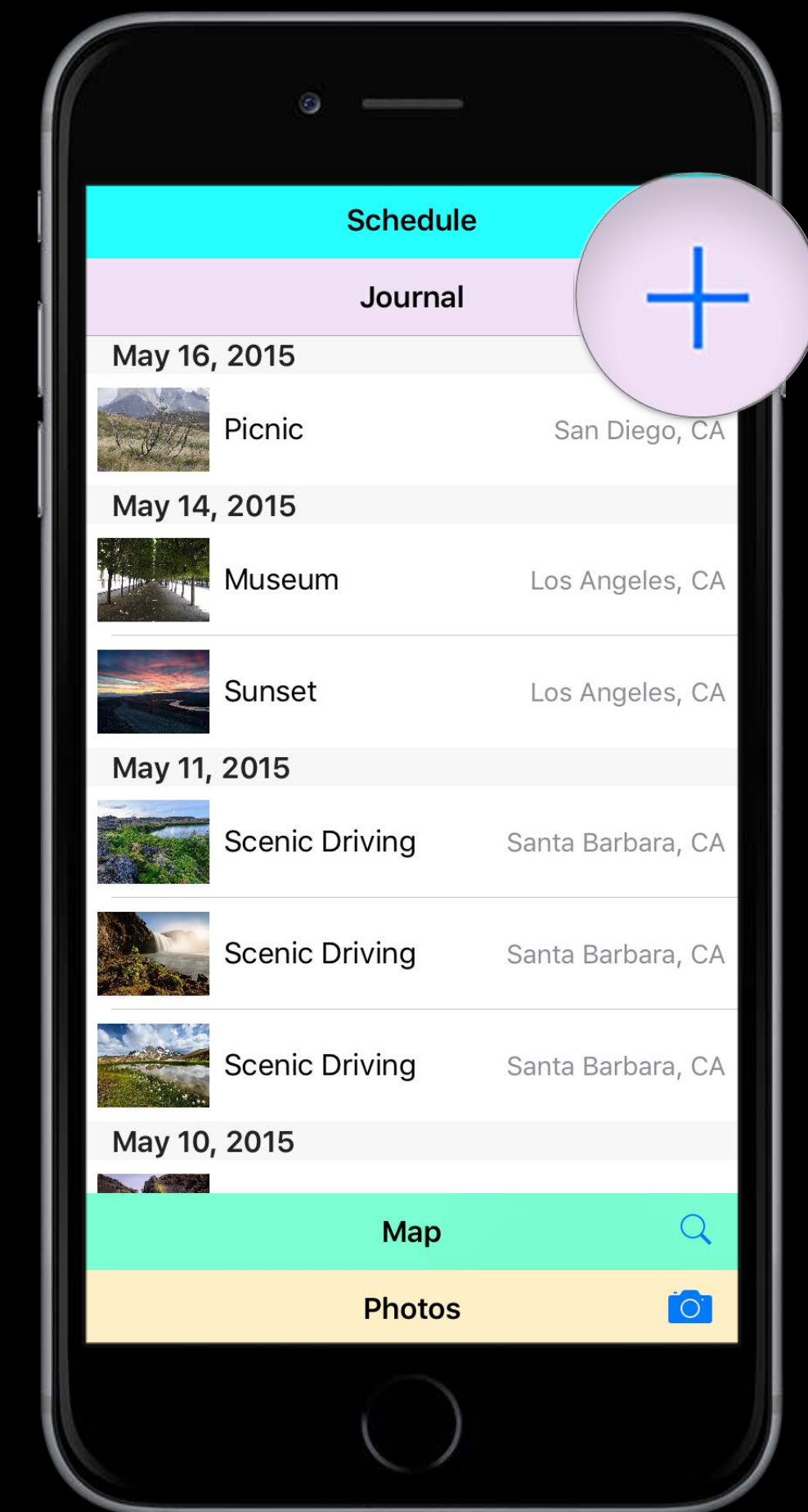
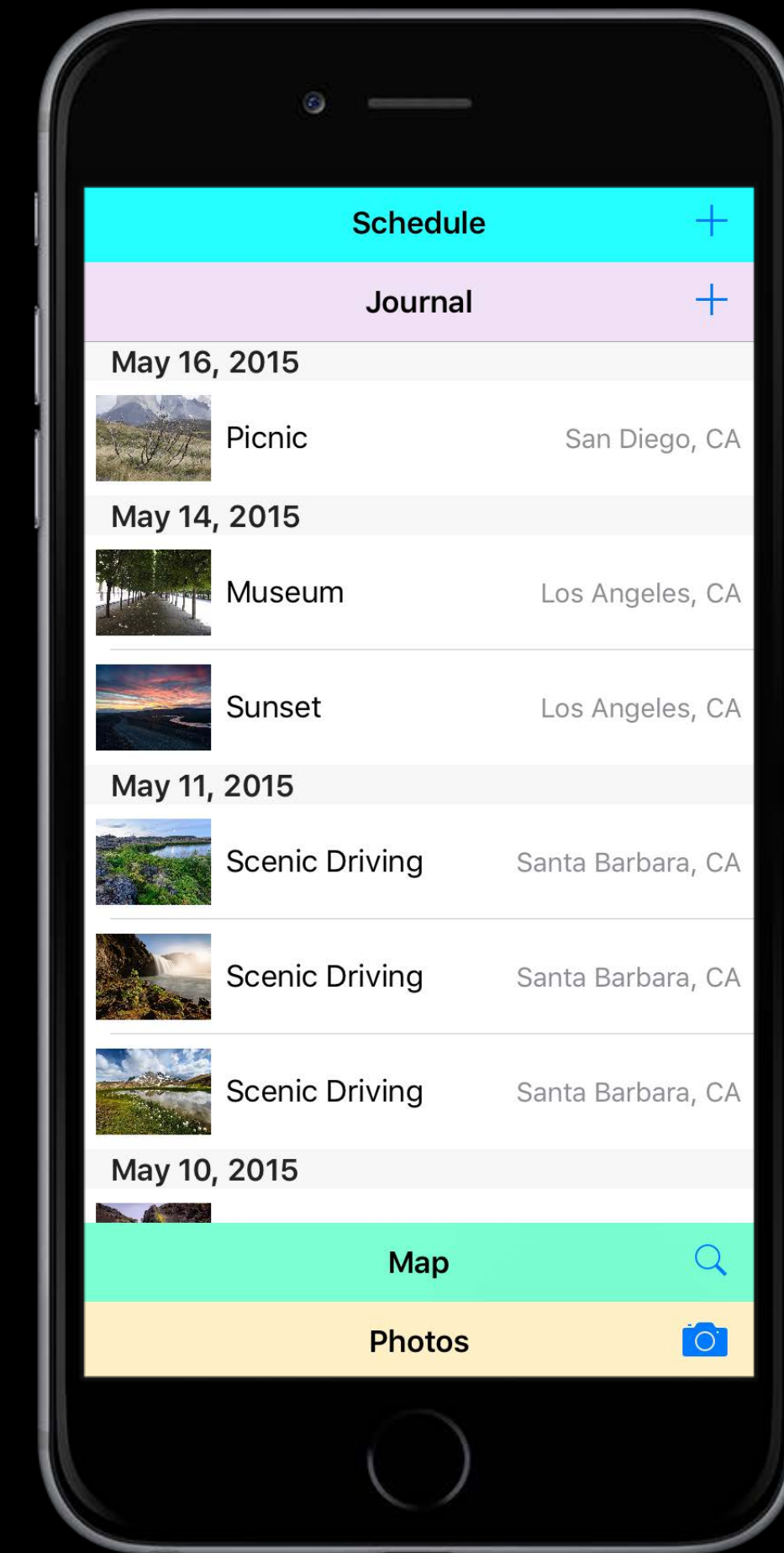
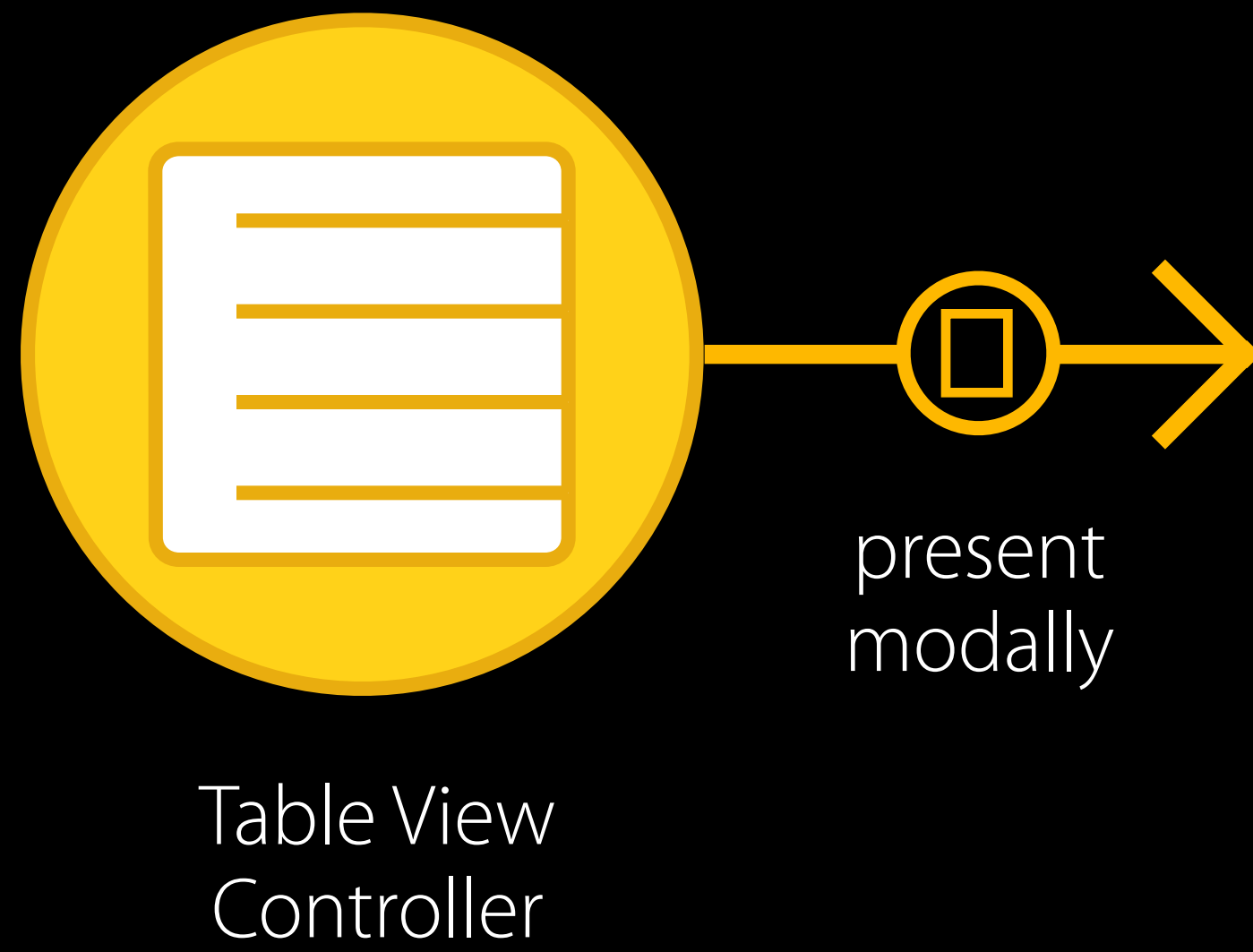




Table View
Controller





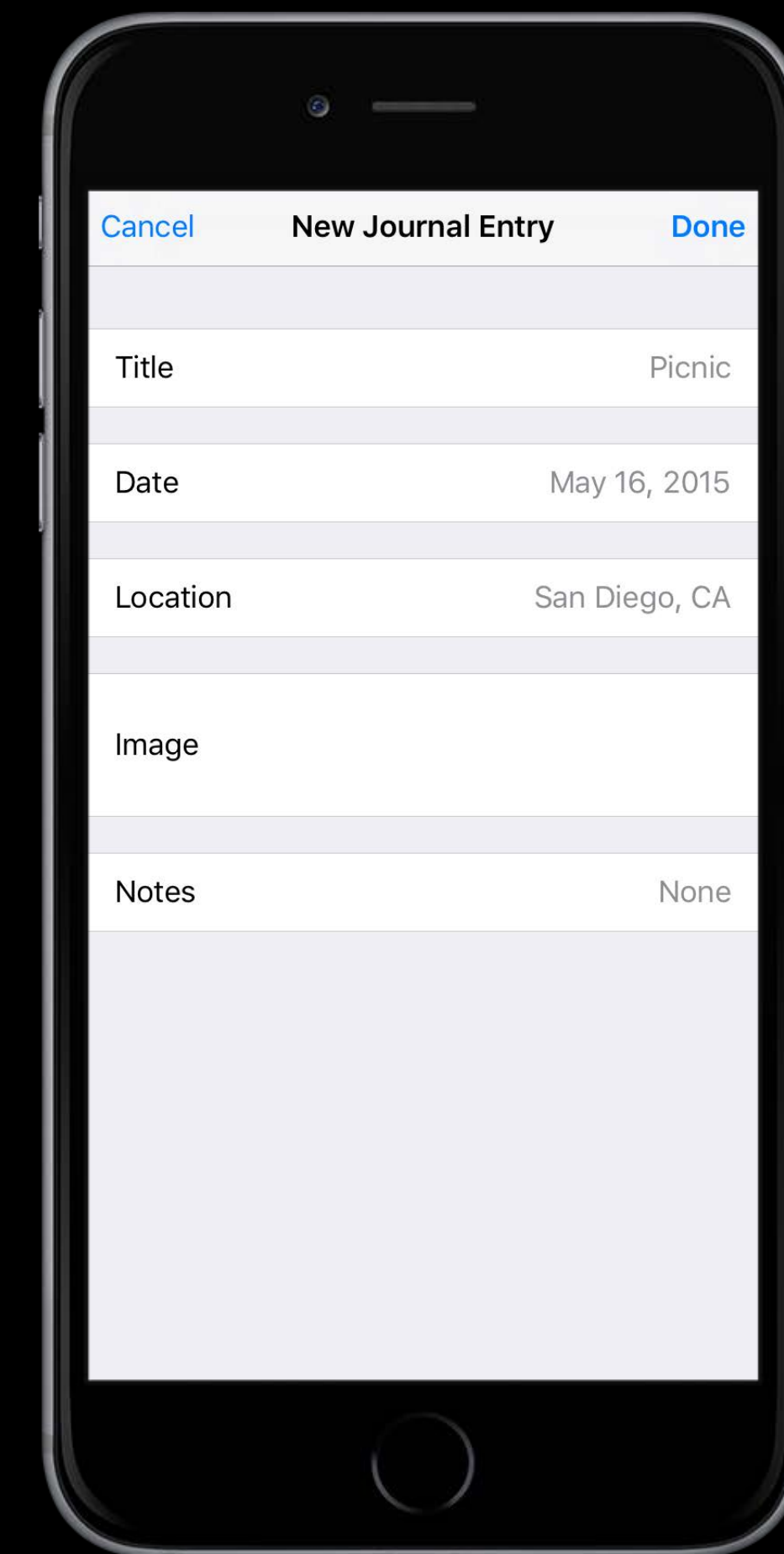
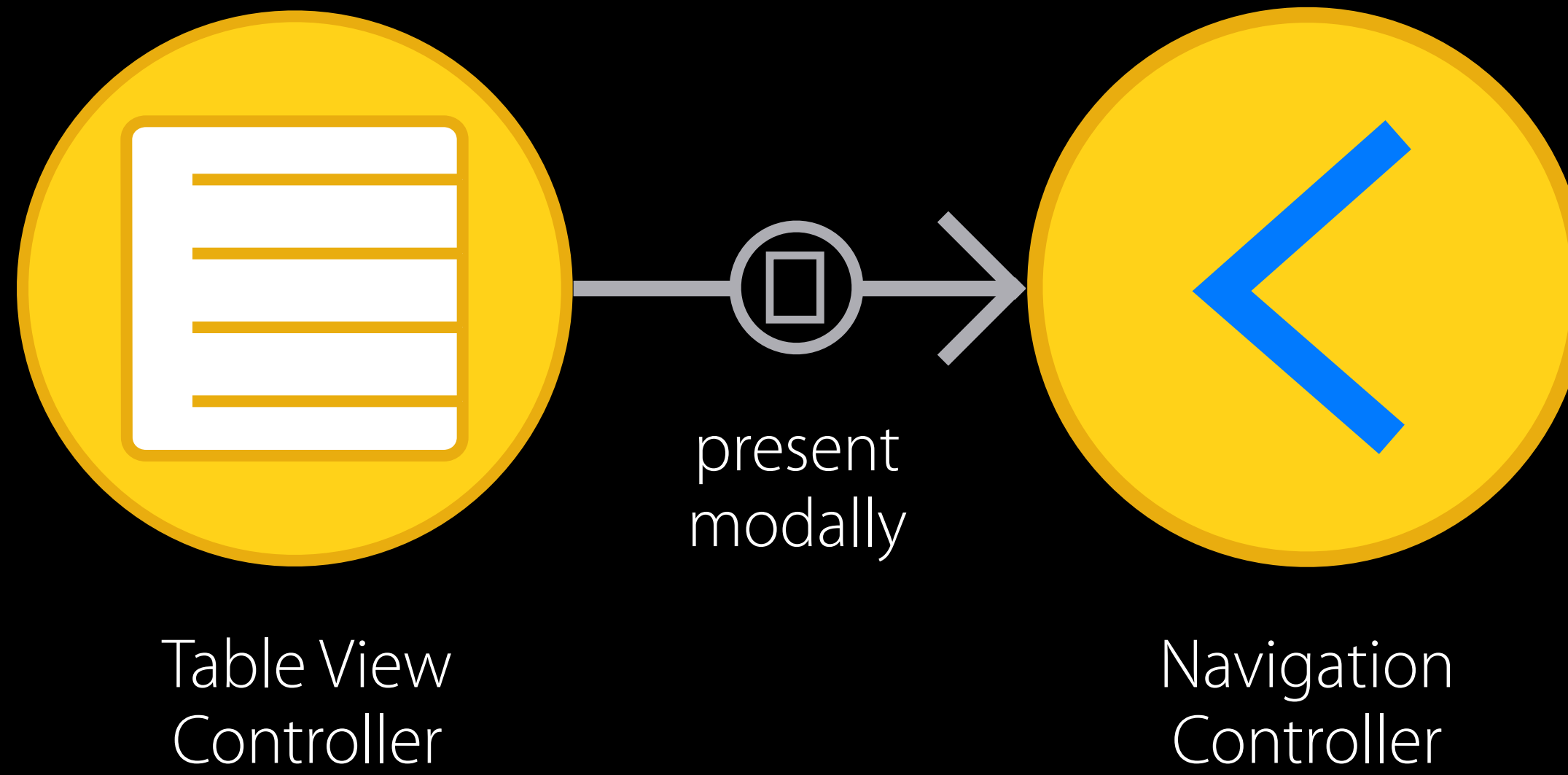




Table View
Controller

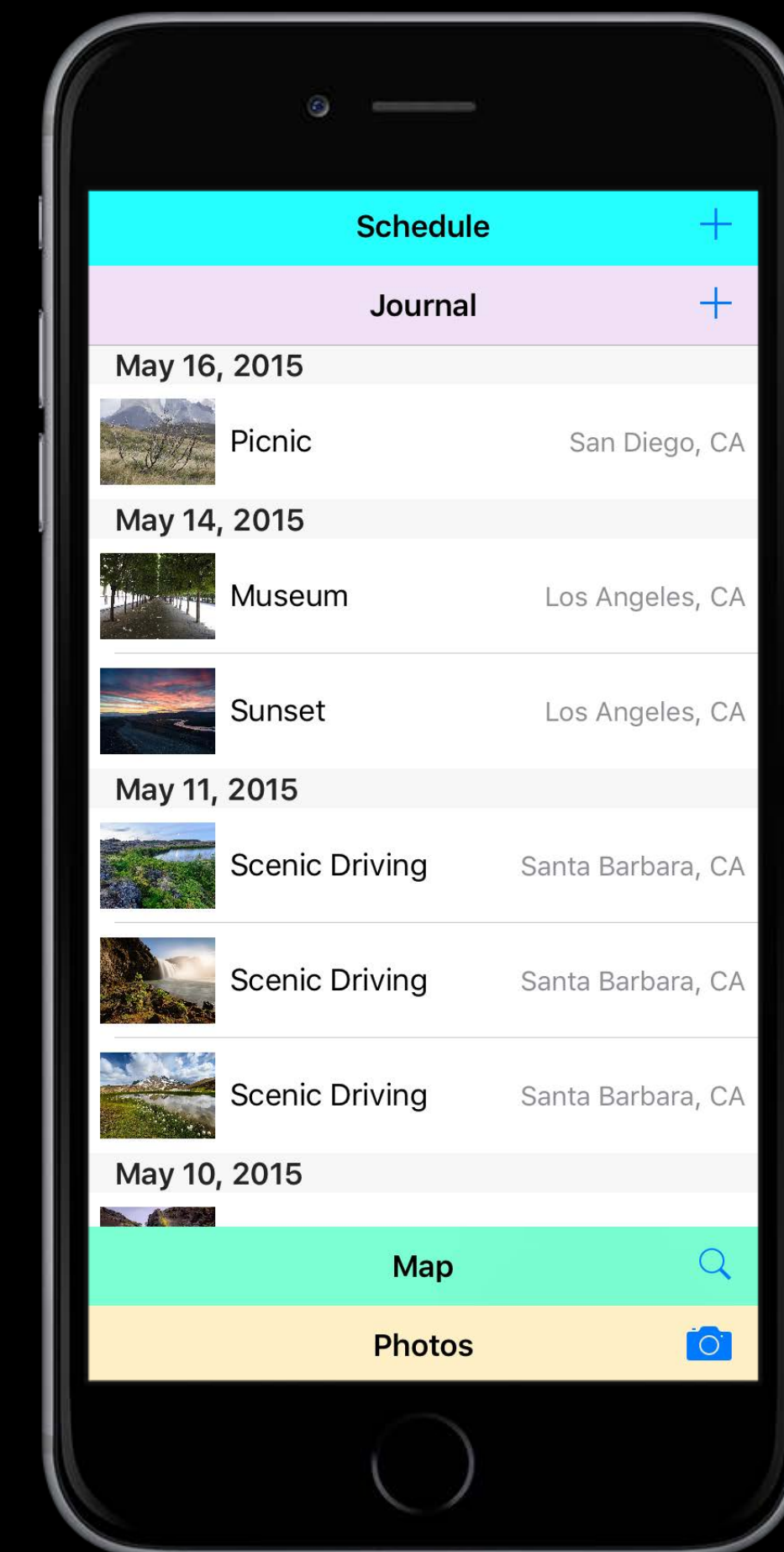
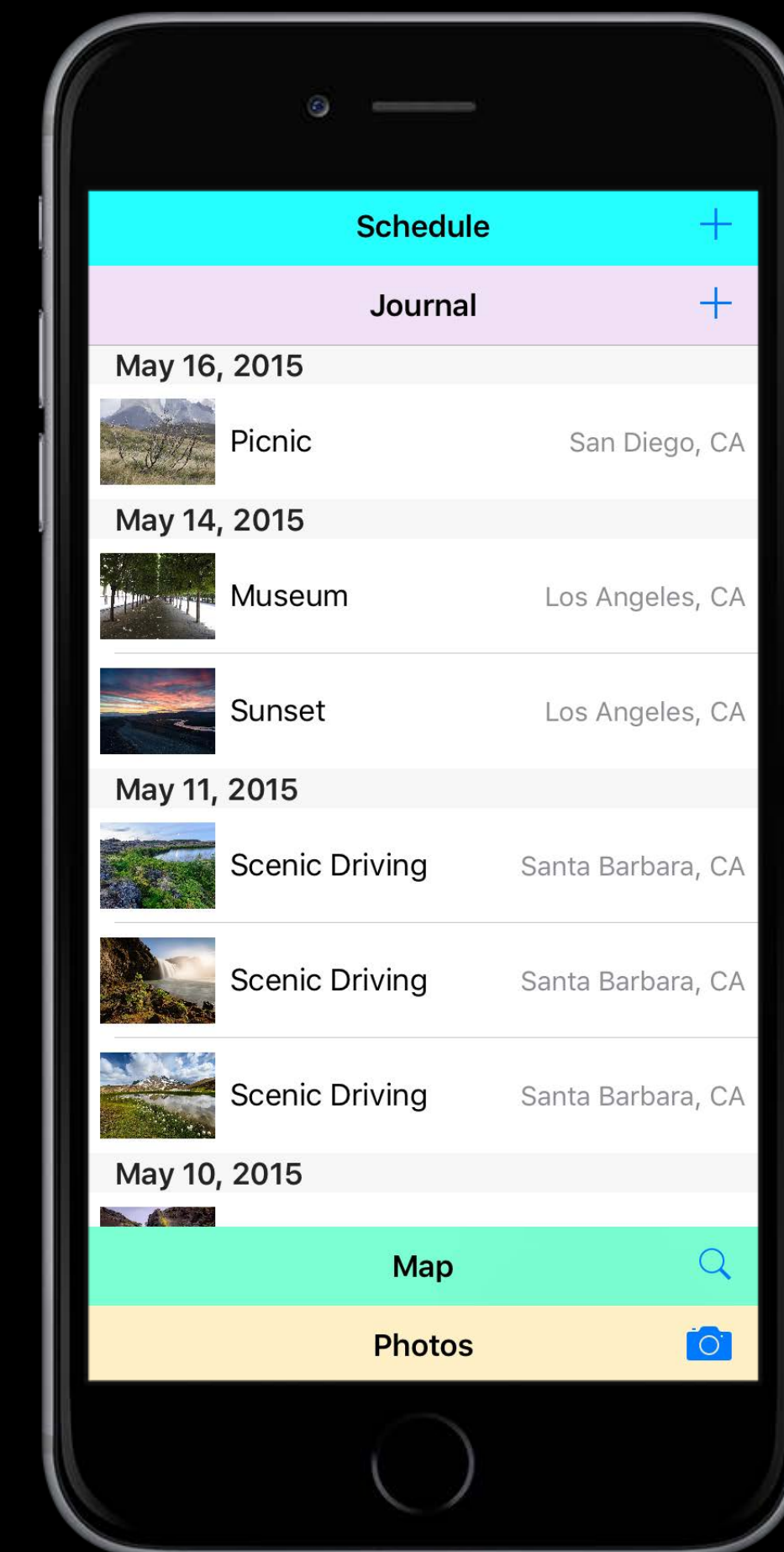
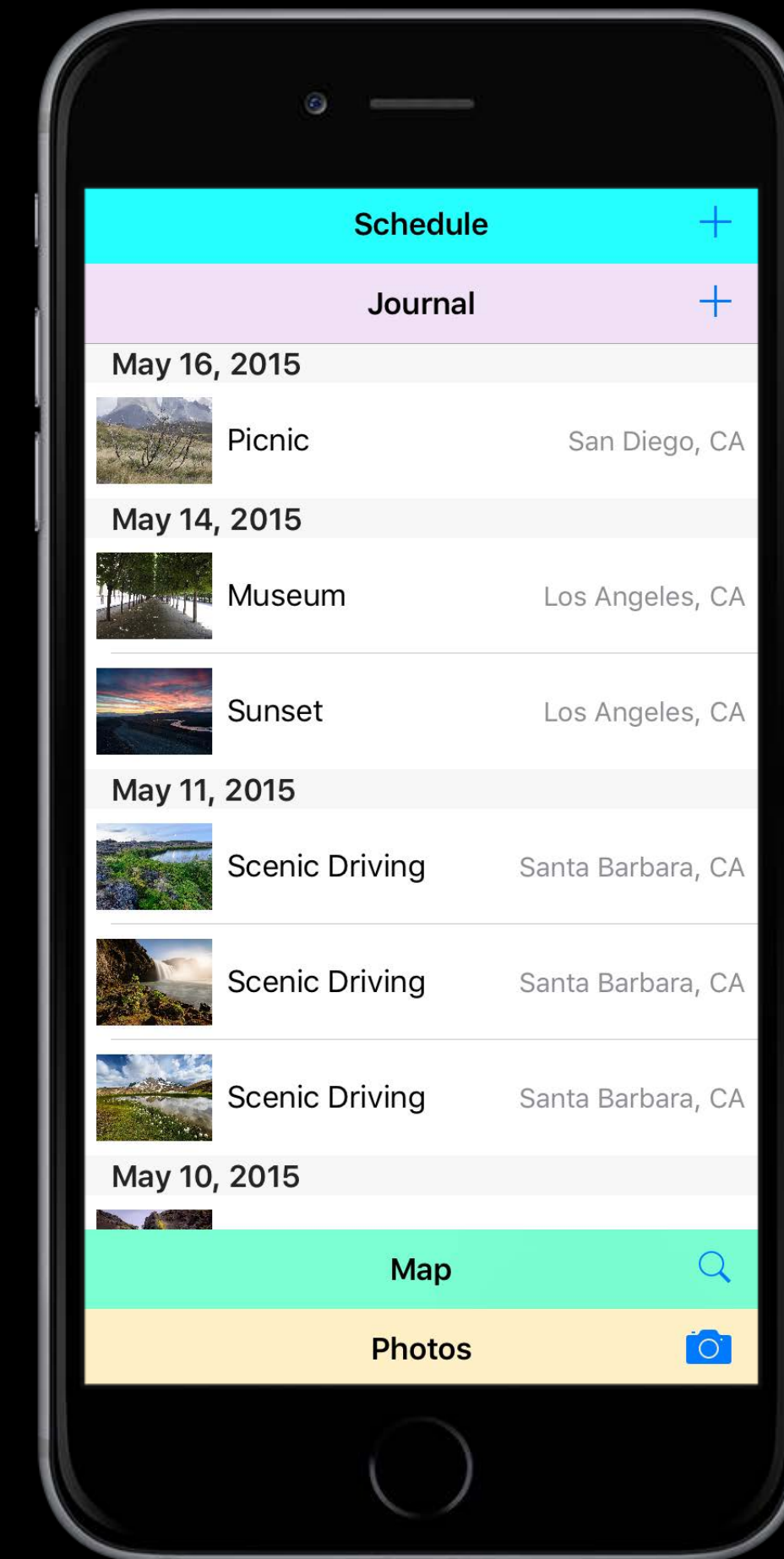
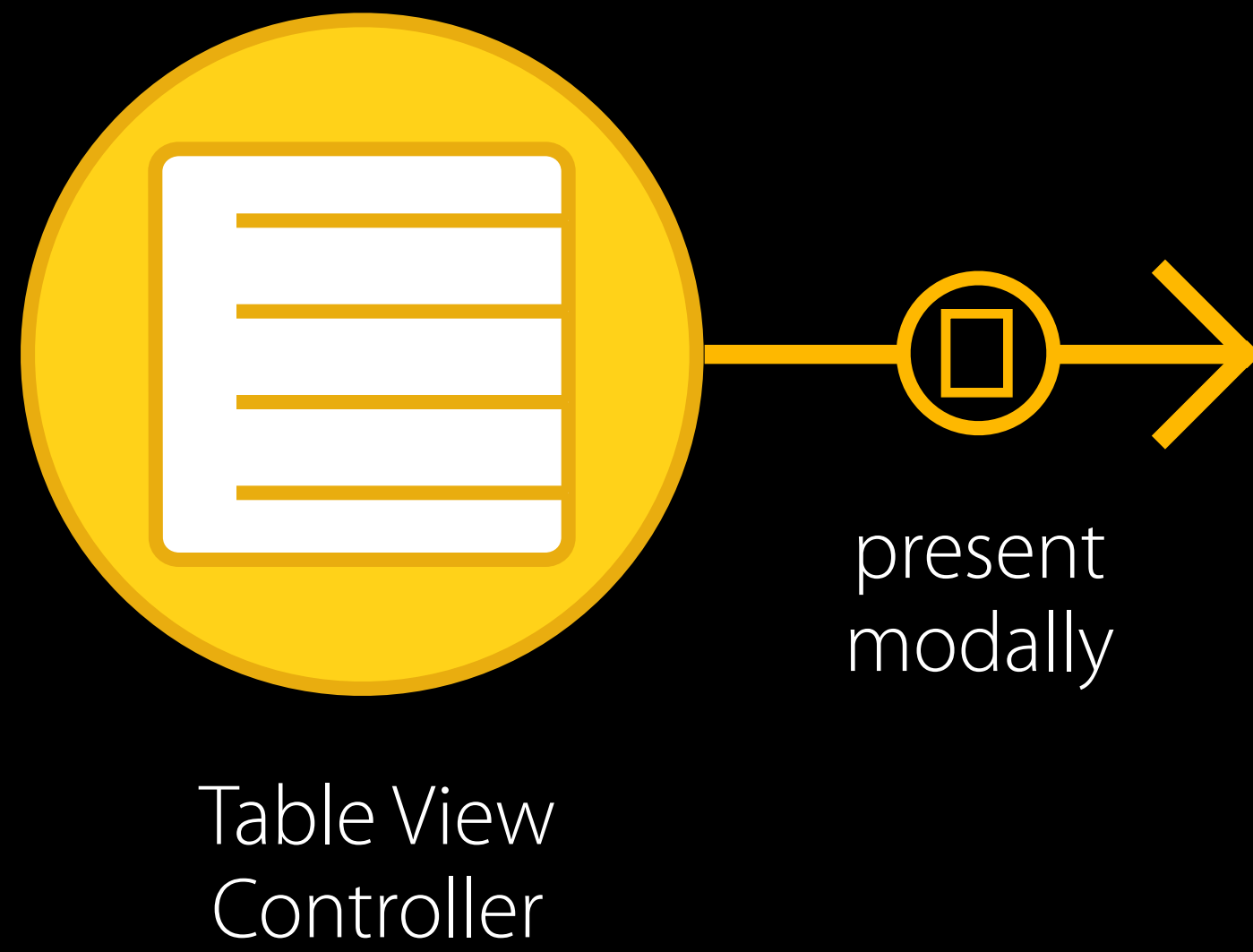




Table View
Controller





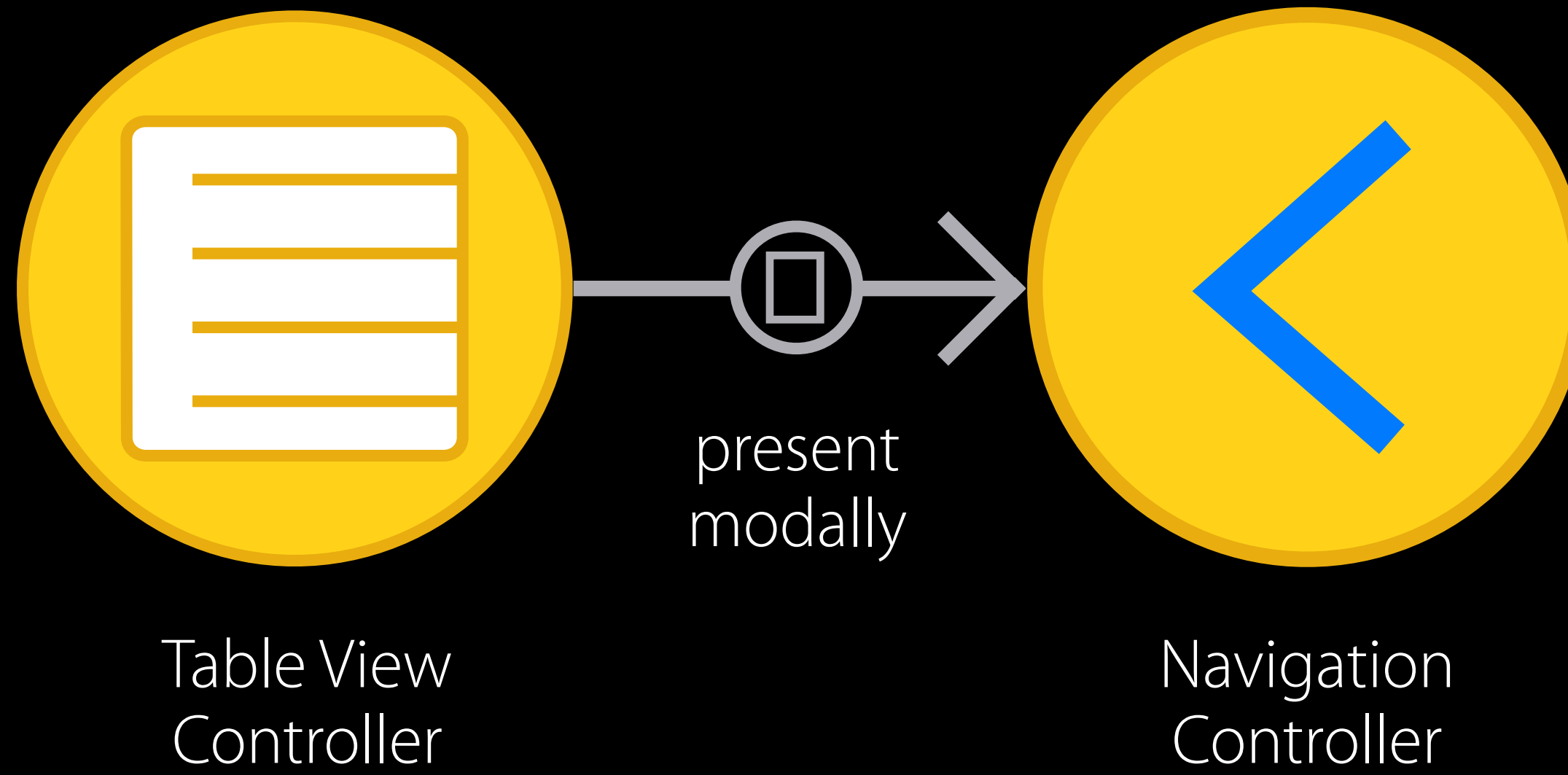
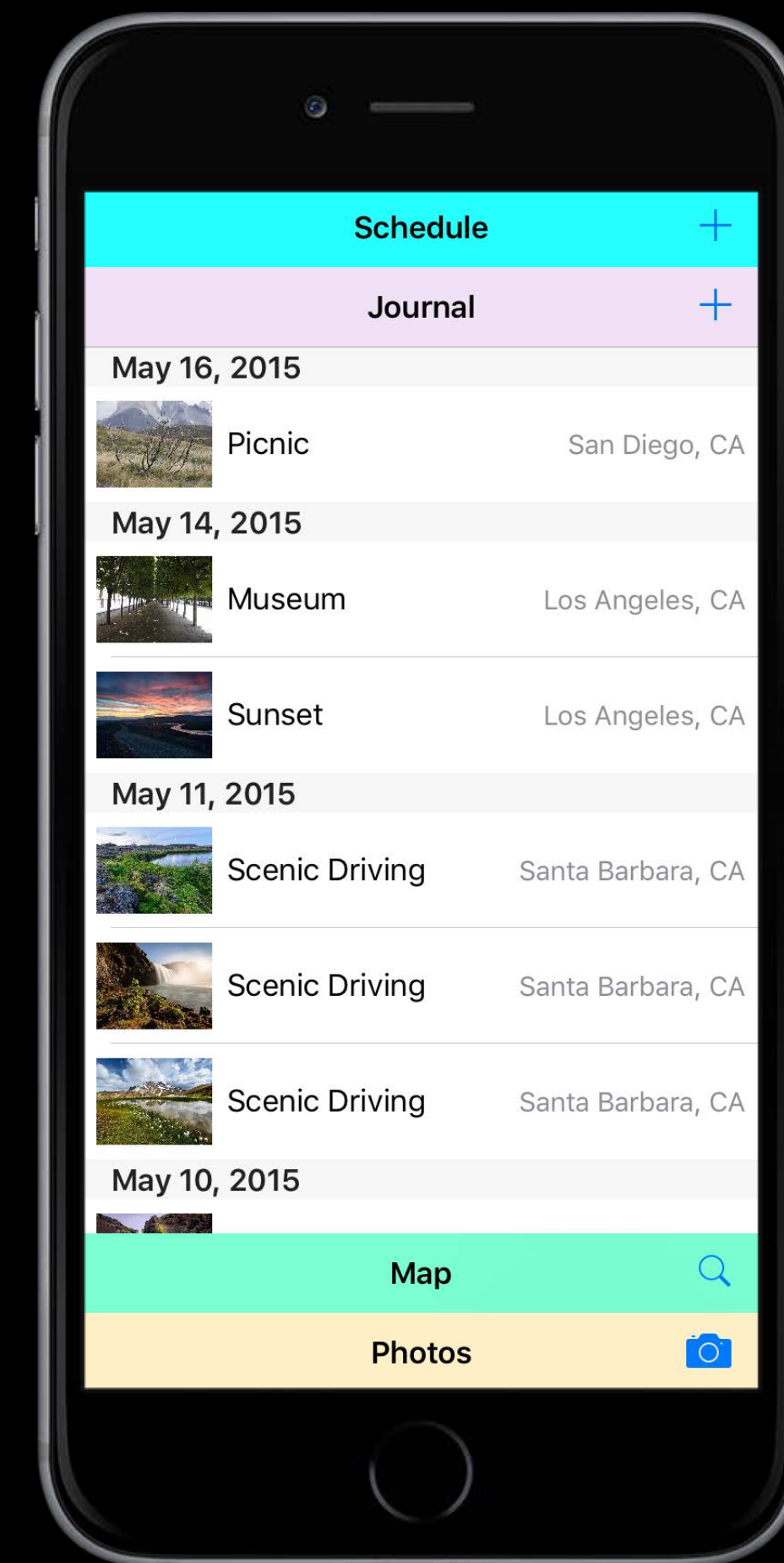




Table View
Controller



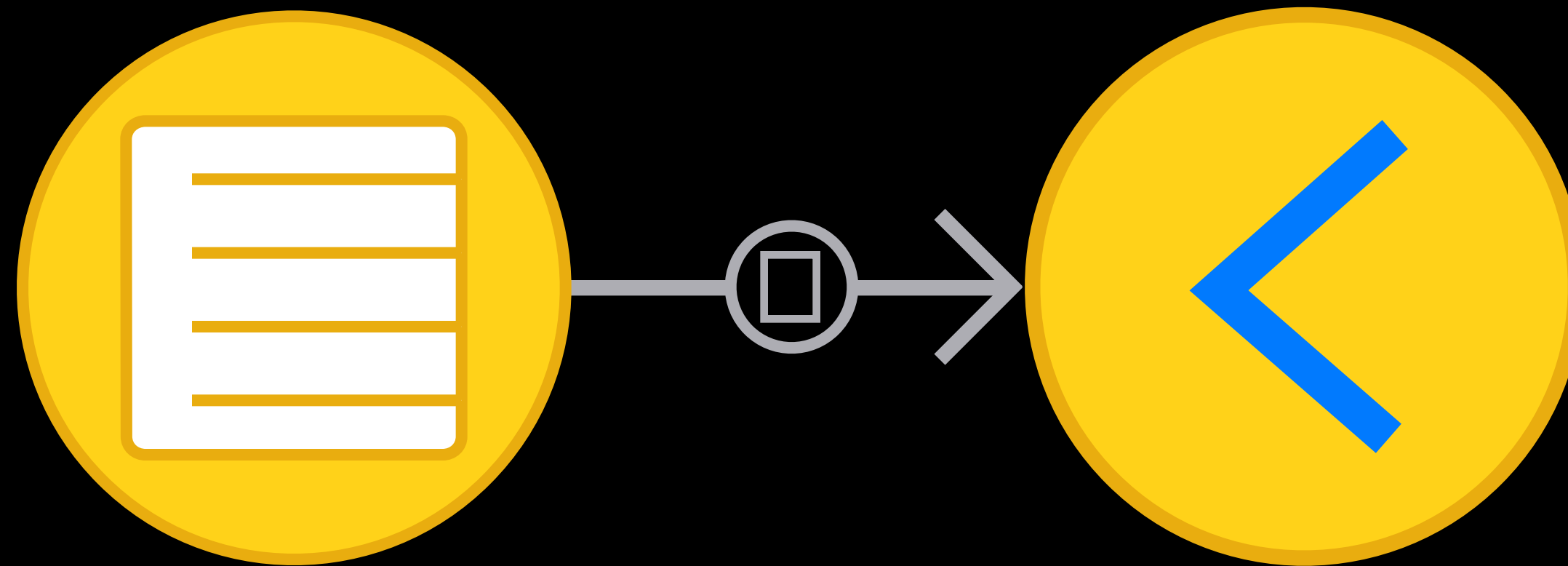


Table View
Controller

Navigation
Controller

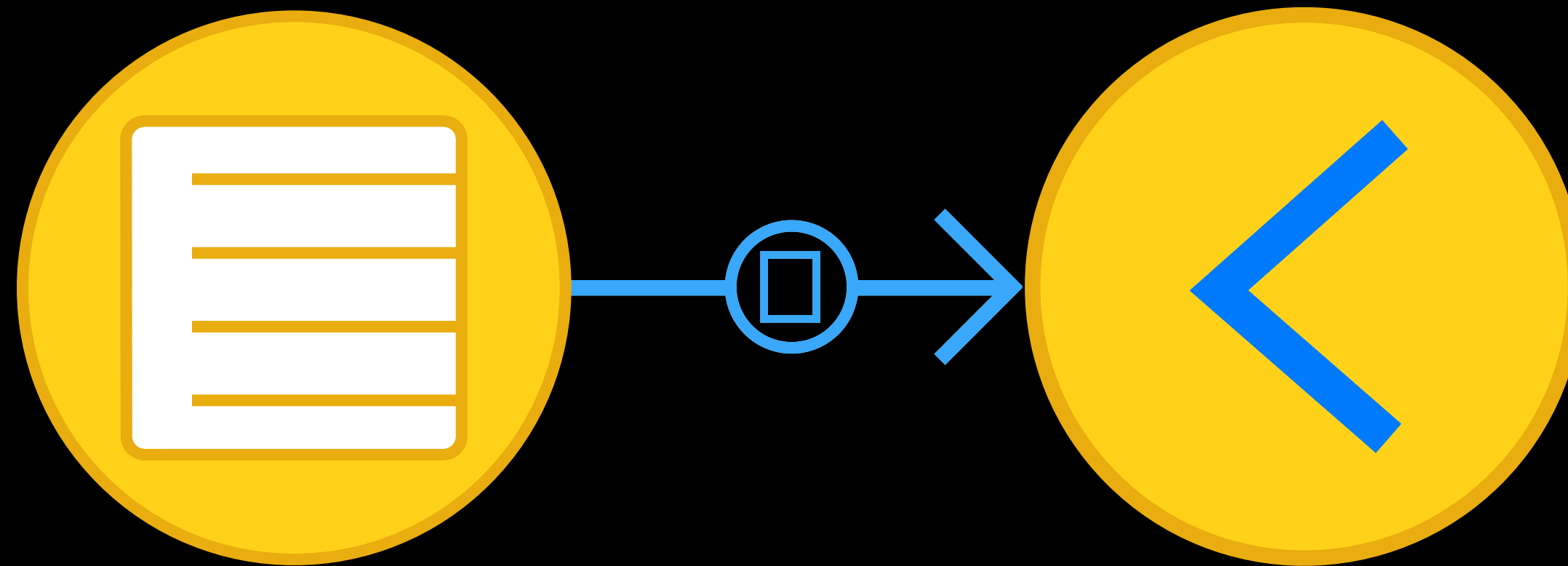
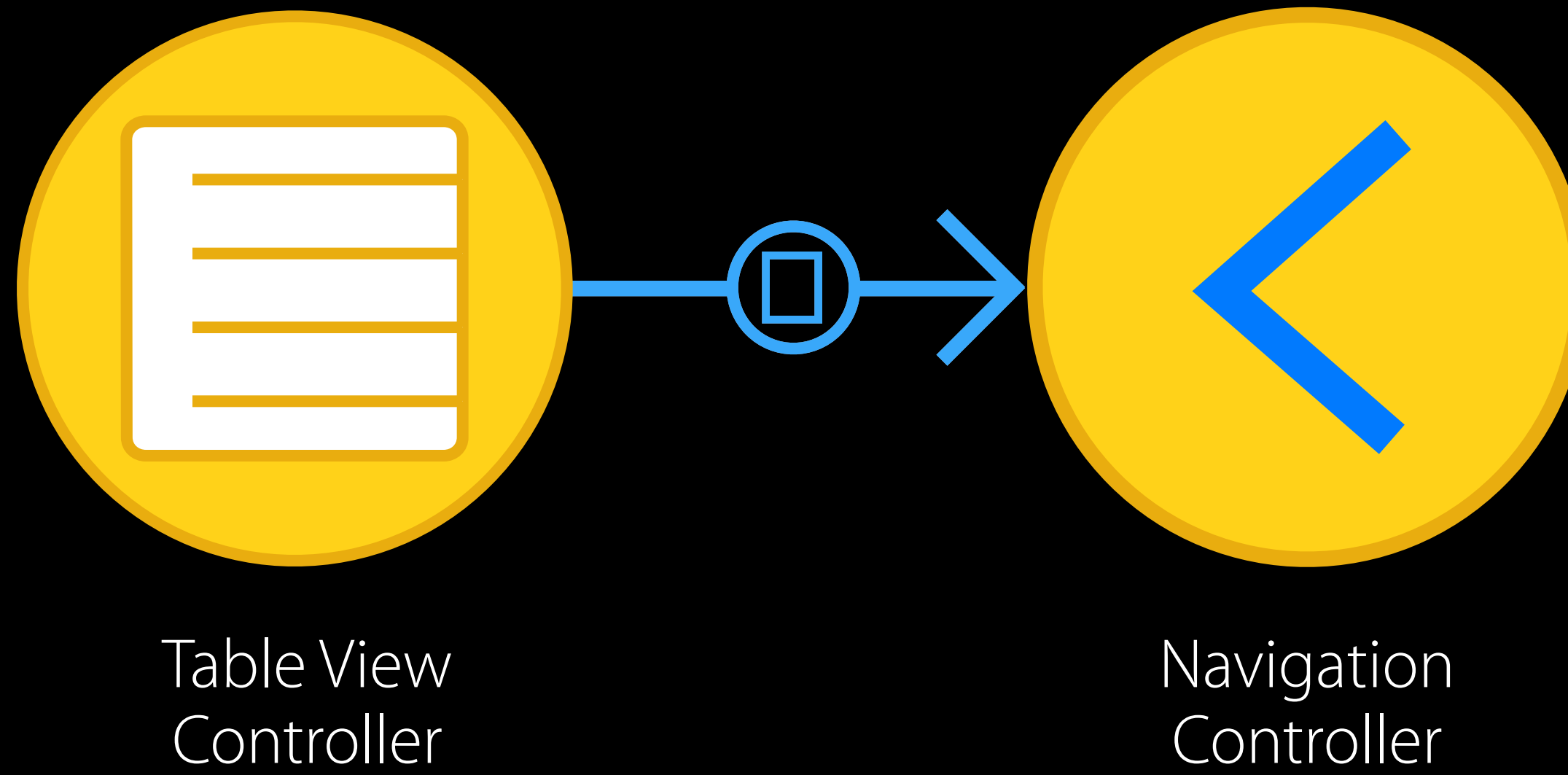
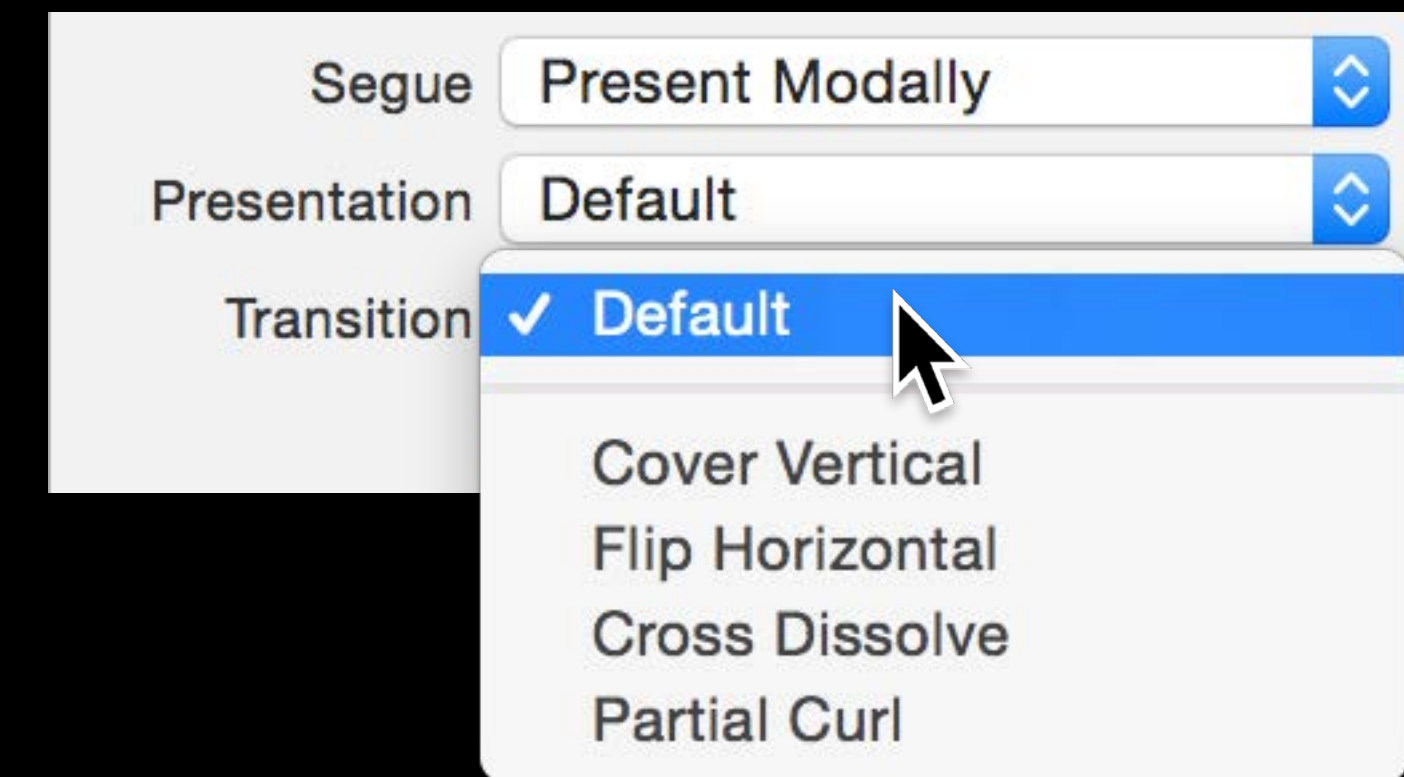
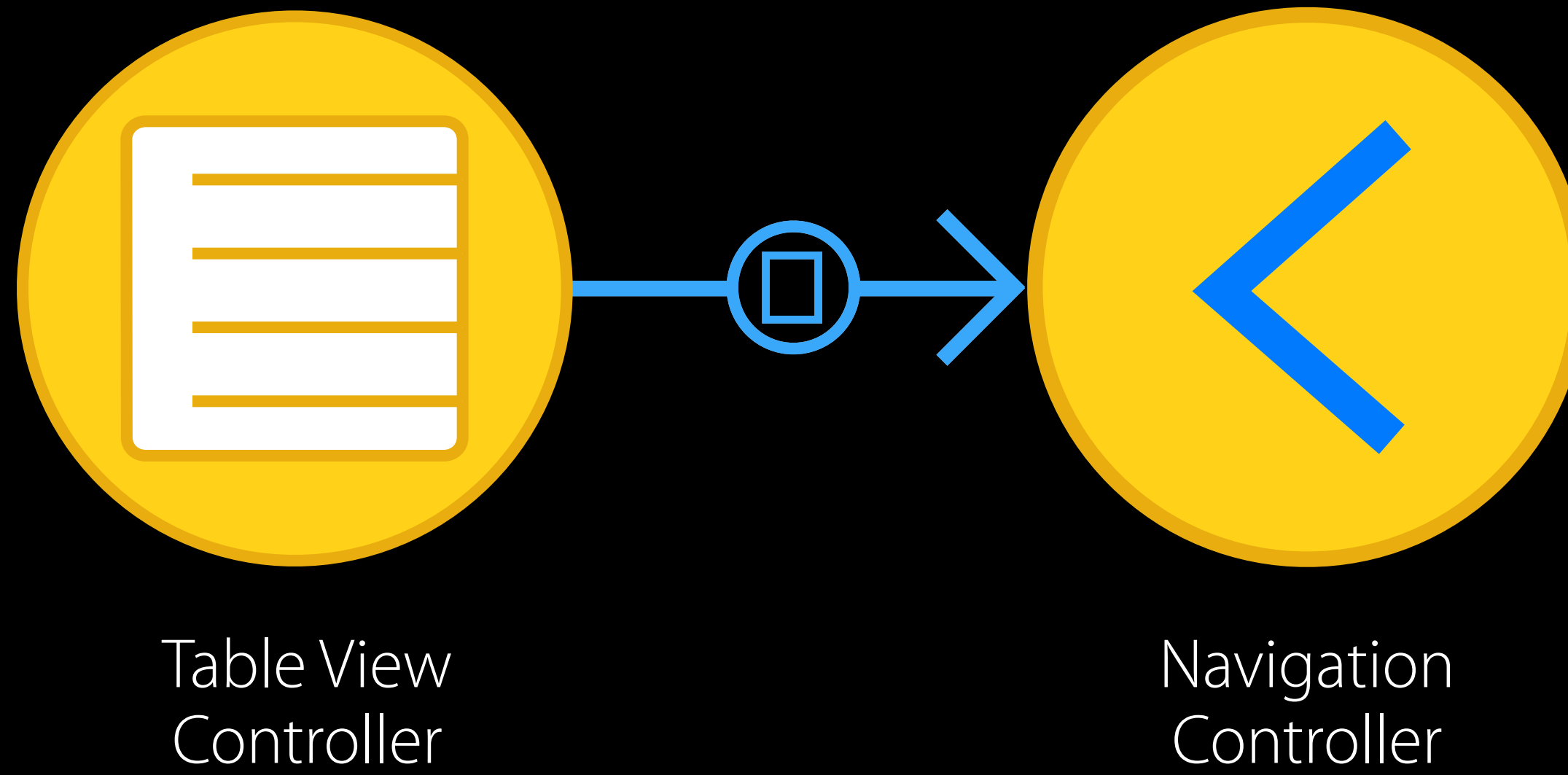


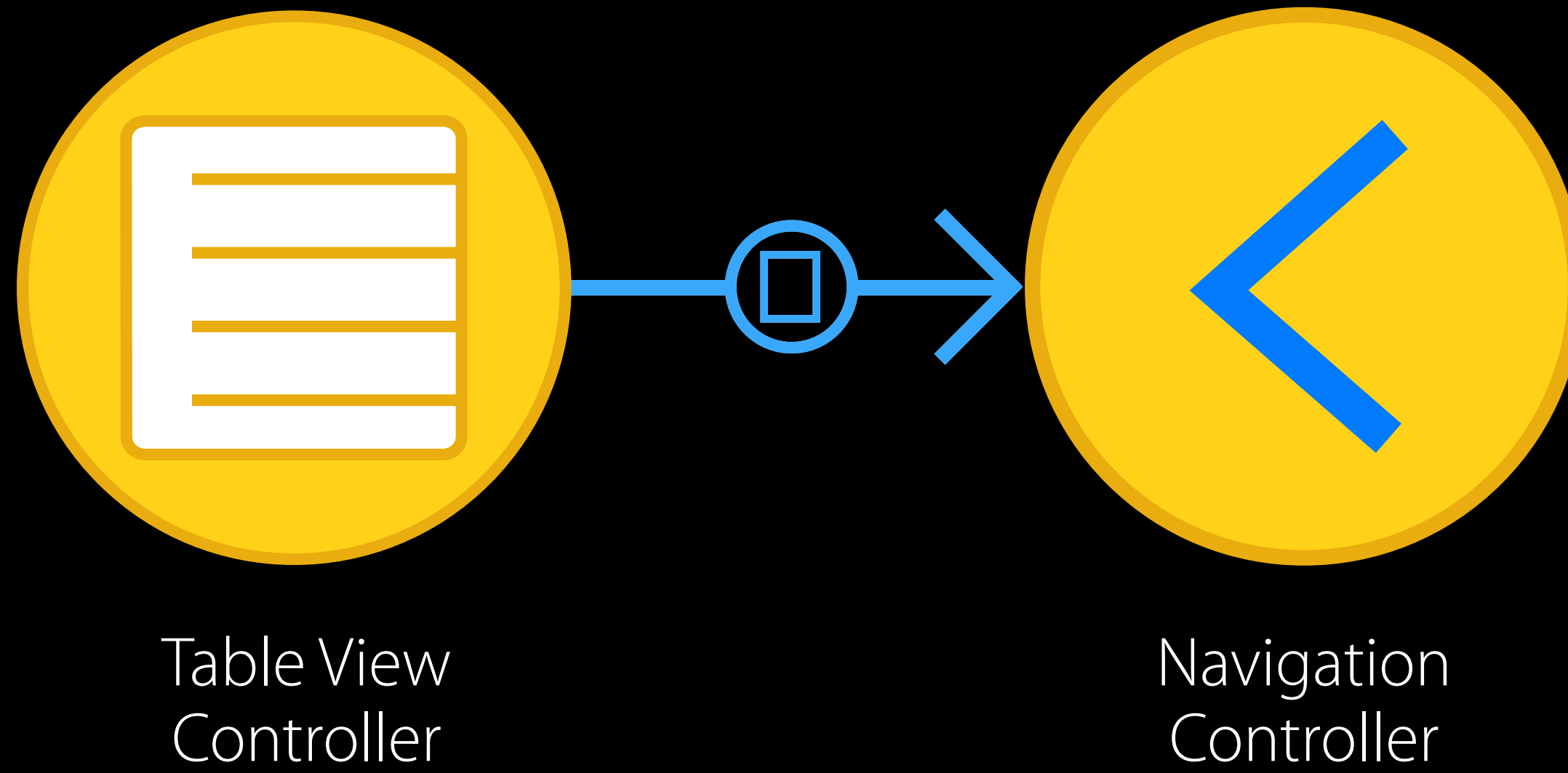
Table View
Controller

Navigation
Controller

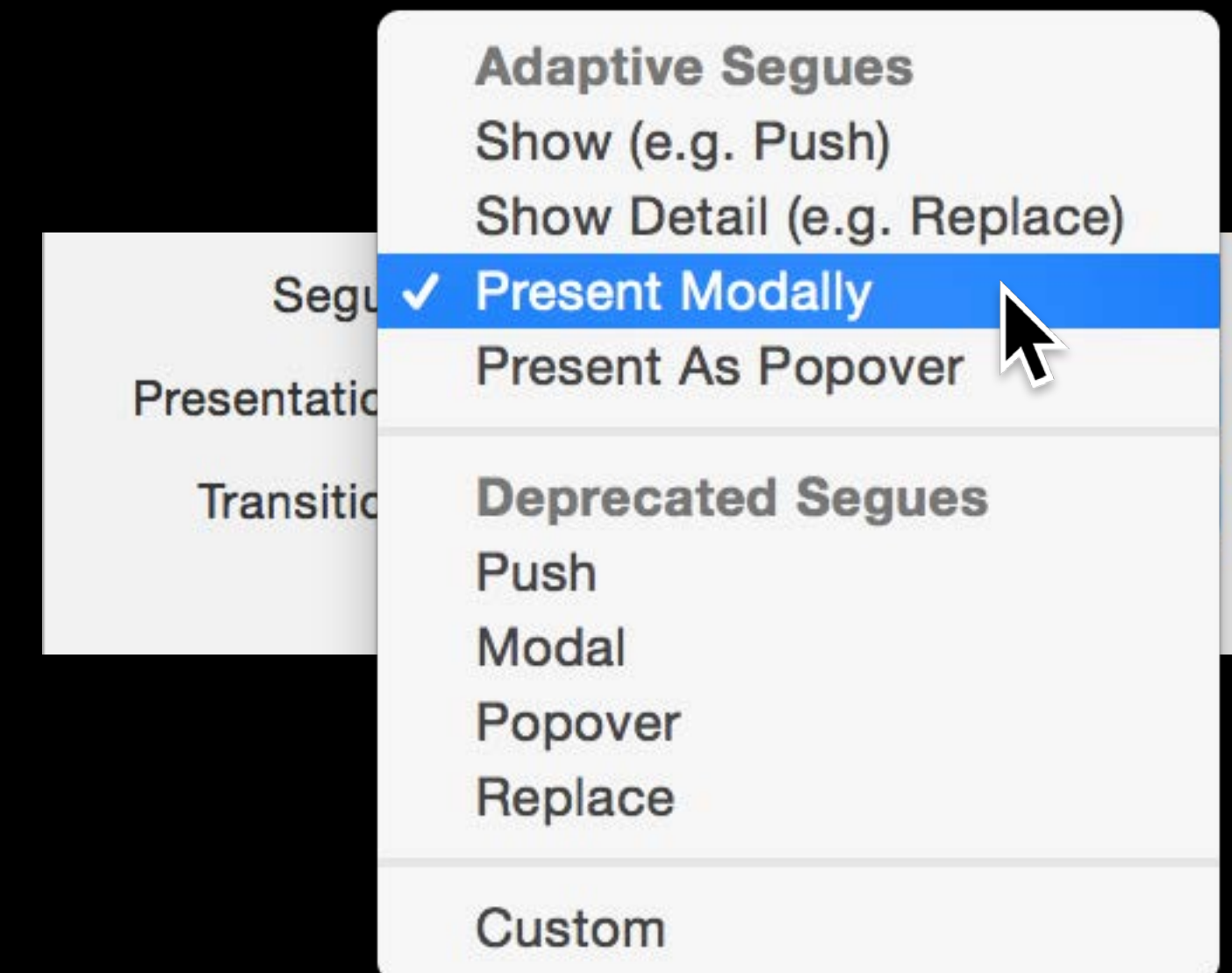
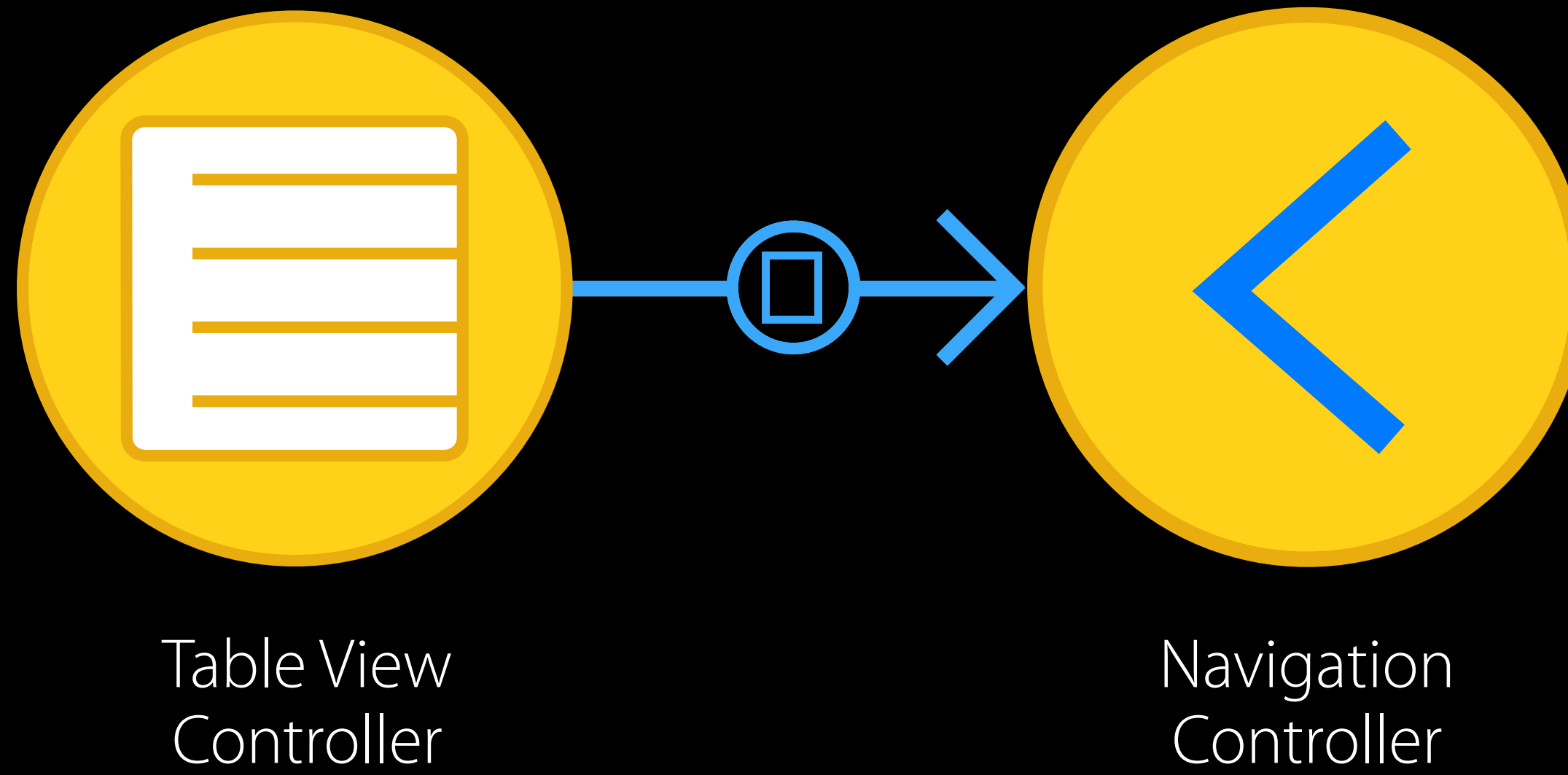


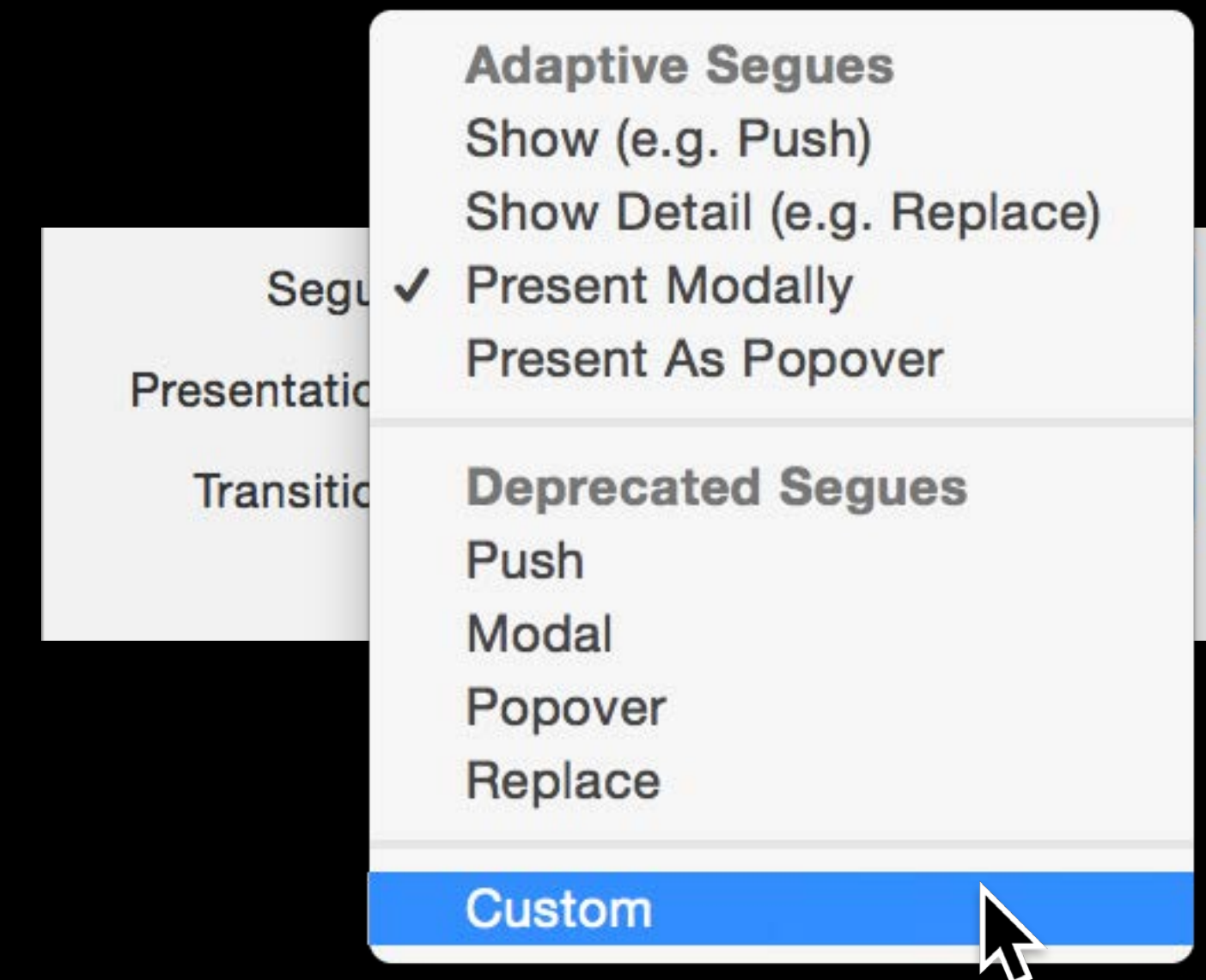
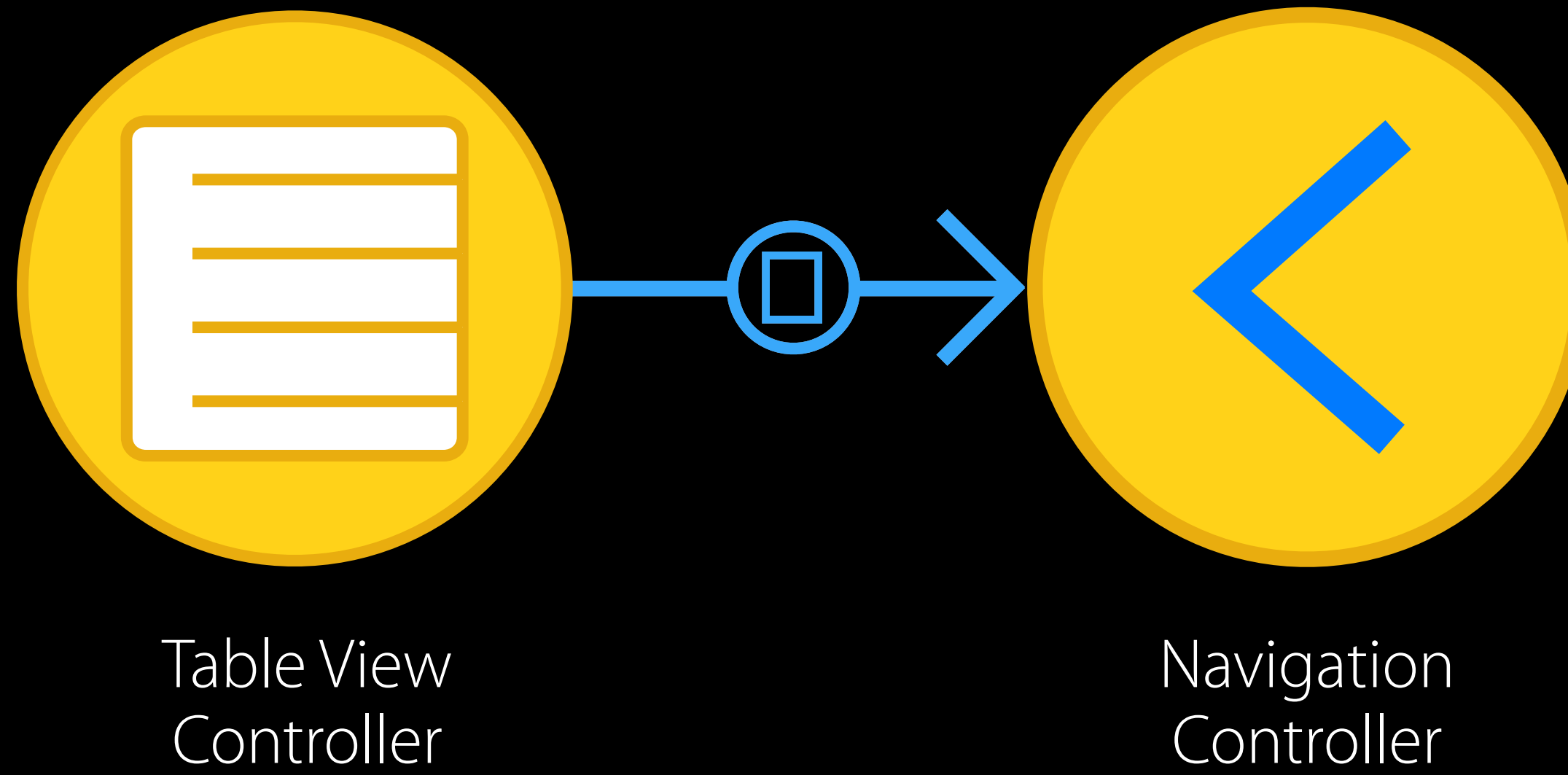
Segue	Present Modally	⌵
Presentation	Default	⌵
Transition	Default	⌵
<input checked="" type="checkbox"/> Animates		

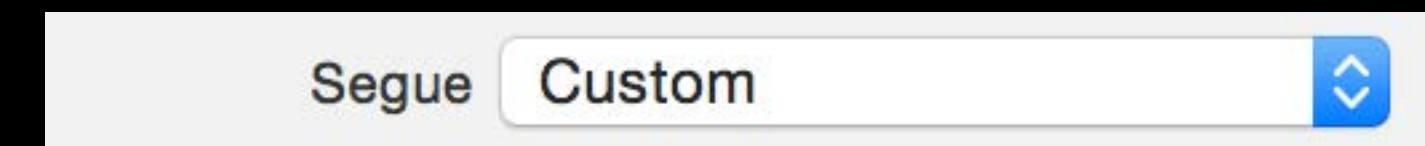
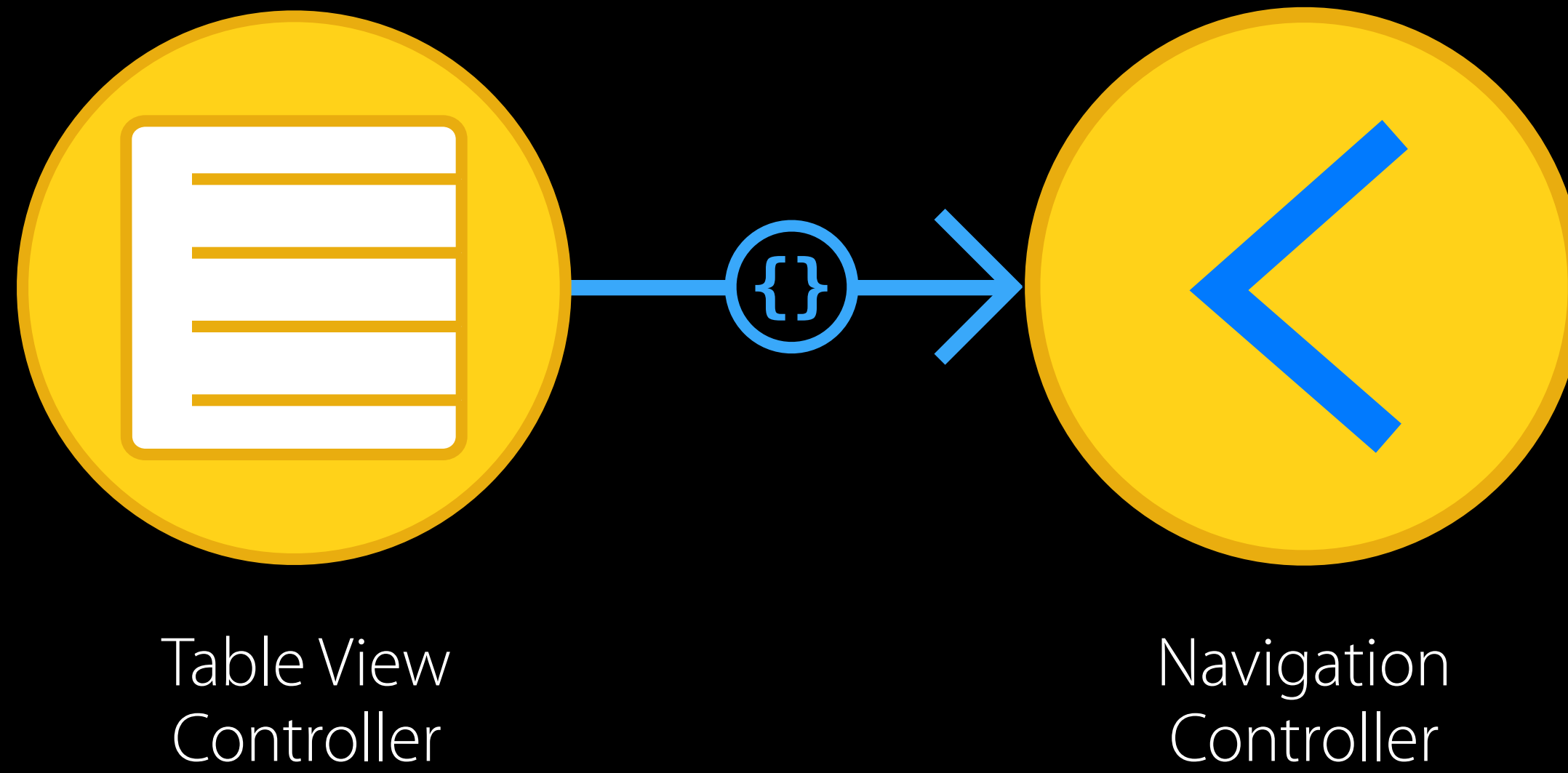




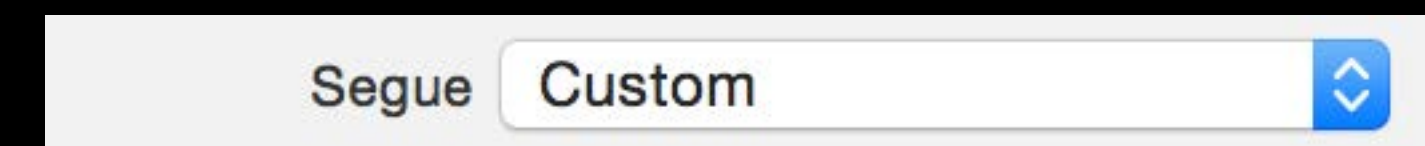
Segue	Present Modally	⌵
Presentation	Default	⌵
Transition	Default	⌵
<input checked="" type="checkbox"/> Animates		







```
class MySegue: UIStoryboardSegue {  
    override func perform() -> () {  
        setUpAnimation()  
        sourceViewController  
            .presentViewController(...)  
    }  
}
```



Segue Subclassing

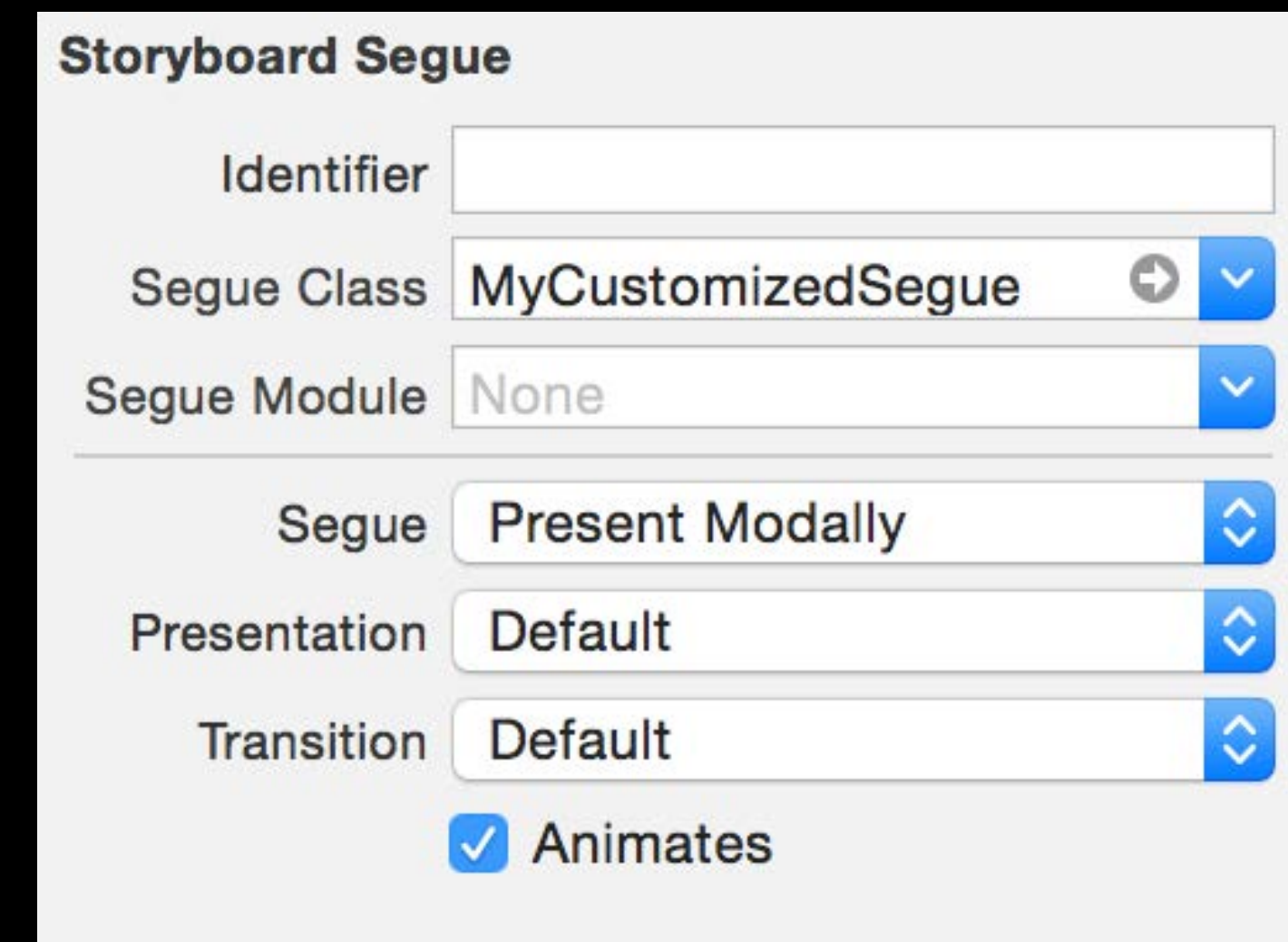
NEW

Can specify a **UIStoryboardSegue** subclass for any triggered or unwind segue







Override **perform()**

Call **super.perform()** for standard behavior

Present Modally and Popover Presentation segues retained throughout presentation

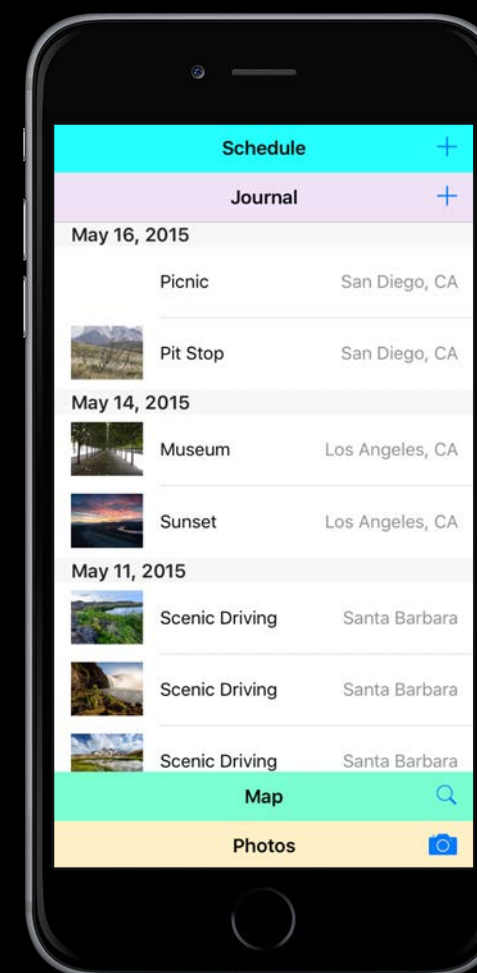


The screenshot shows the 'Storyboard Segue' configuration panel. It includes fields for 'Identifier', 'Segue Class' (set to 'MyCustomizedSegue'), 'Segue Module' (set to 'None'), 'Segue' (set to 'Present Modally'), 'Presentation' (set to 'Default'), and 'Transition' (set to 'Default'). There is also a checked checkbox for 'Animates'.

Storyboard Segue	
Identifier	<input type="text"/>
Segue Class	MyCustomizedSegue  
Segue Module	None 
Segue	Present Modally 
Presentation	Default 
Transition	Default 
<input checked="" type="checkbox"/> Animates	

Segue Subclassing

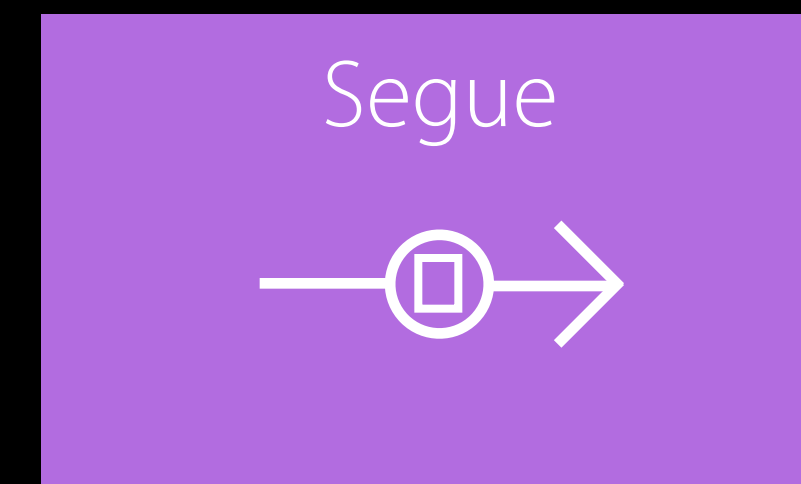
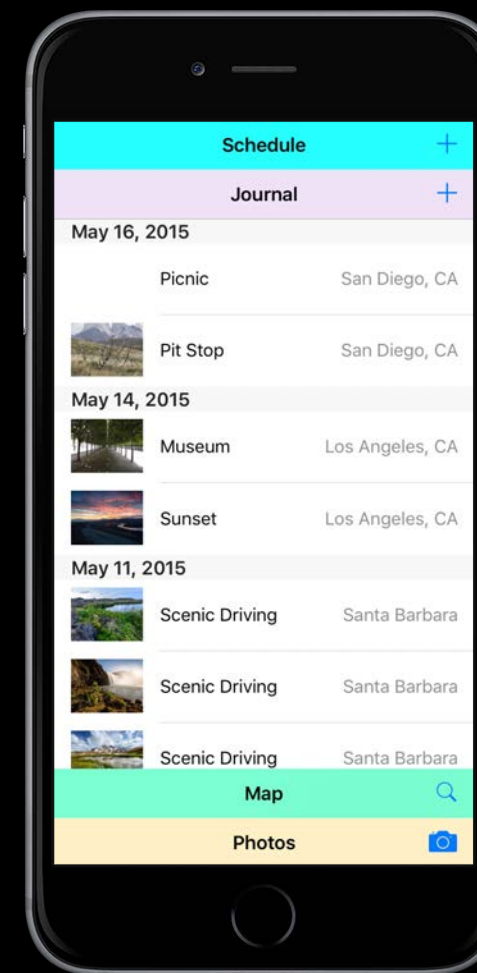
Customizing presentation animations



Segue Subclassing

Customizing presentation animations

User triggers segue

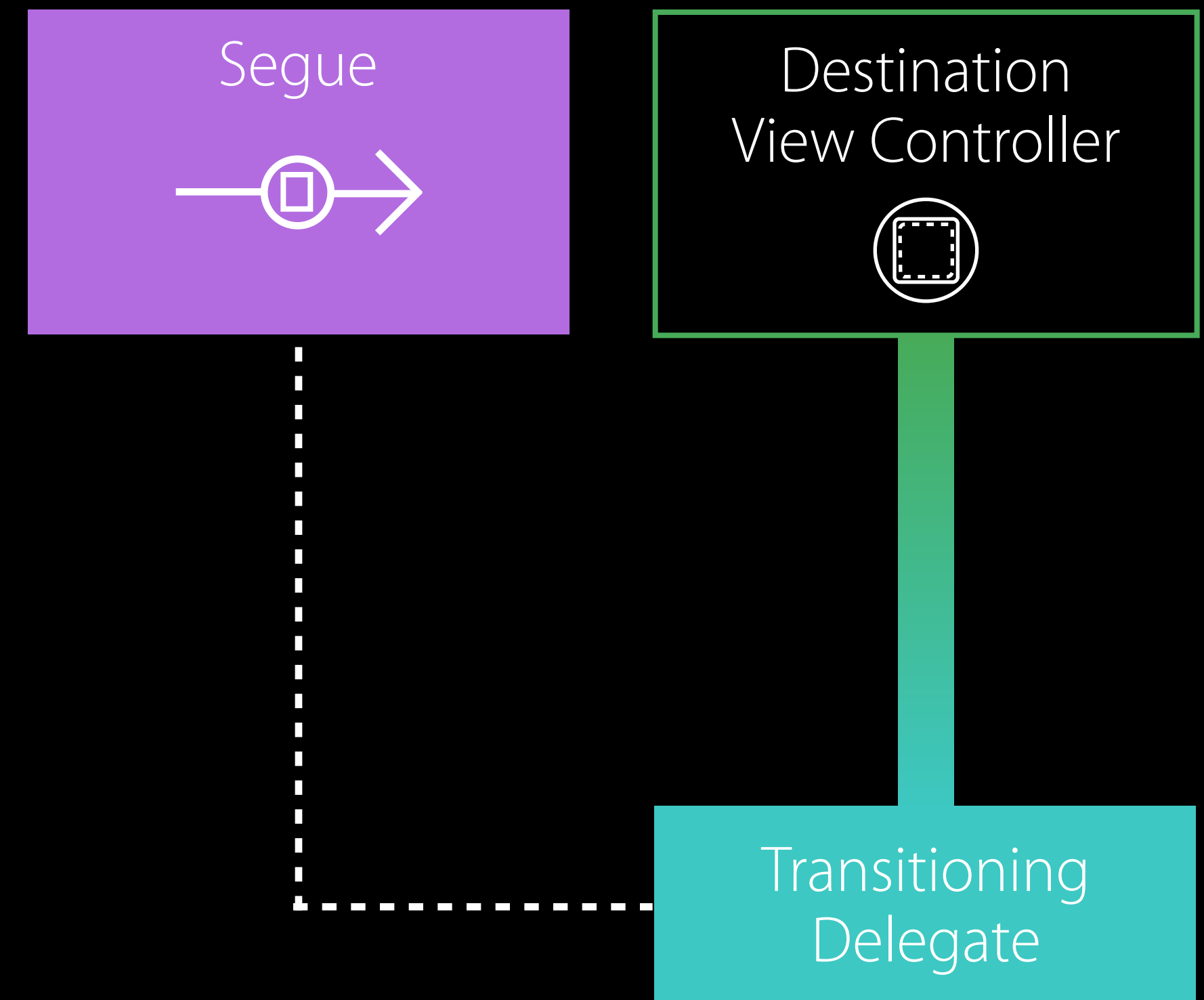
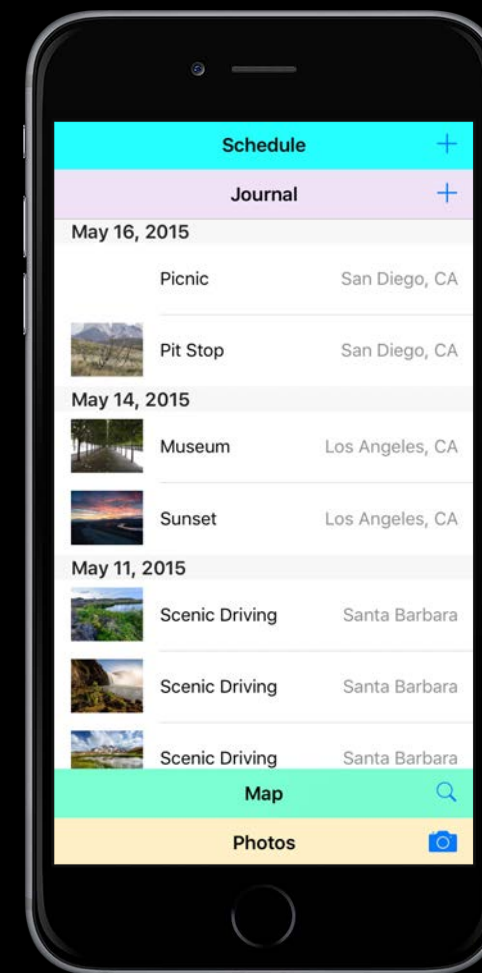


Segue Subclassing

Customizing presentation animations

User triggers segue

- Assign transitioning delegate

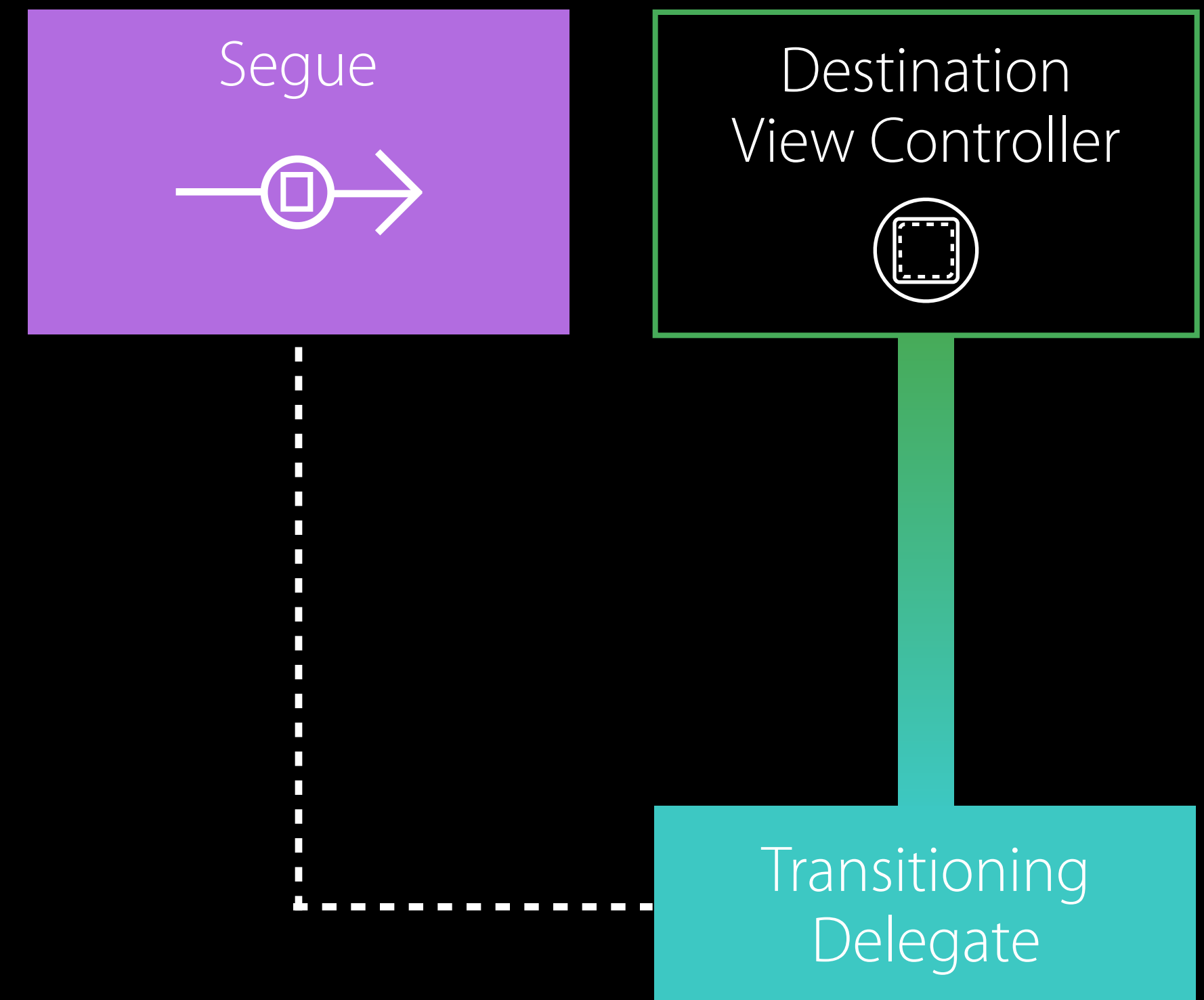
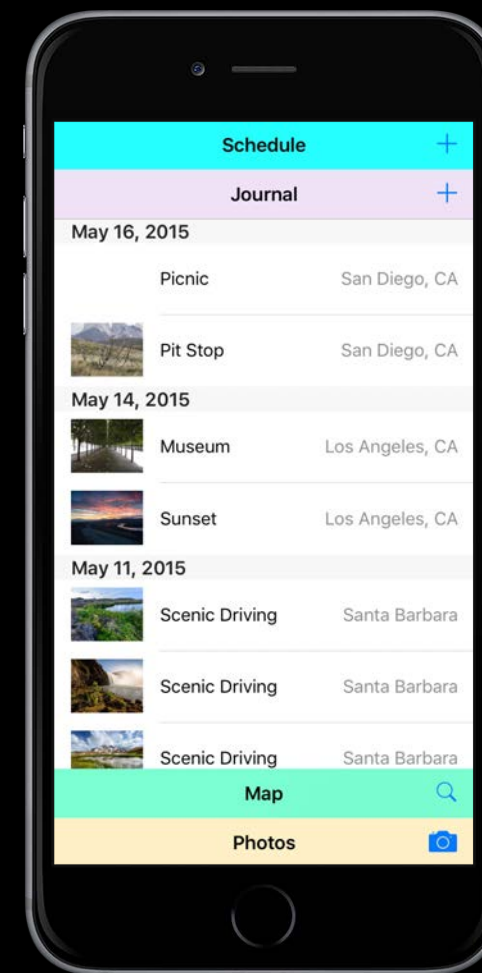


Segue Subclassing

Customizing presentation animations

User triggers segue

- Assign transitioning delegate
- Call **super.perform()** to start modal presentation

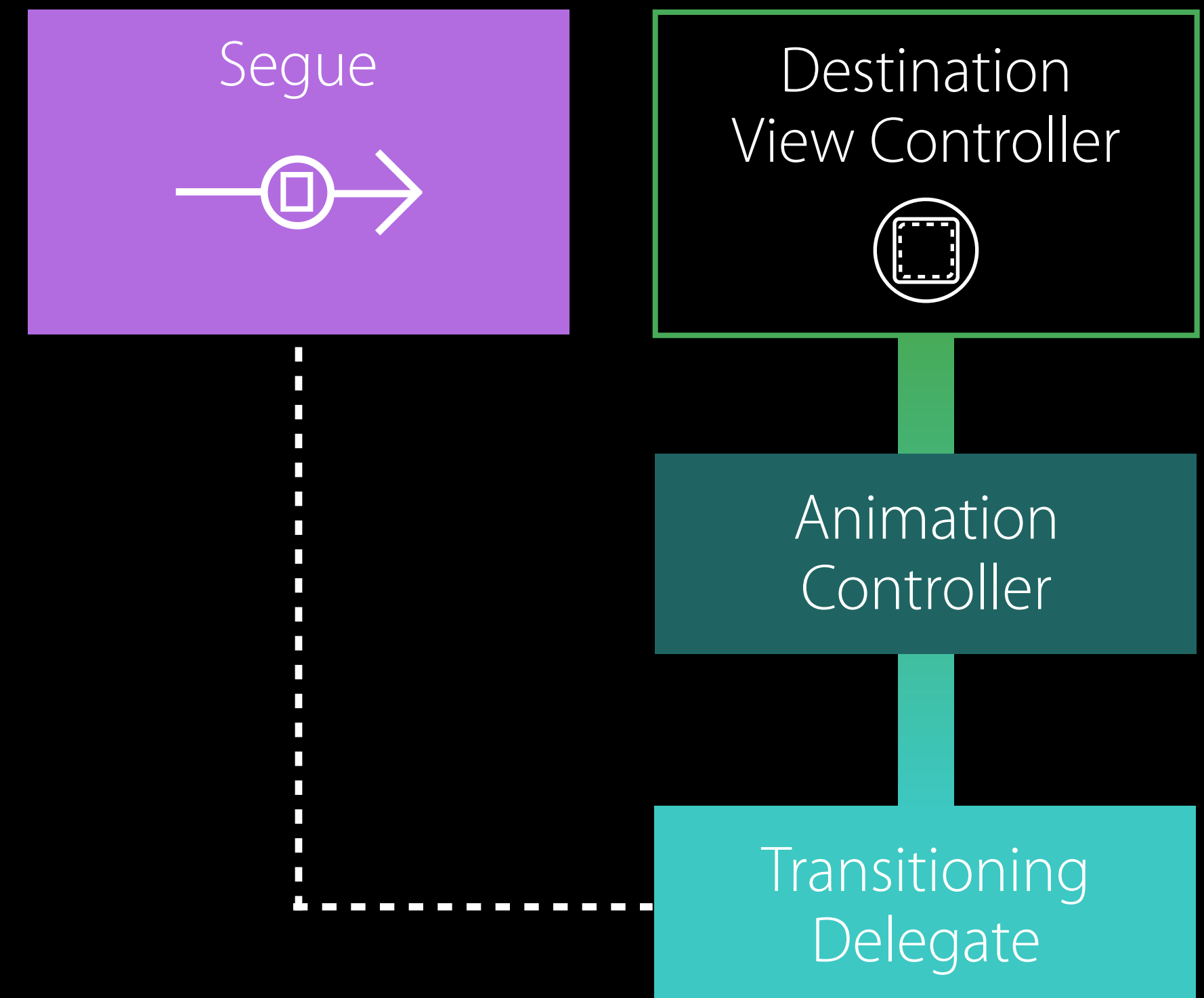
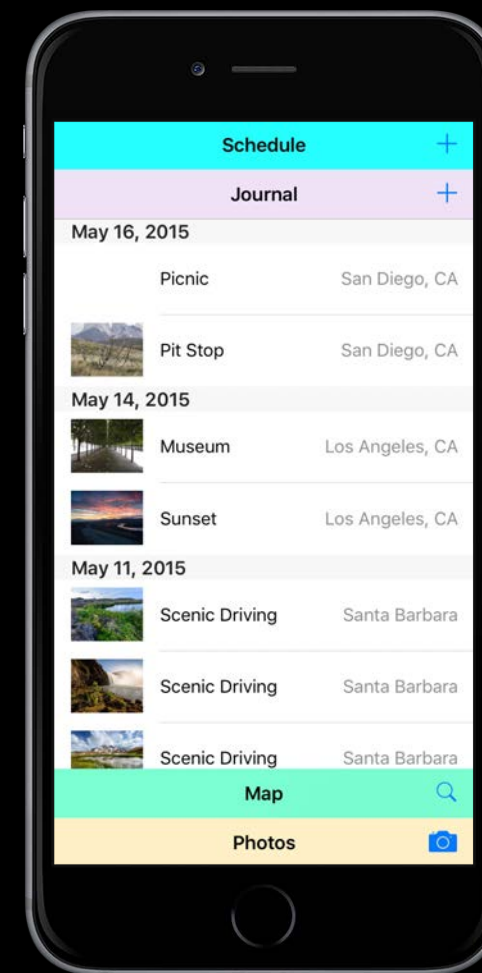


Segue Subclassing

Customizing presentation animations

User triggers segue

- Assign transitioning delegate
- Call **super.perform()** to start modal presentation
- Vend animation controller for presentation

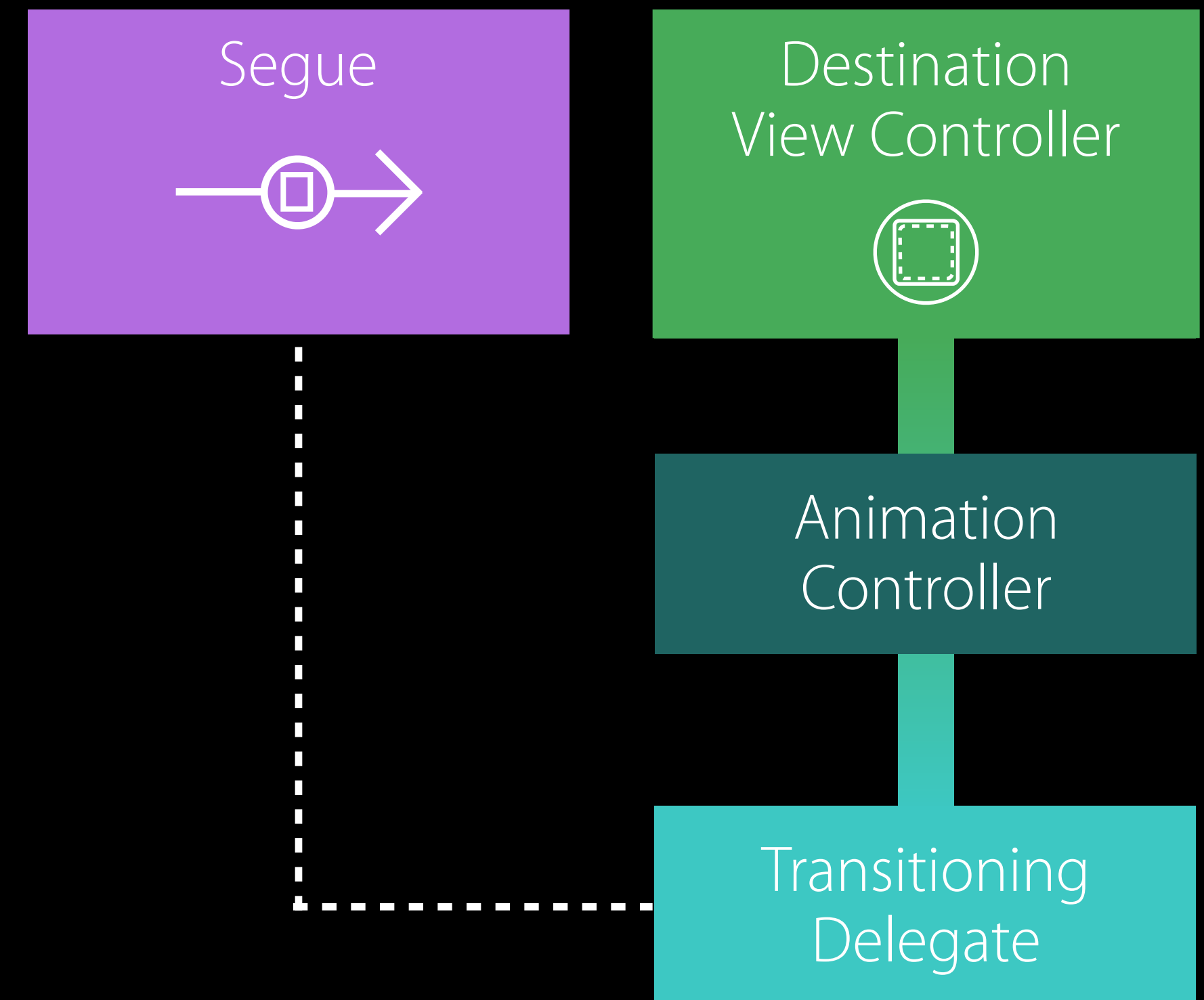
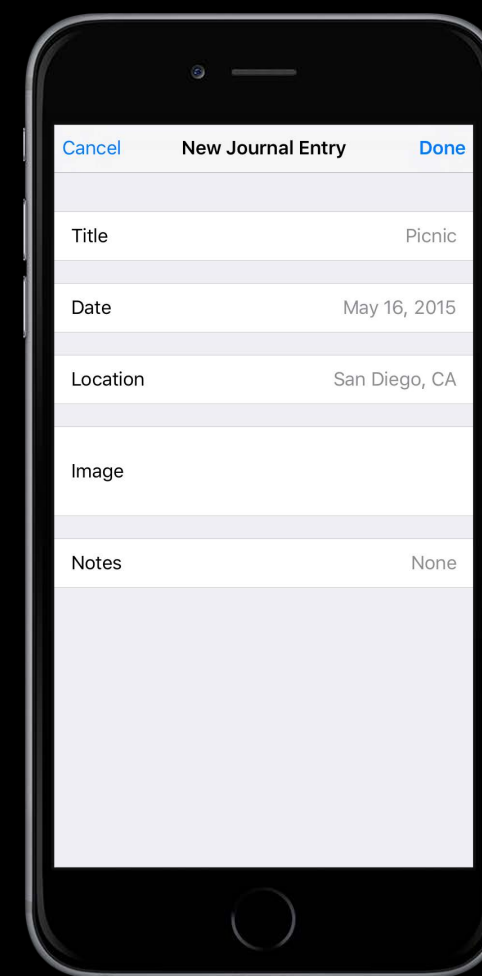


Segue Subclassing

Customizing presentation animations

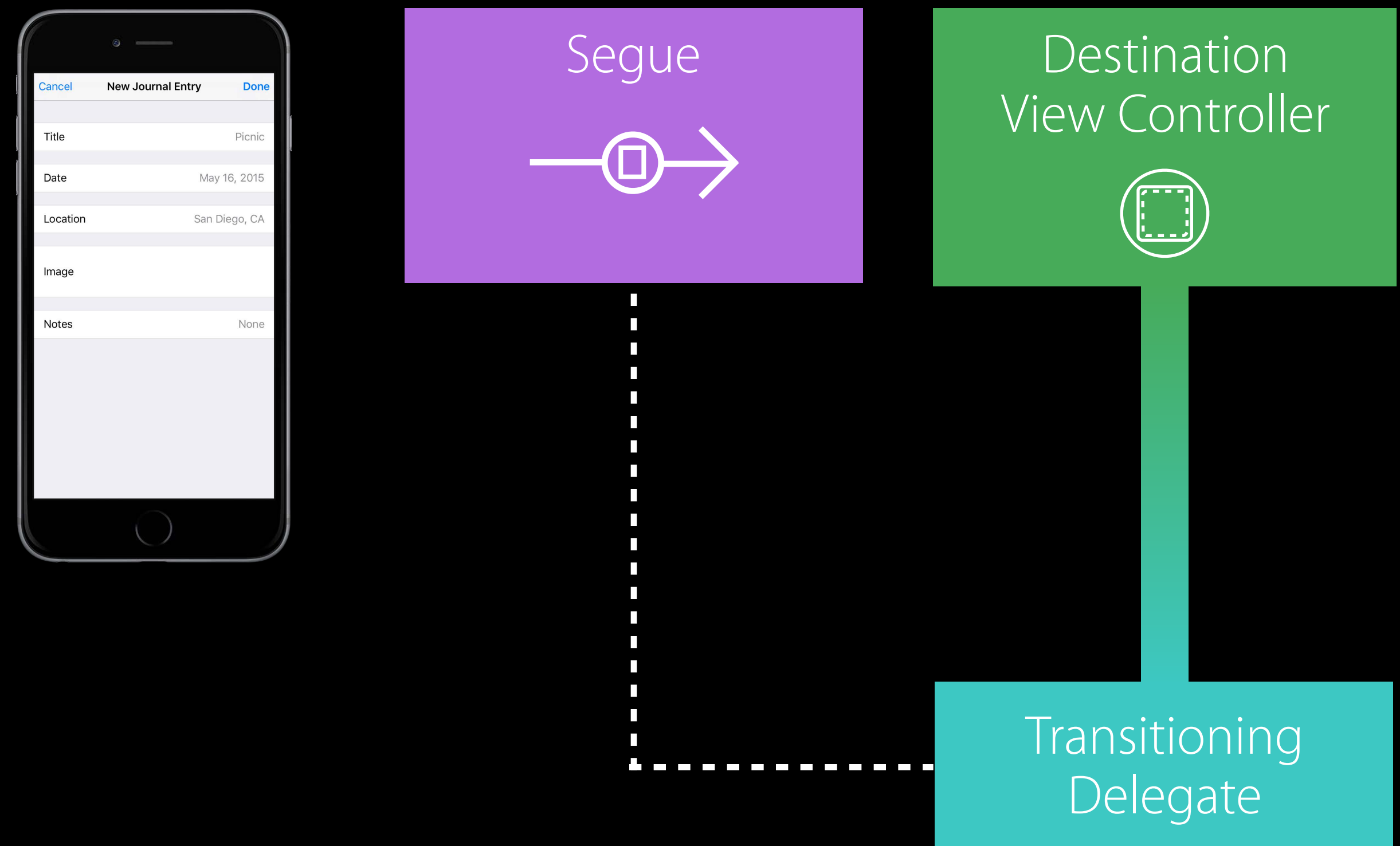
User triggers segue

- Assign transitioning delegate
- Call **super.perform()** to start modal presentation
- Vend animation controller for presentation
- Animate appearance of view controller



Segue Subclassing

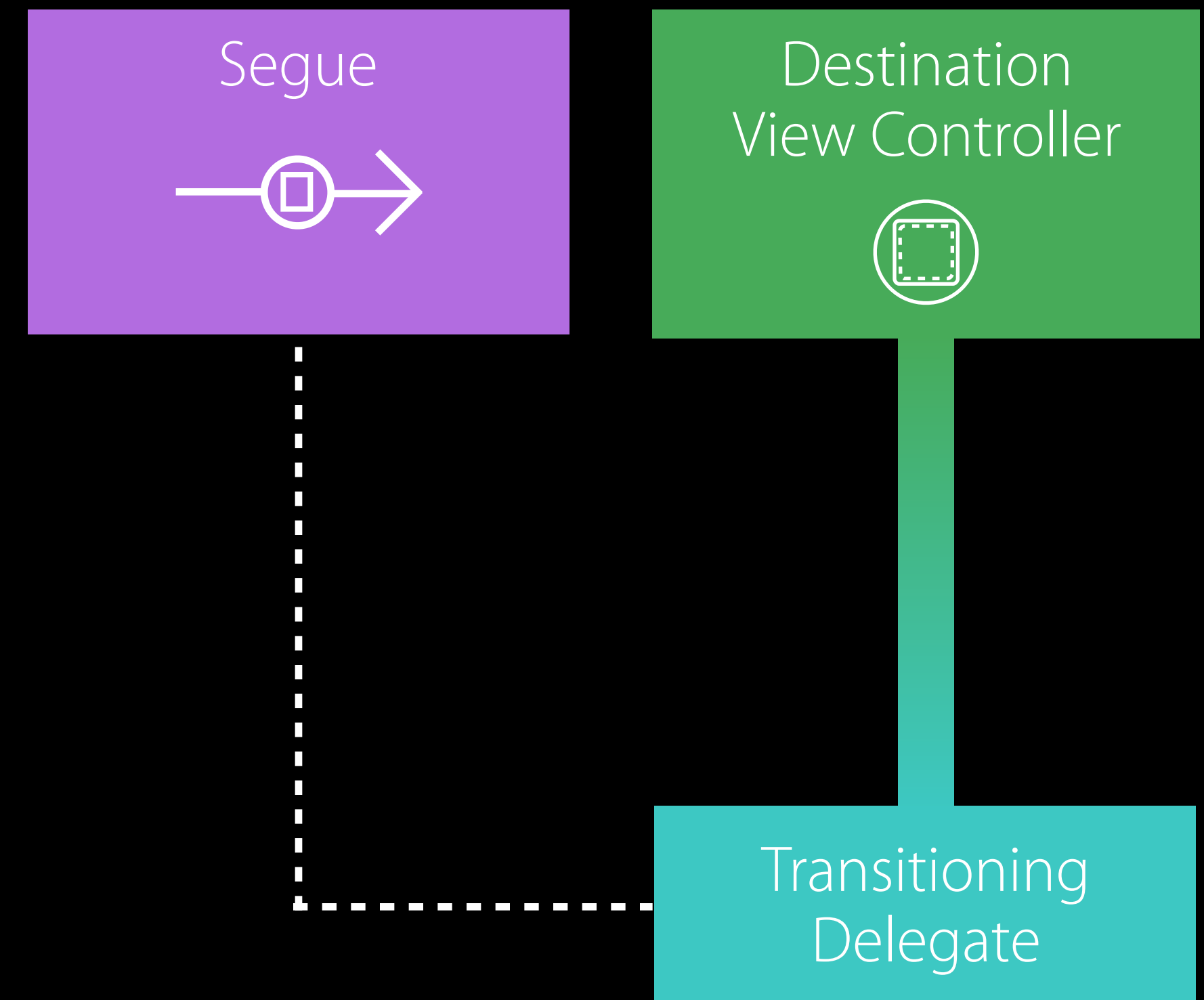
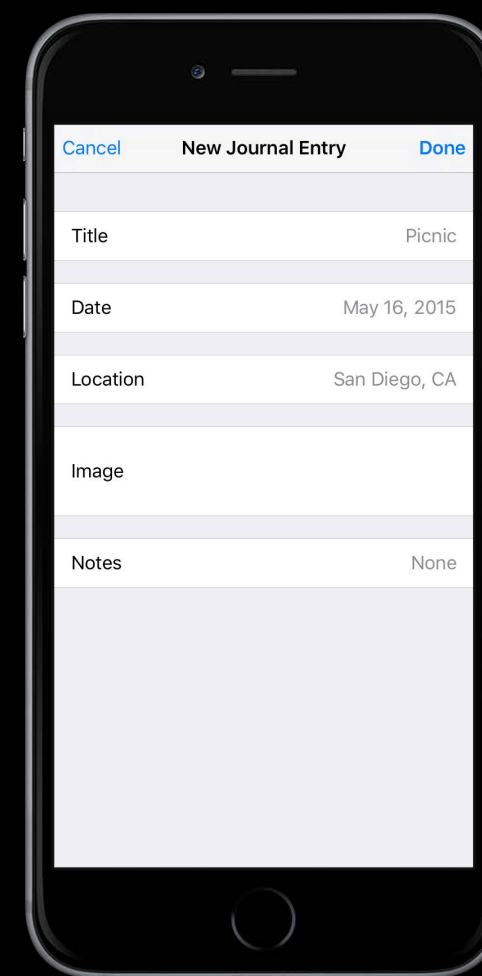
Customizing presentation animations



Segue Subclassing

Customizing presentation animations

User dismisses presentation

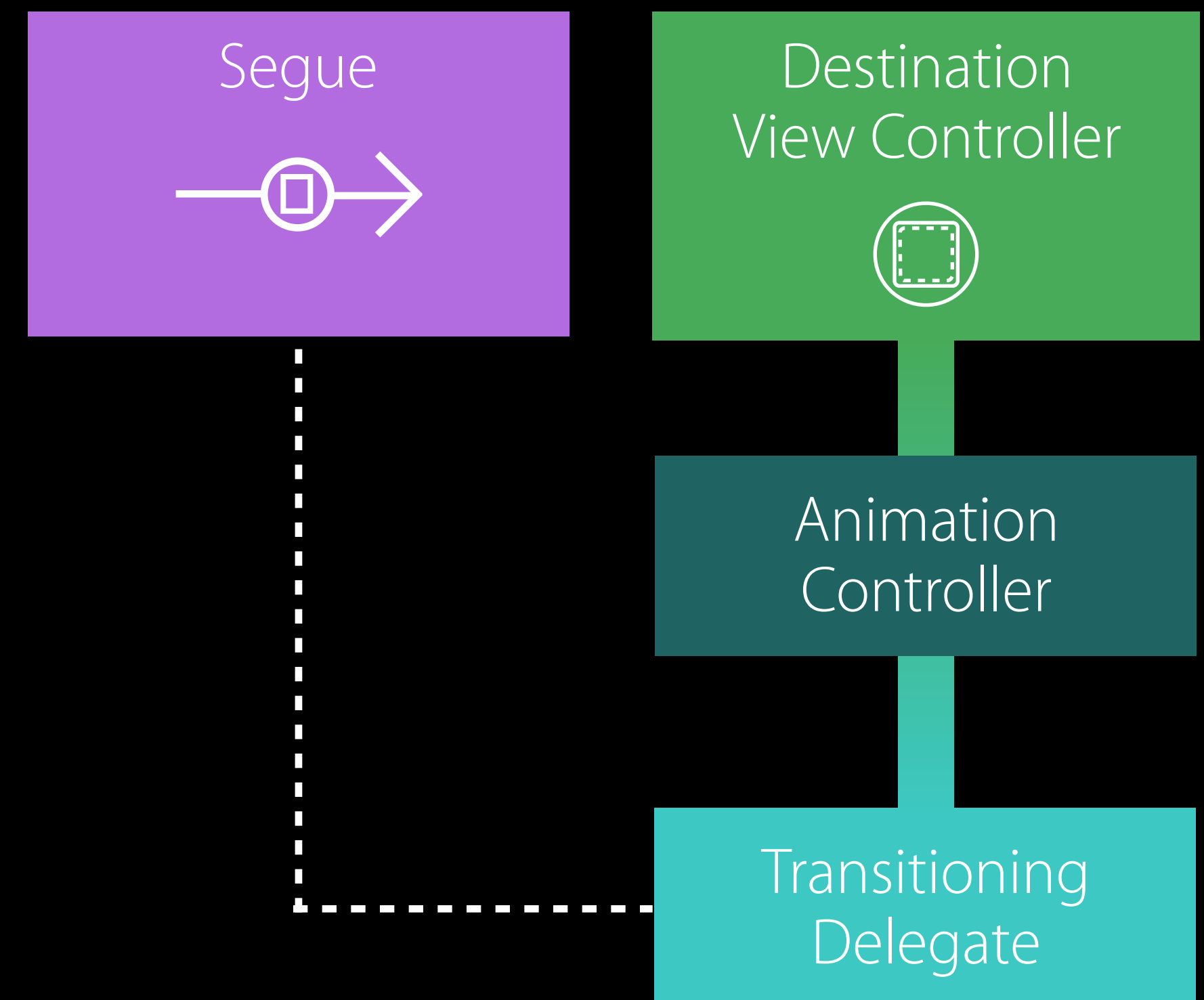
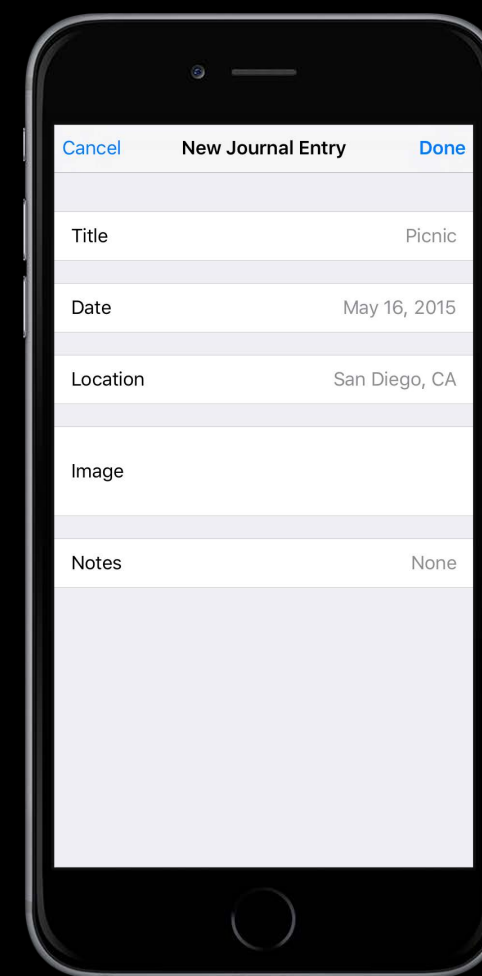


Segue Subclassing

Customizing presentation animations

User dismisses presentation

- Vend animation controller for dismissal

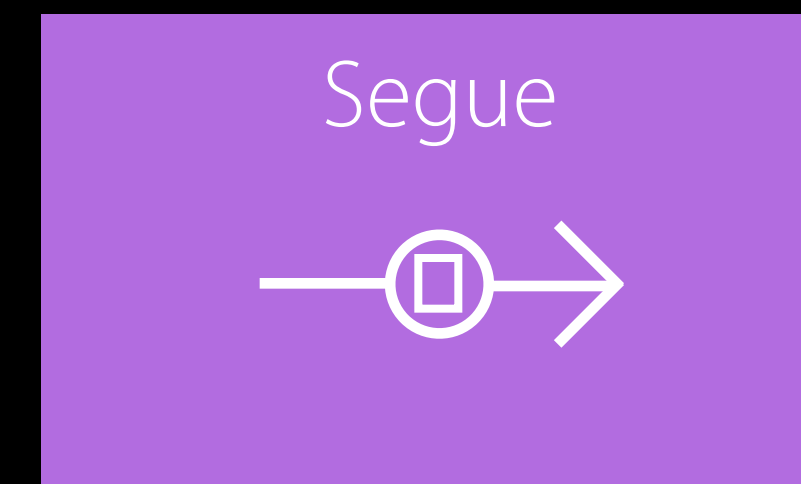
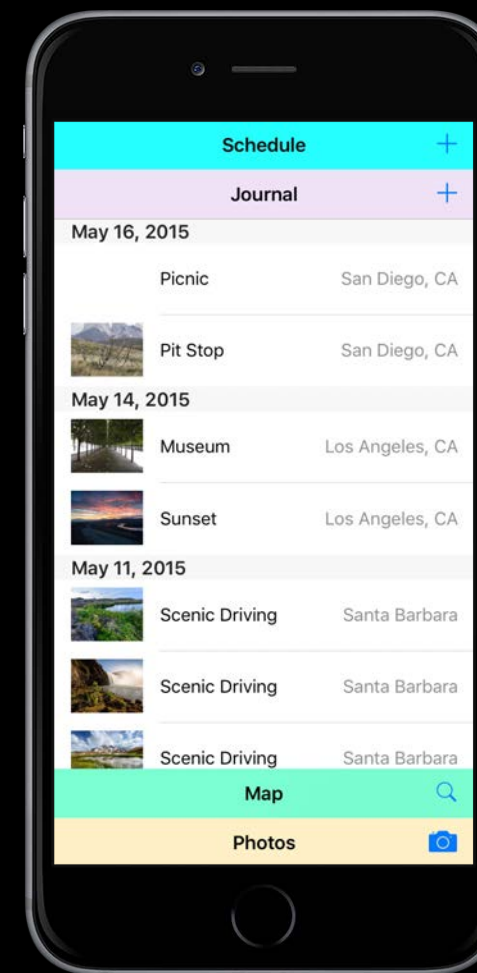


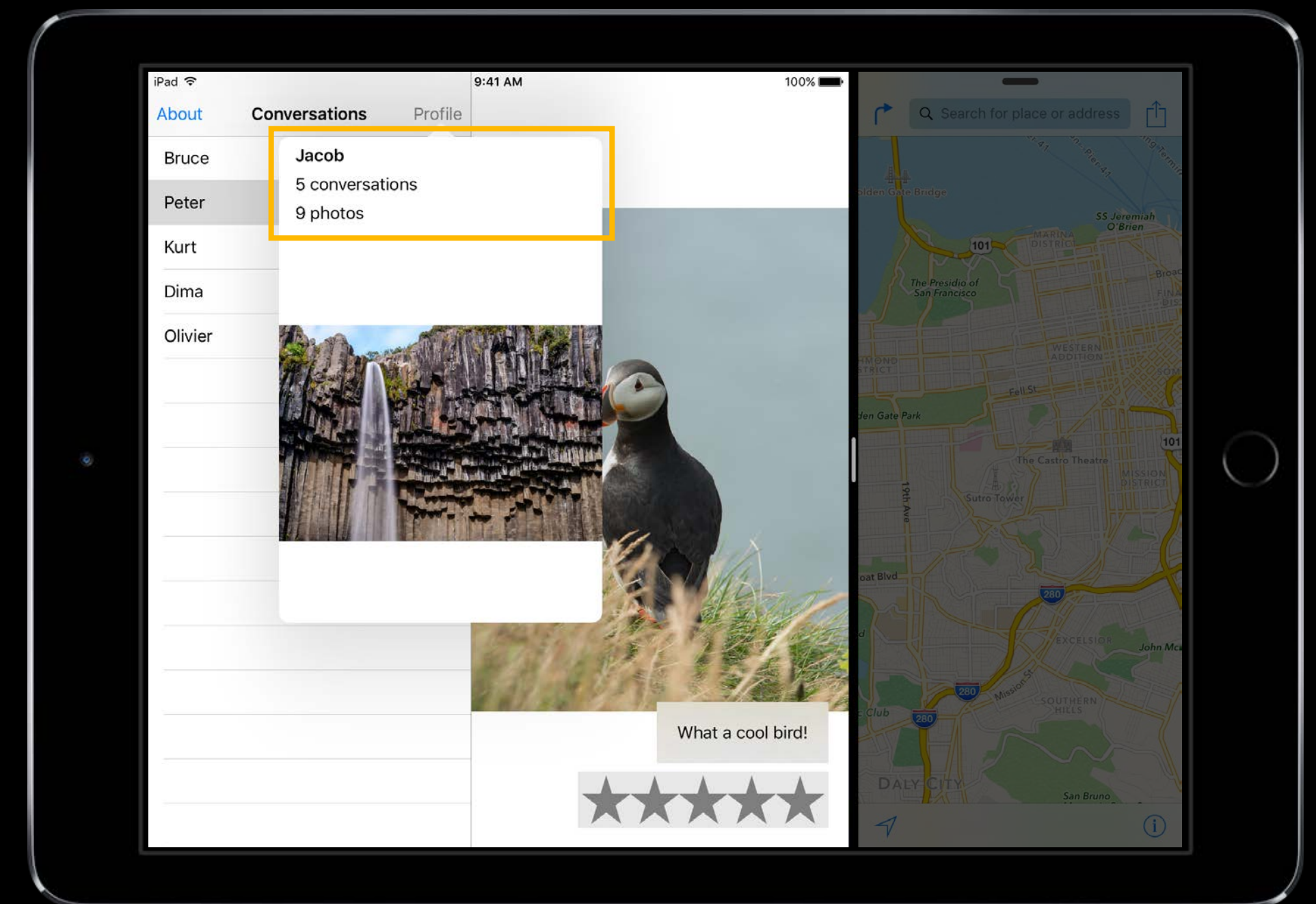
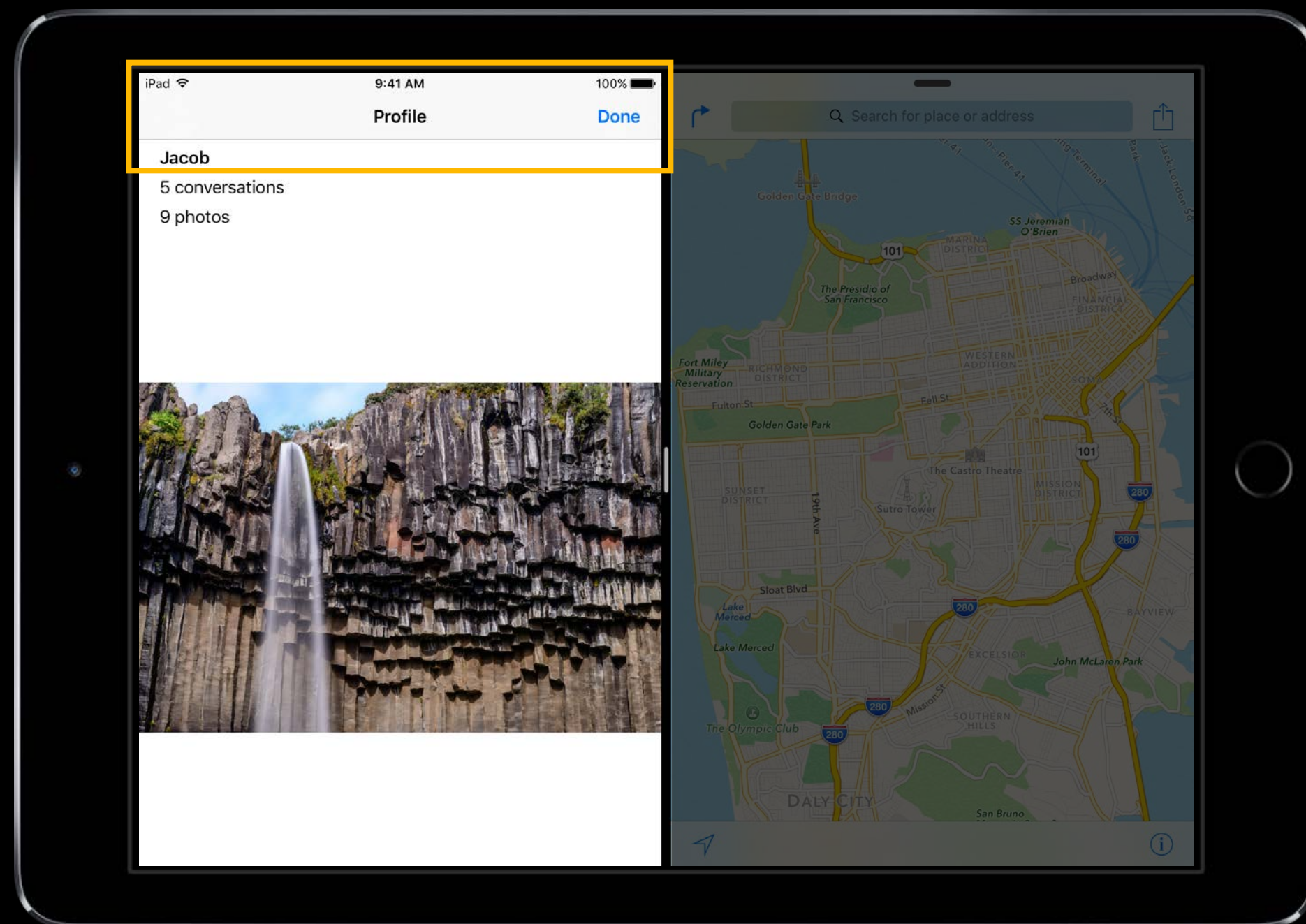
Segue Subclassing

Customizing presentation animations

User dismisses presentation

- Vend animation controller for dismissal
- Animate dismissal of view controller





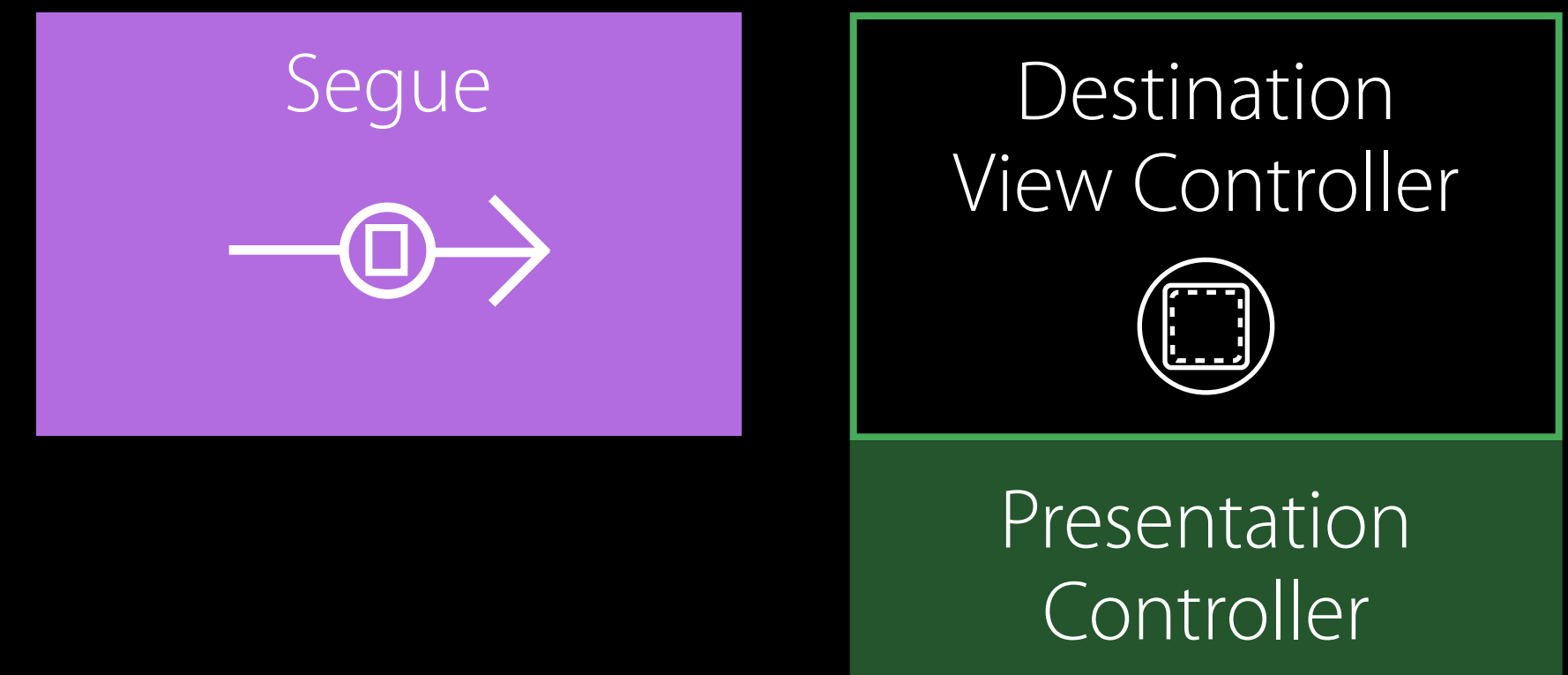
Getting Started with Multitasking on iPad in iOS 9

Presidio

Tuesday 4:30PM

Segue Subclassing

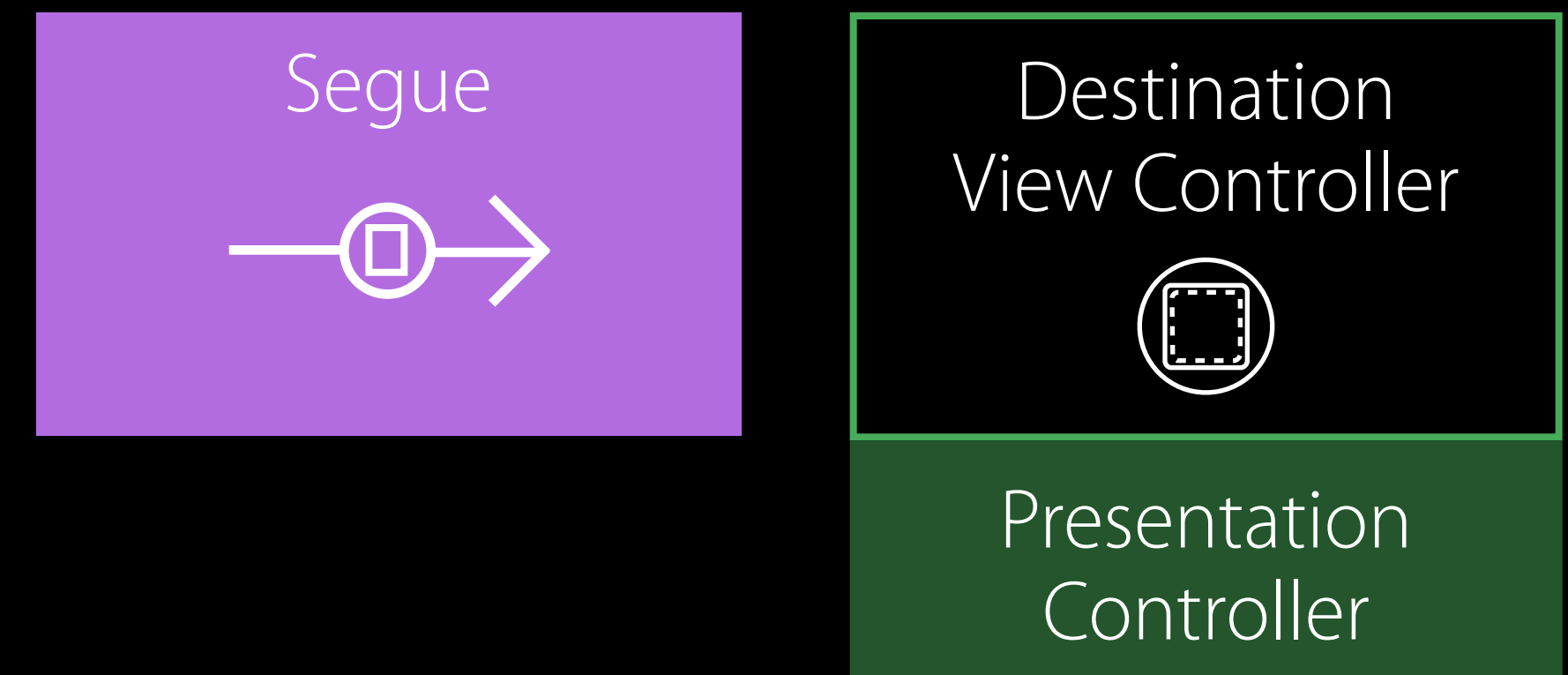
Customizing adaptive presentations



Segue Subclassing

Customizing adaptive presentations

User triggers segue

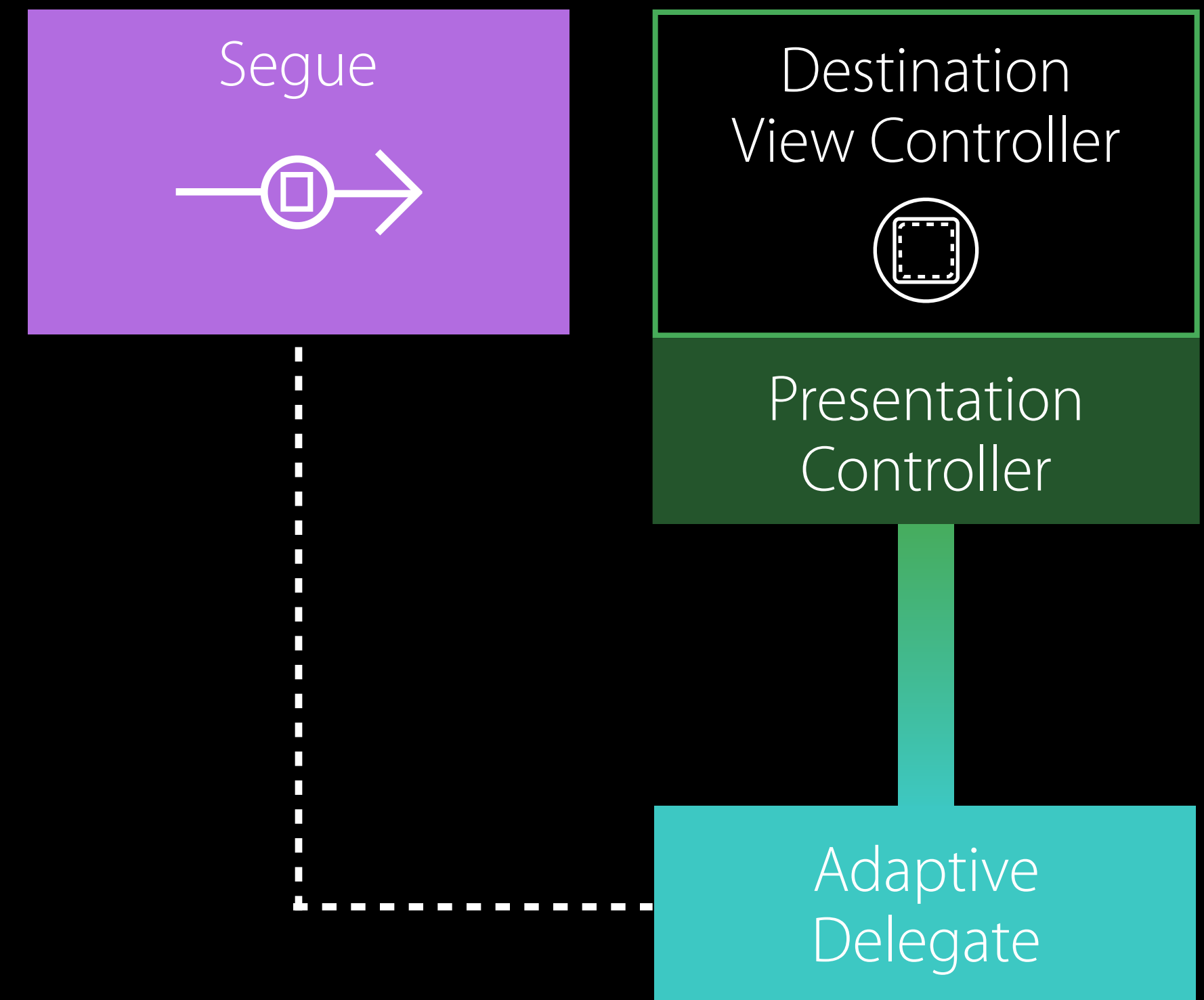


Segue Subclassing

Customizing adaptive presentations

User triggers segue

- Assign delegate to presentation controller

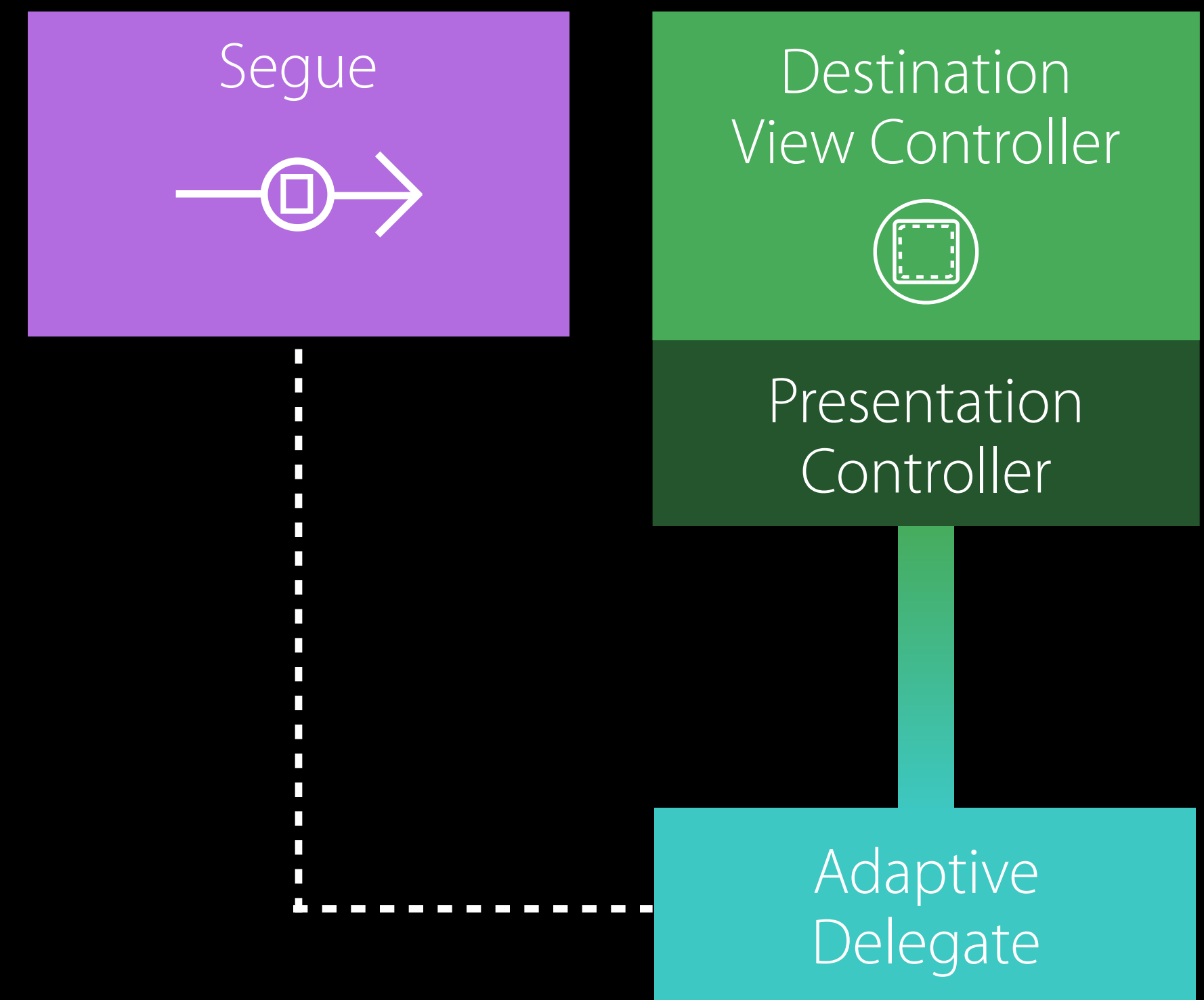


Segue Subclassing

Customizing adaptive presentations

User triggers segue

- Assign delegate to presentation controller
- Call **super.perform()** to perform modal presentation



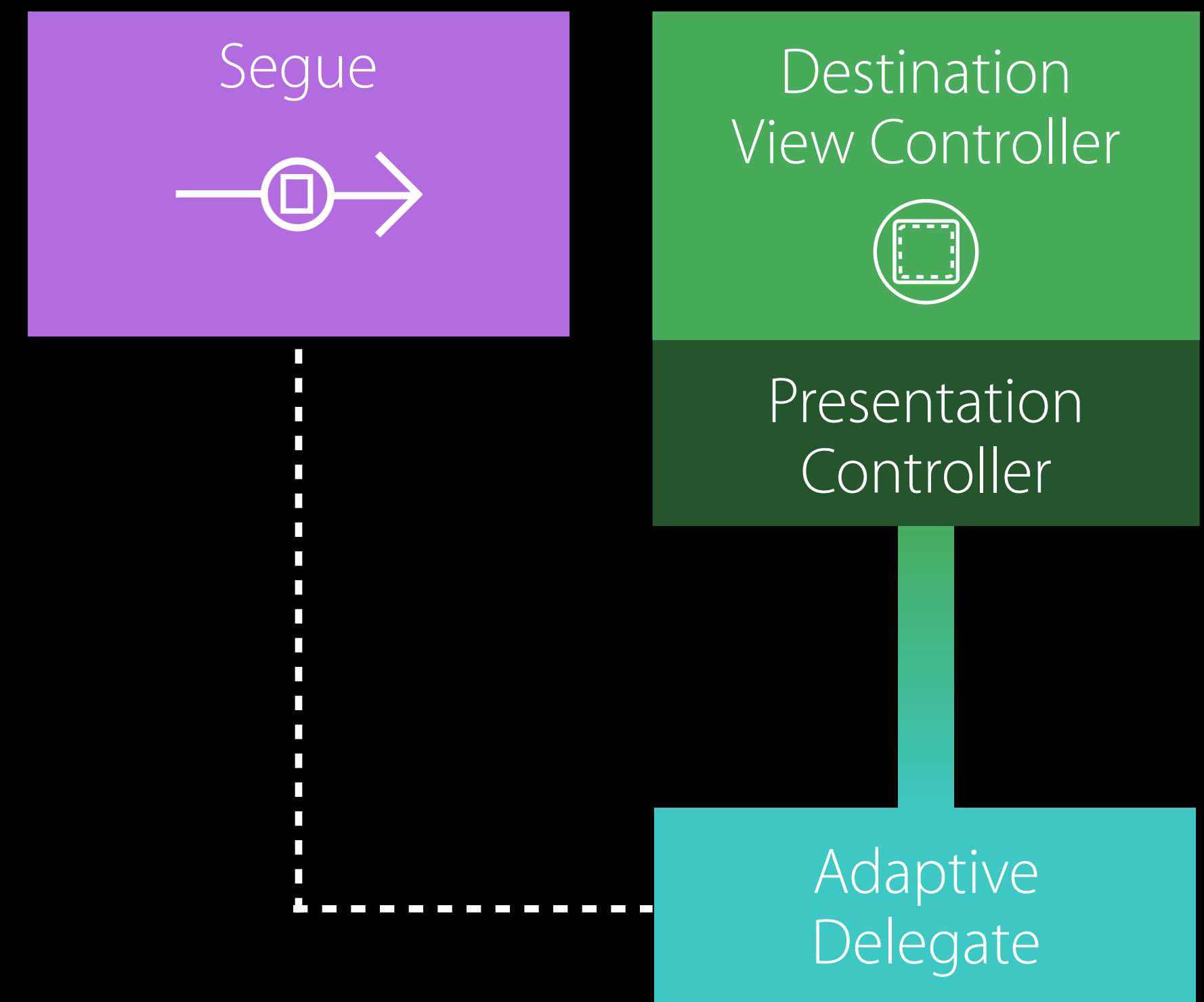
Segue Subclassing

Customizing adaptive presentations

User triggers segue

- Assign delegate to presentation controller
- Call **super.perform()** to perform modal presentation

Size class changes



Segue Subclassing

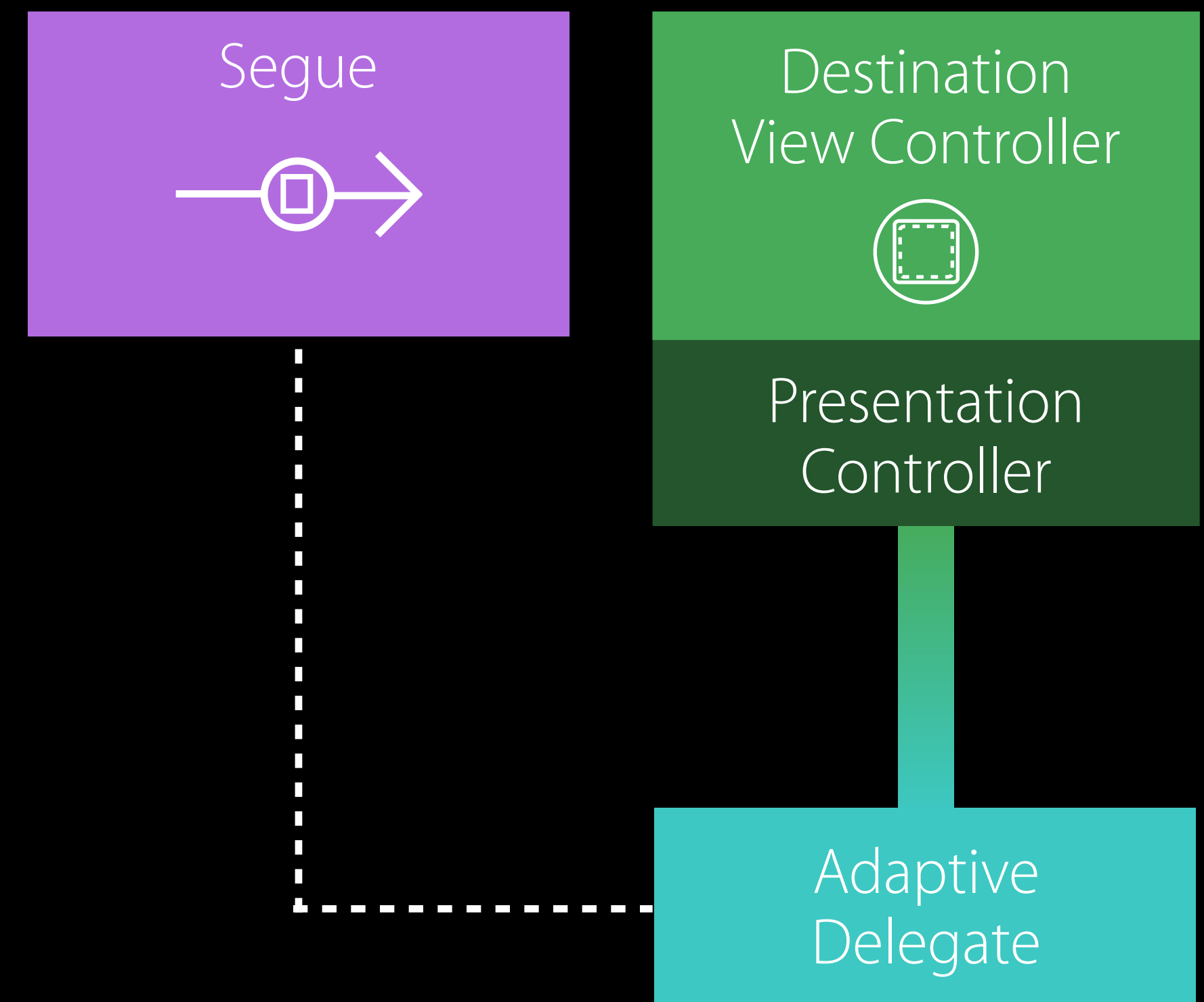
Customizing adaptive presentations

User triggers segue

- Assign delegate to presentation controller
- Call **super.perform()** to perform modal presentation

Size class changes

- Presentation controller informs delegate



Segue Subclassing

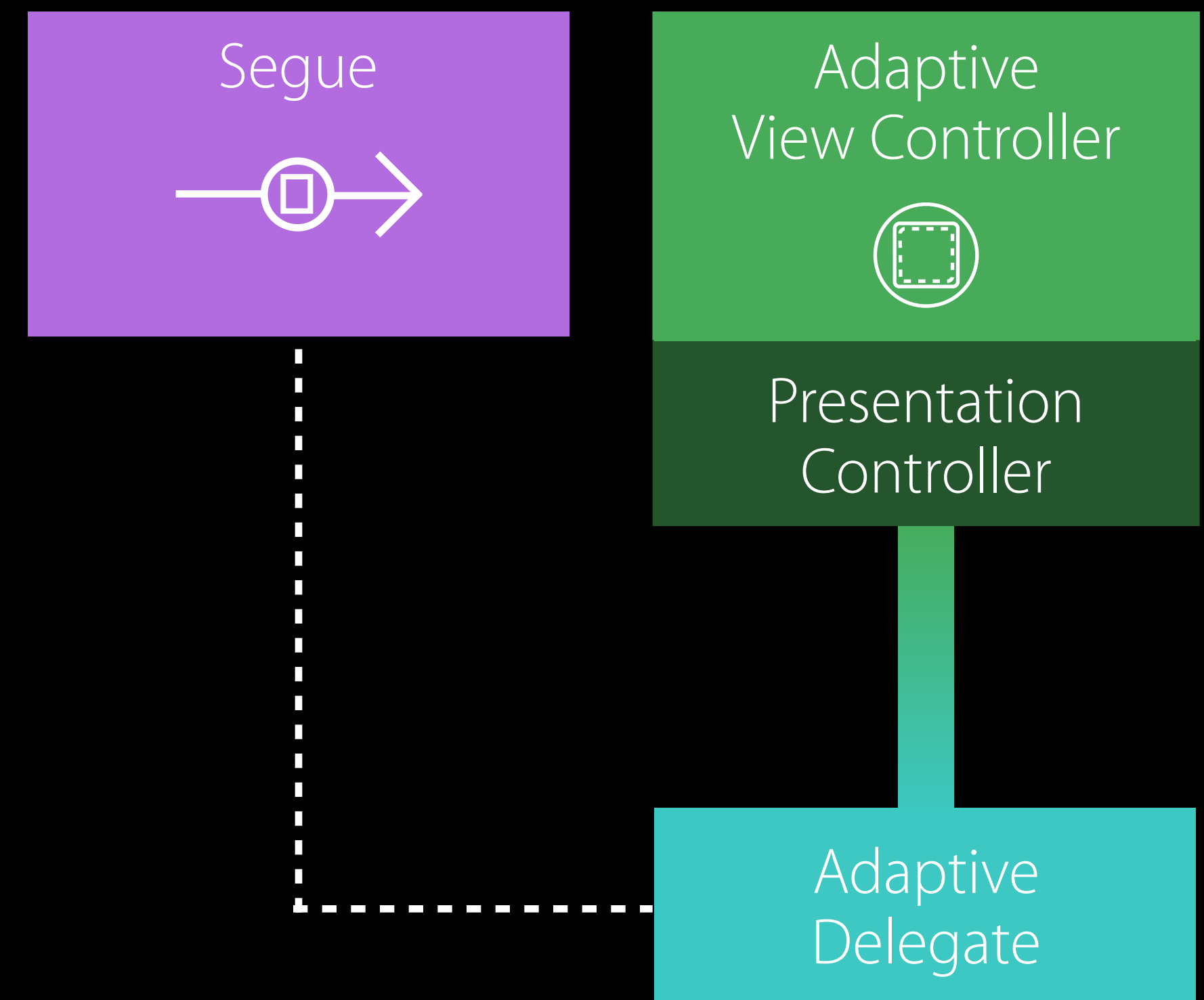
Customizing adaptive presentations

User triggers segue

- Assign delegate to presentation controller
- Call **super.perform()** to perform modal presentation

Size class changes

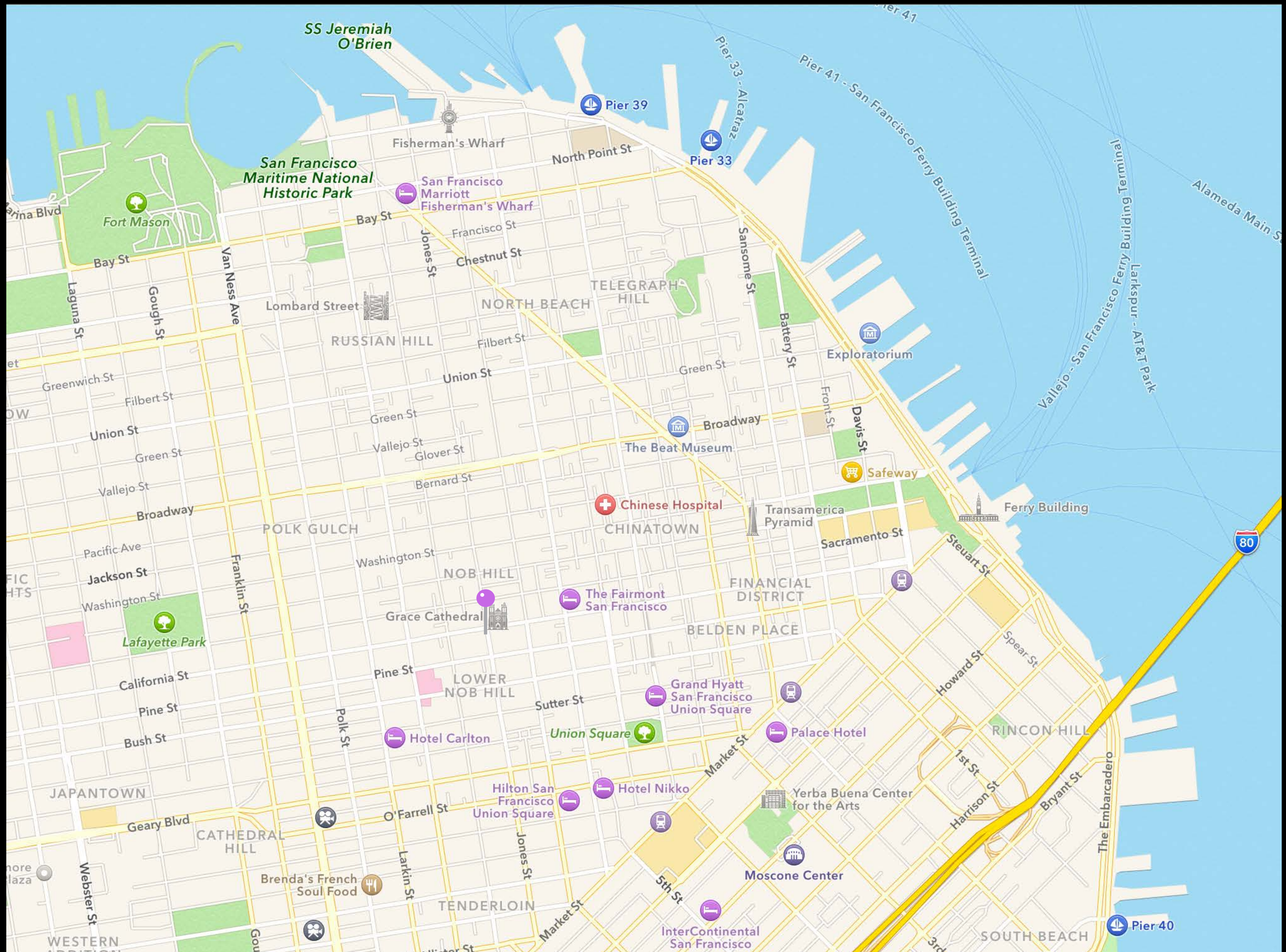
- Presentation controller informs delegate
- Delegate vends new view controller

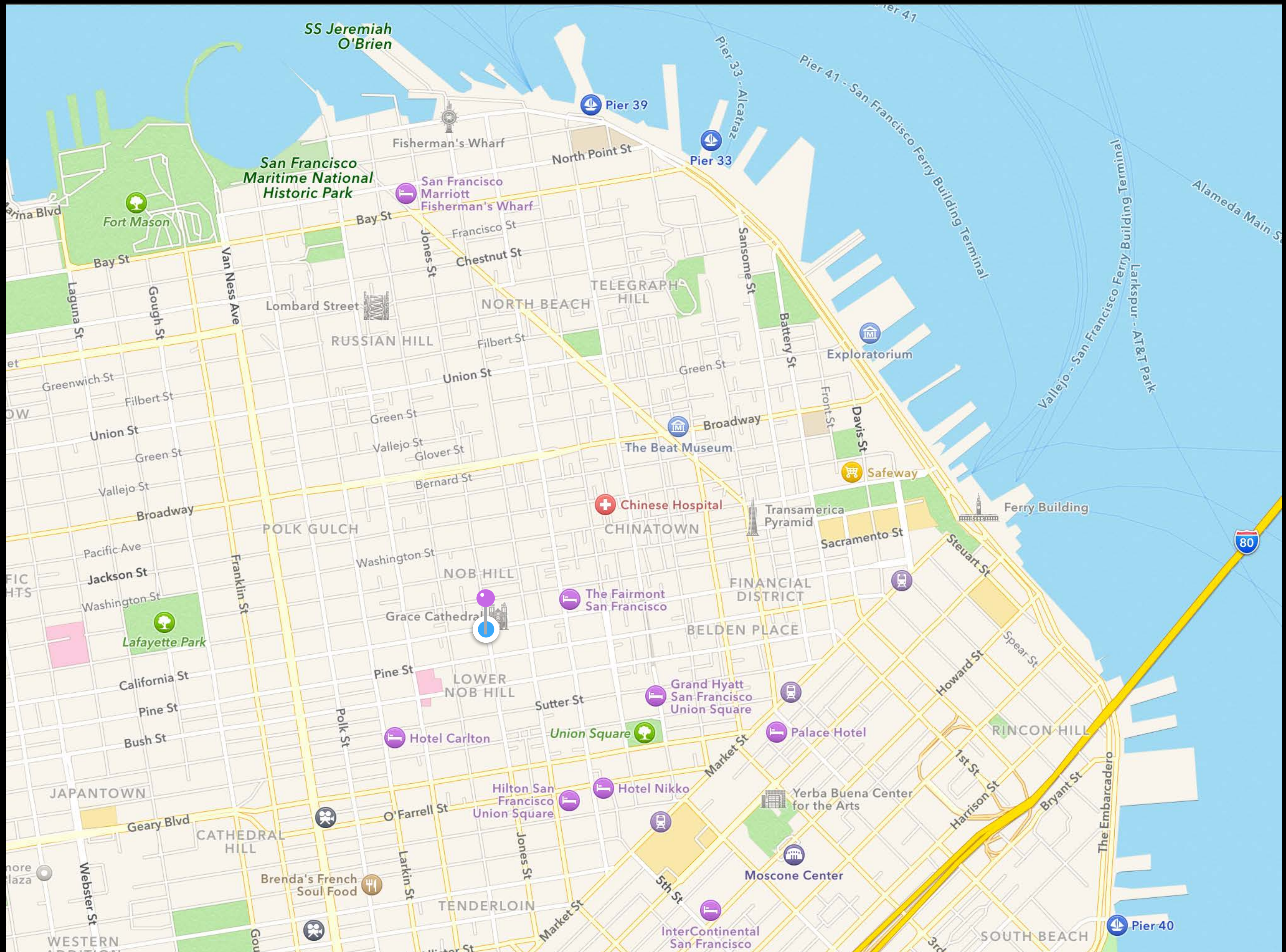


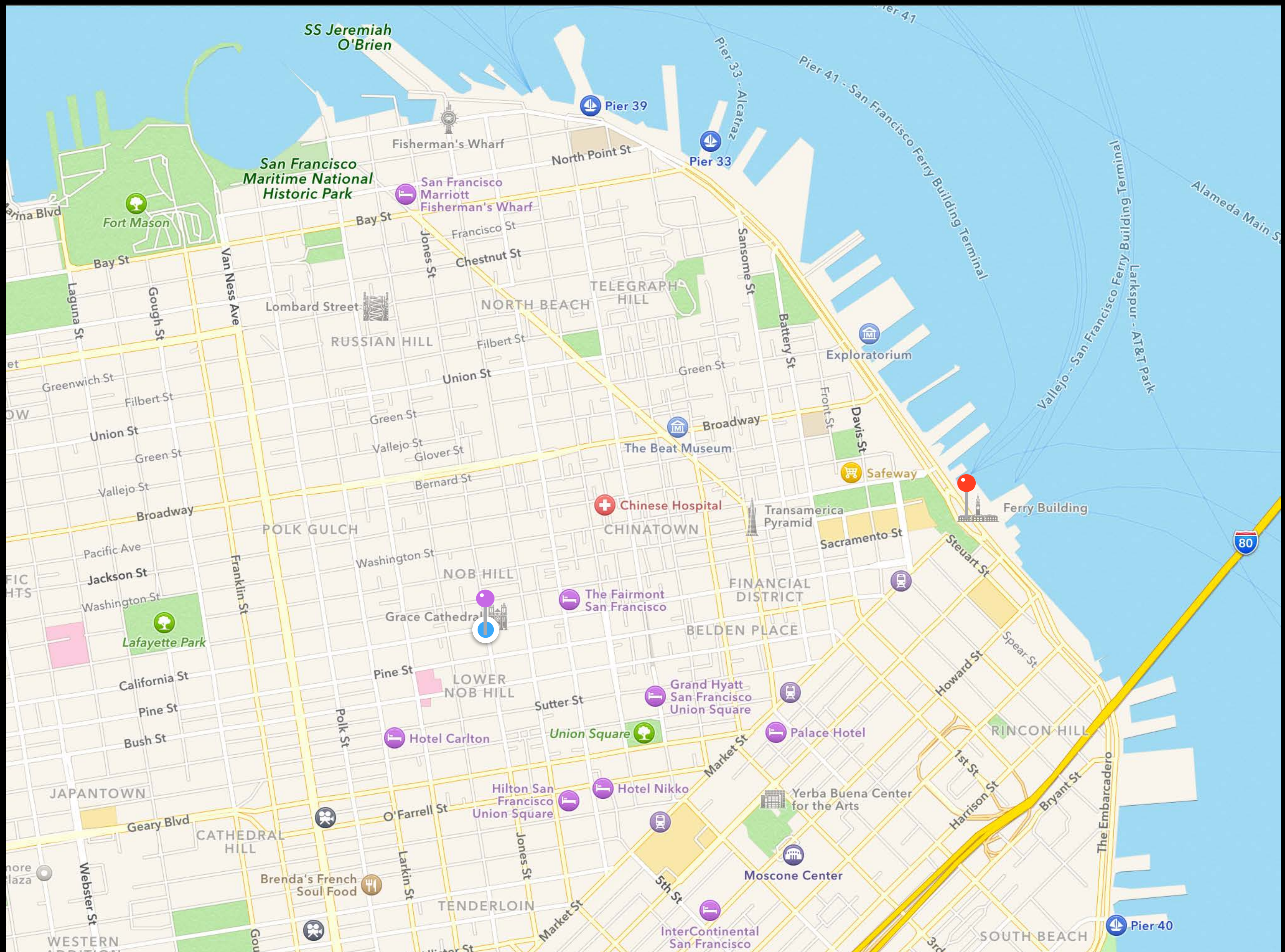
Demo

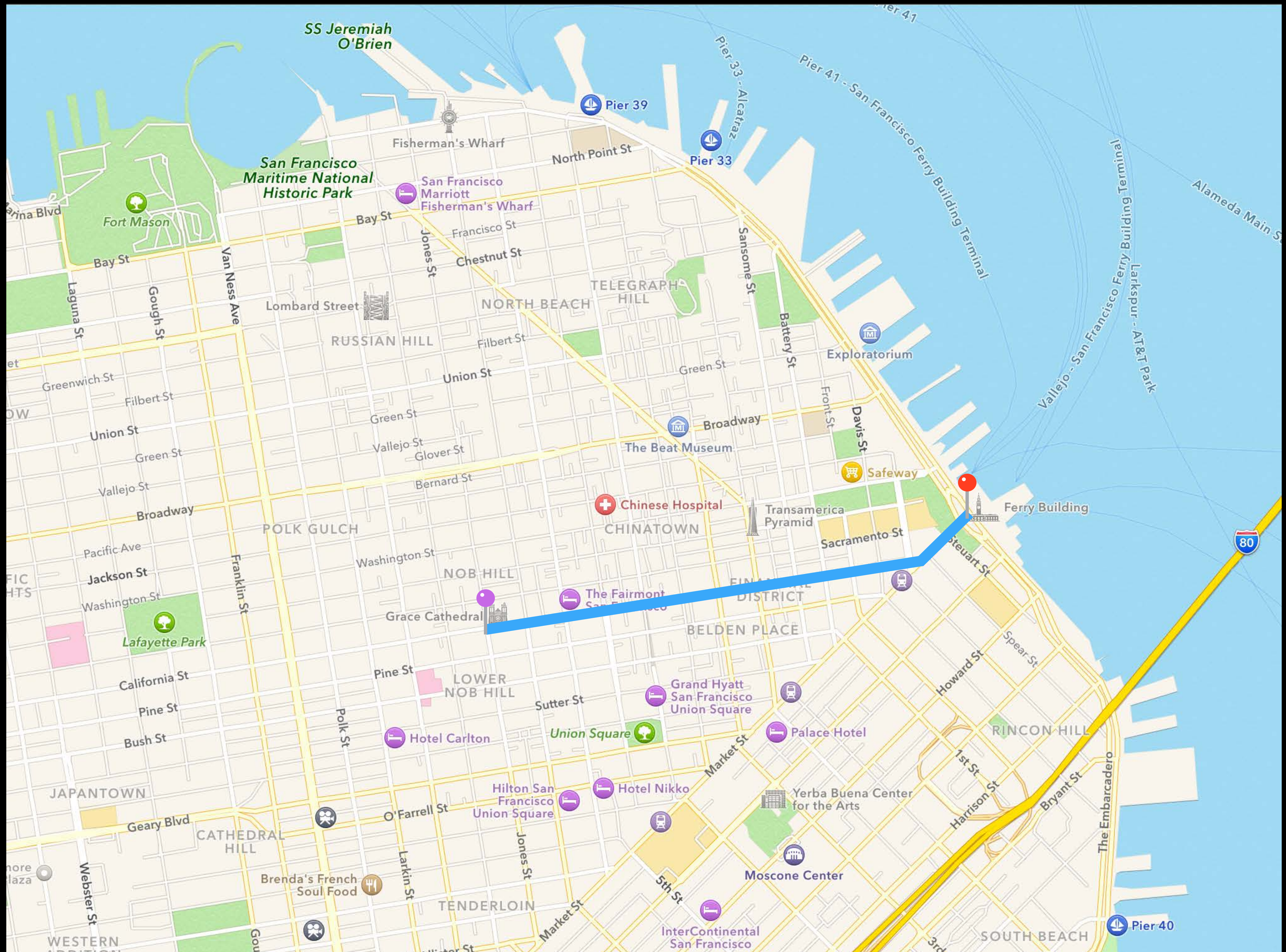
Customizing standard segues

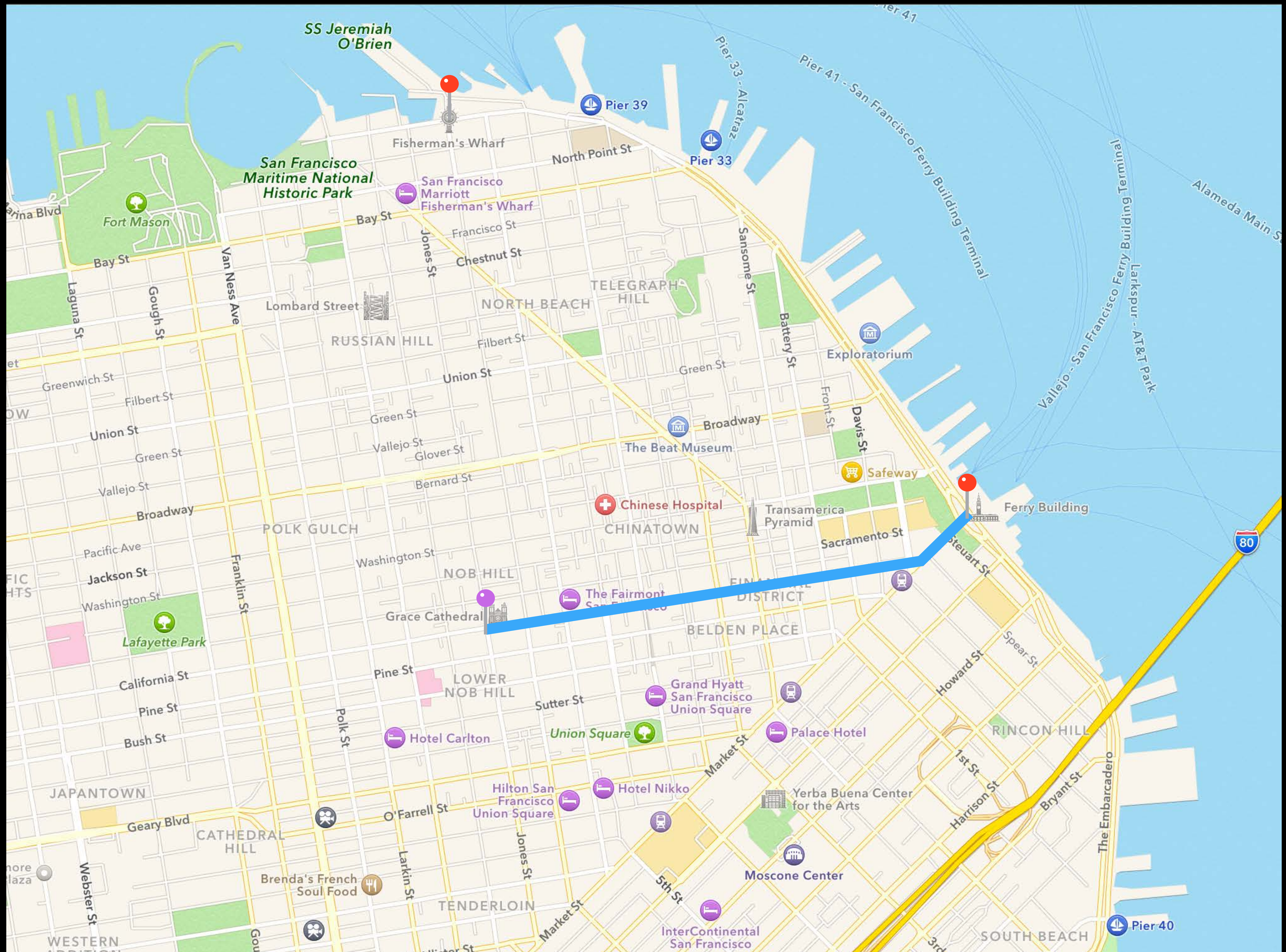
Unwind Segues and Custom Containers

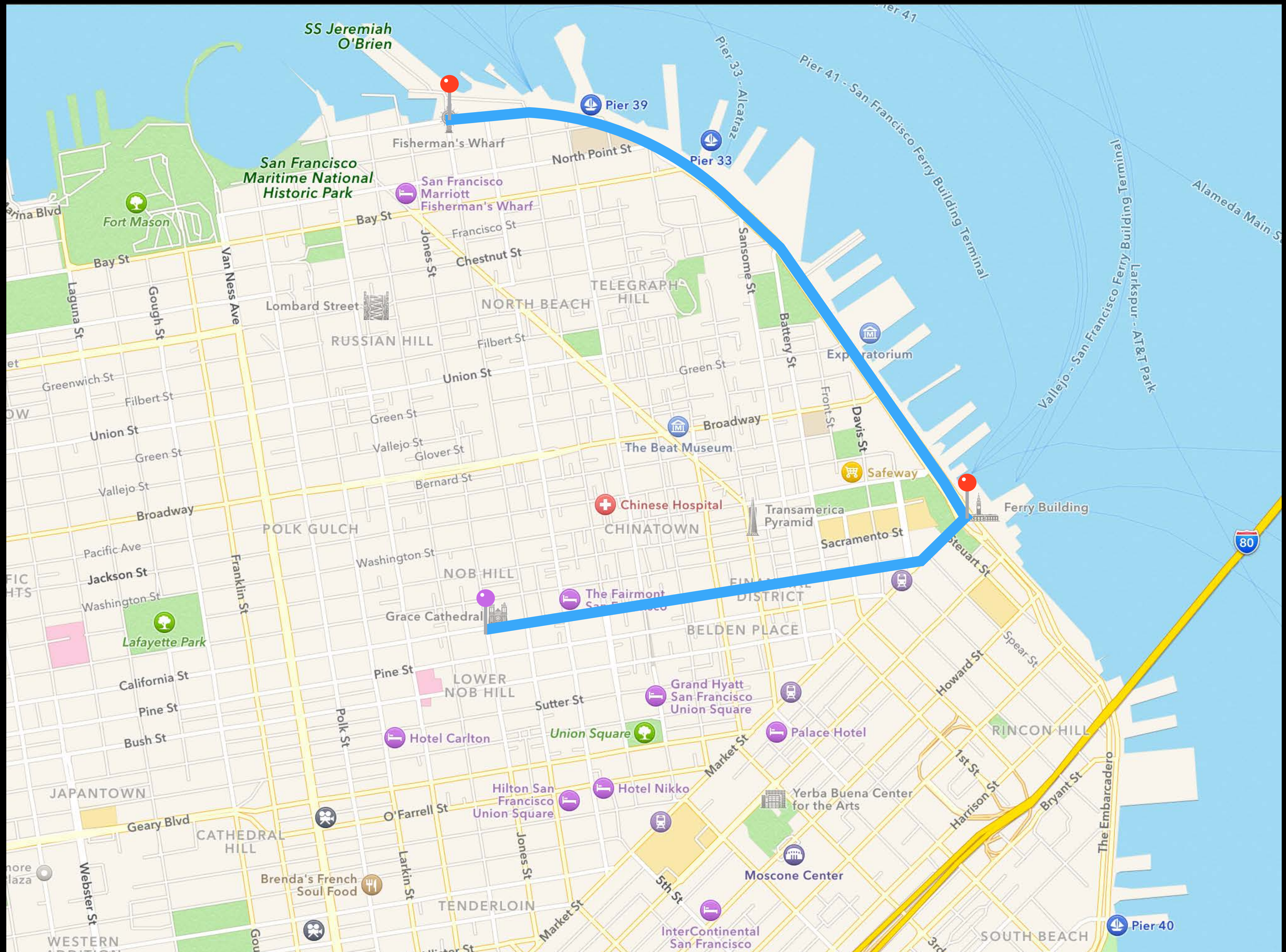


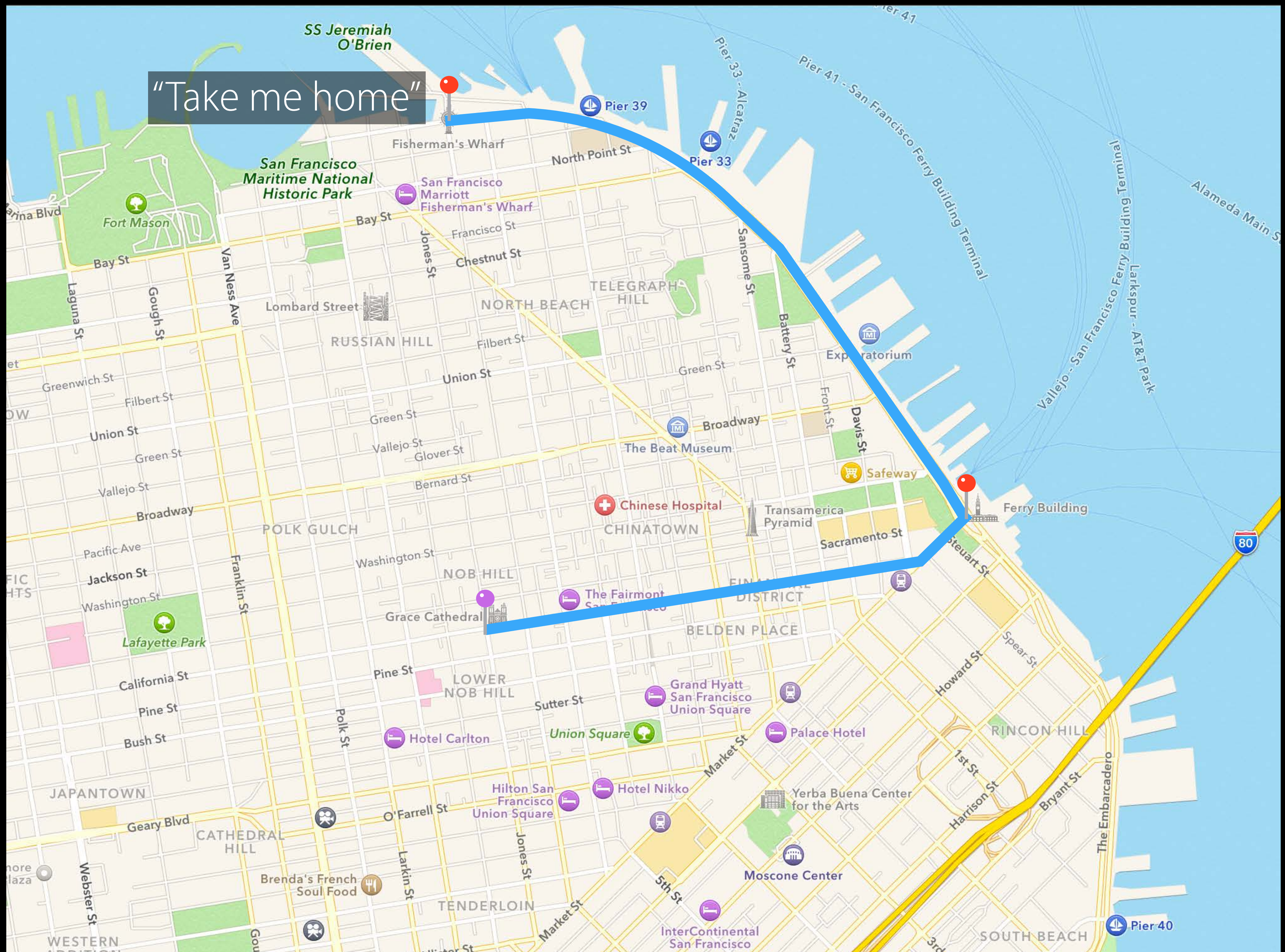












"Take me home"

SS Jeremiah
O'Brien

San Francisco
Maritime National
Historic Park

San Francisco
Marriott
Fisherman's Wharf

TELEGRAPH
HILL

NORTH BEACH

RUSSIAN HILL

POLK GULCH

Chinese Hospital
CHINATOWN

NOB HILL

FINANCIAL DISTRICT

BELDEN PLACE

LOWER
NOB HILL

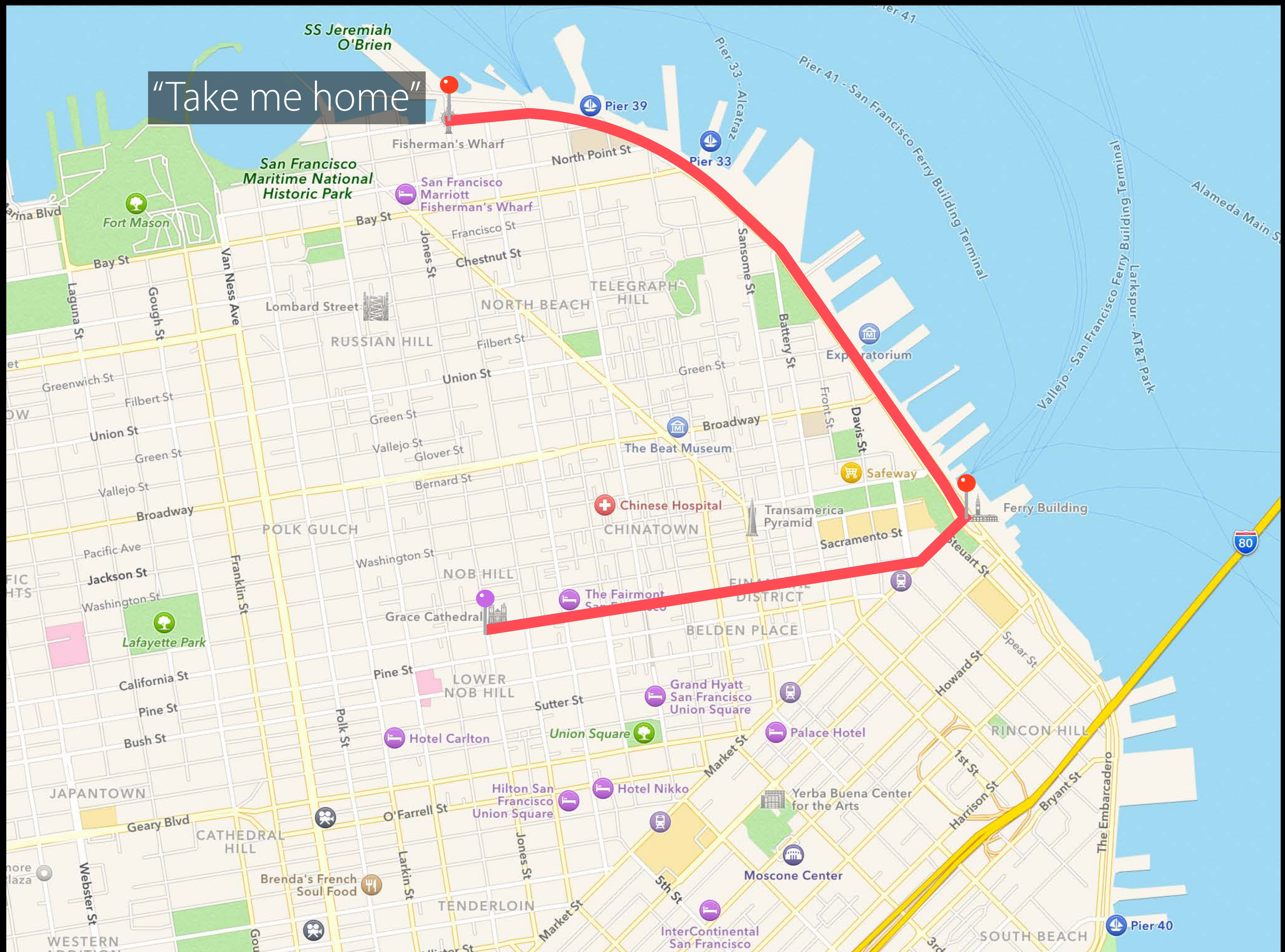
RINCON HILL

JAPANTOWN

CATHEDRAL HILL

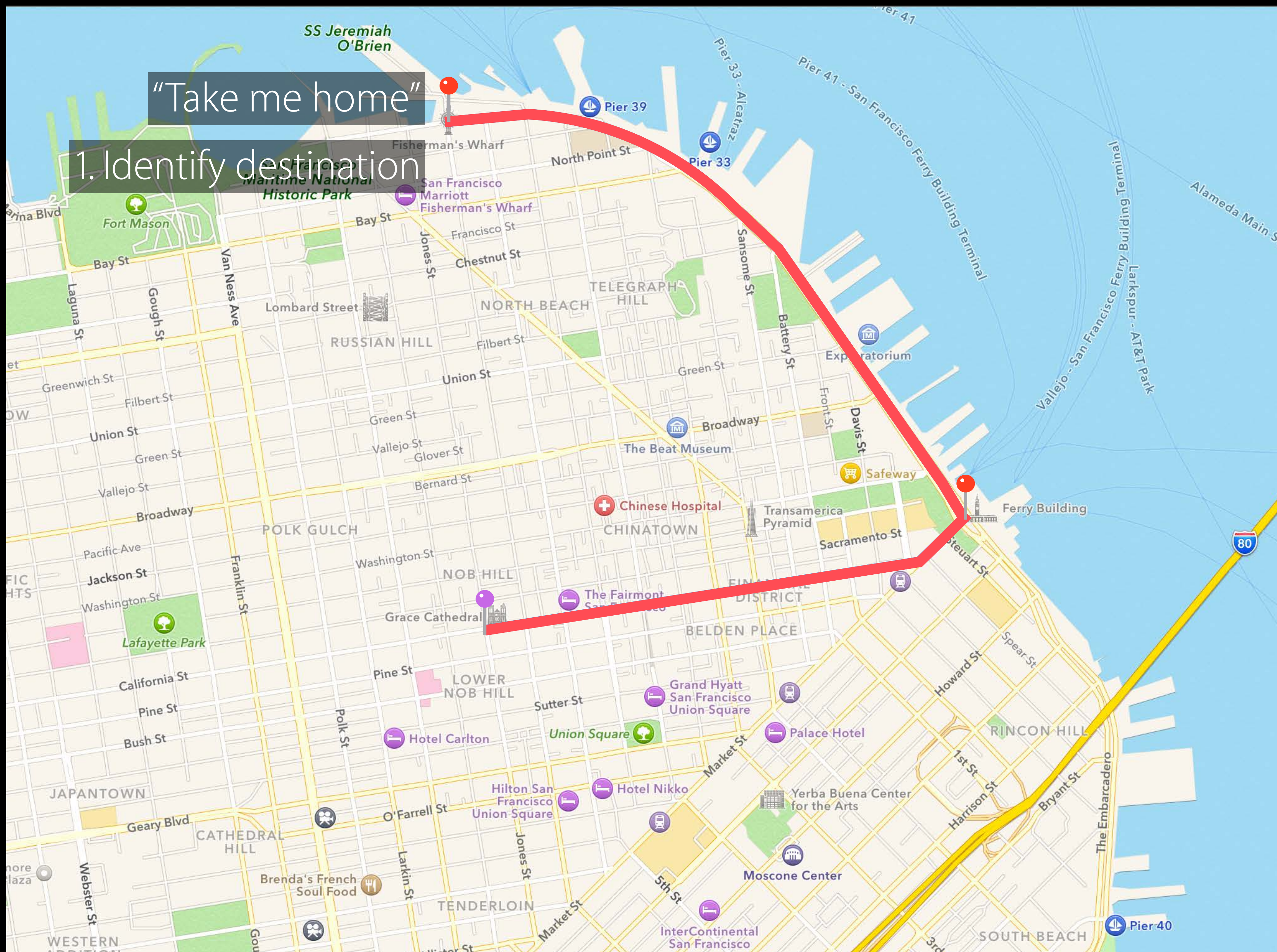
TENDERLOIN

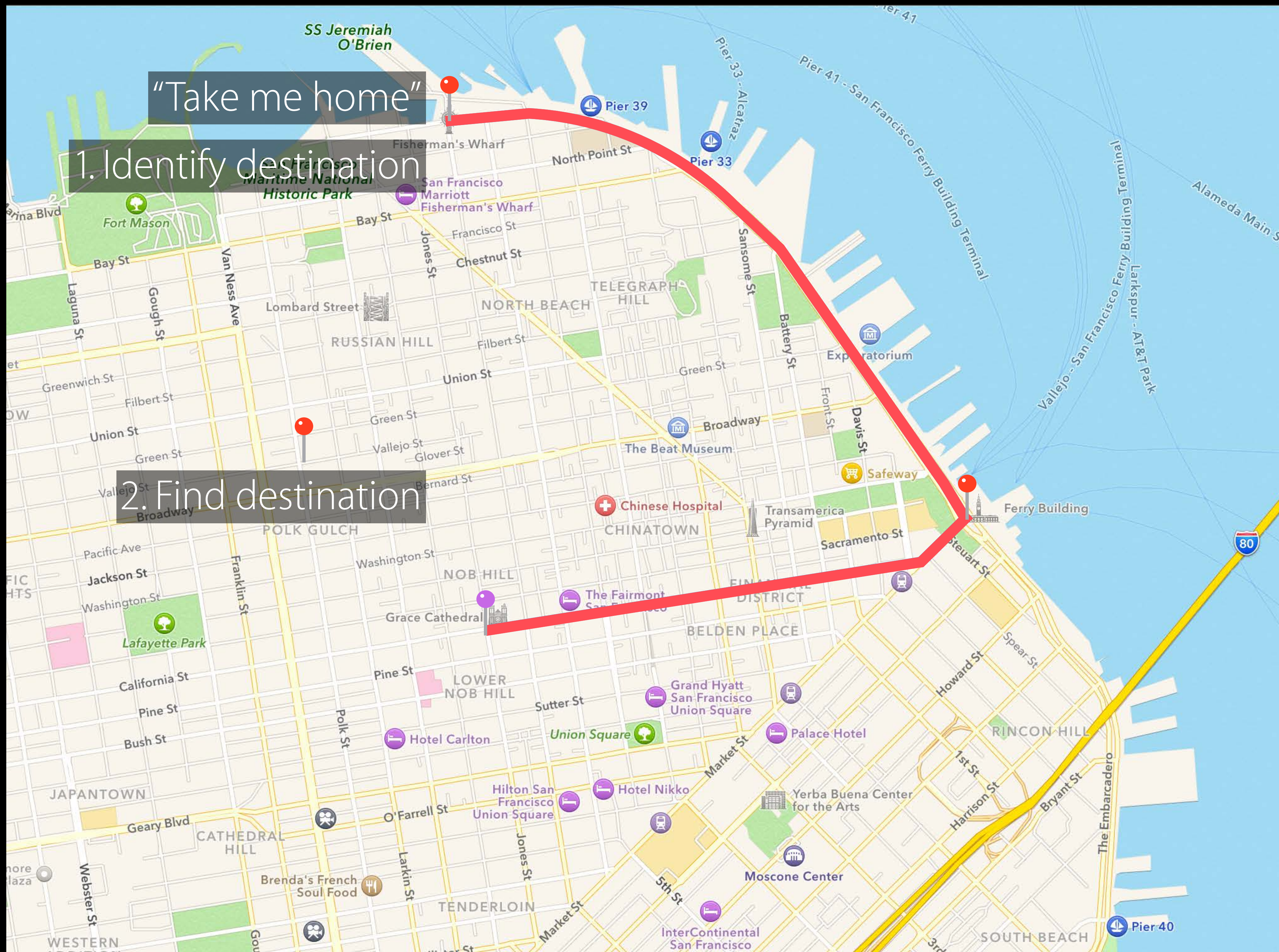
SOUTH BEACH

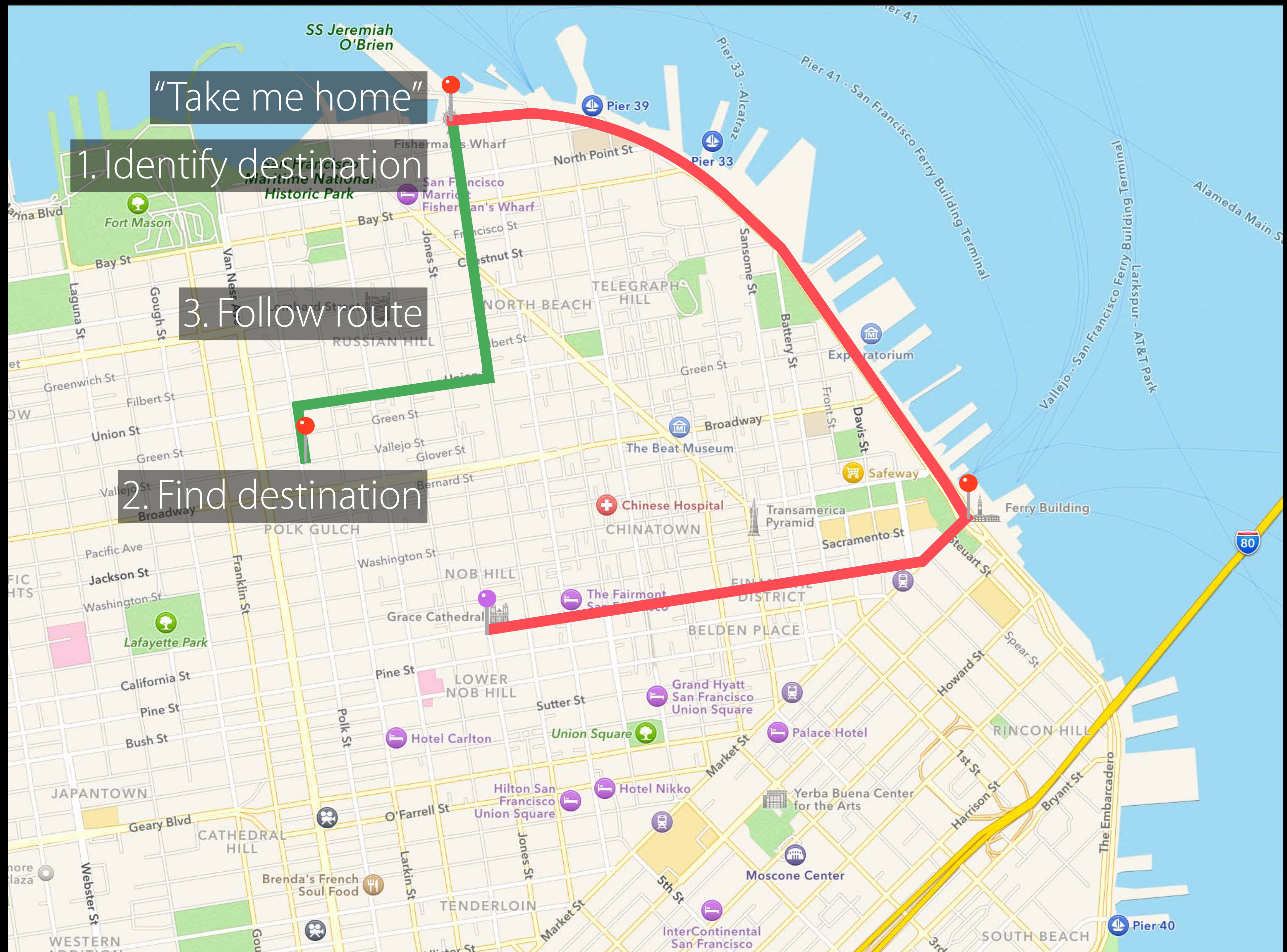


"Take me home"

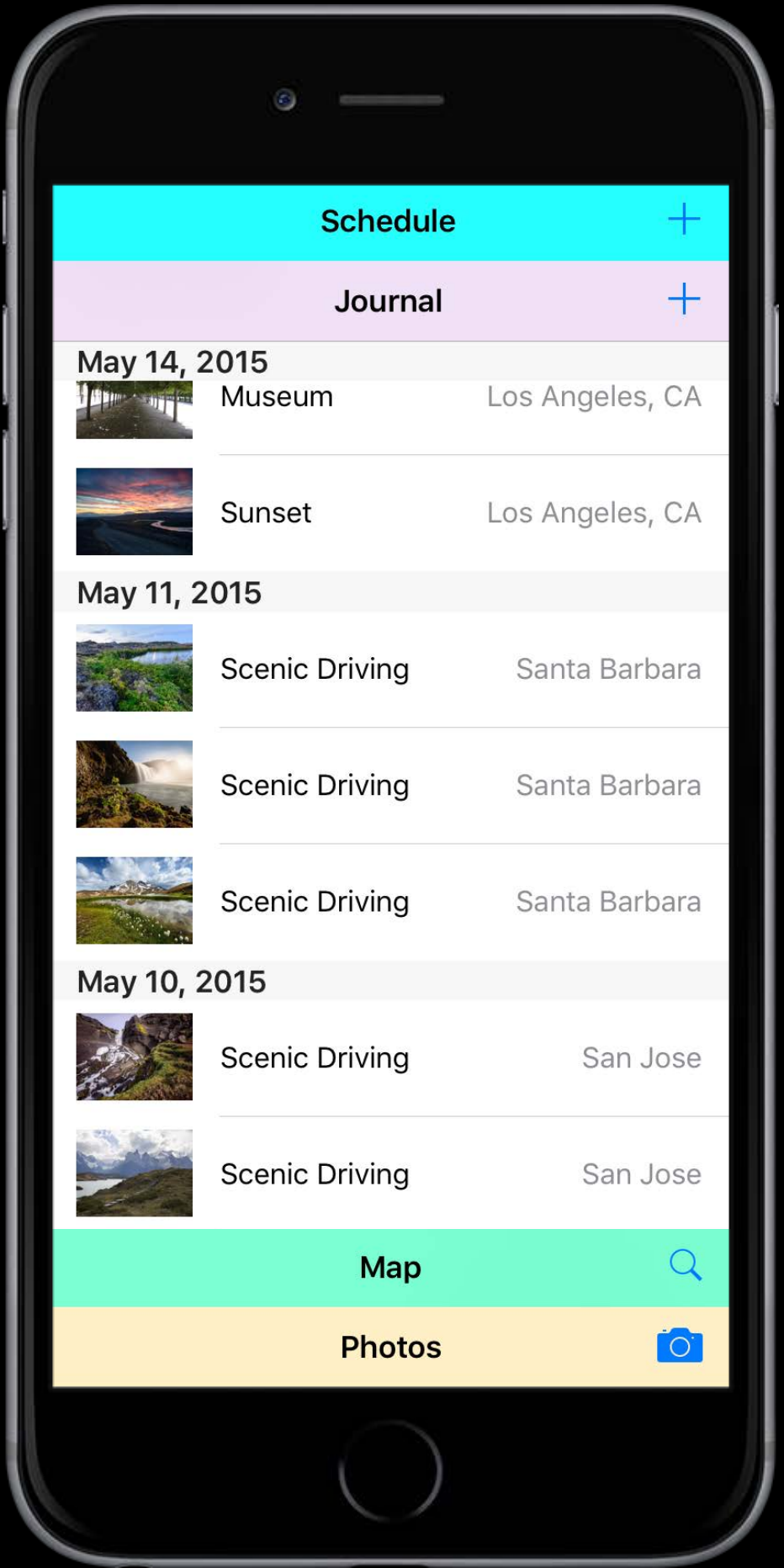
1. Identify destination



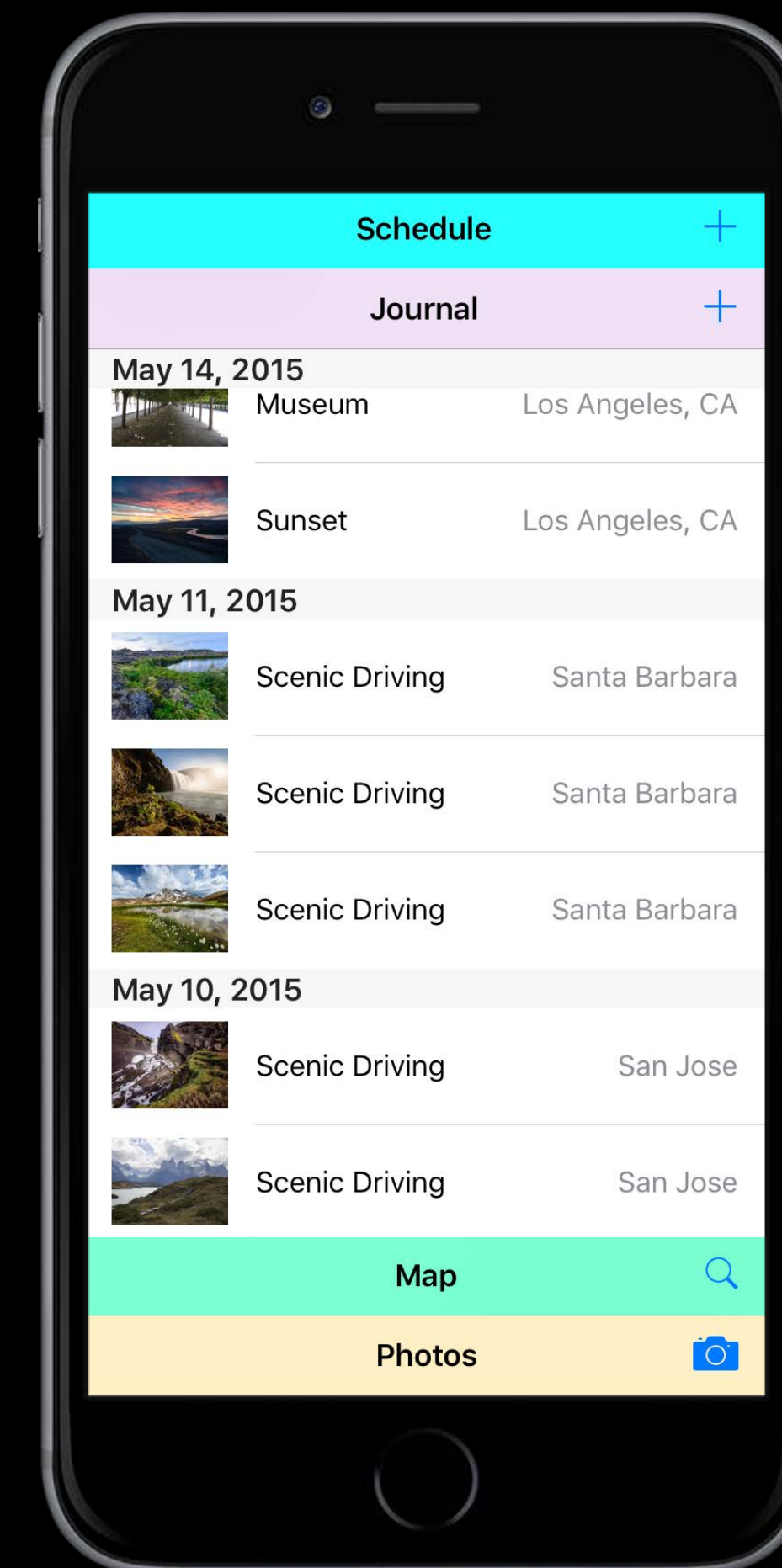
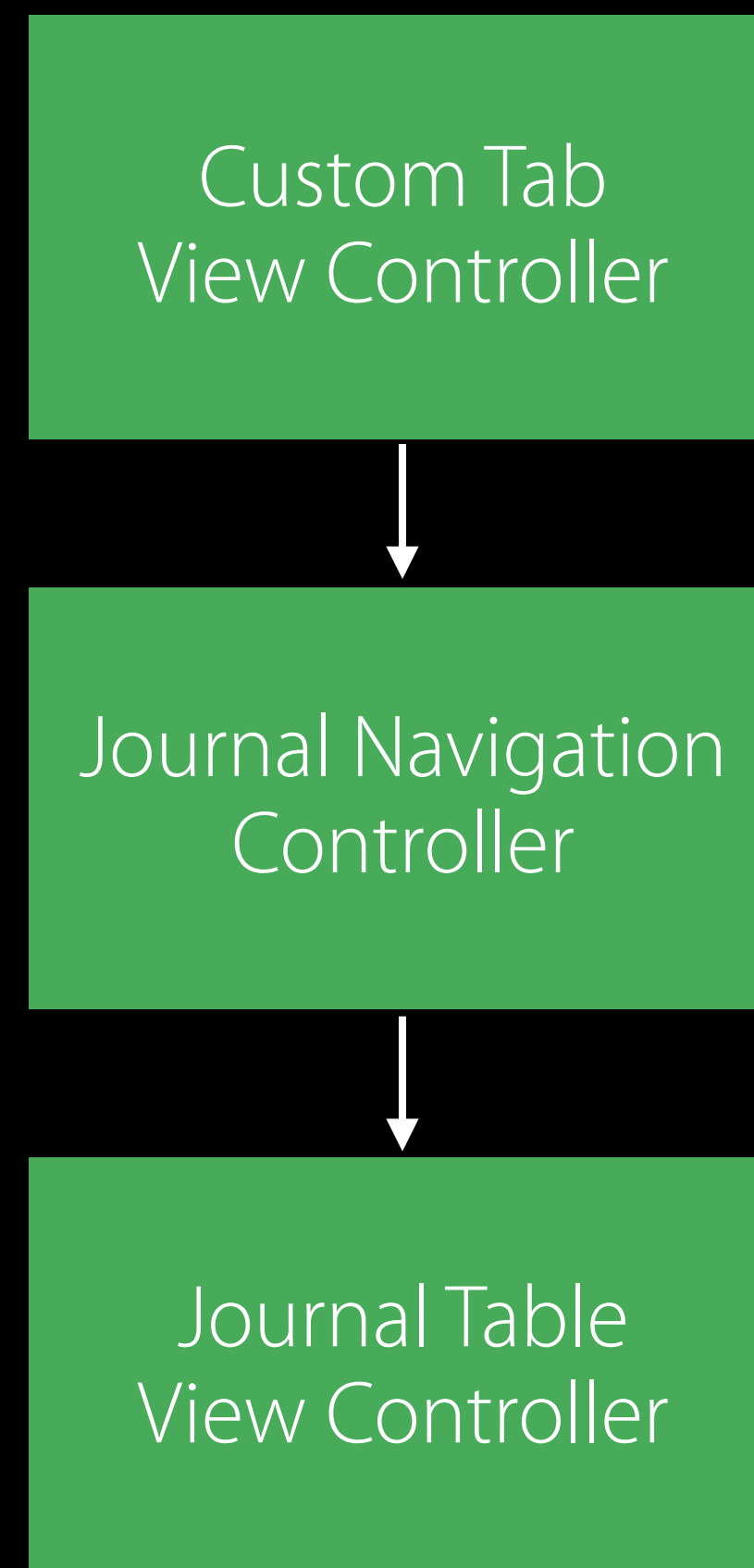




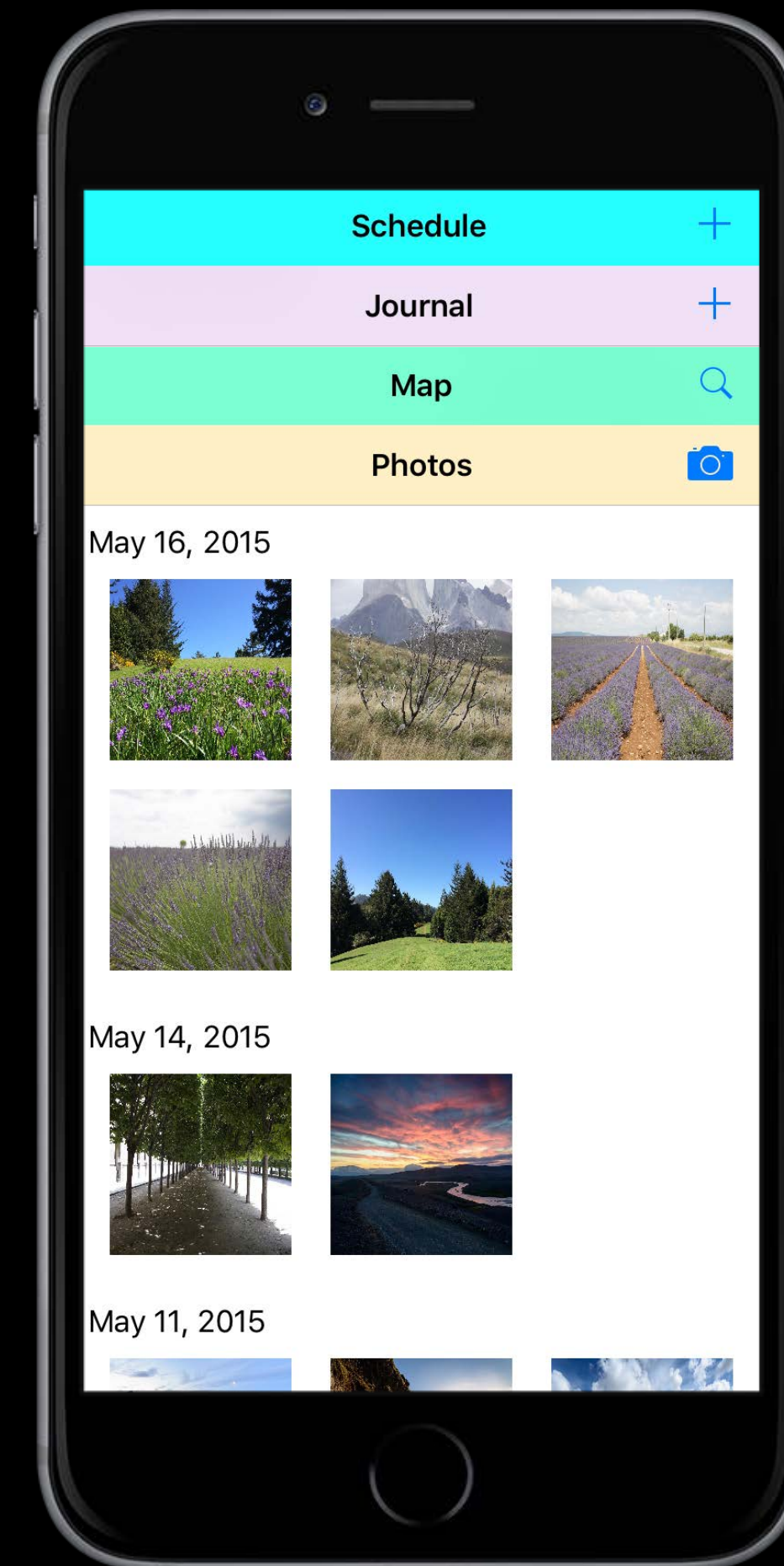
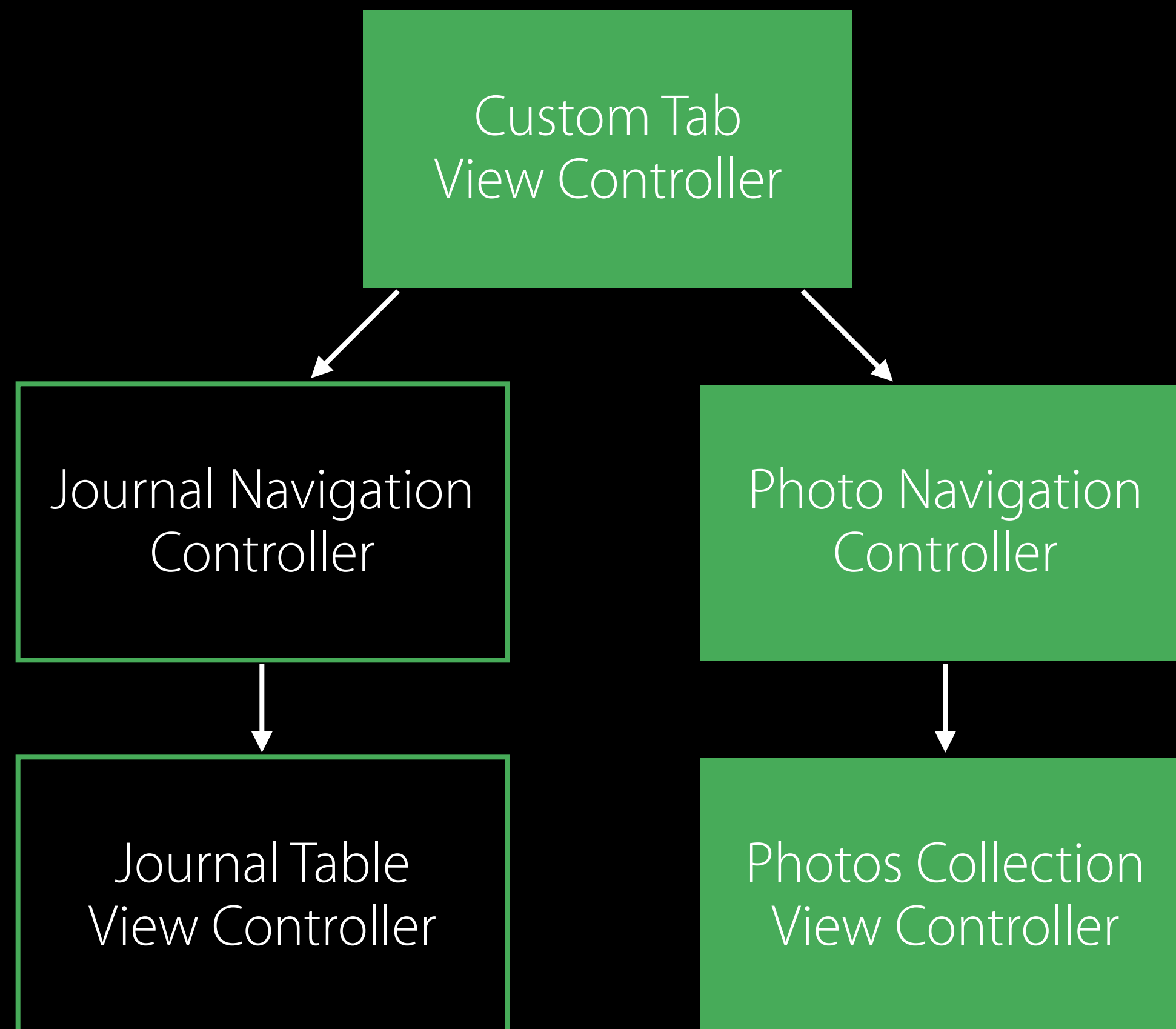
Unwind Segues



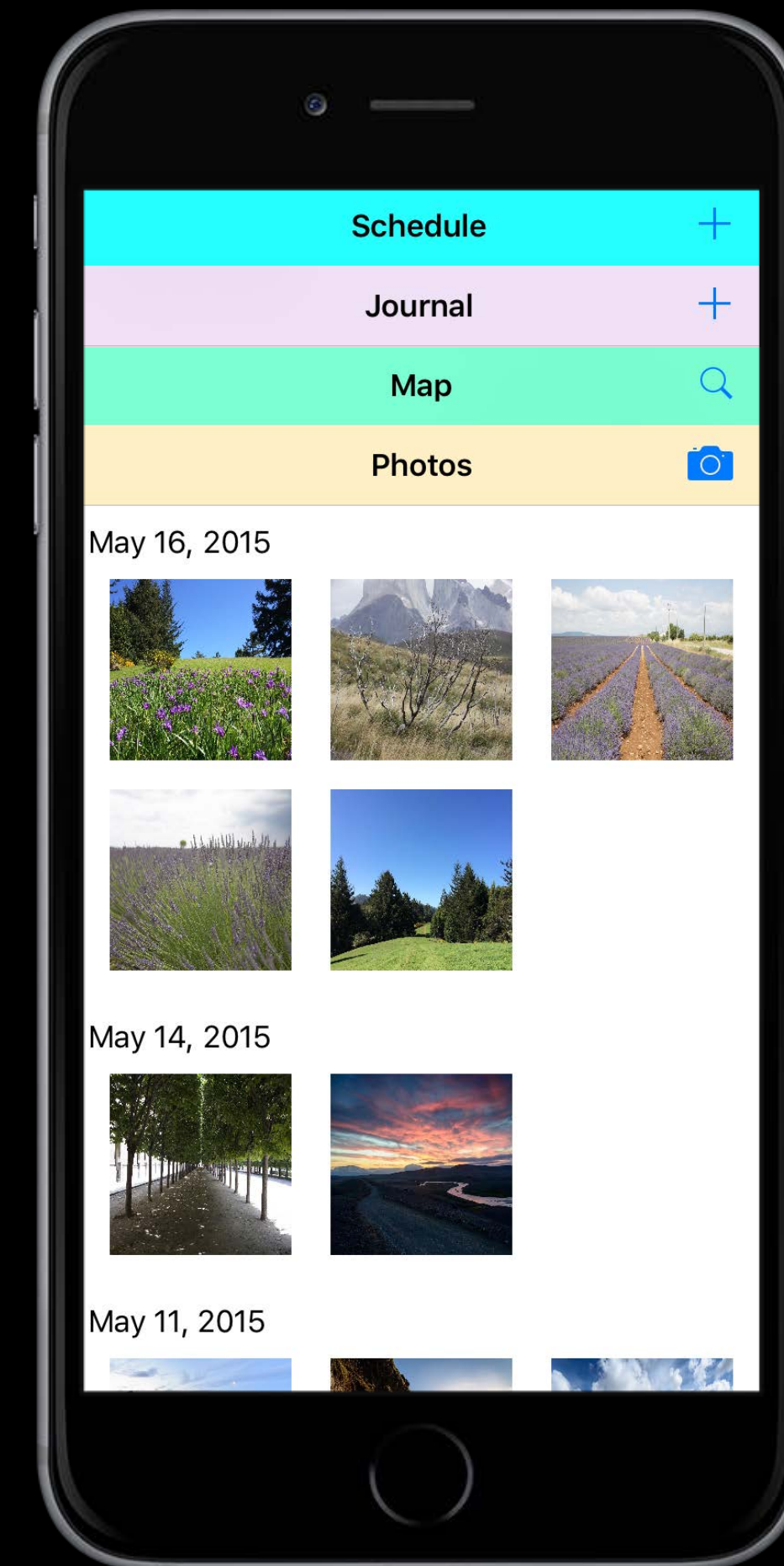
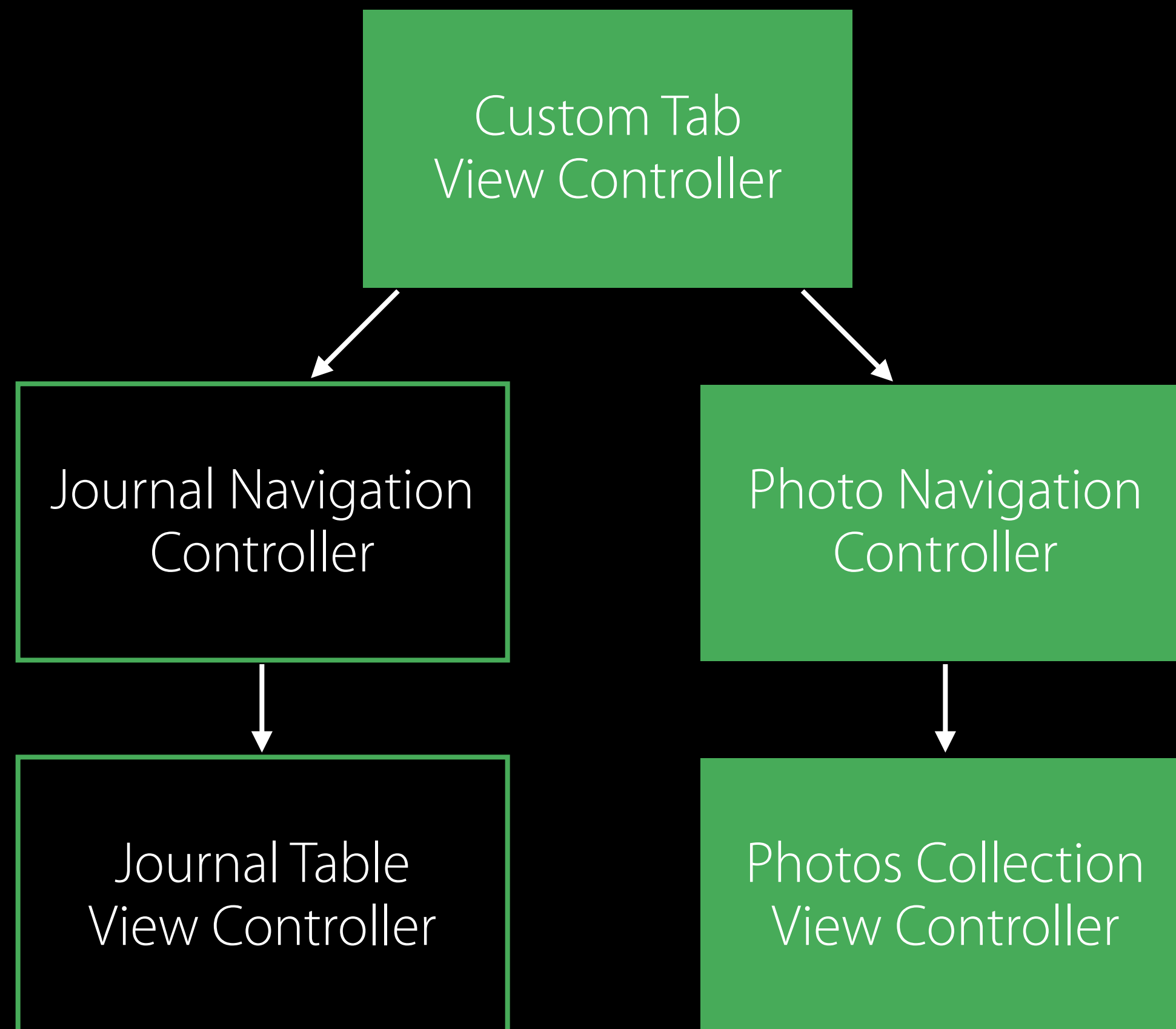
Unwind Segues



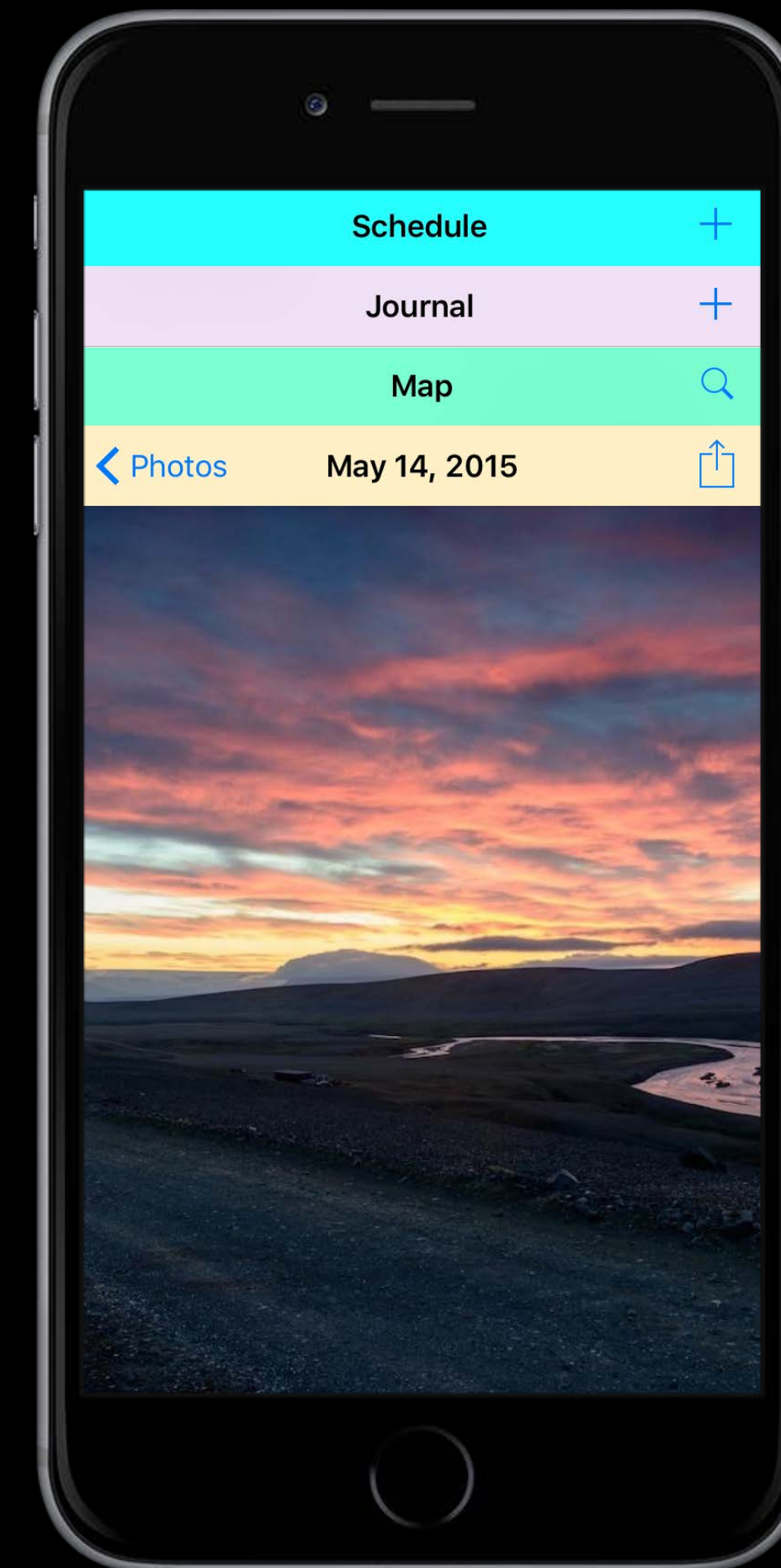
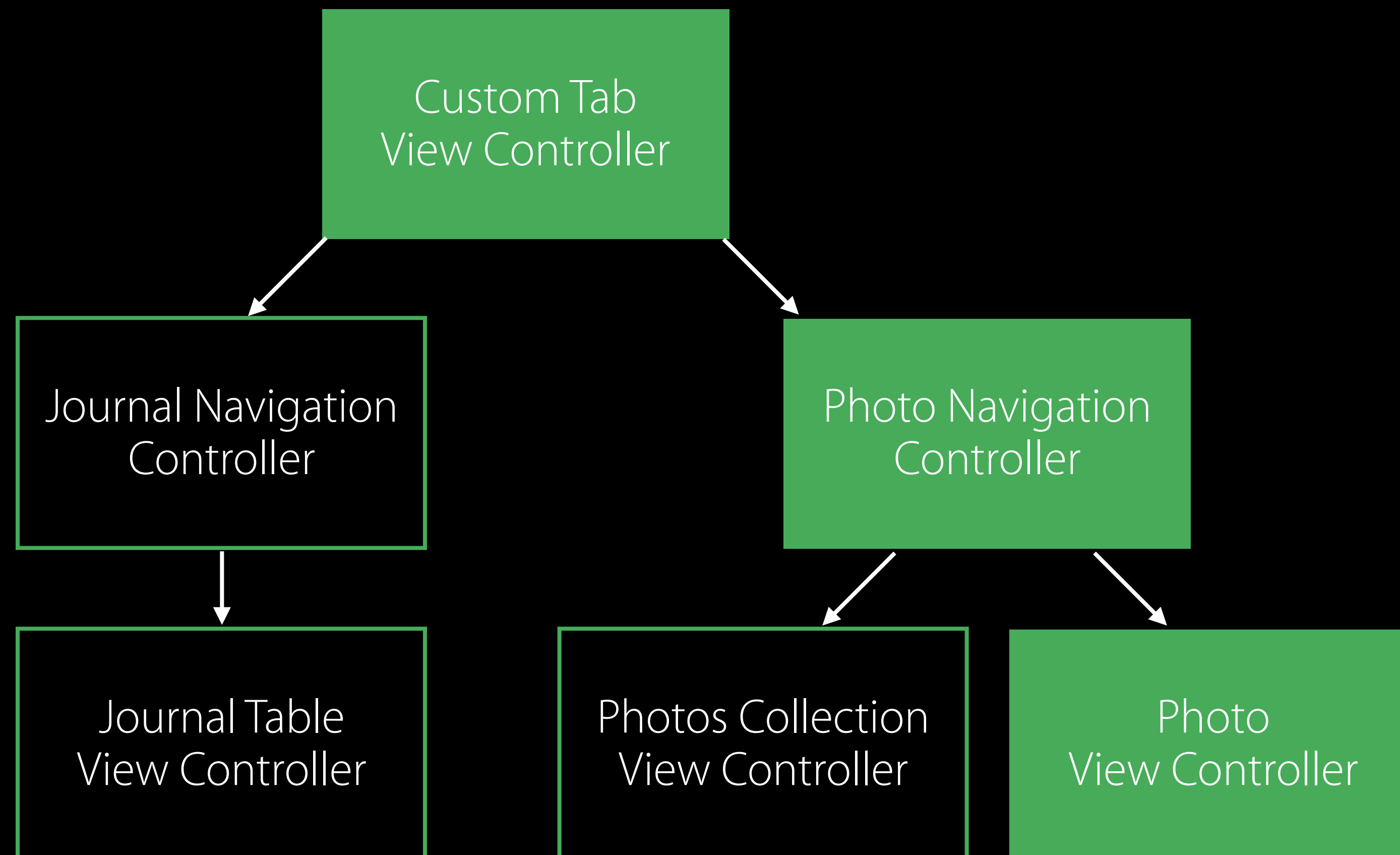
Unwind Segues



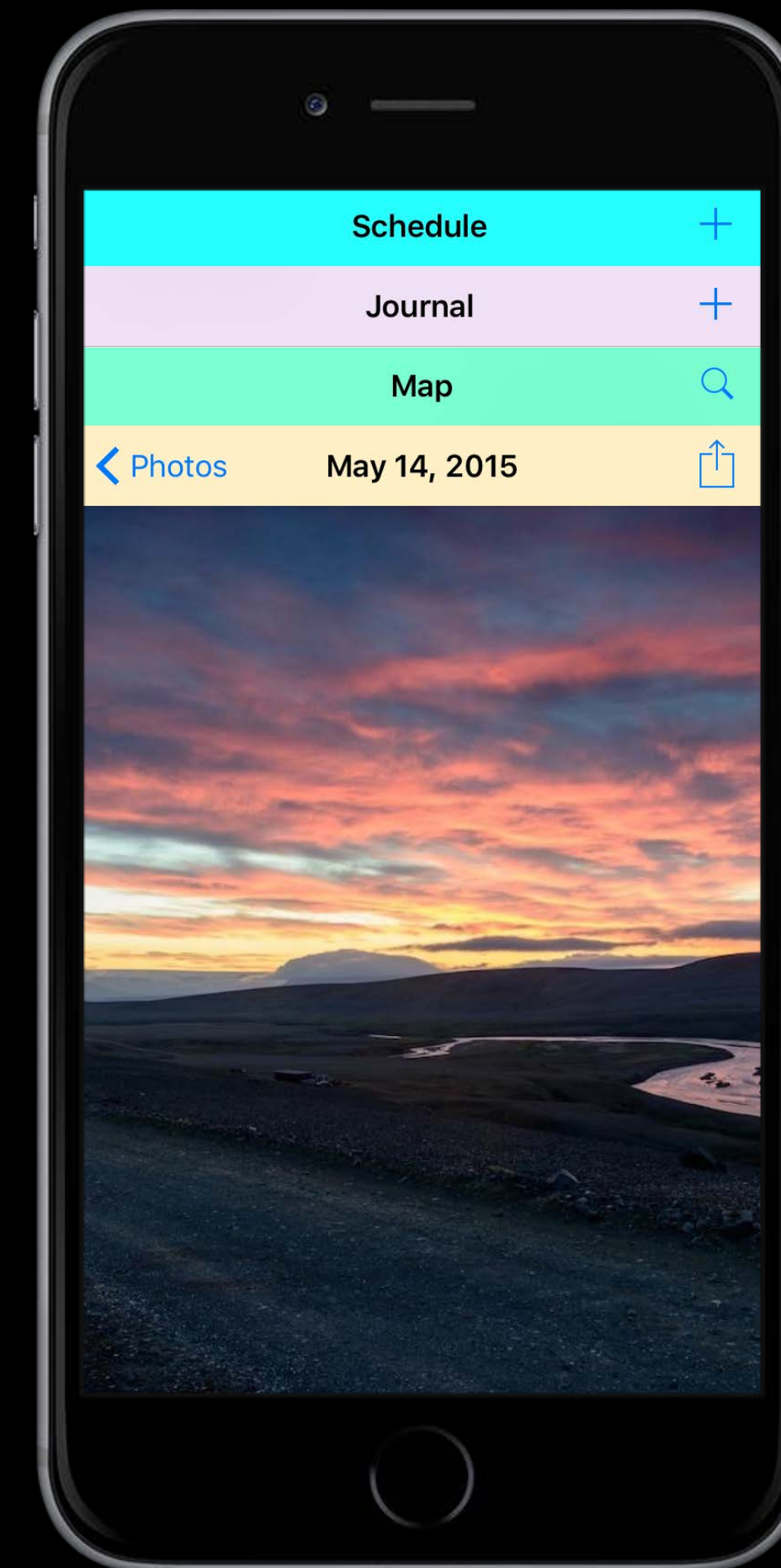
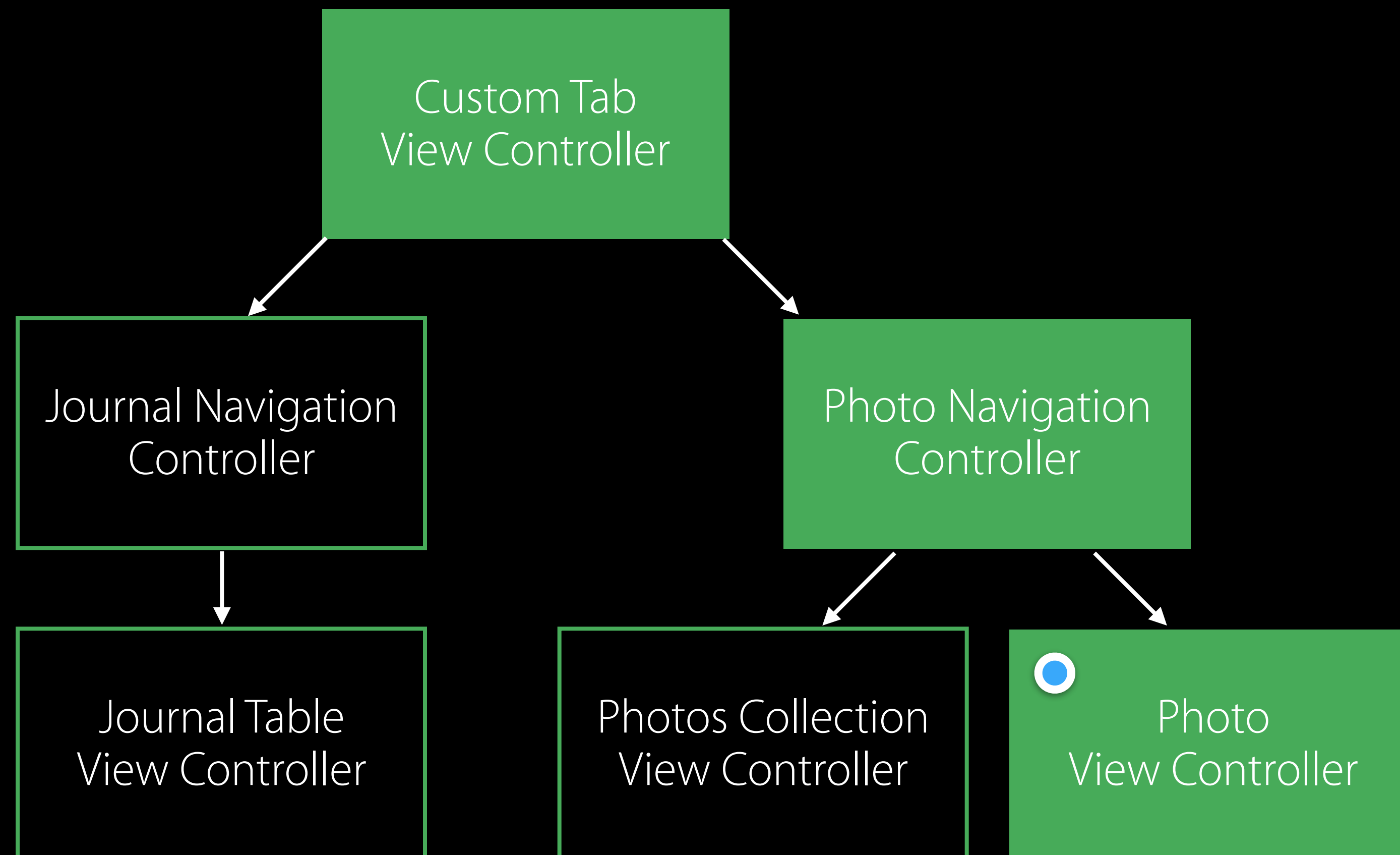
Unwind Segues



Unwind Segues

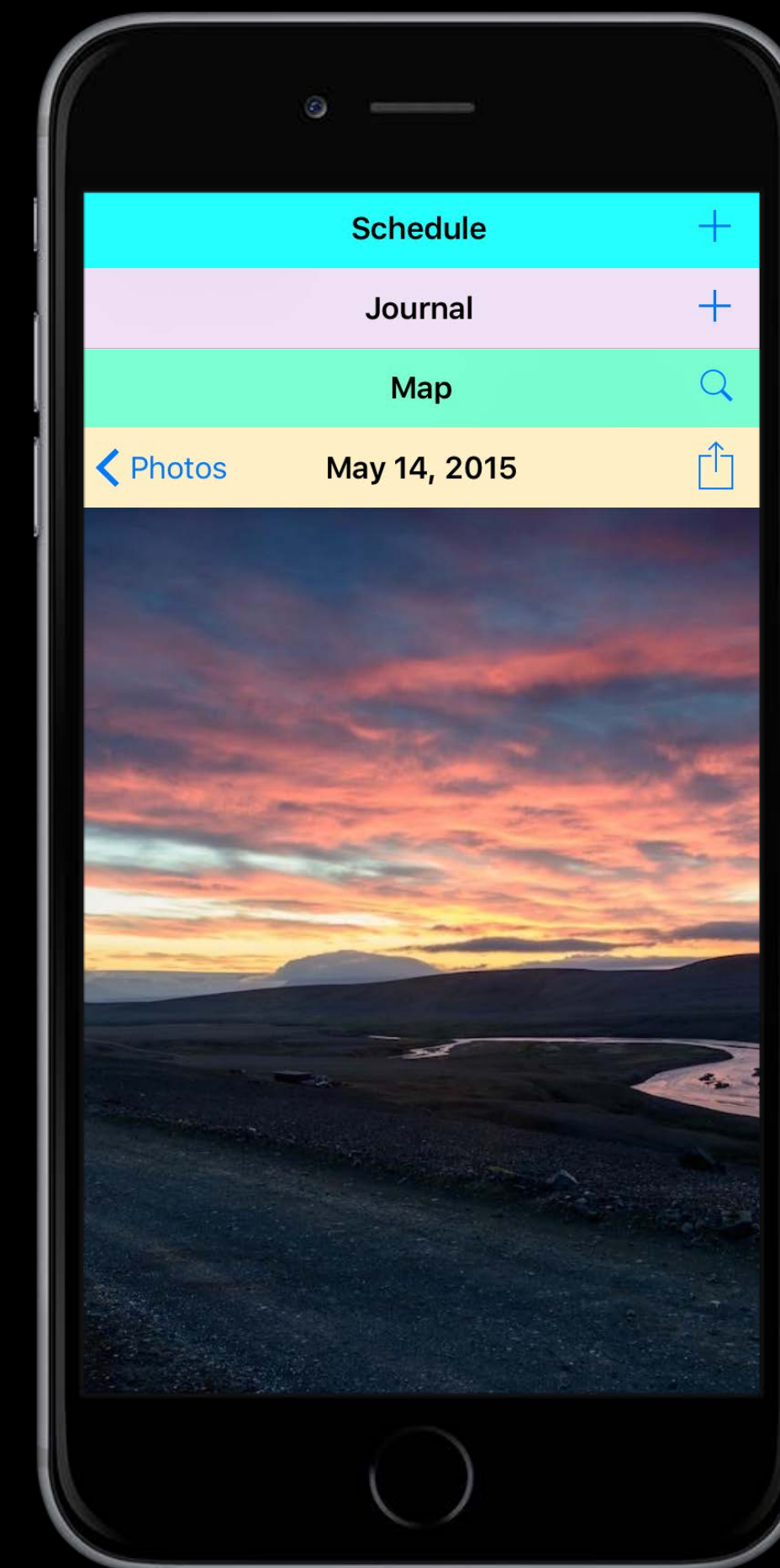
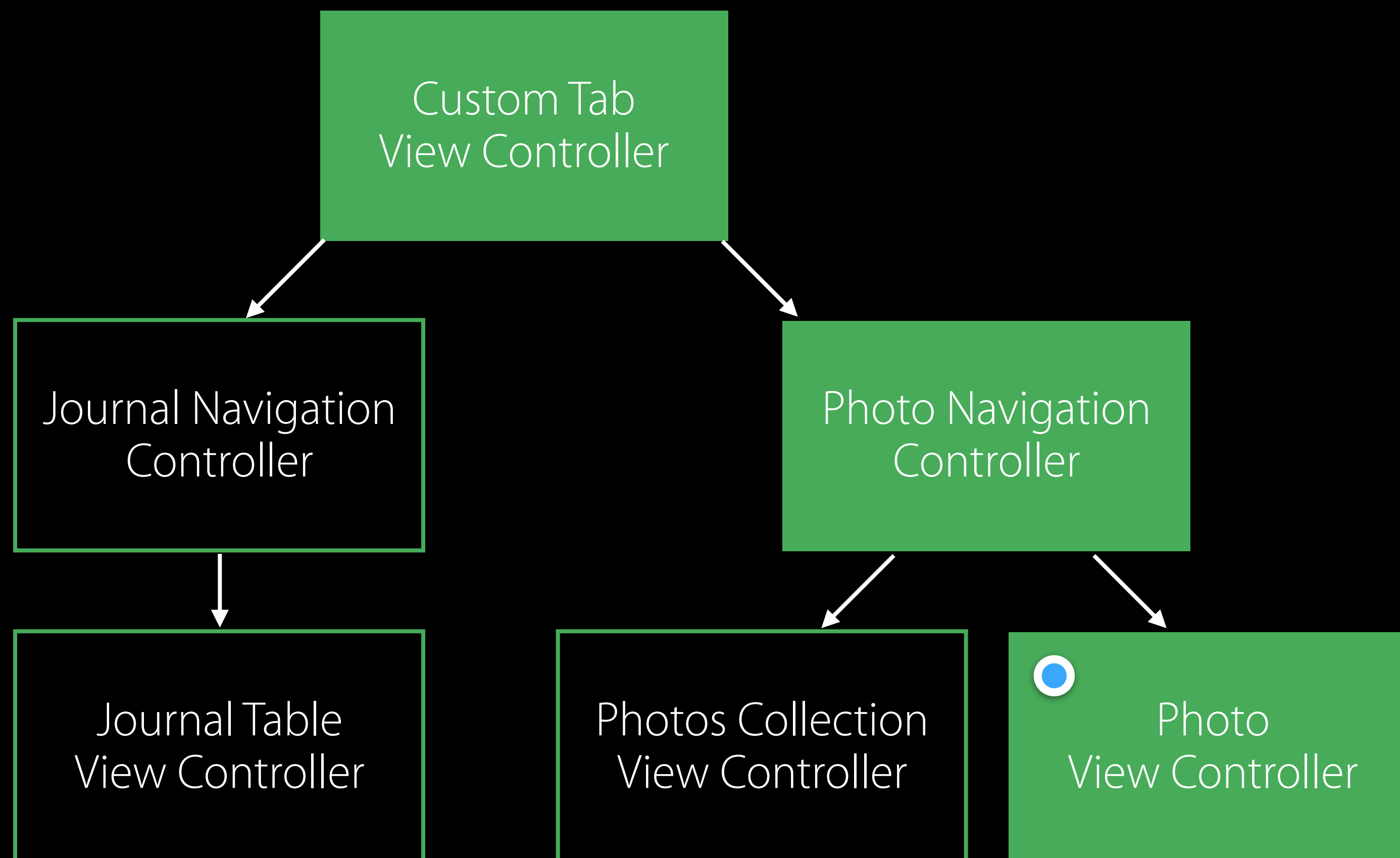


Unwind Segues

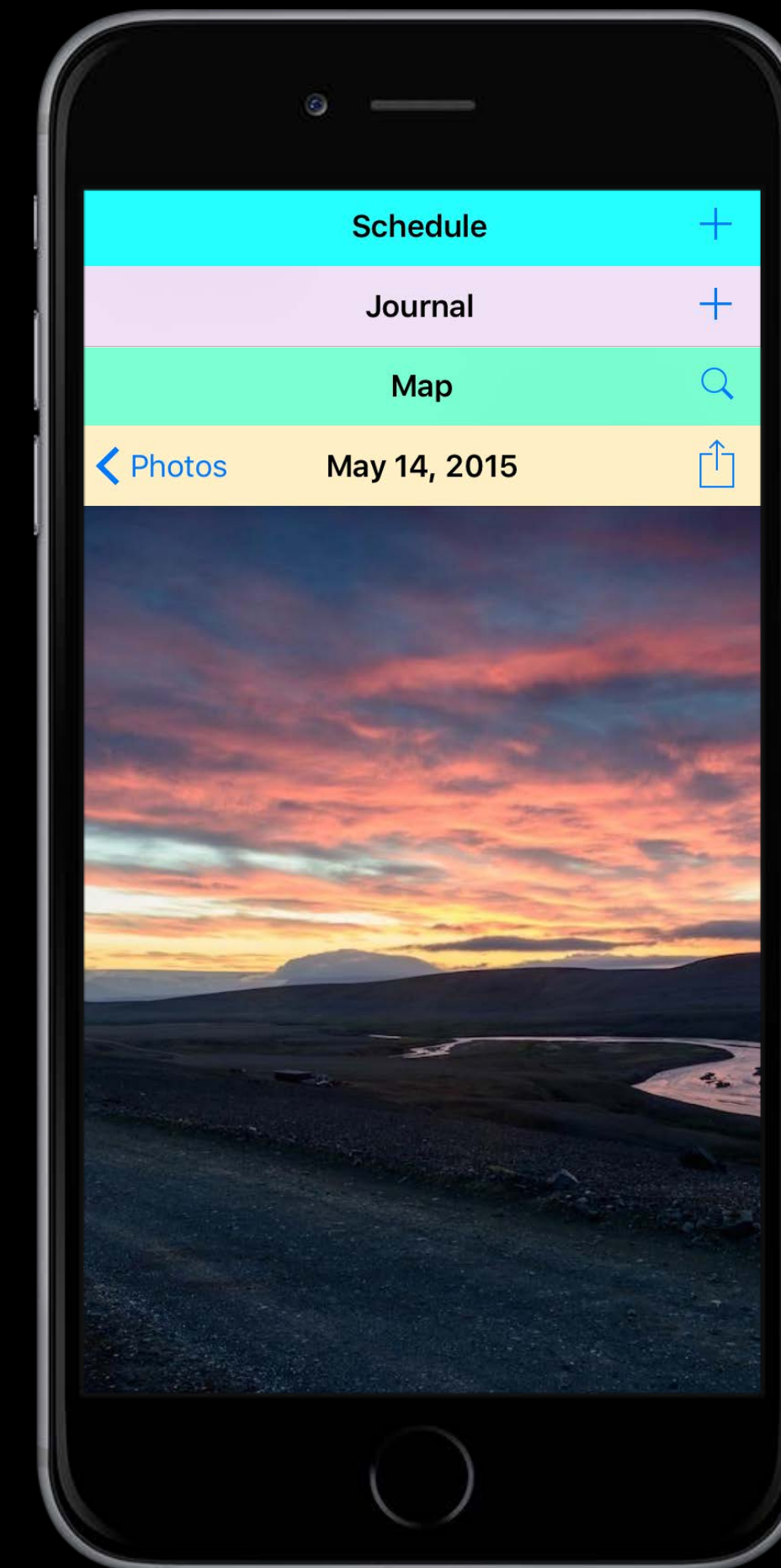
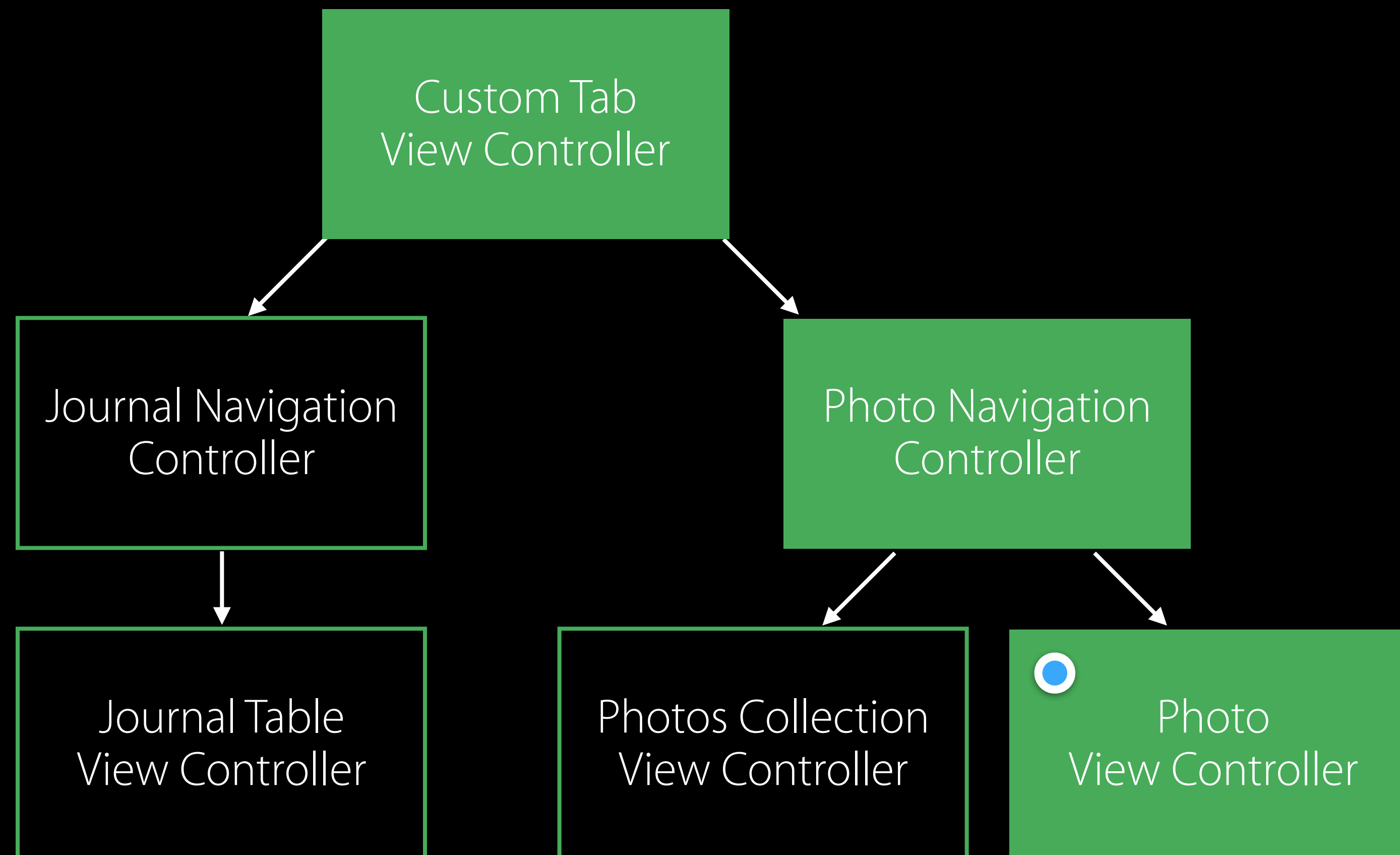


Unwind Segues

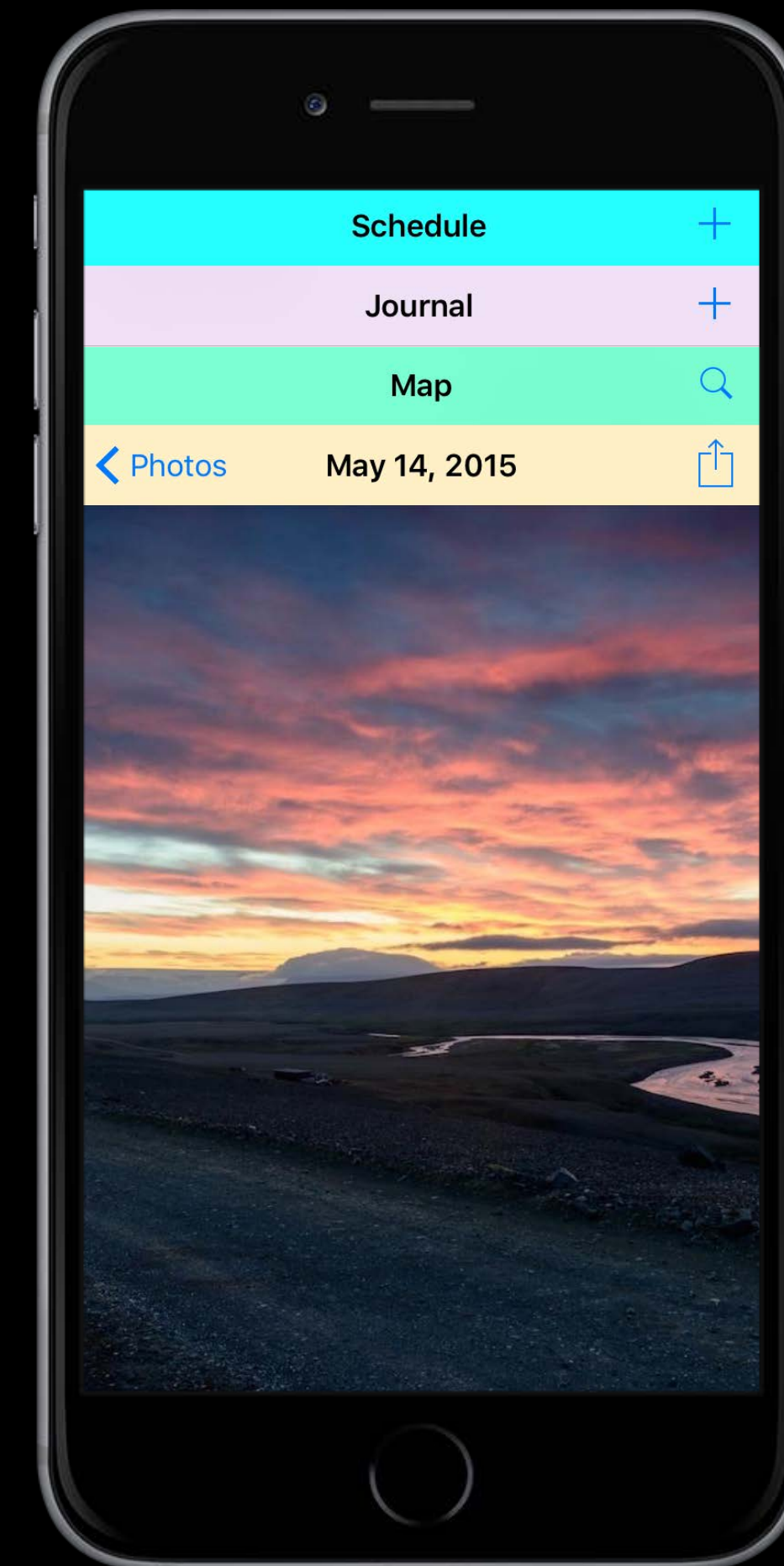
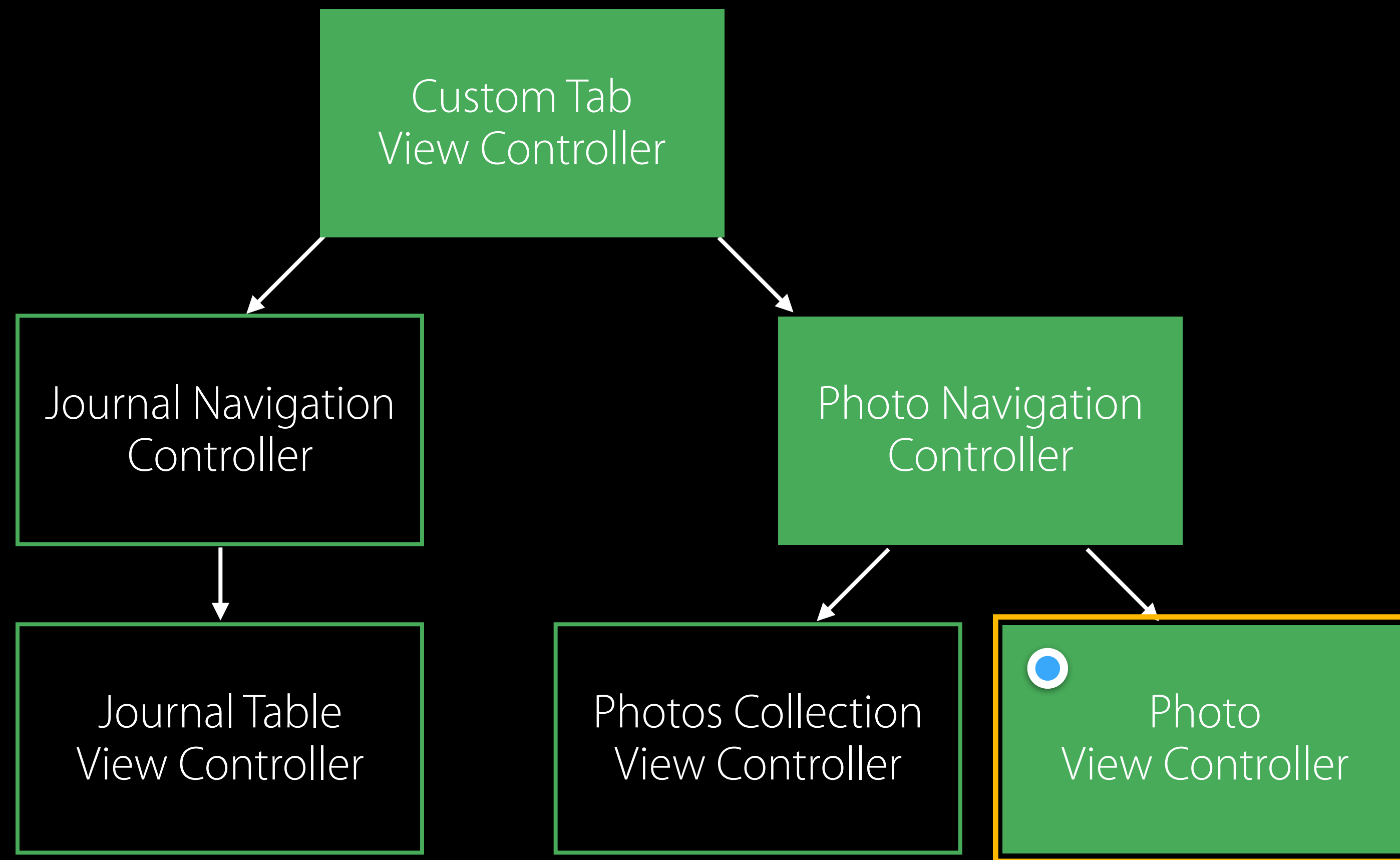
"Go back to the journal"



Unwind Segues

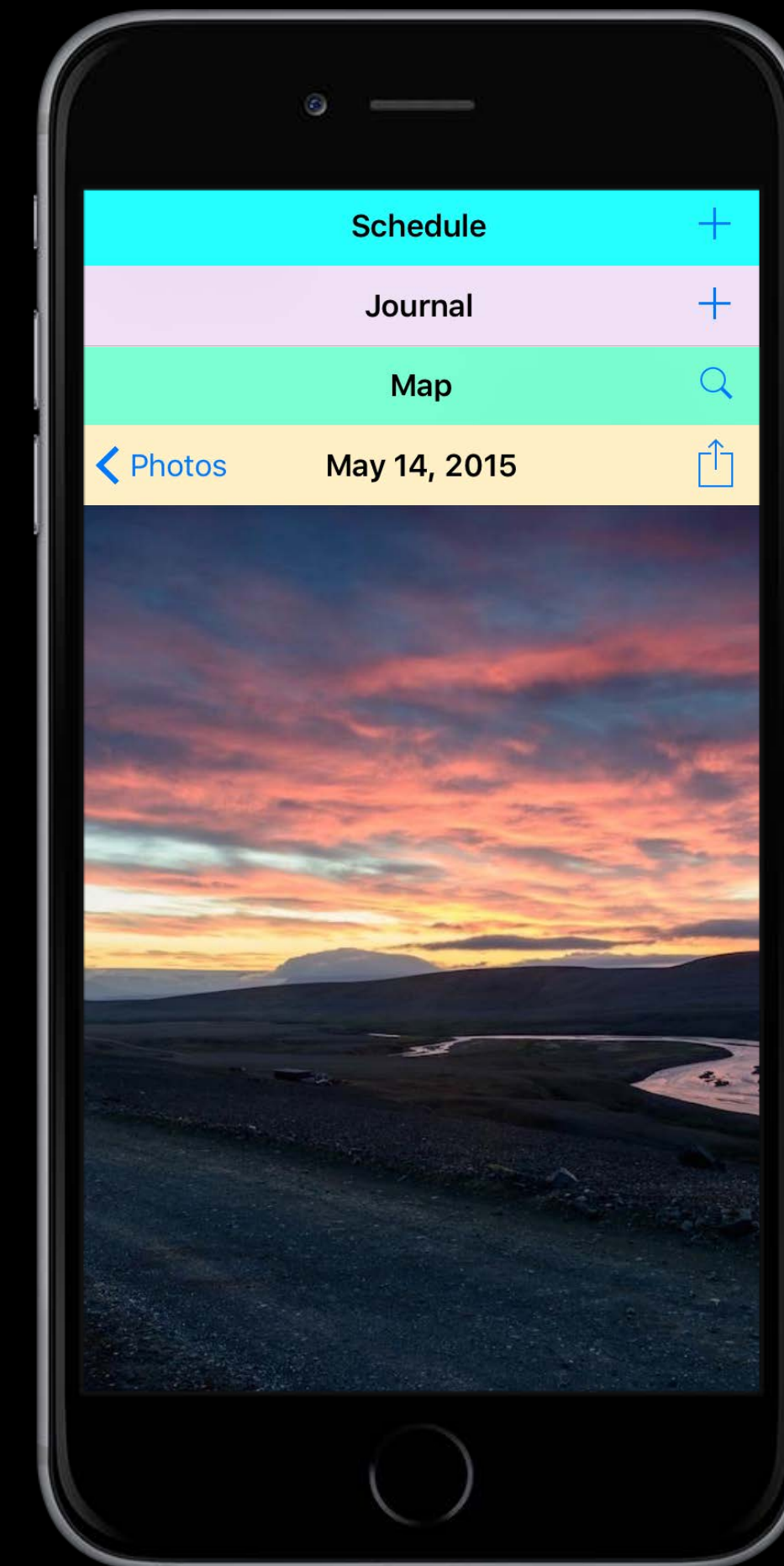
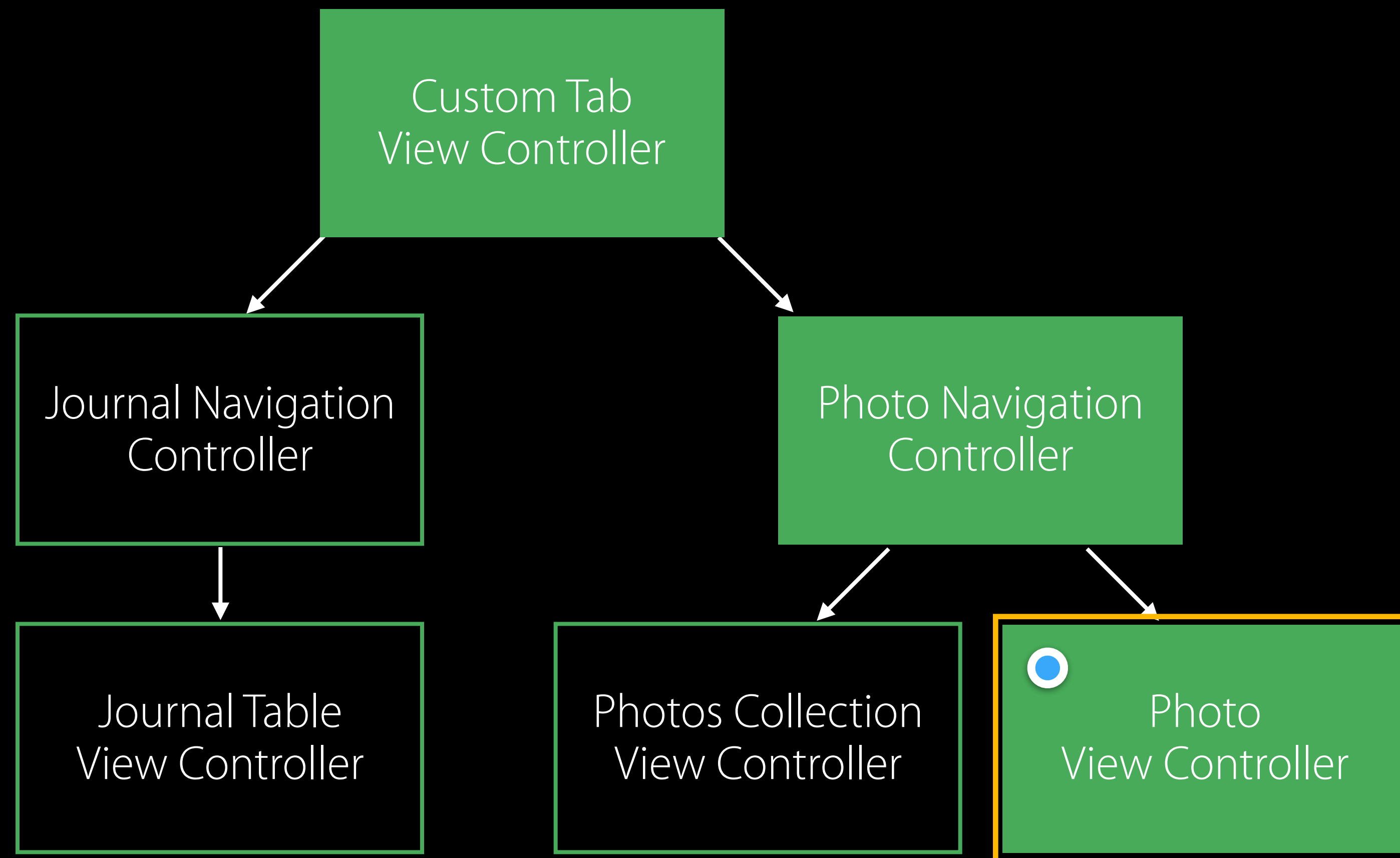


Unwind Segues

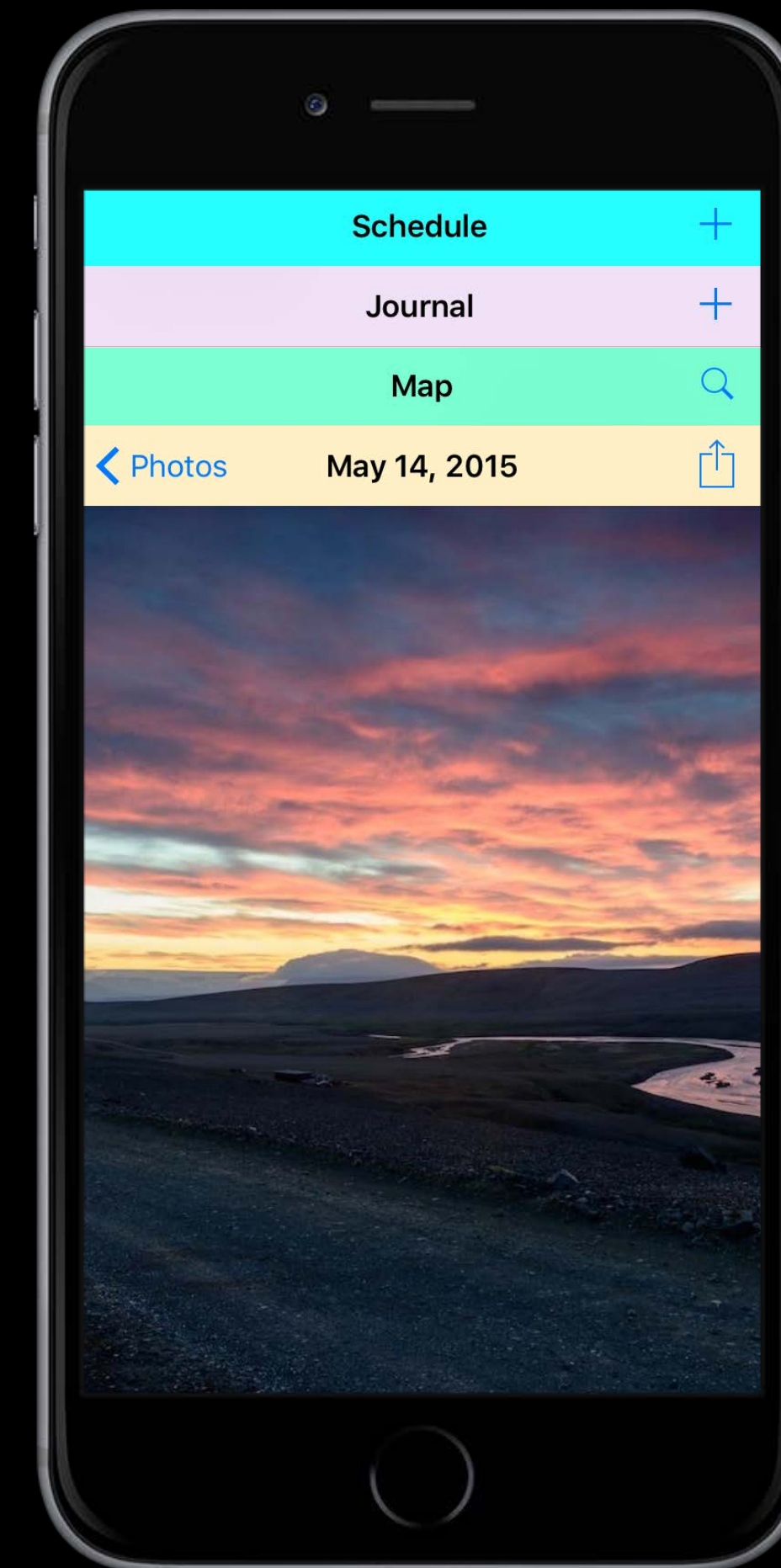
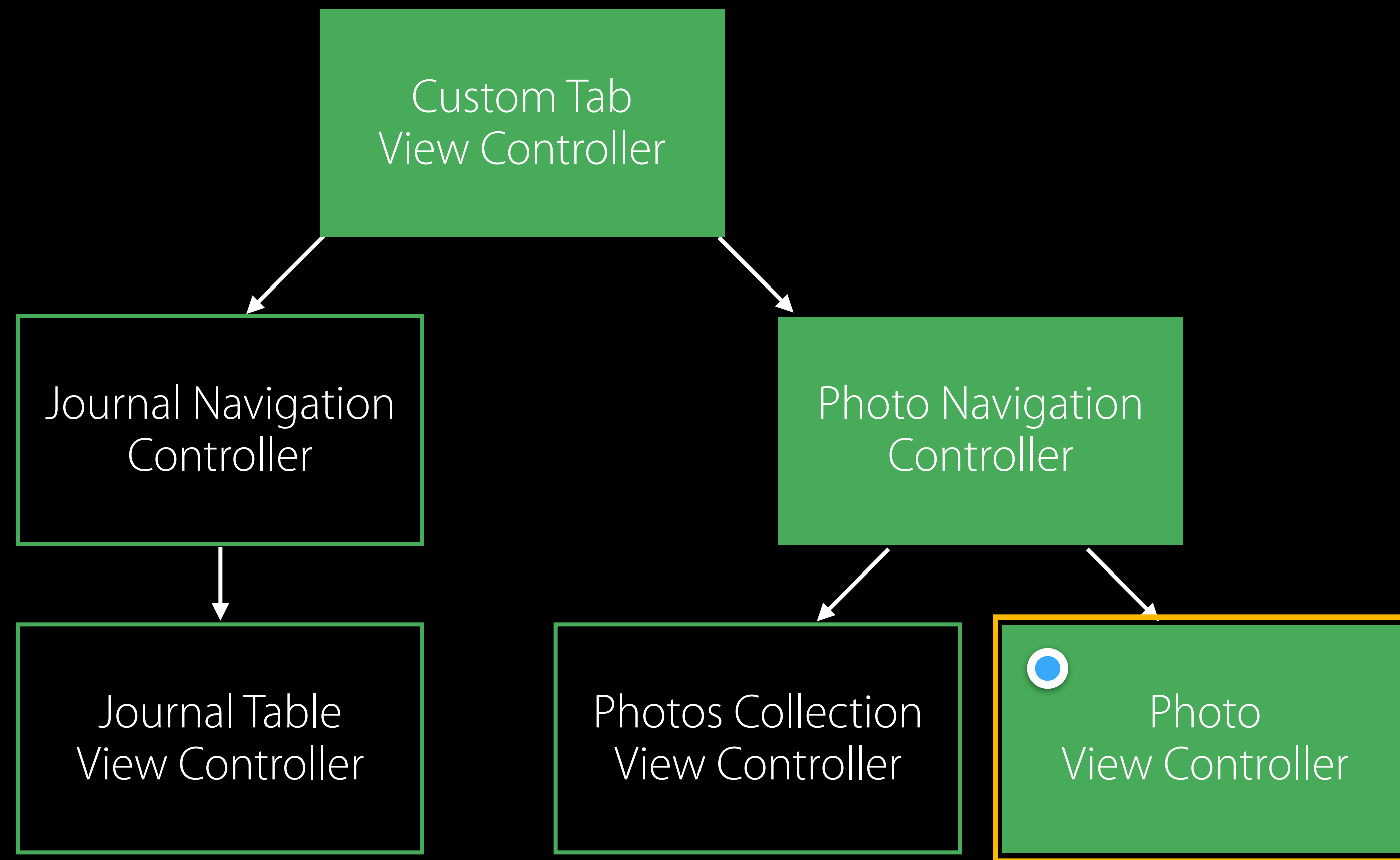


Unwind Segues

```
performSelectorWithIdentifier("goBackToJournal", sender:...)
```

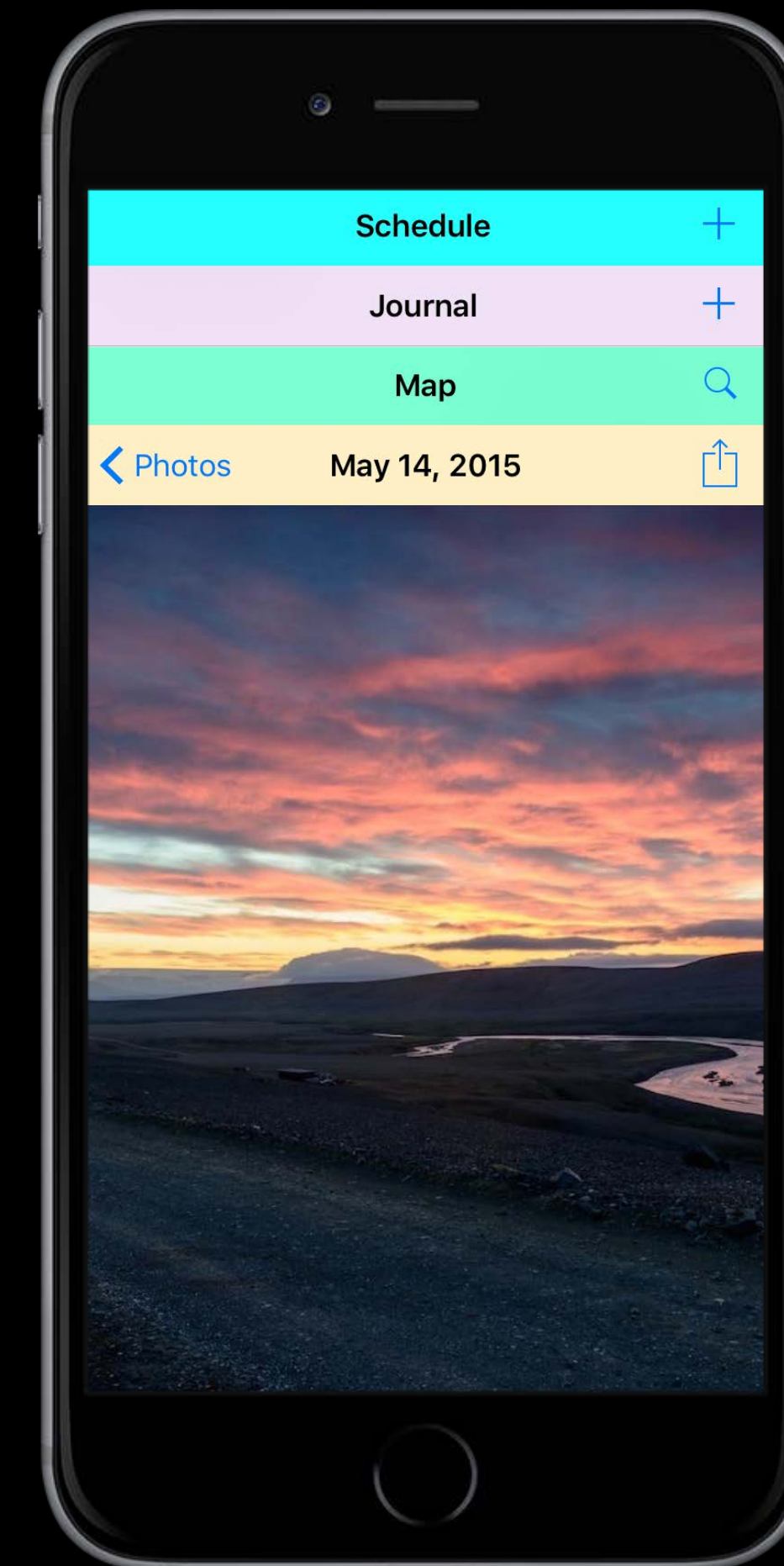
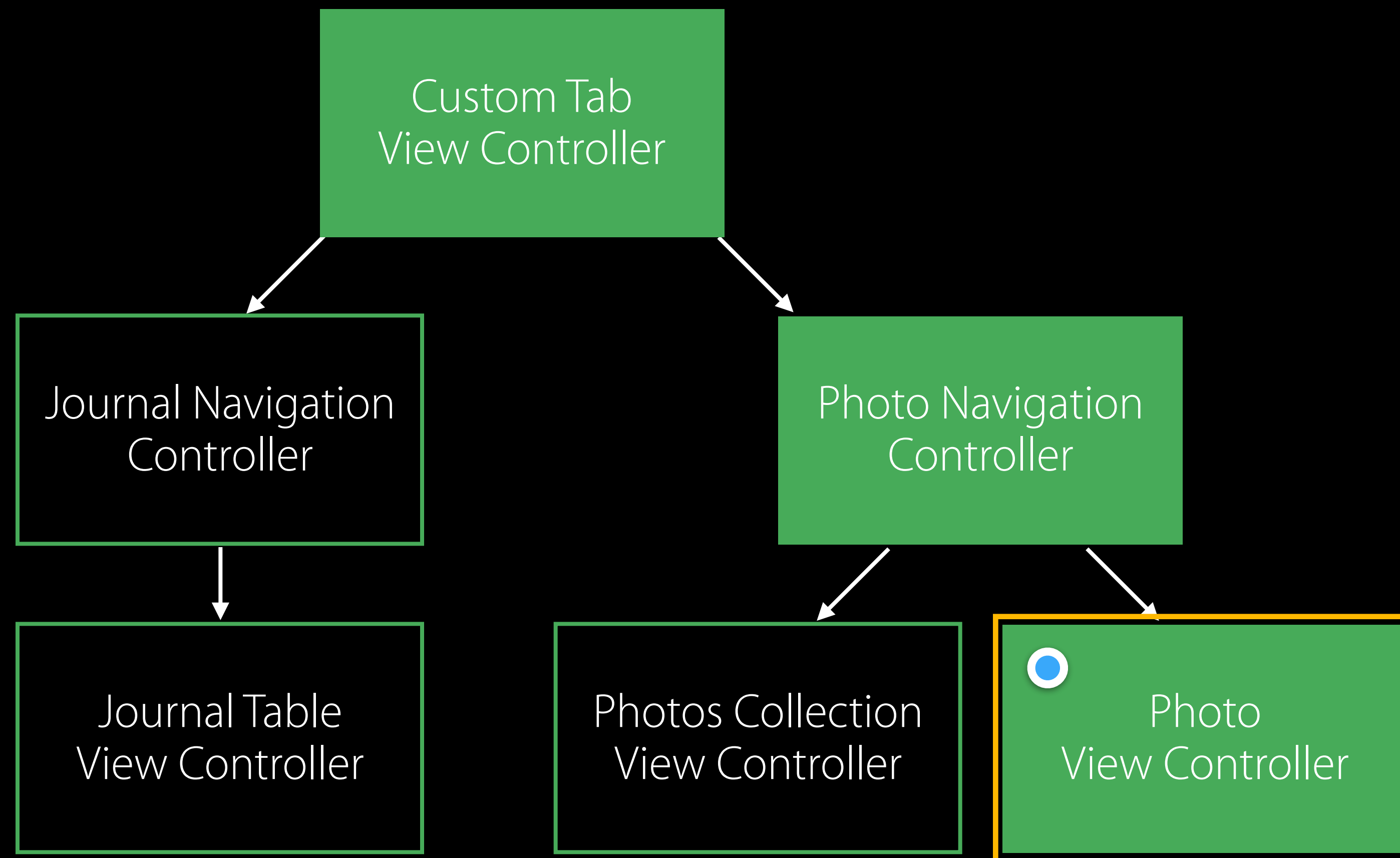


Unwind Segues



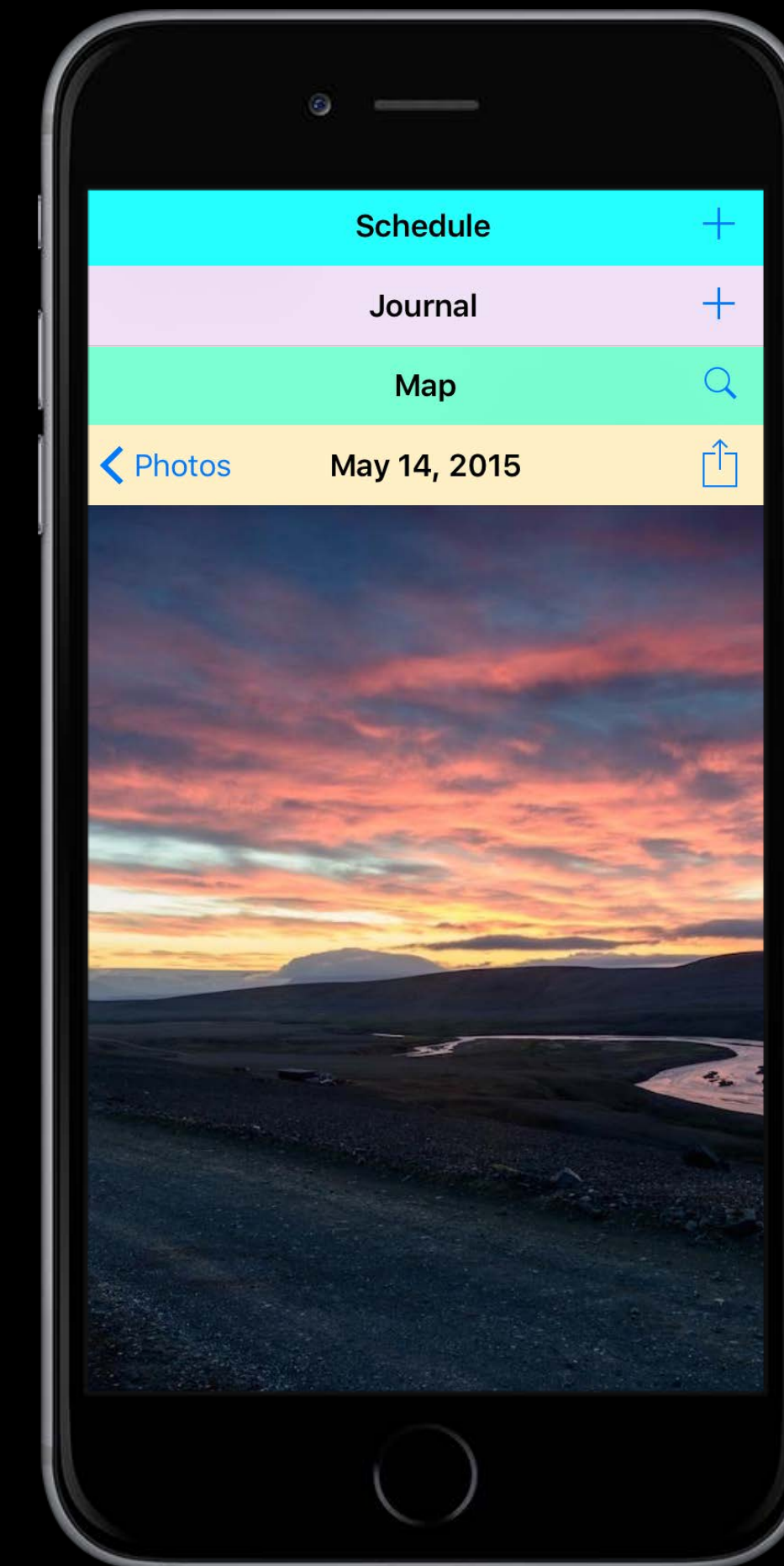
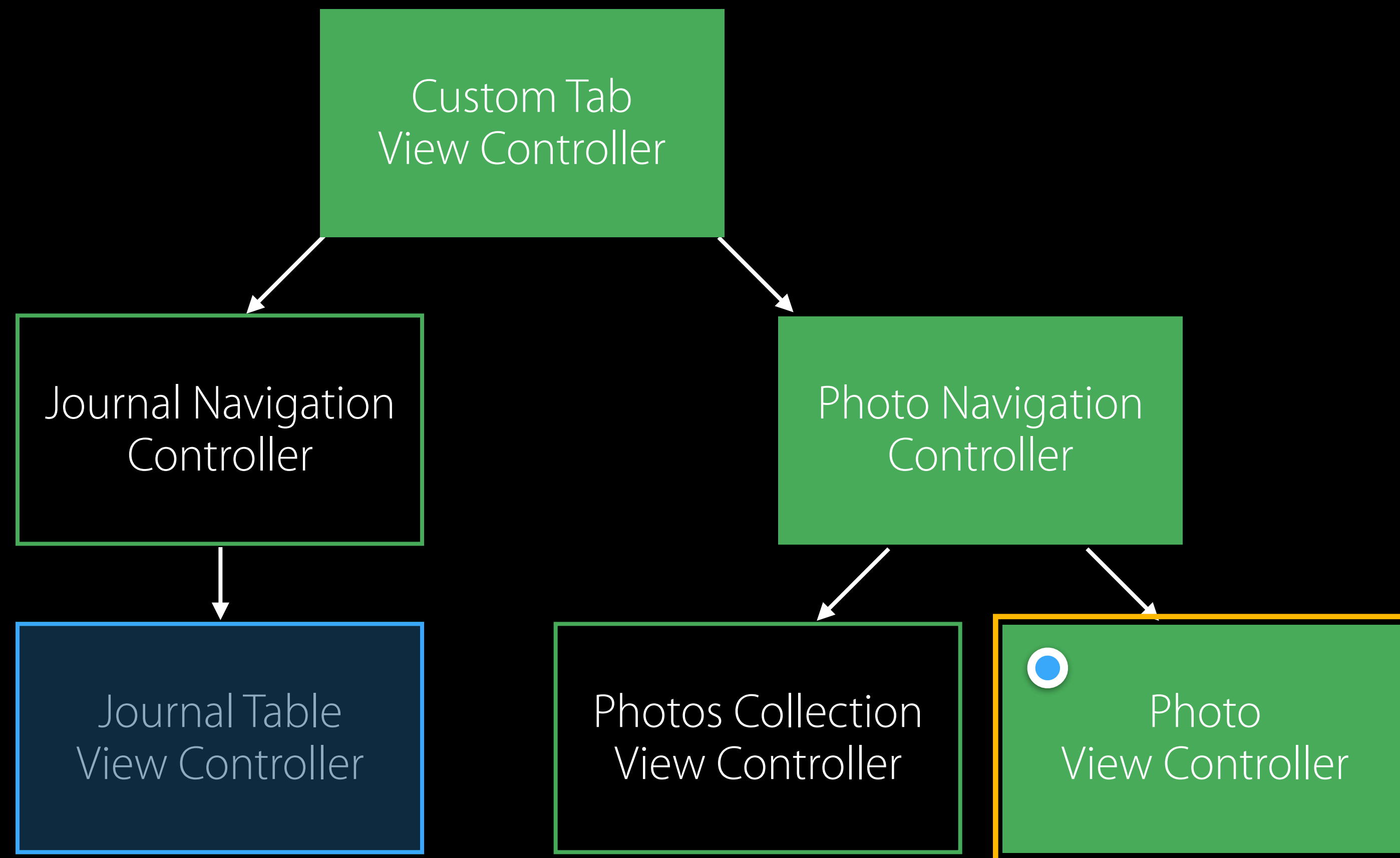
Unwind Segues

Identify the destination



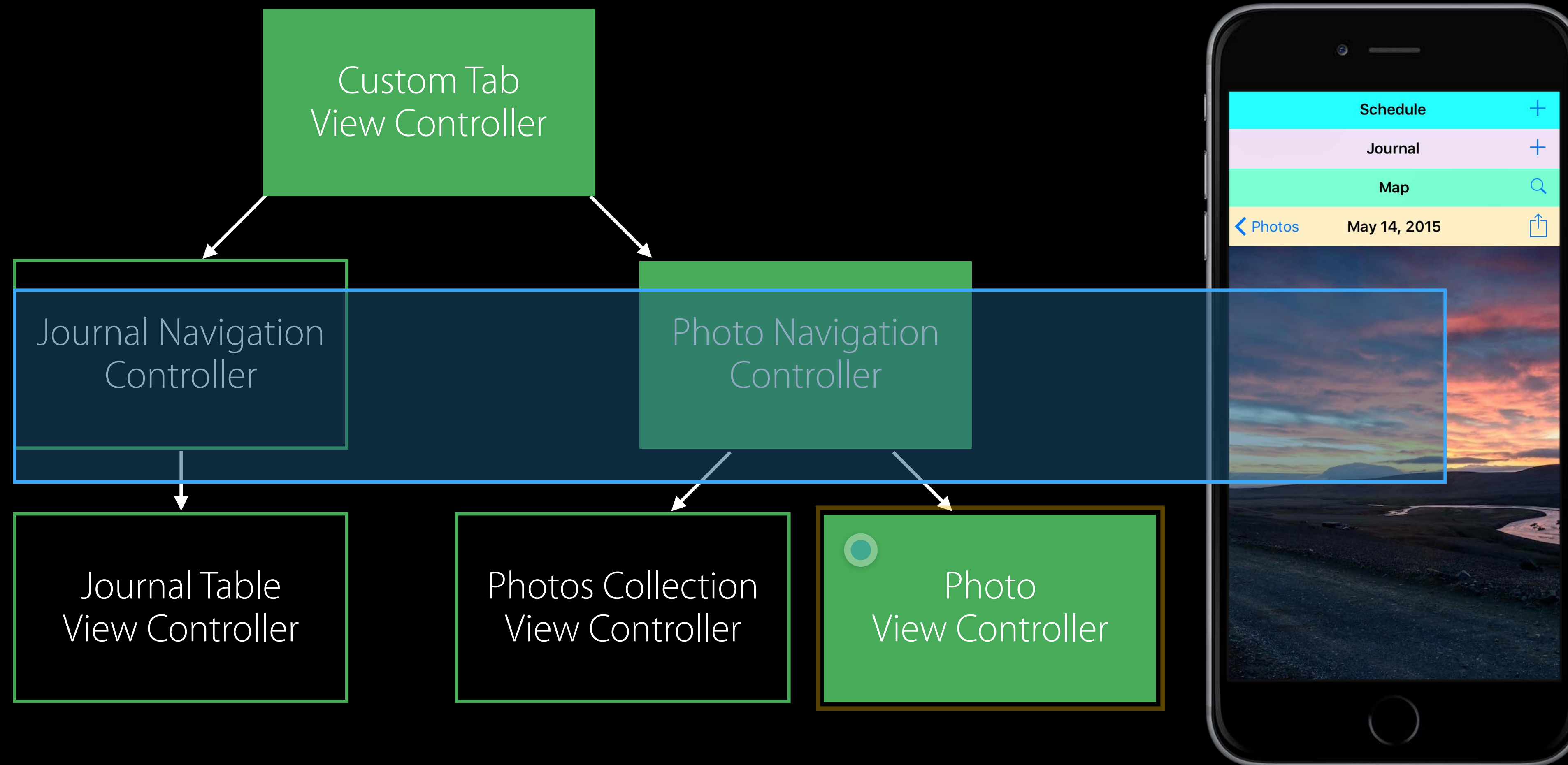
Unwind Segues

Identify the destination



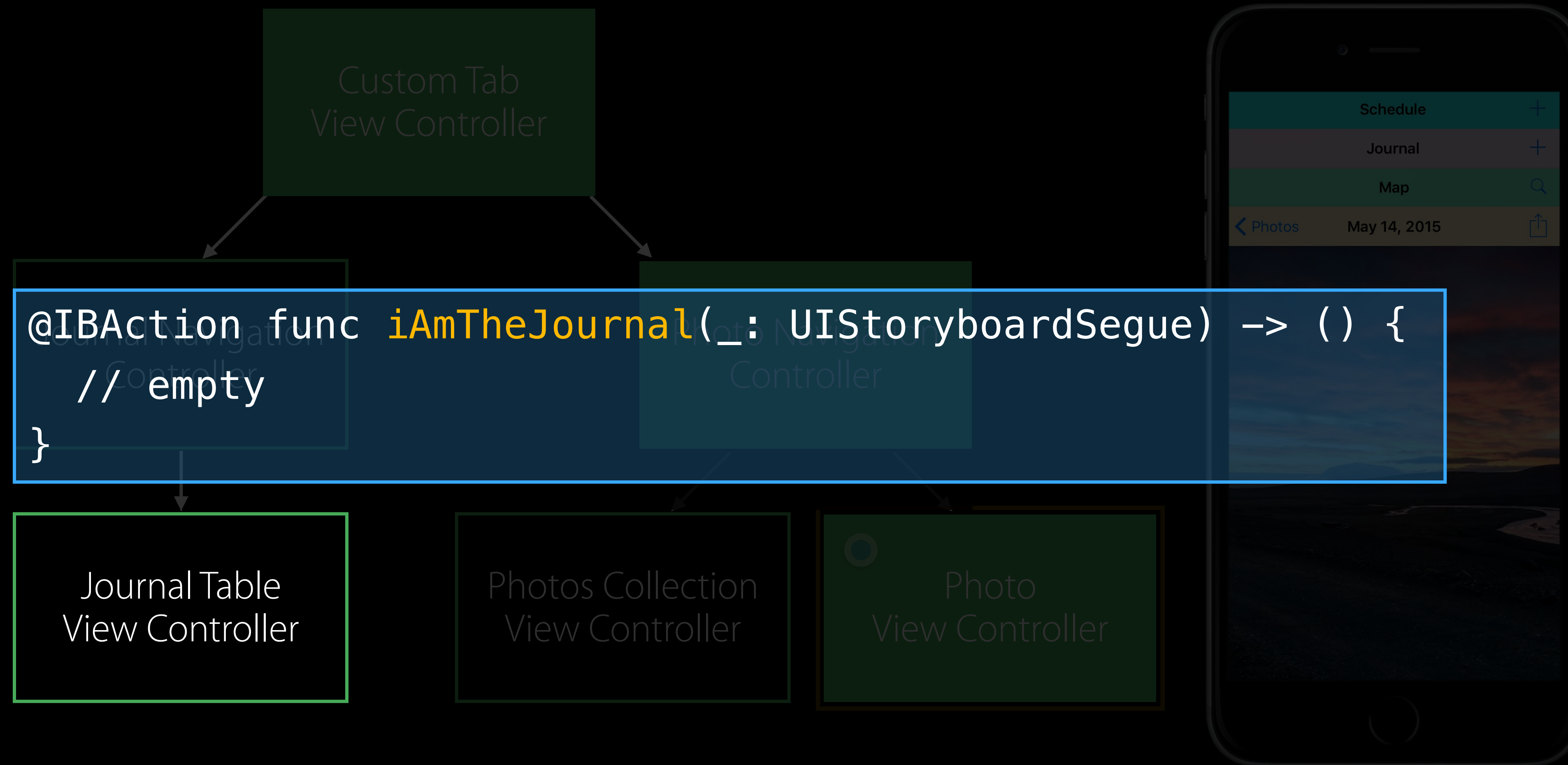
Unwind Segues

Identify the destination



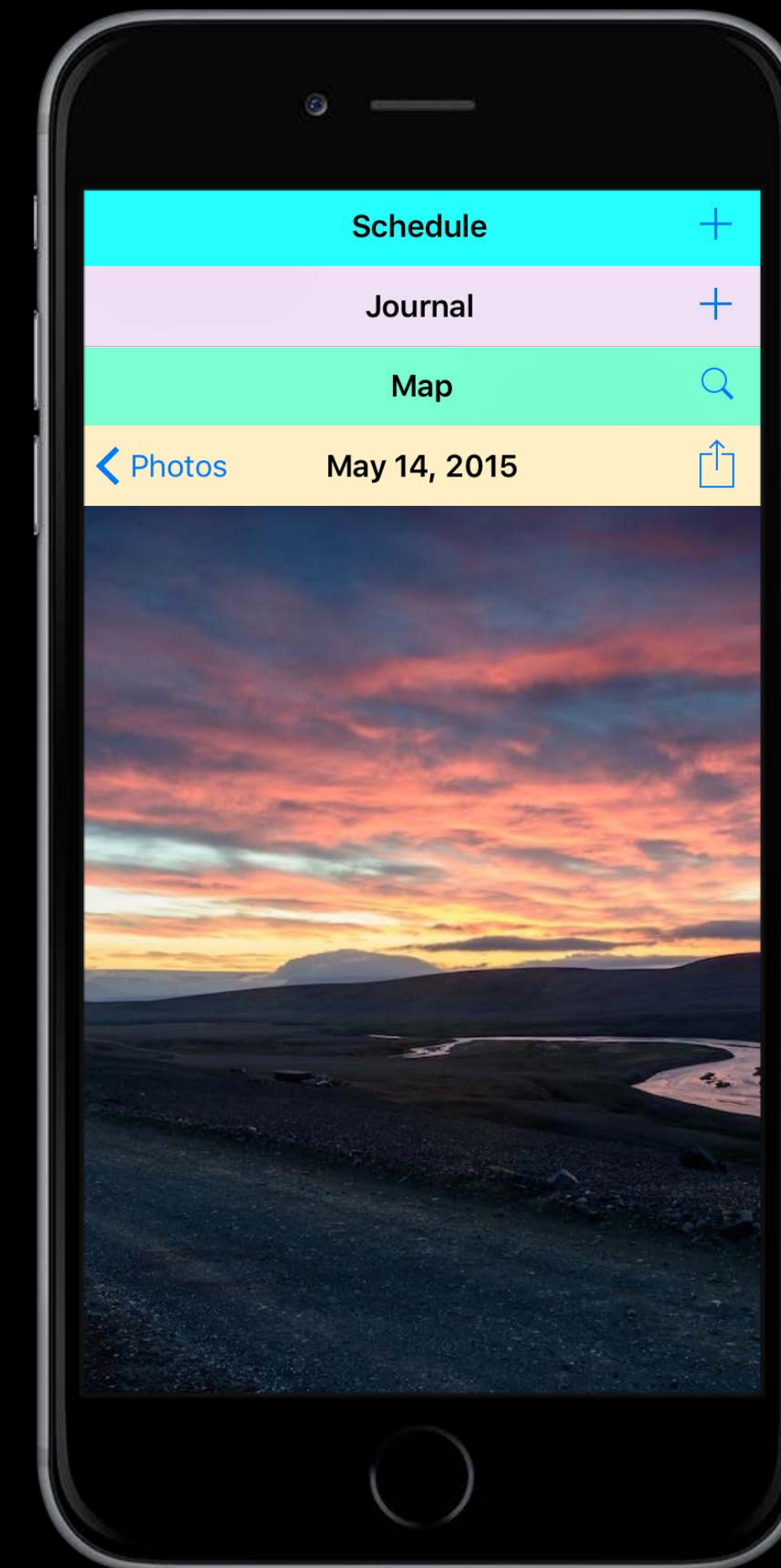
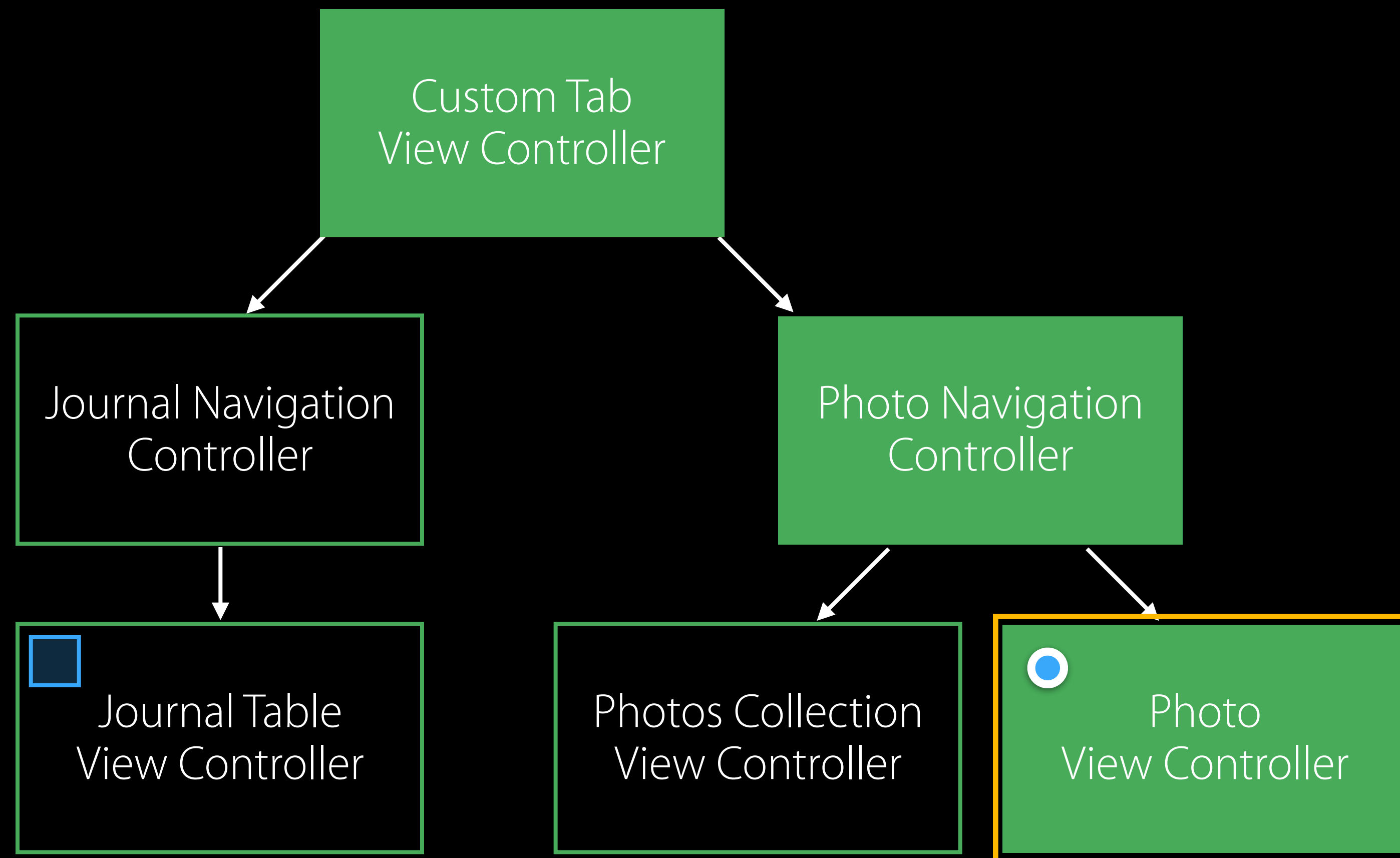
Unwind Segues

Identify the destination



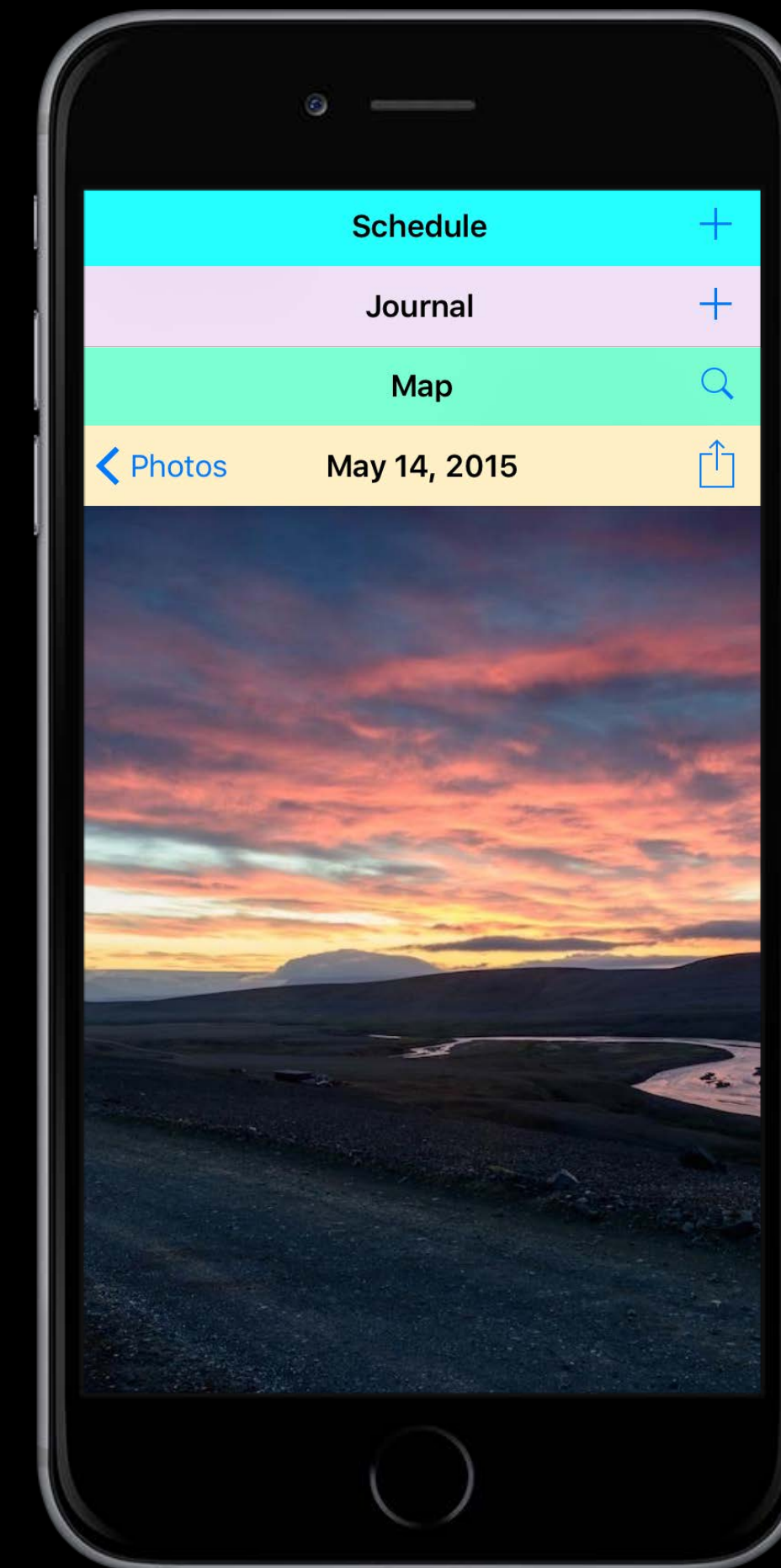
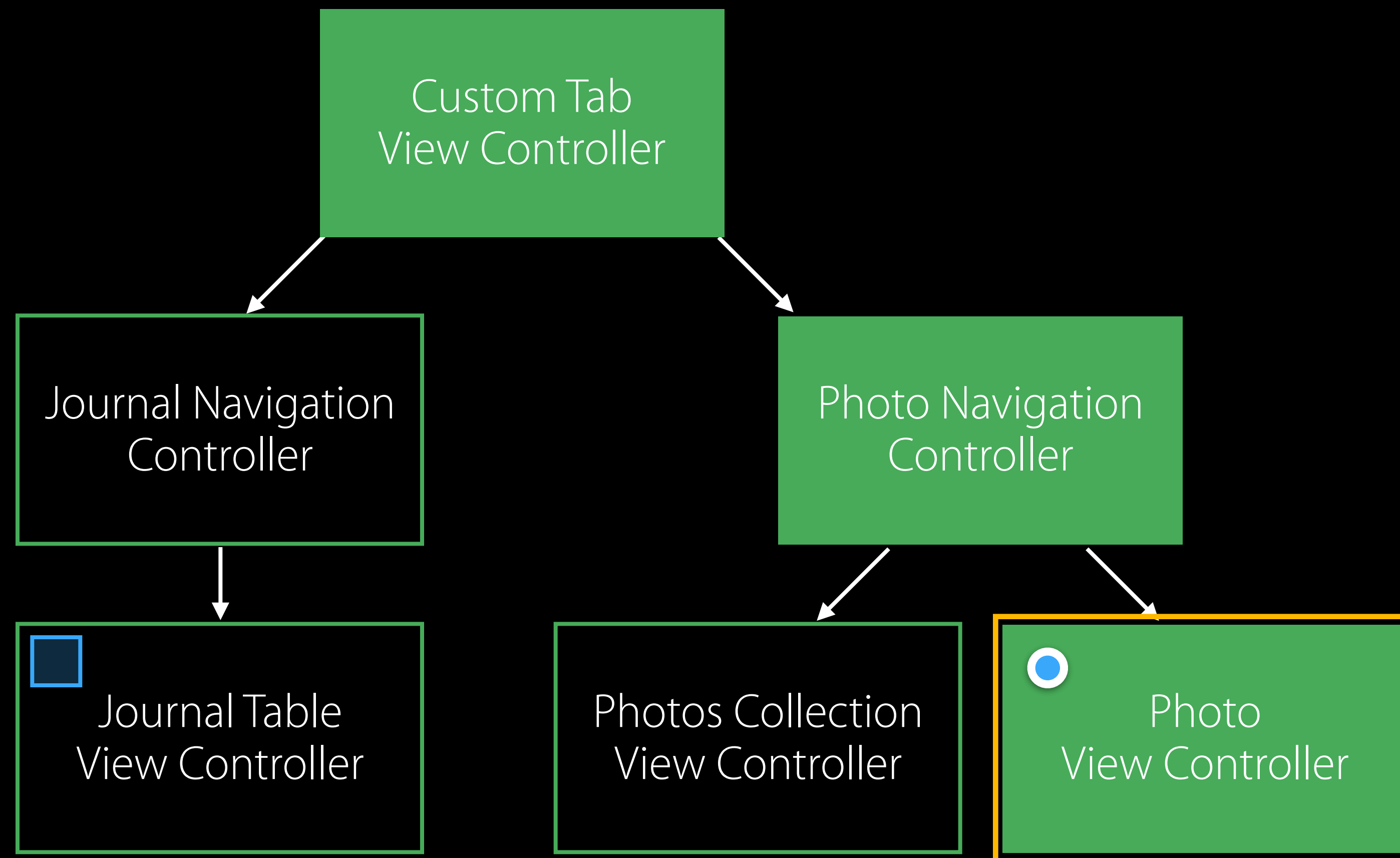
Unwind Segues

Identify the destination



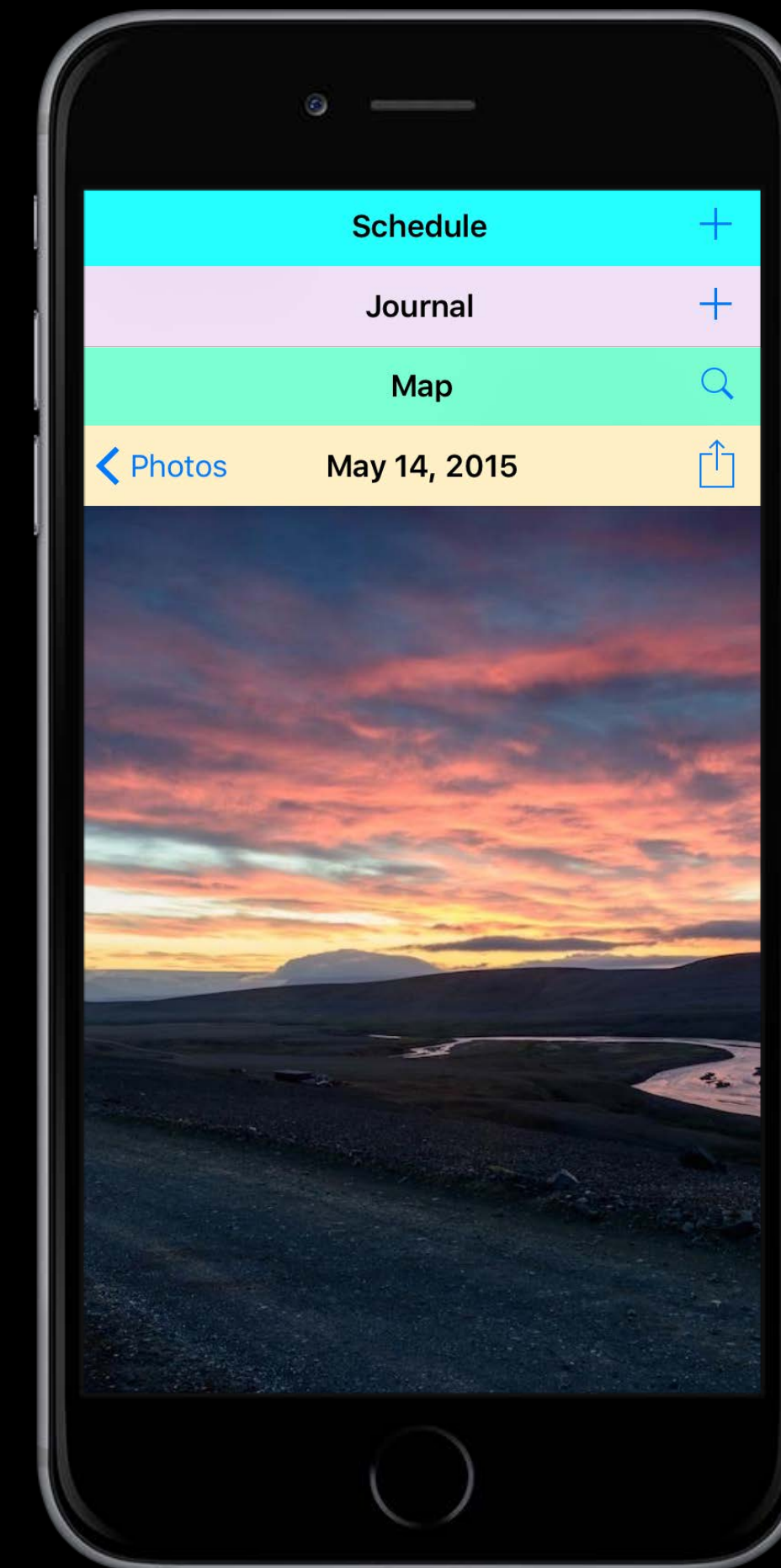
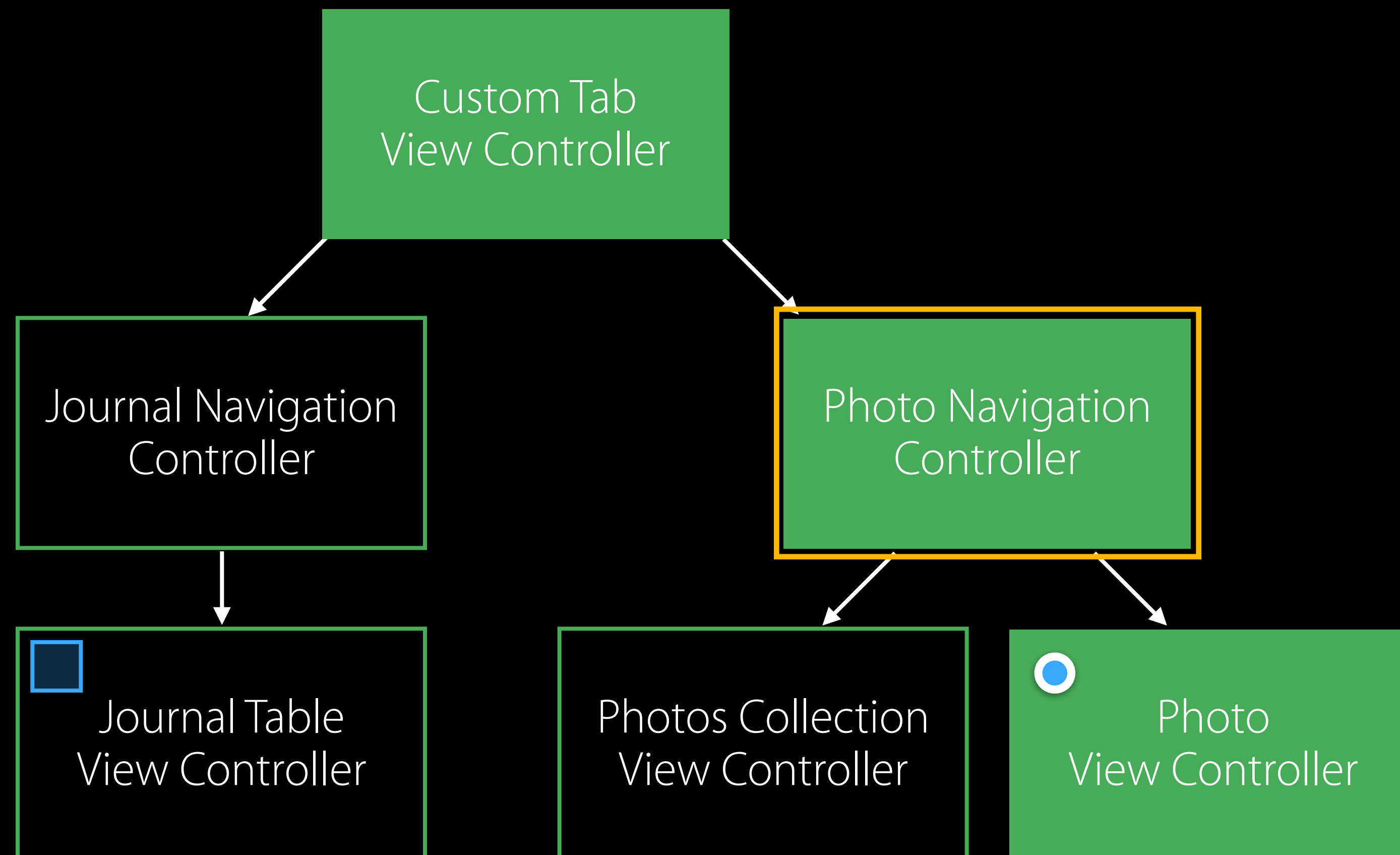
Unwind Segues

Find the destination

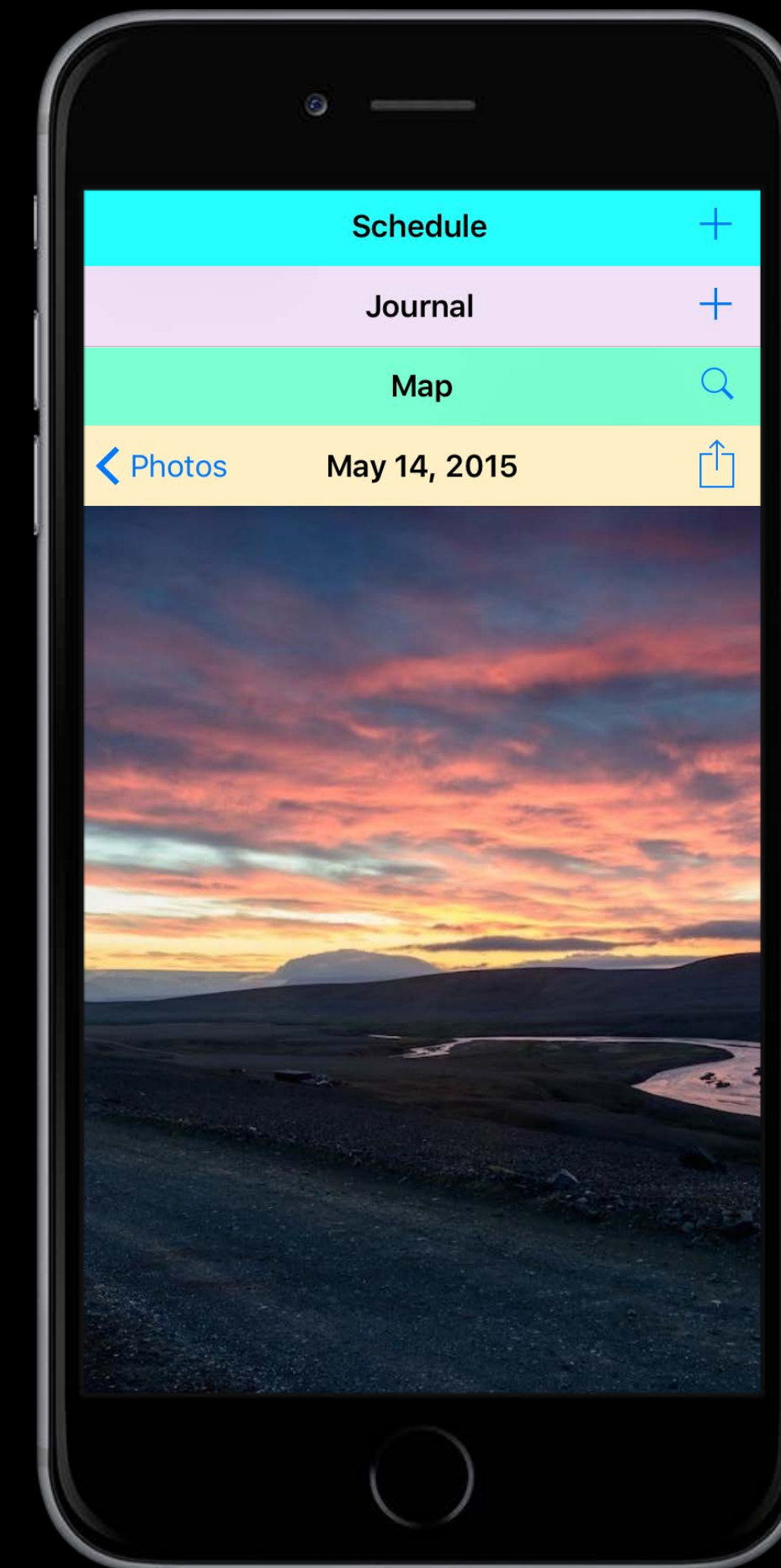
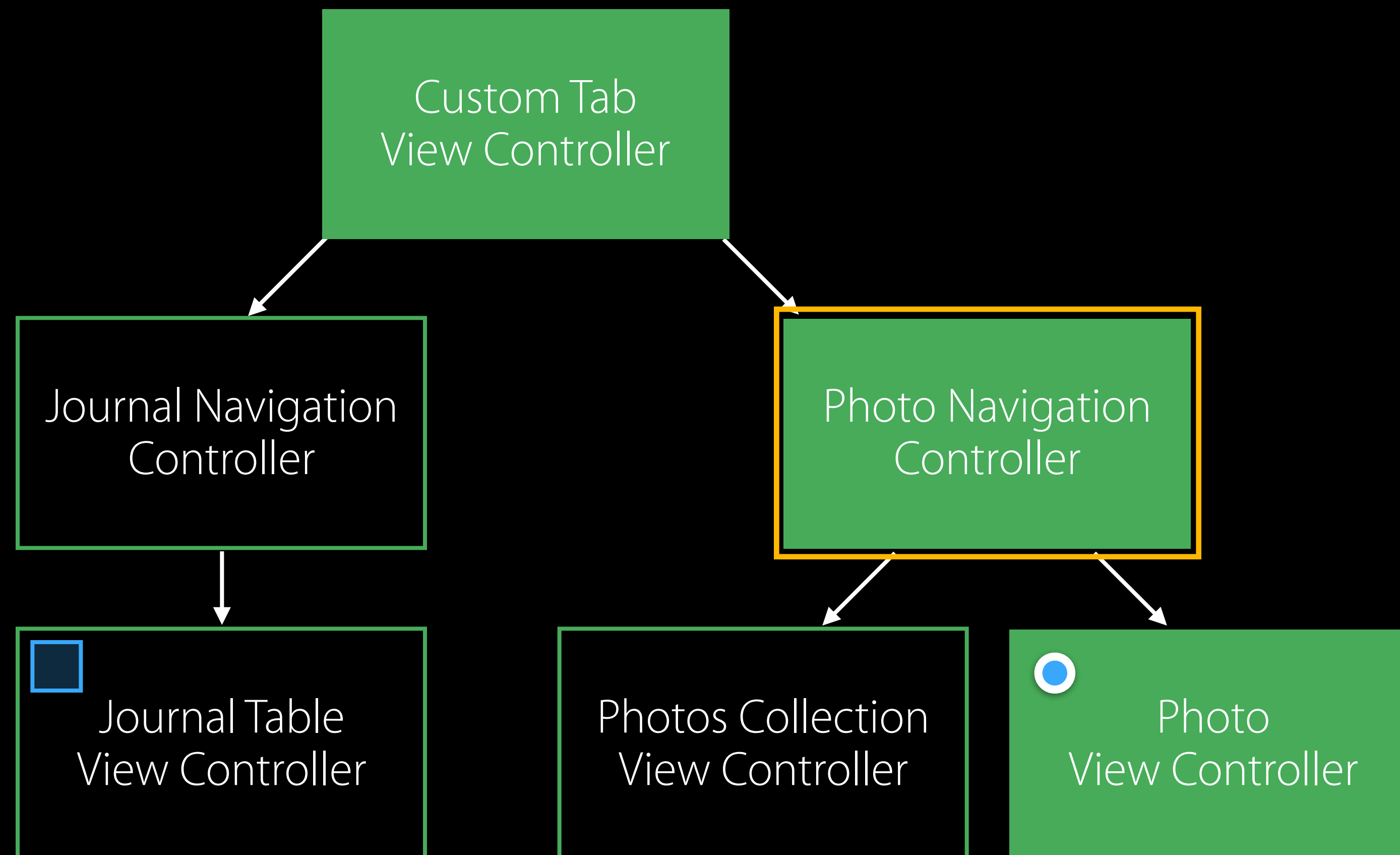


Unwind Segues

Find the destination



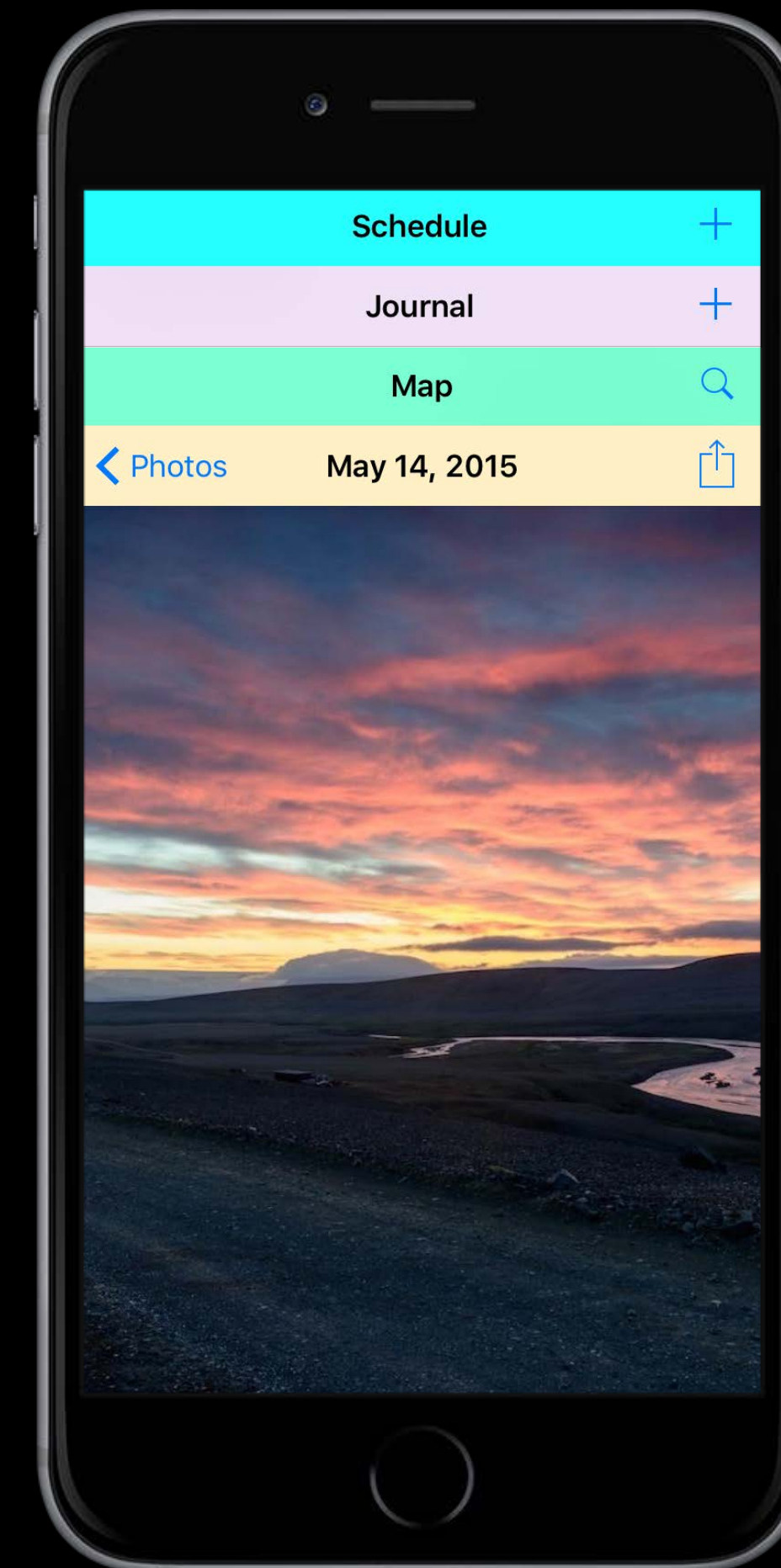
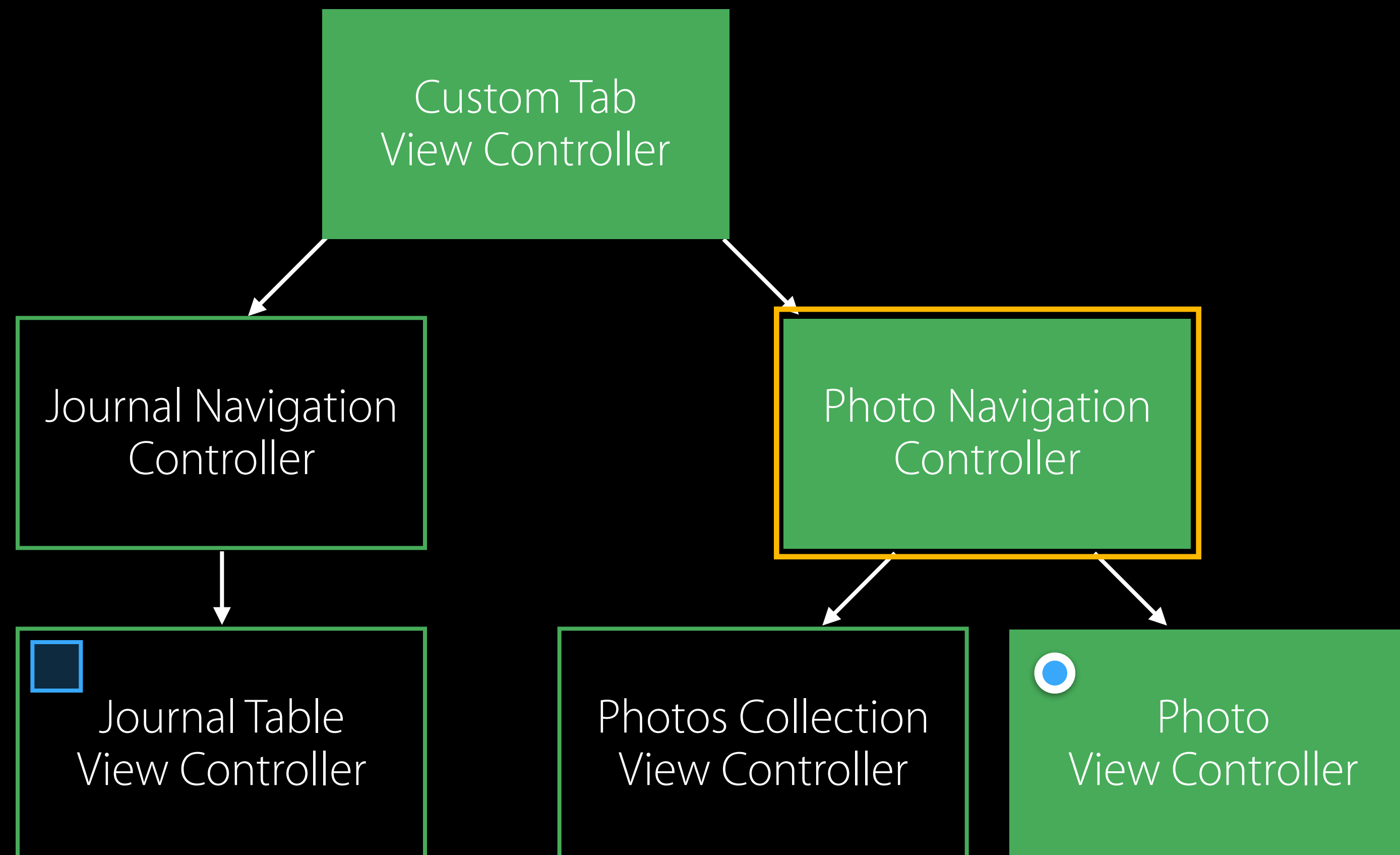
Unwind Segues



Unwind Segues



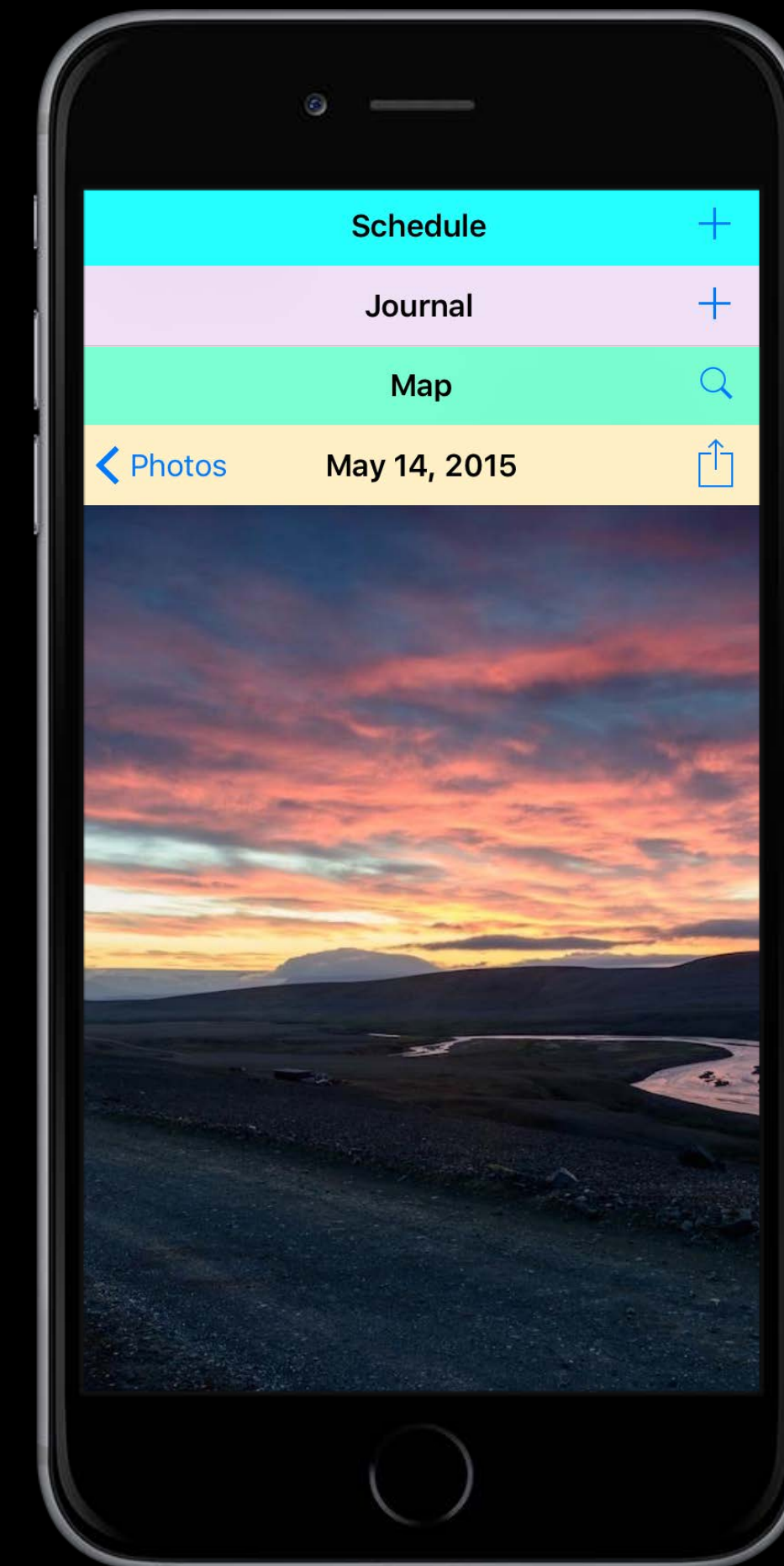
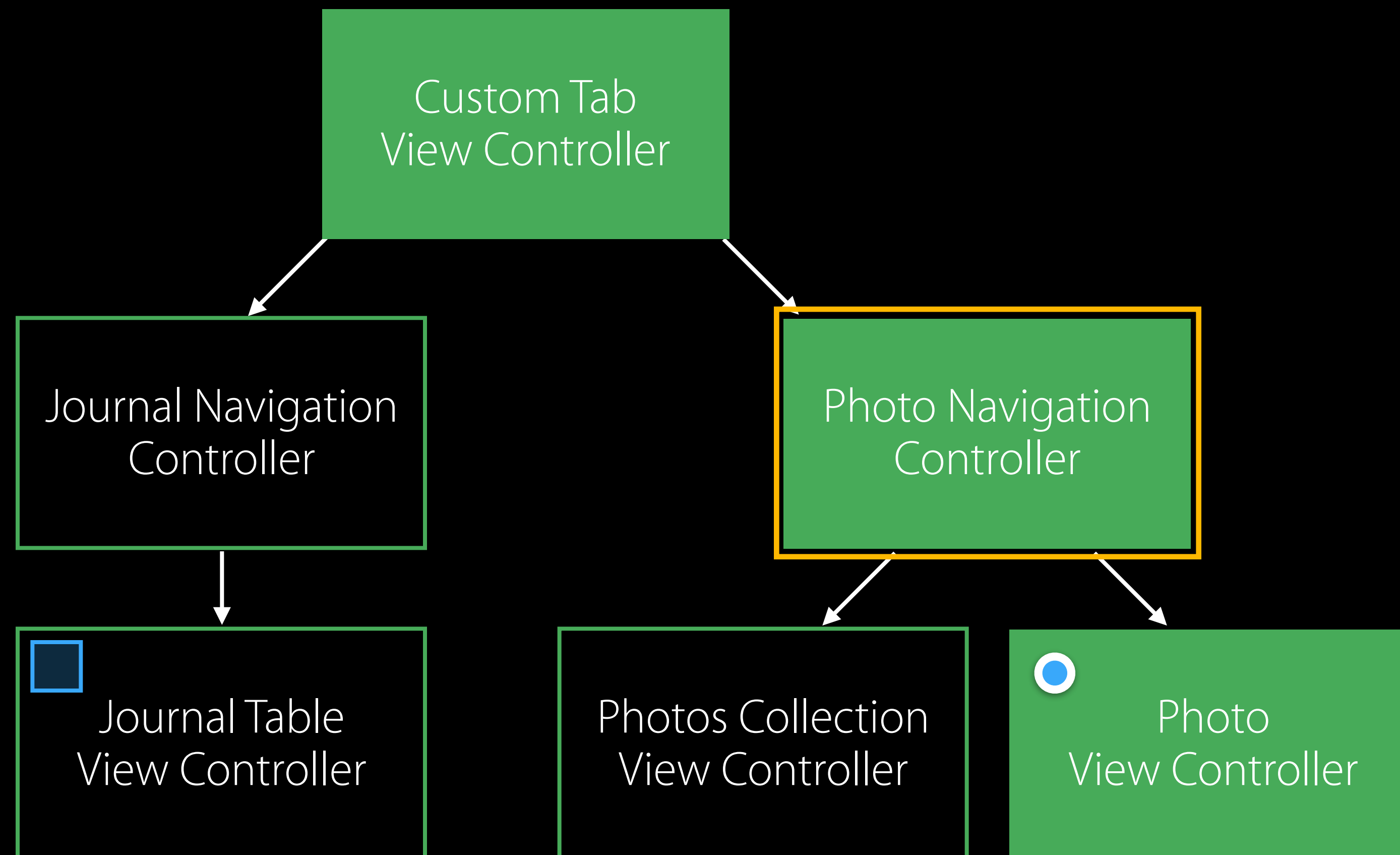
```
viewControllerForUnwindSegueAction("iAmTheJournal:", withSender:...)
```



Unwind Segues



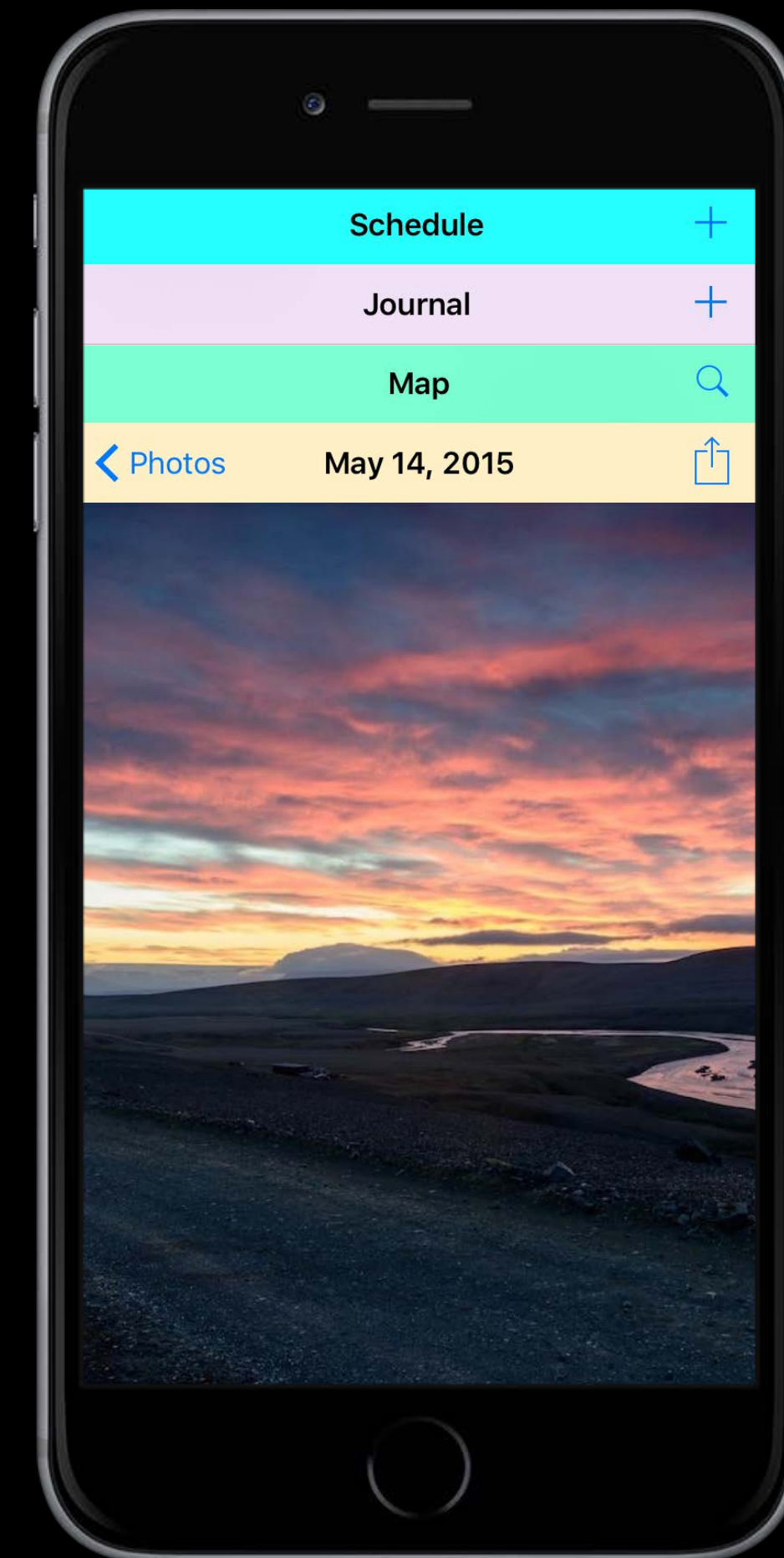
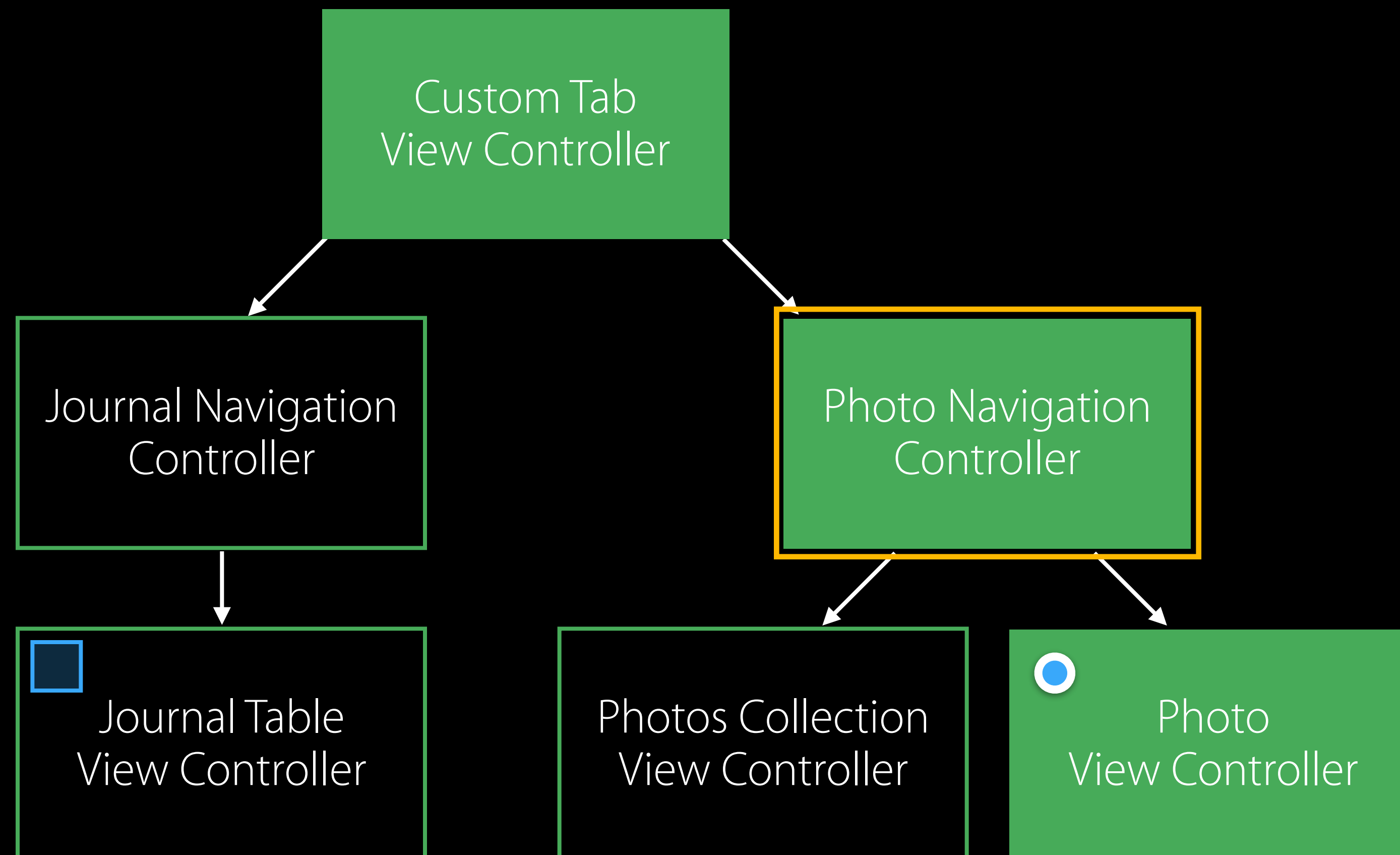
override `allowedChildViewControllersForUnwindingFromSource(_:)`



Unwind Segues



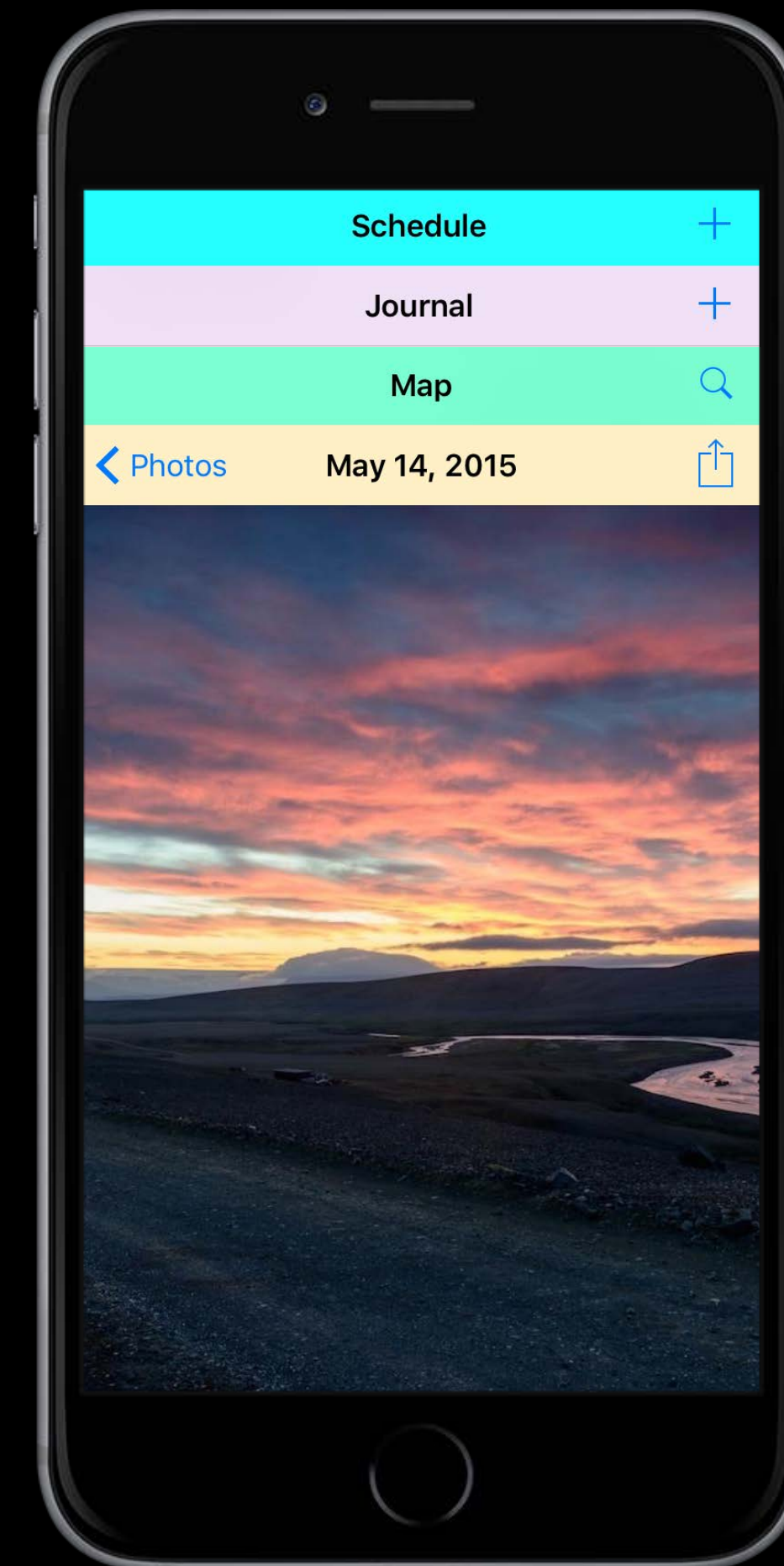
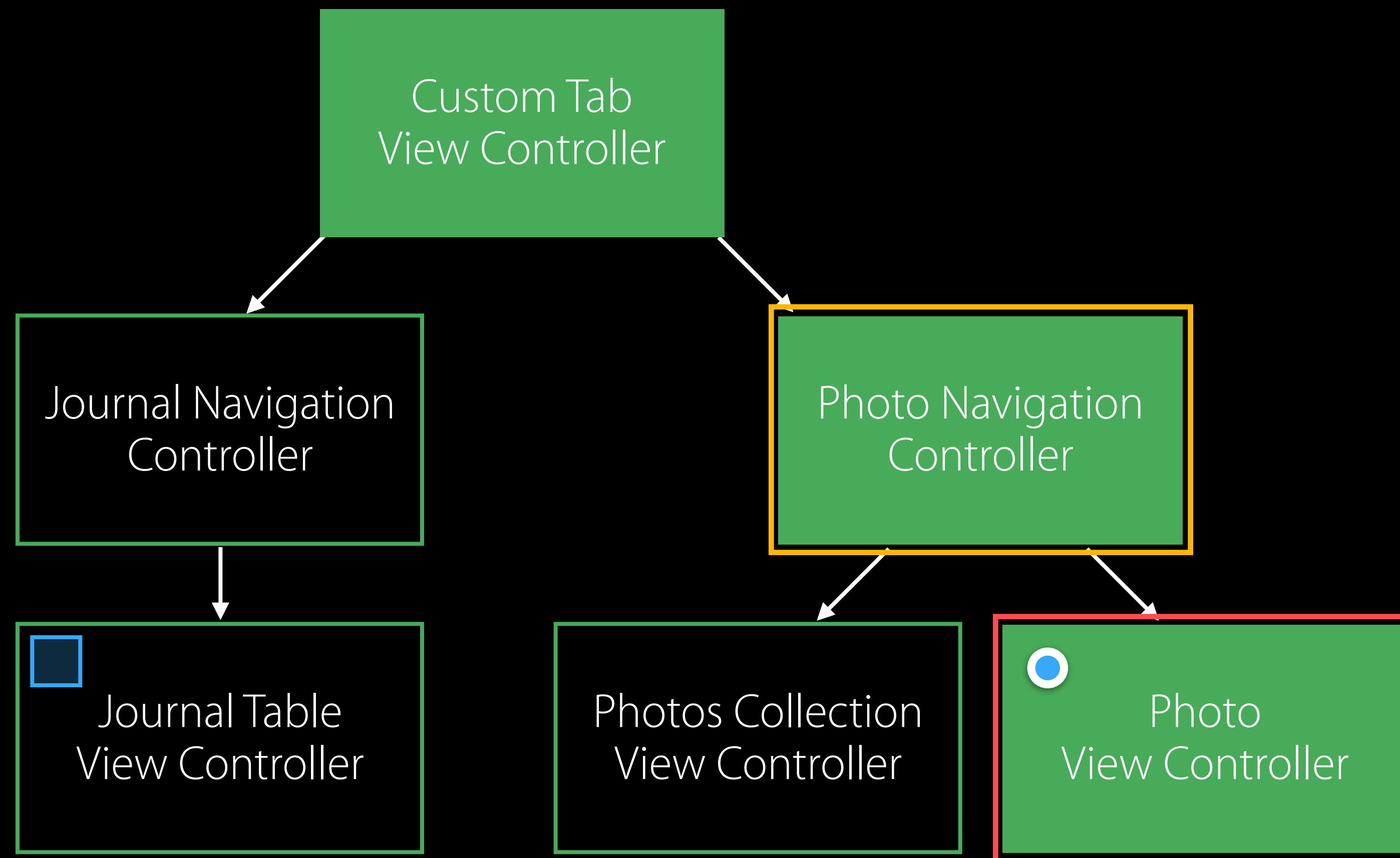
`childViewControllerContainingSegueSource(_:)`



Unwind Segues



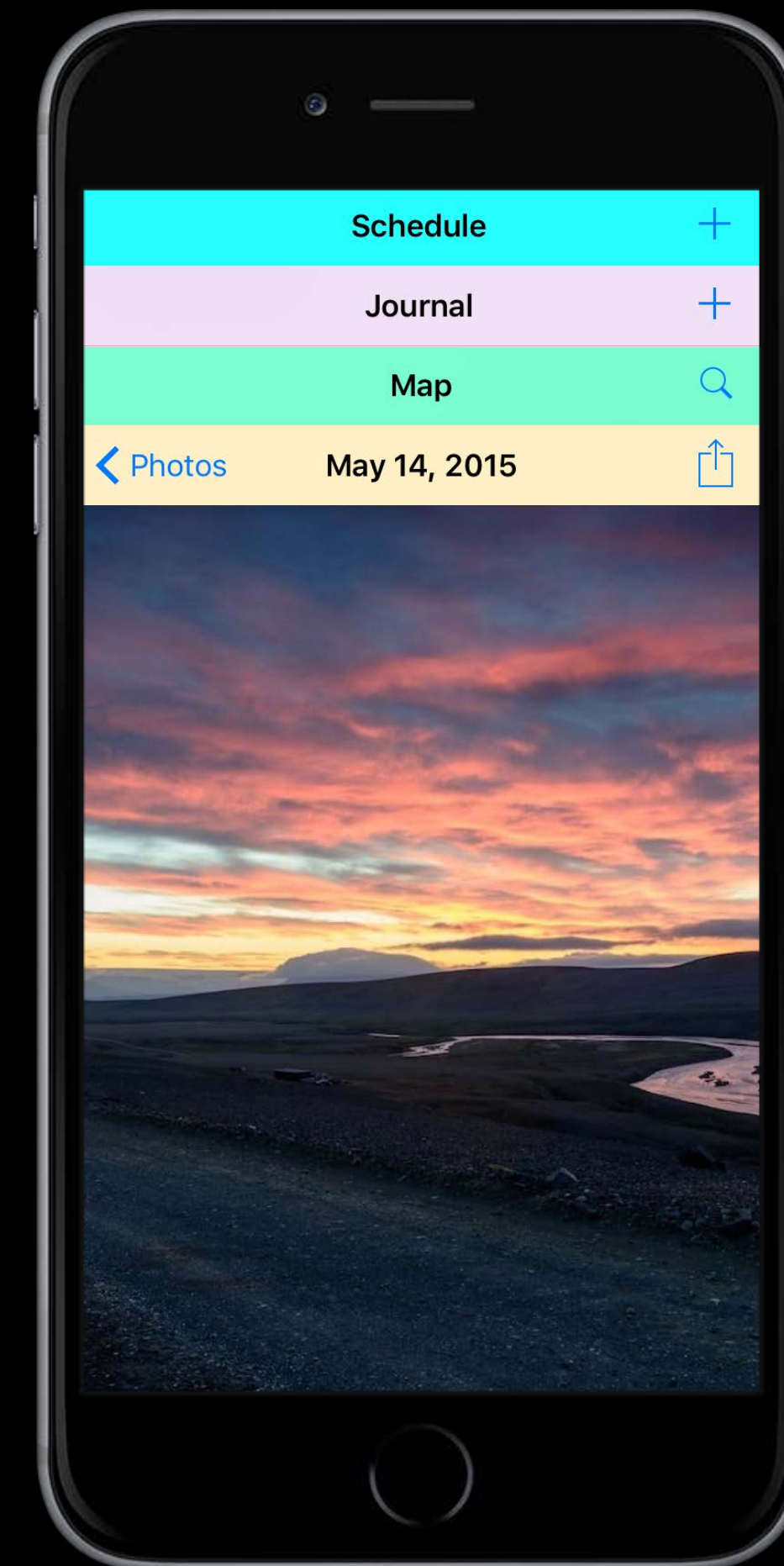
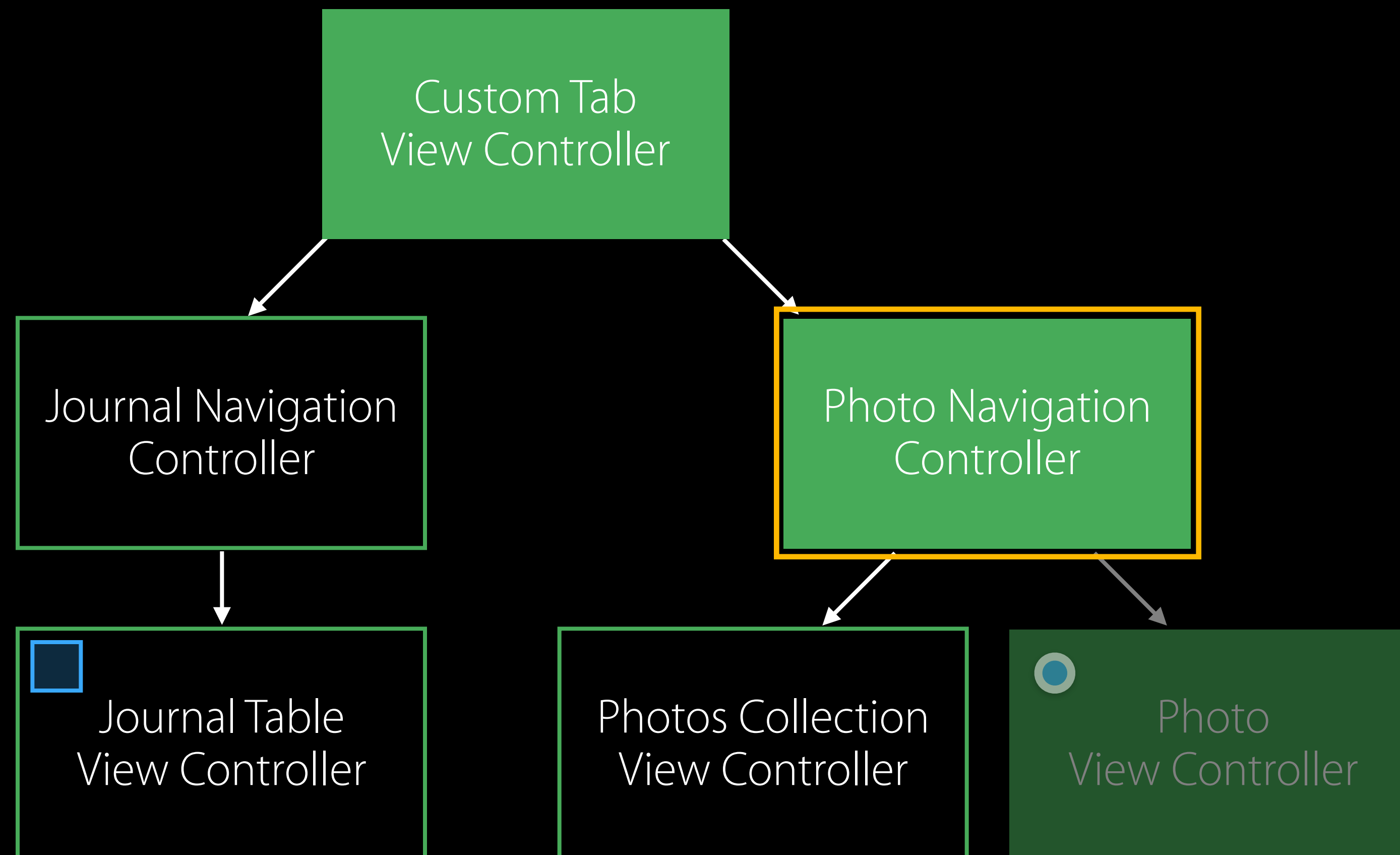
`childViewControllerContainingSegueSource(_:)`



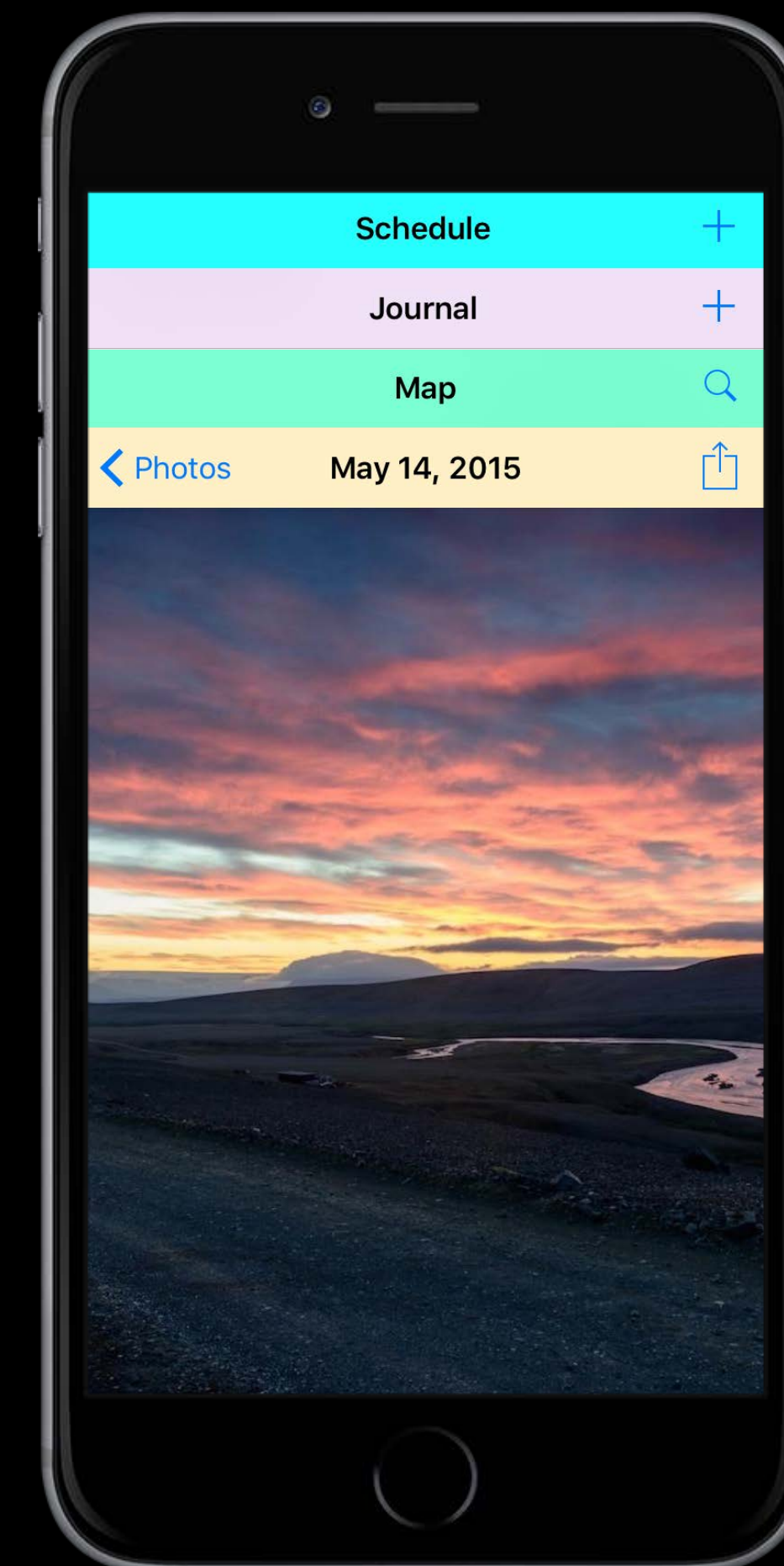
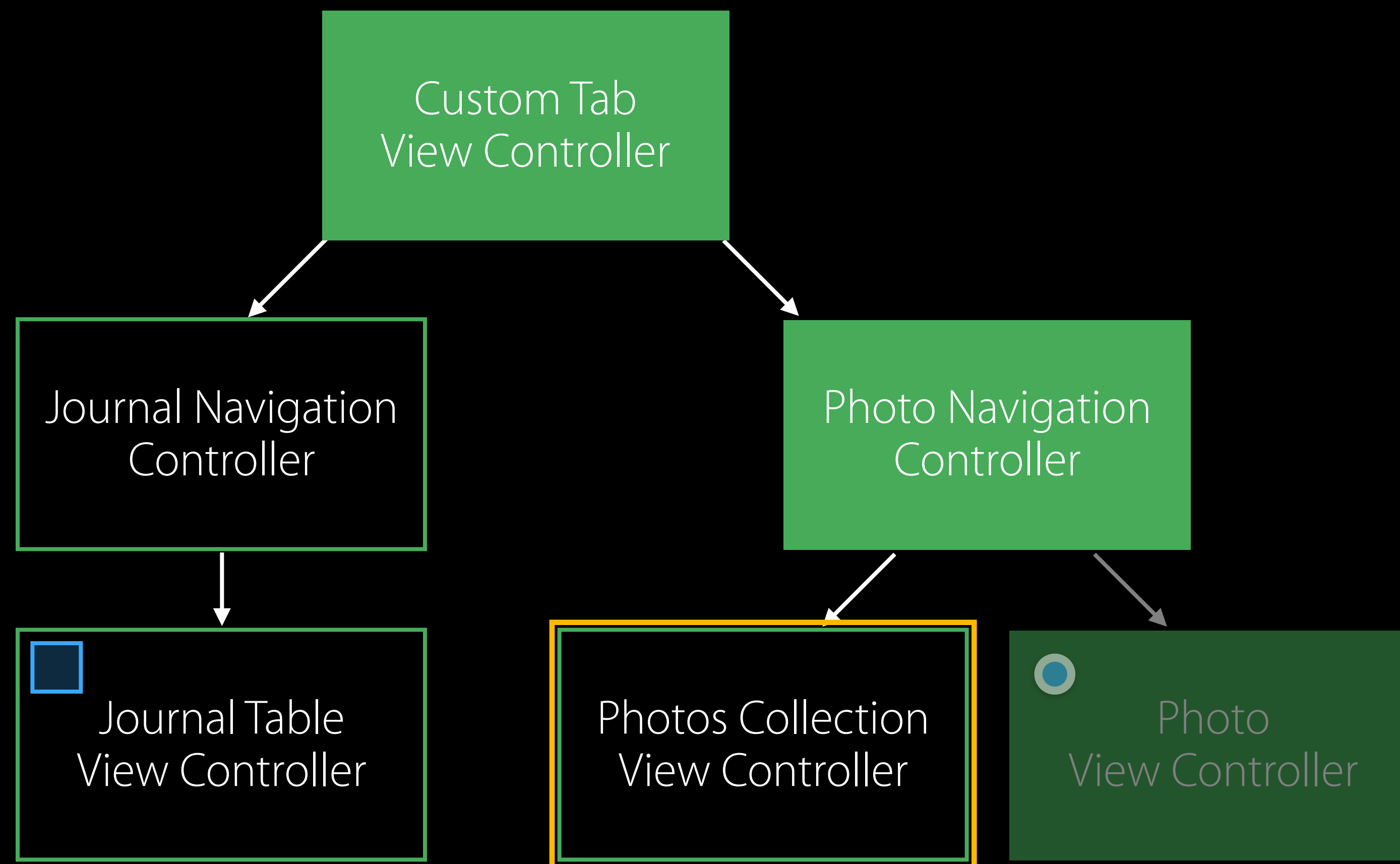
Unwind Segues



`childViewControllerContainingSegueSource(_:)`



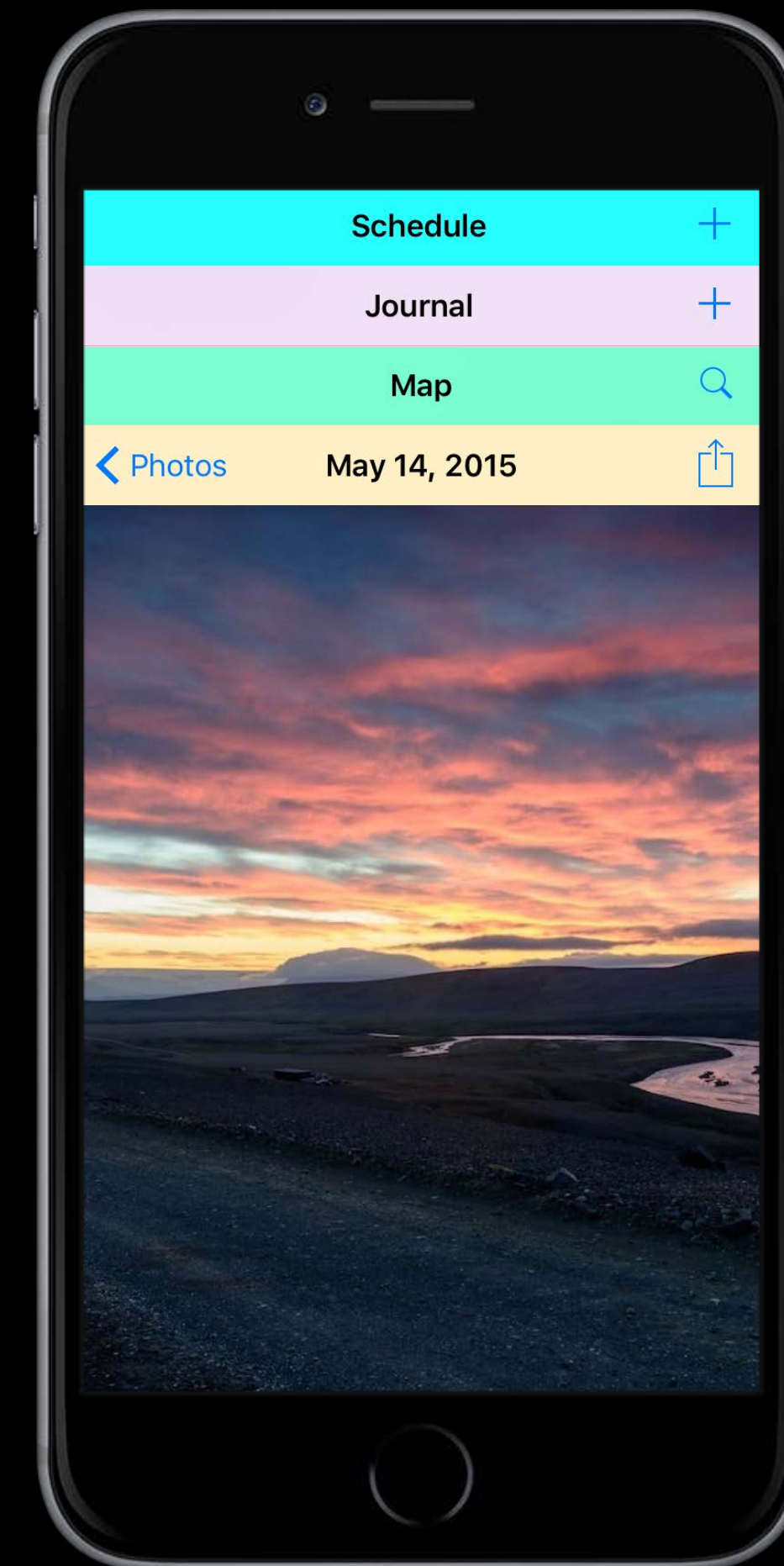
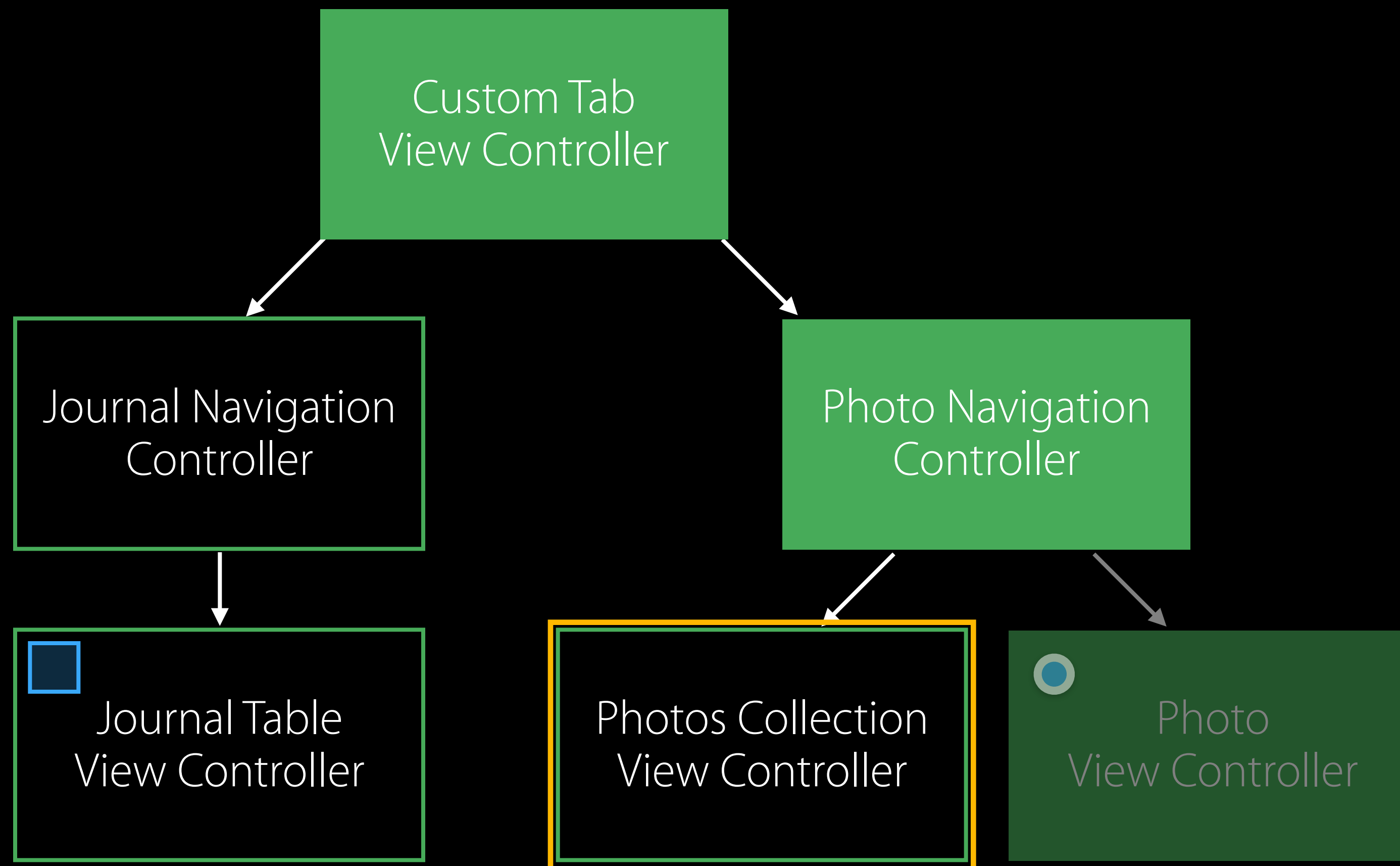
Unwind Segues



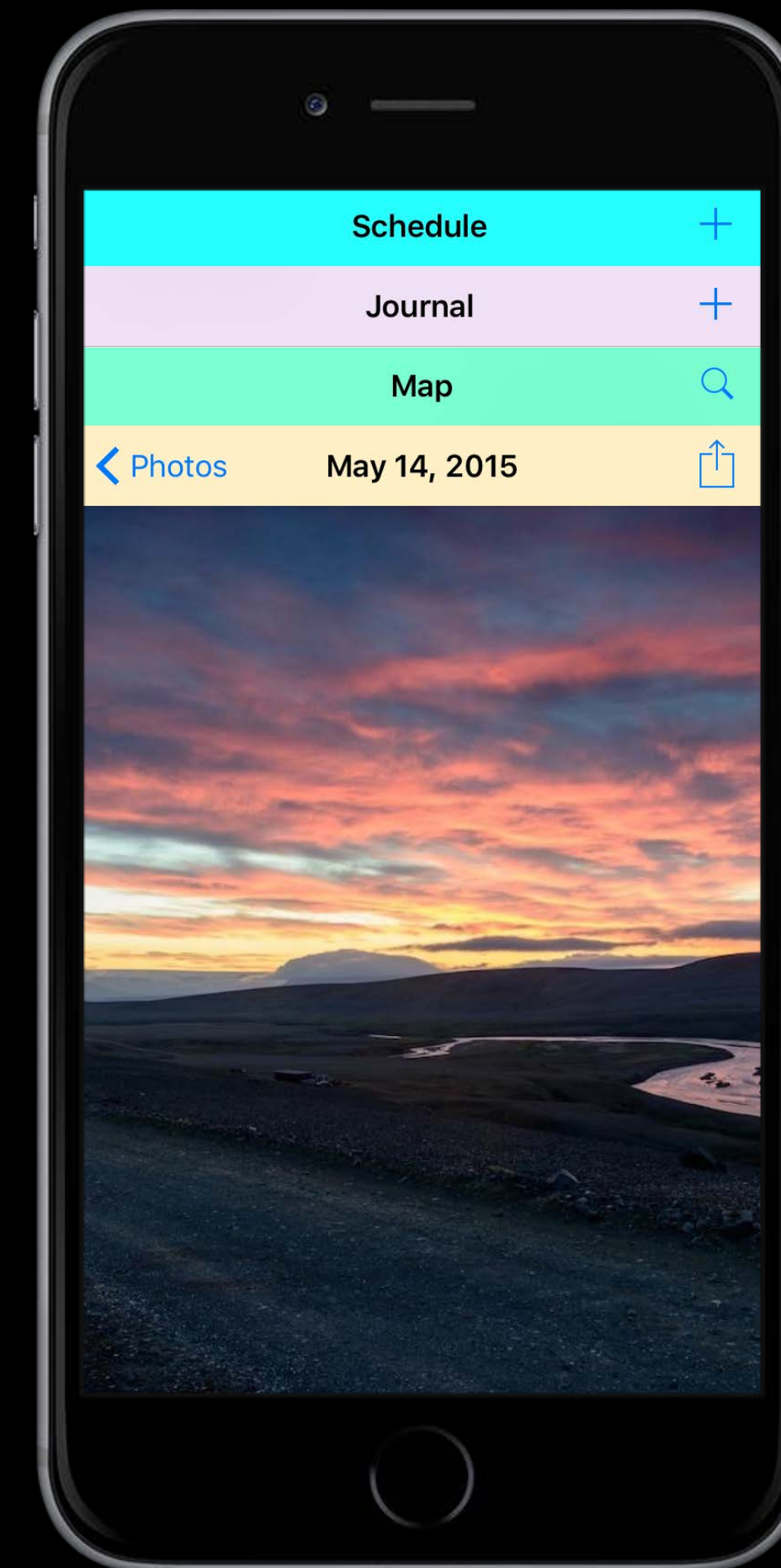
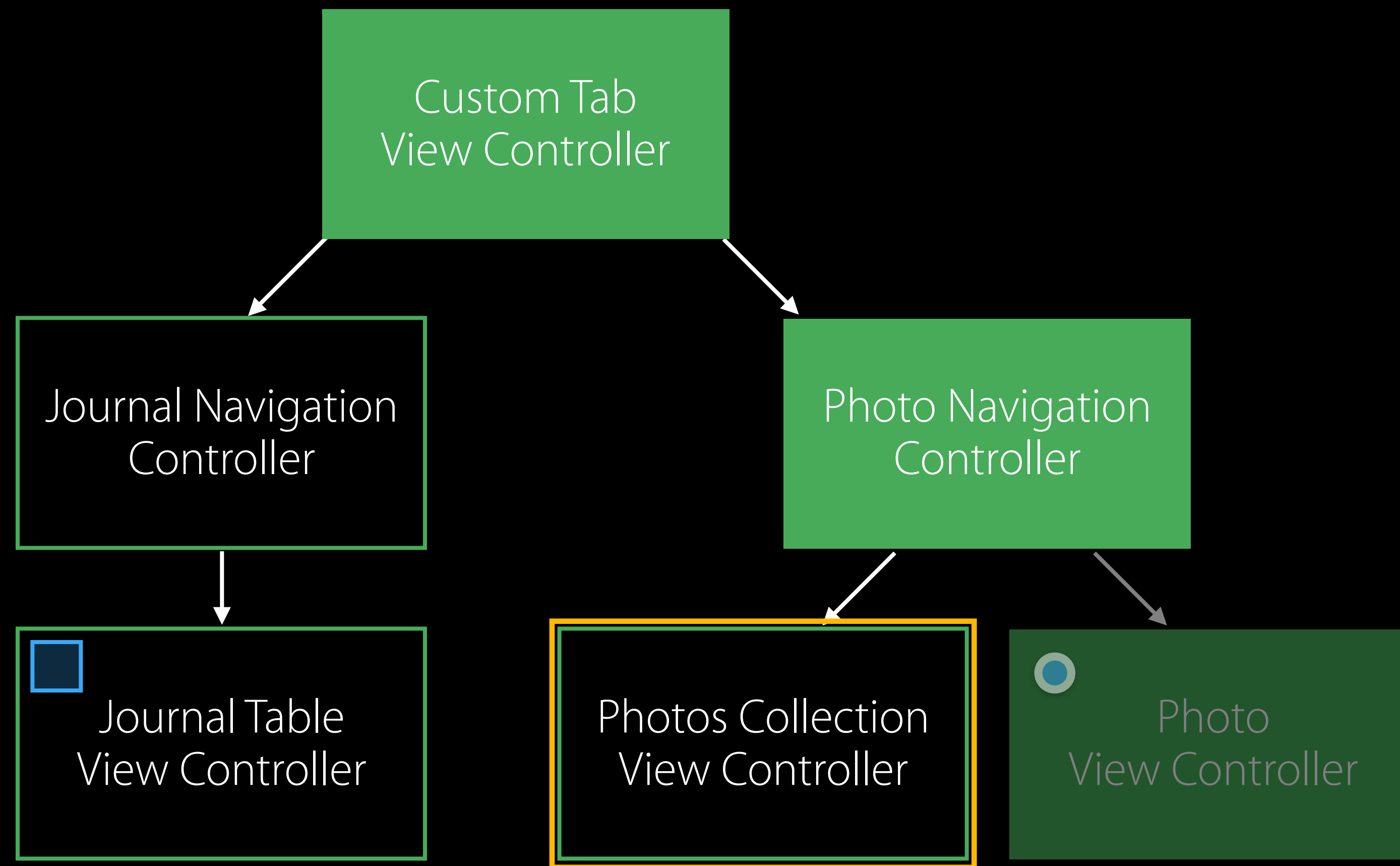
Unwind Segues



override `allowedChildViewControllersForUnwindingFromSource(_:)`

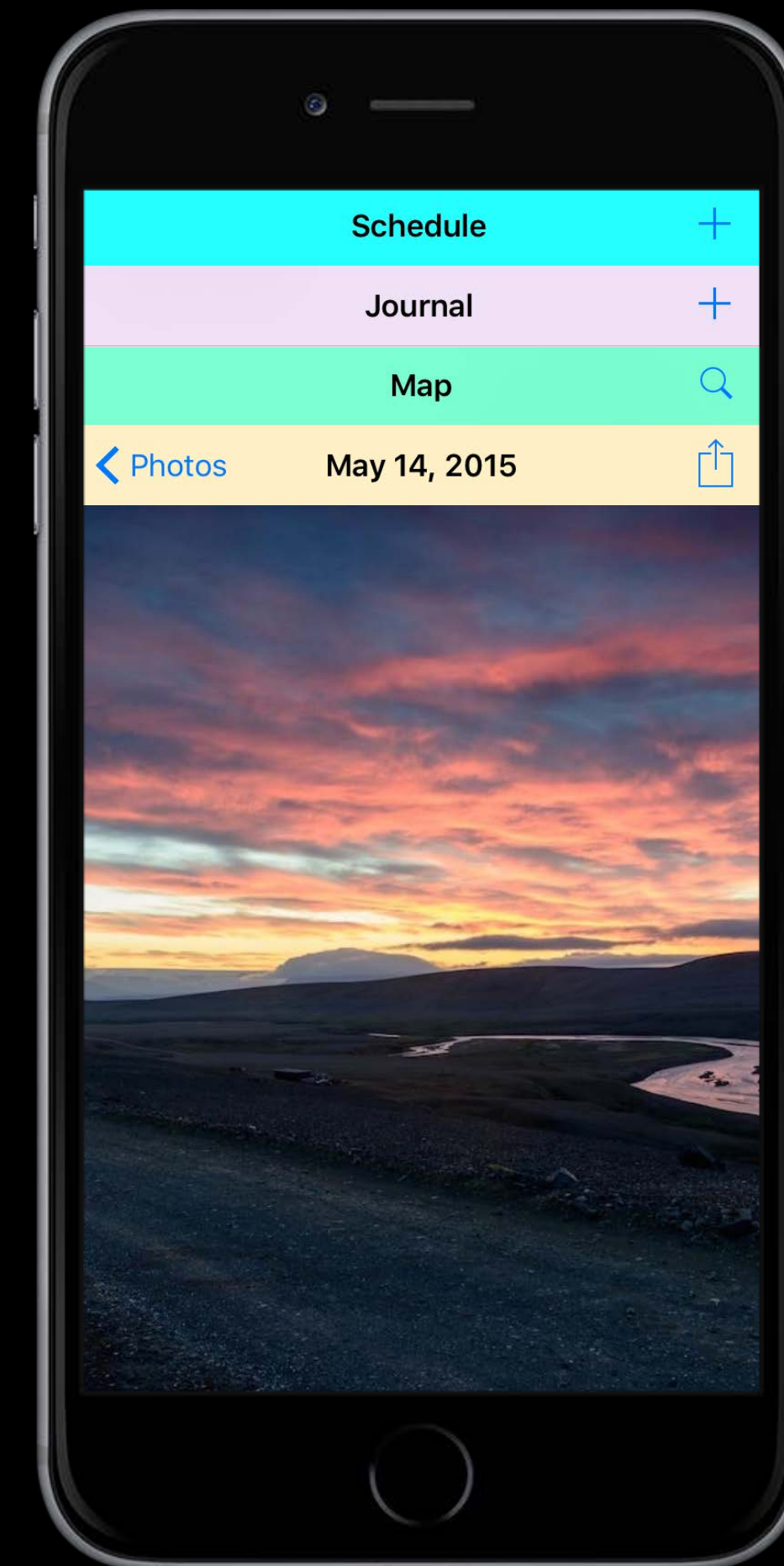
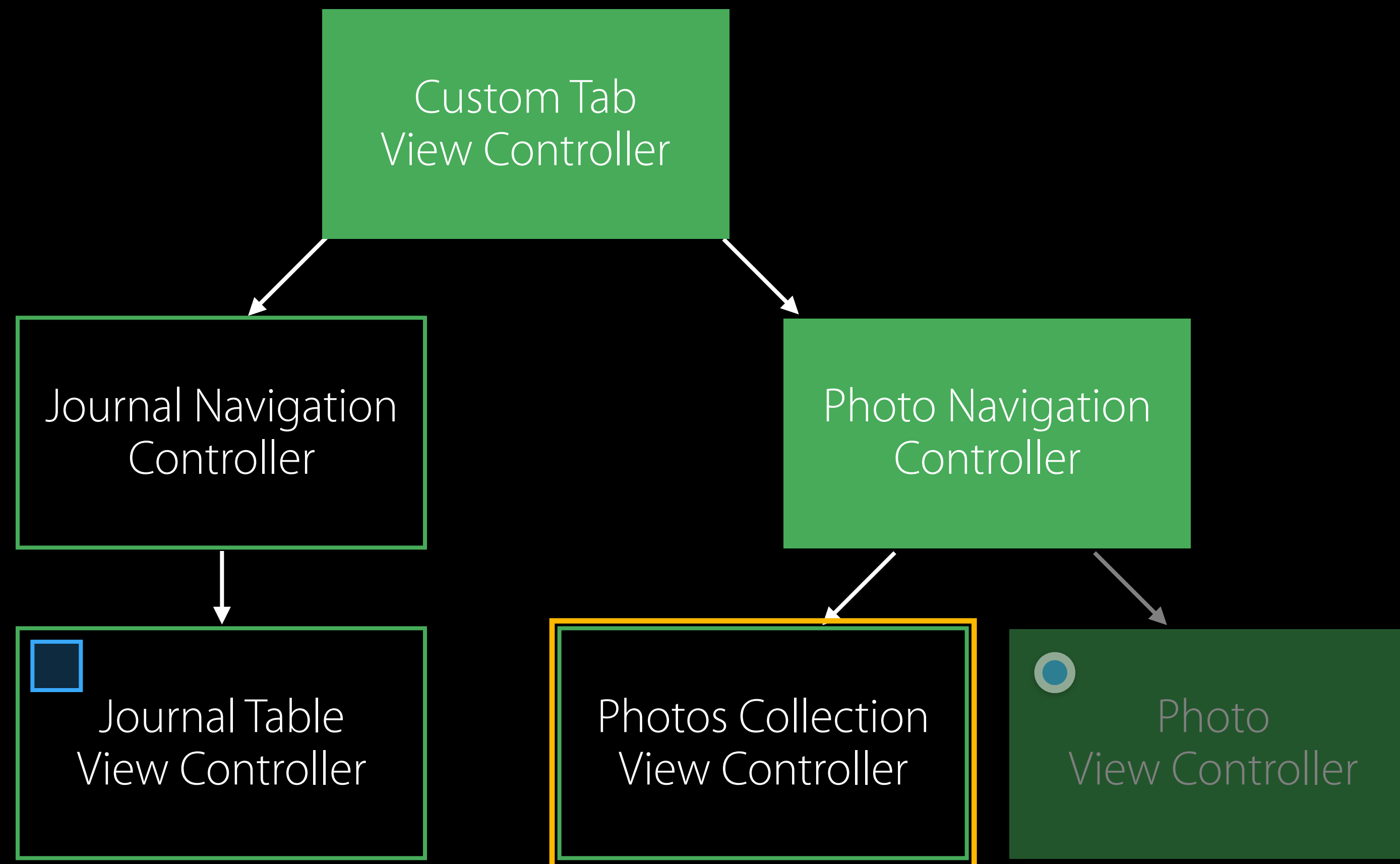


Unwind Segues



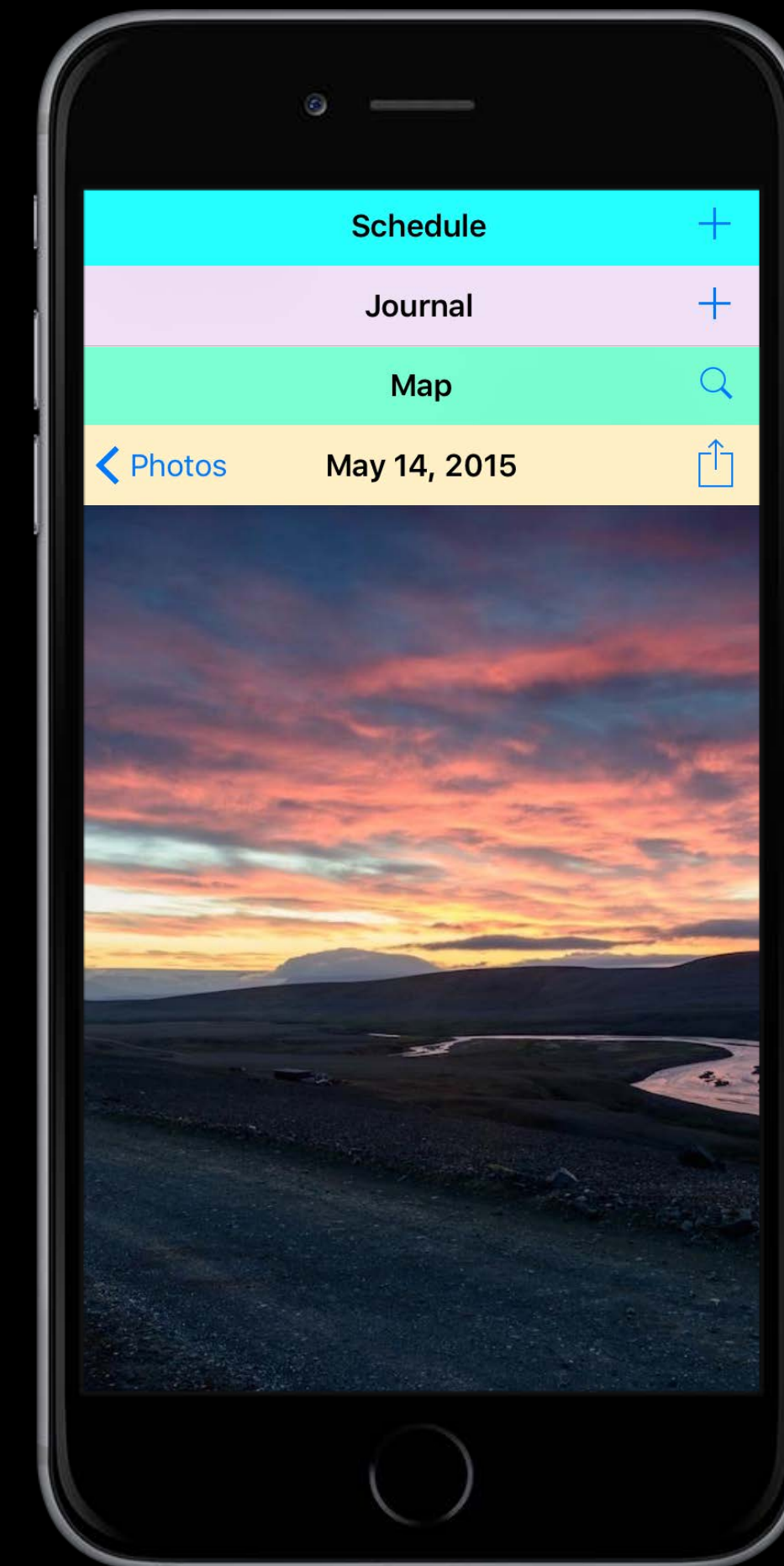
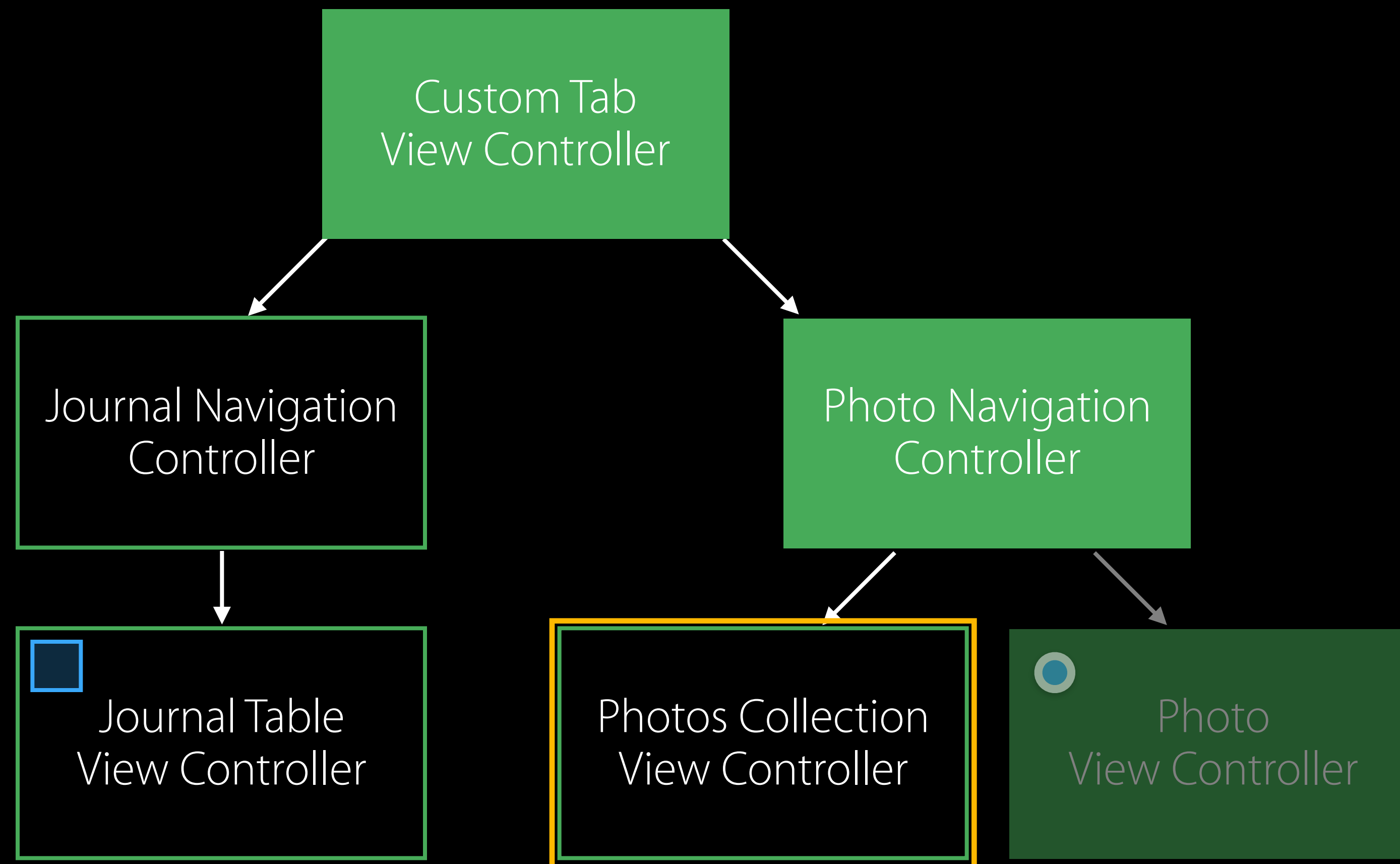
Unwind Segues

`canPerformUnwindSegueAction("iAmTheJournal:", fromViewController:...)`

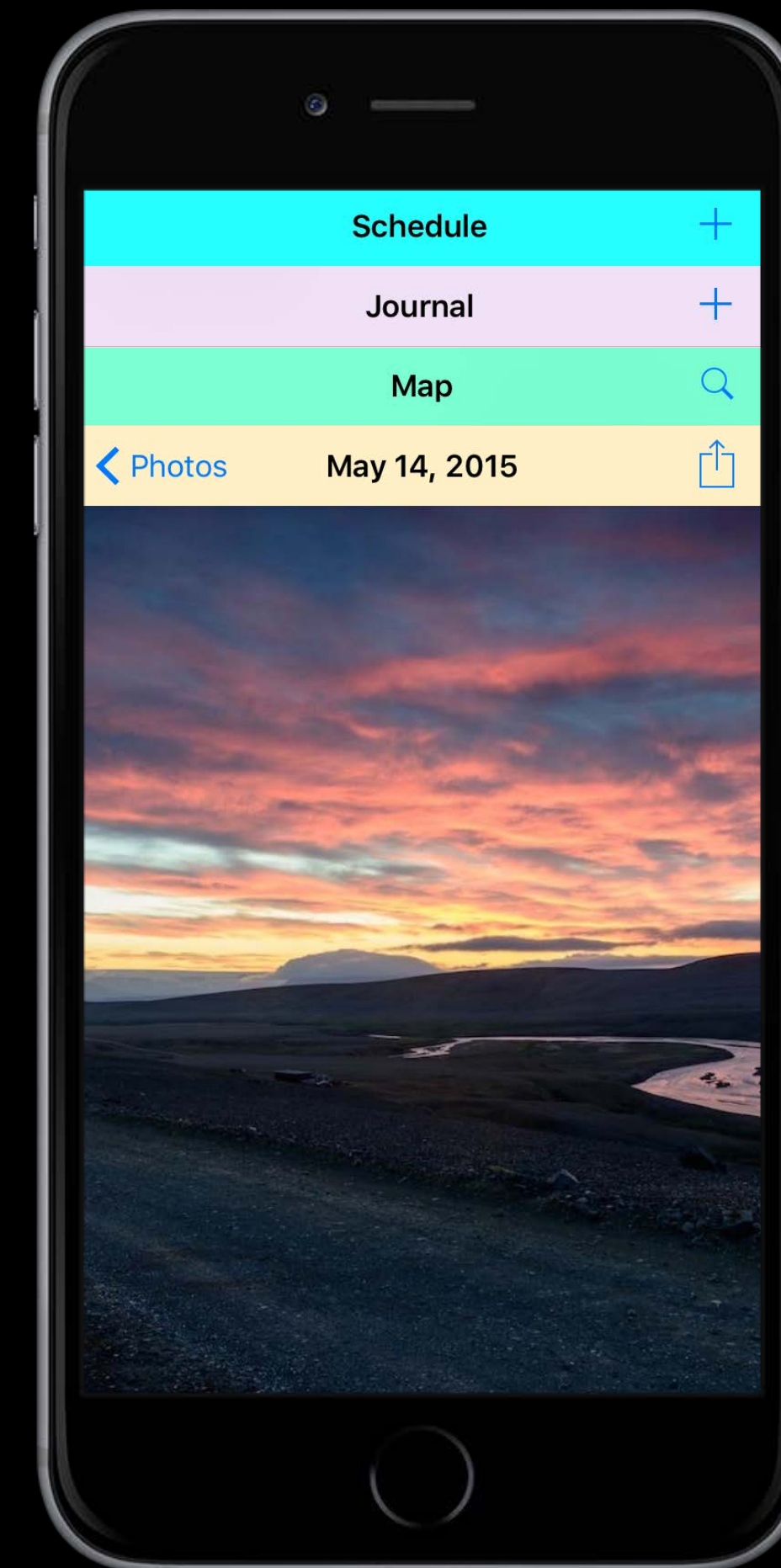
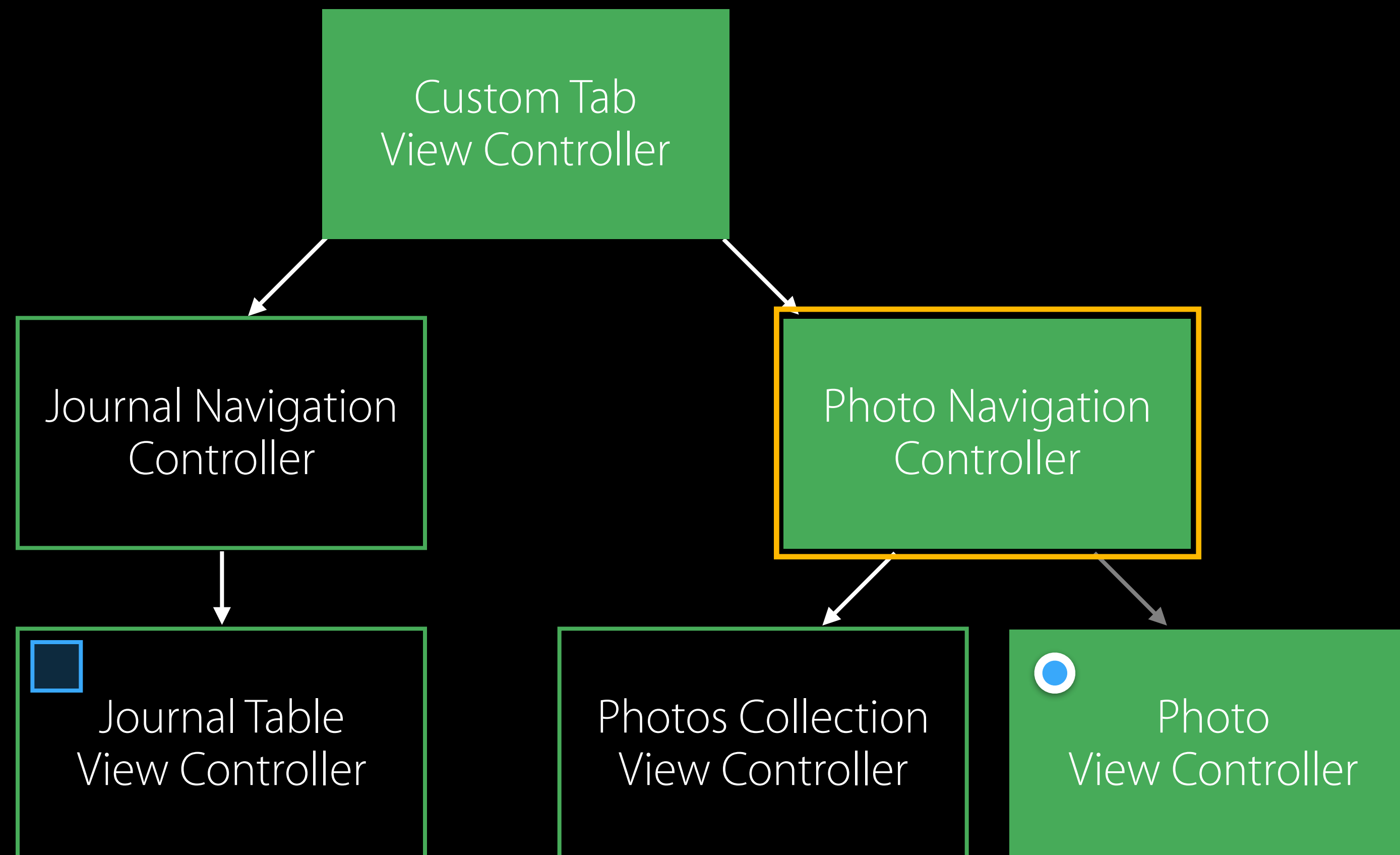


Unwind Segues

⊗ canPerformUnwindSegueAction("iAmTheJournal:", fromViewController:...)

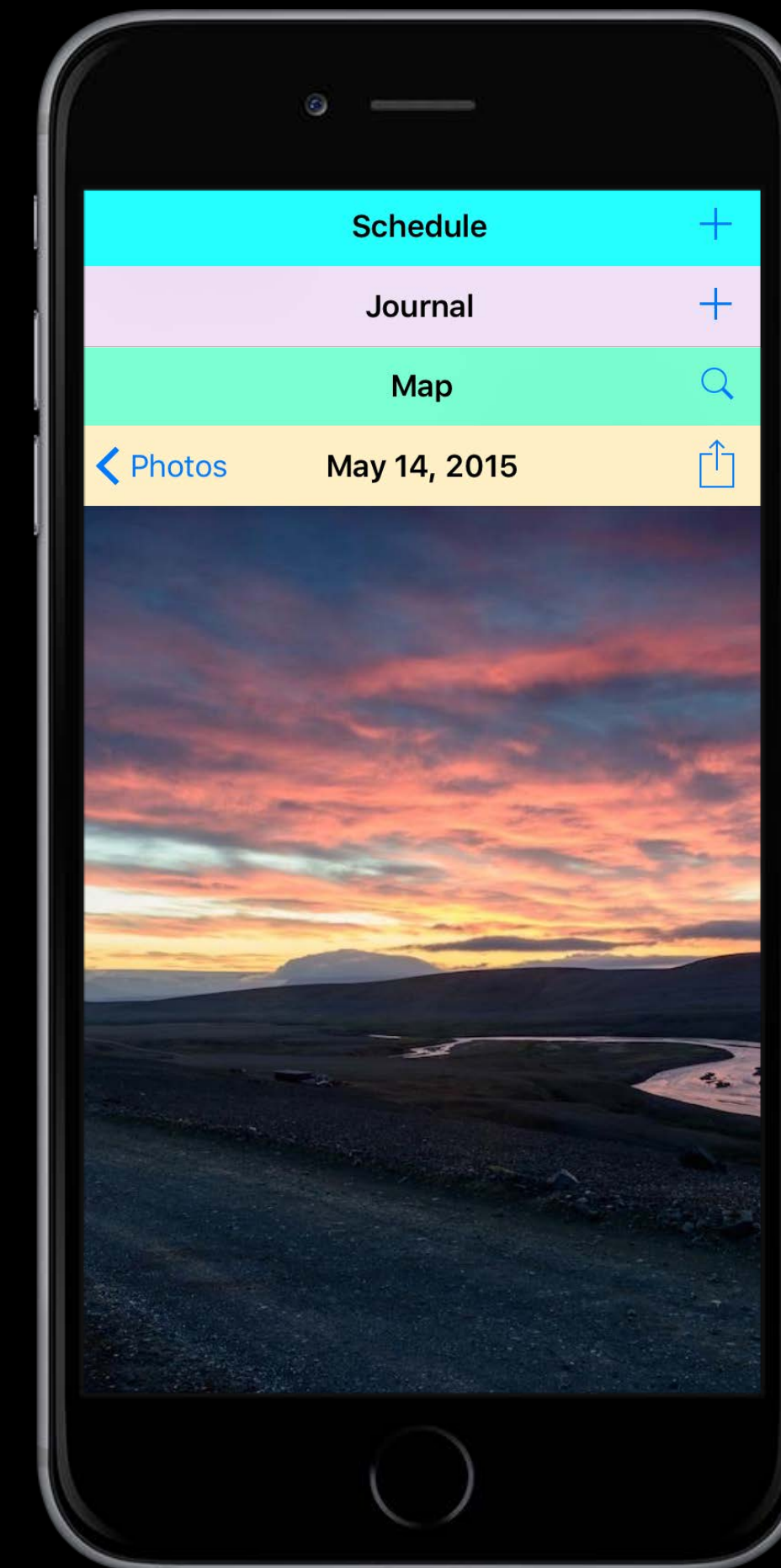
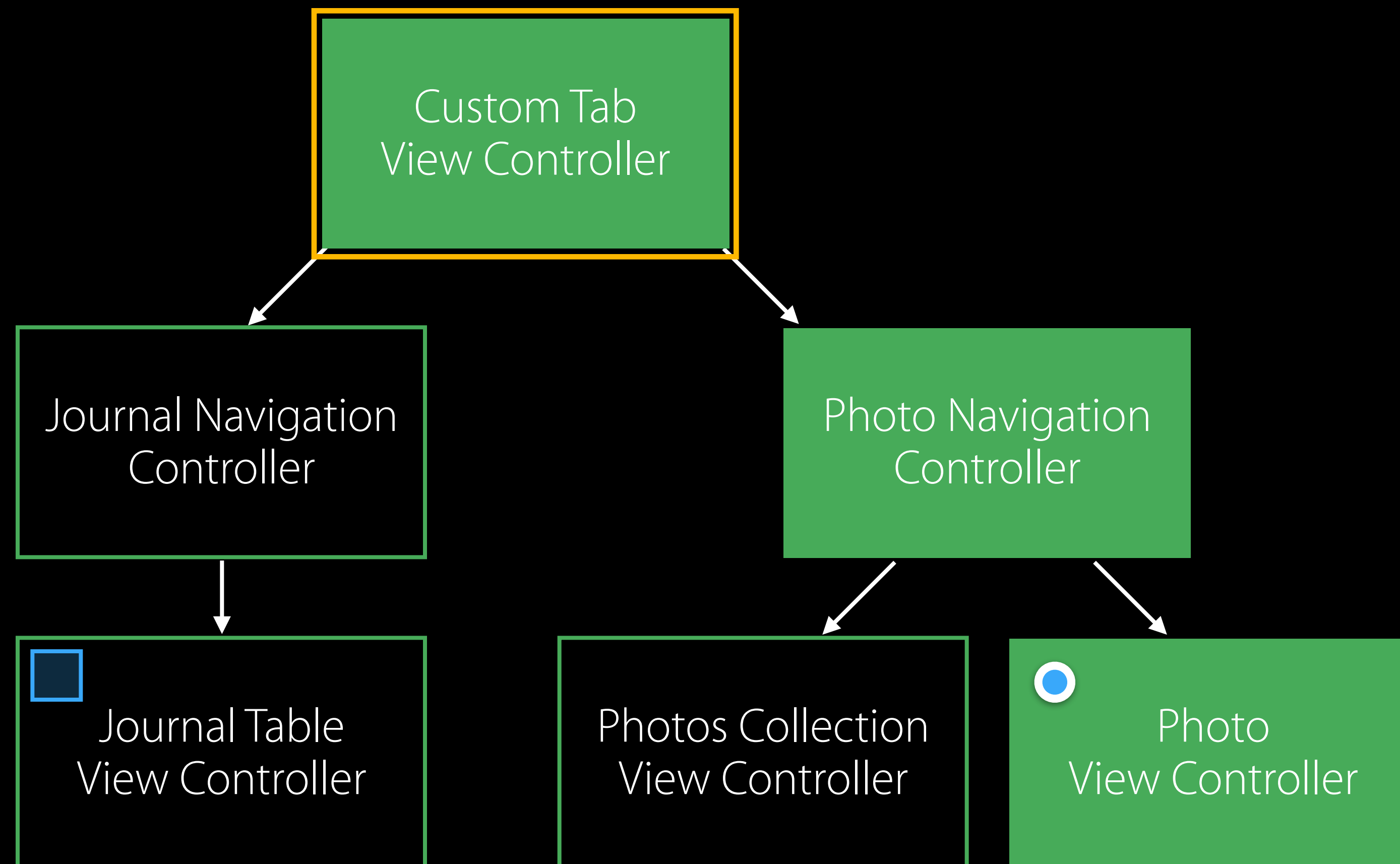


Unwind Segues

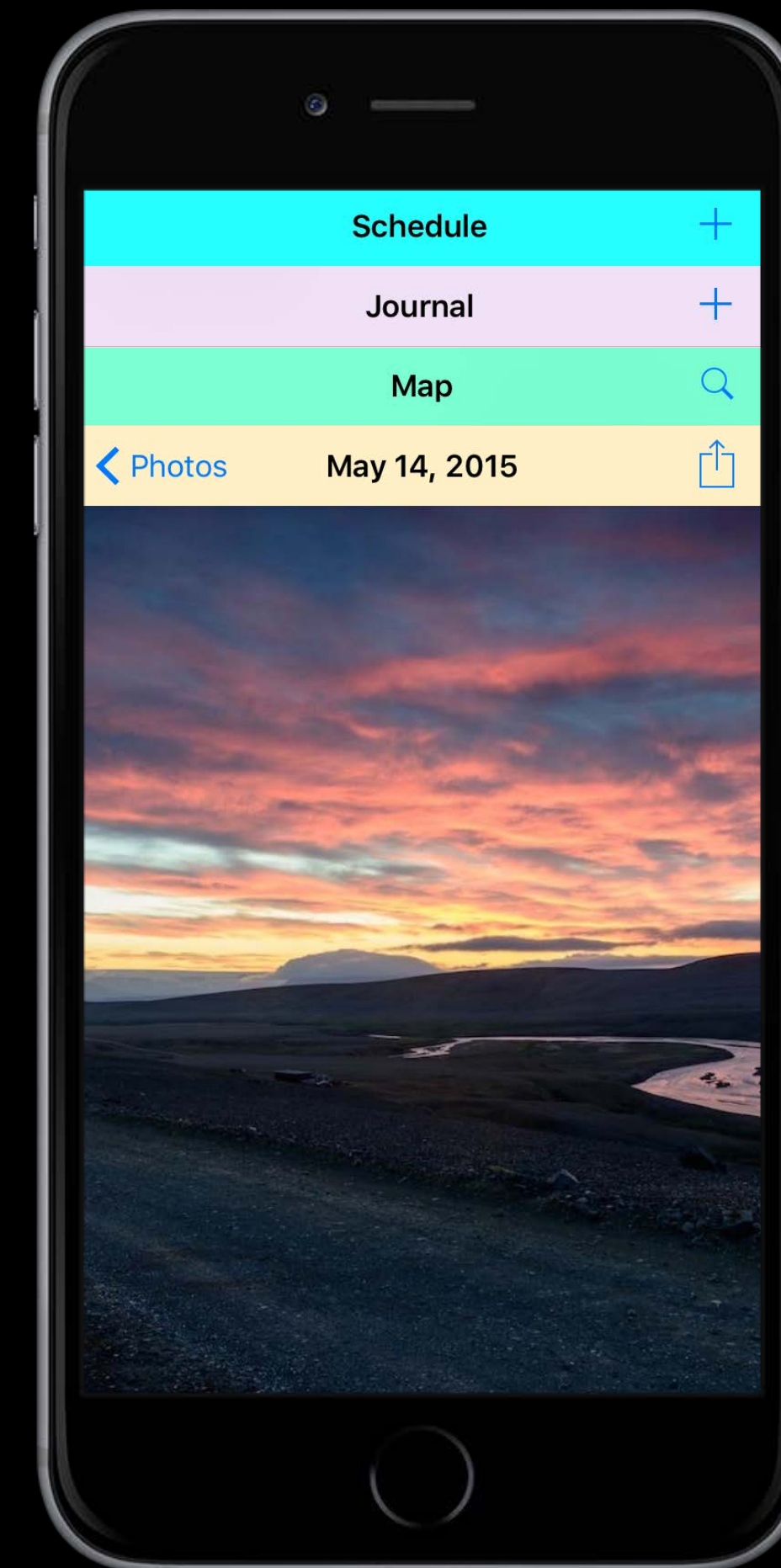
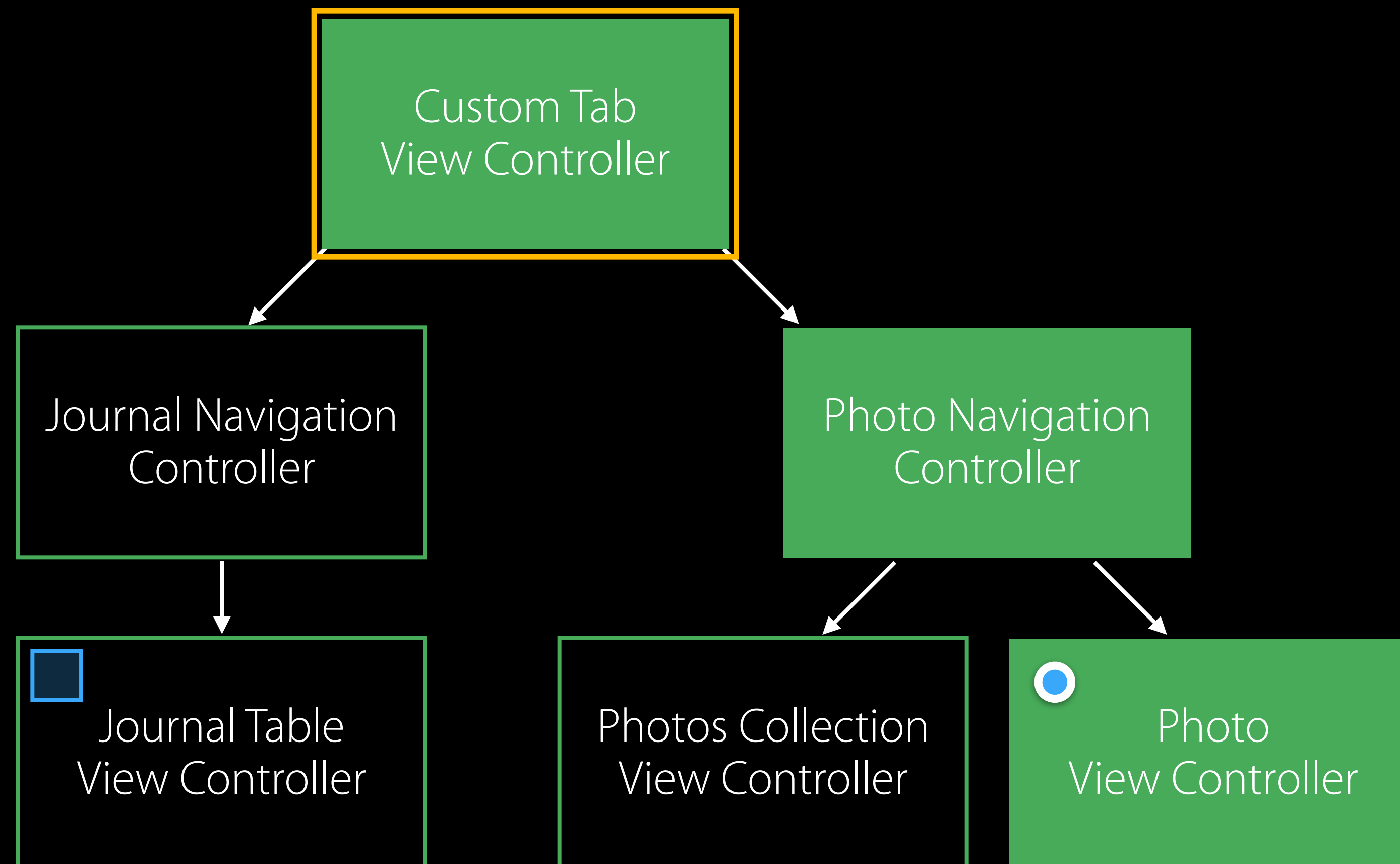


Unwind Segues

override `allowedChildViewControllersForUnwindingFromSource(_:)`

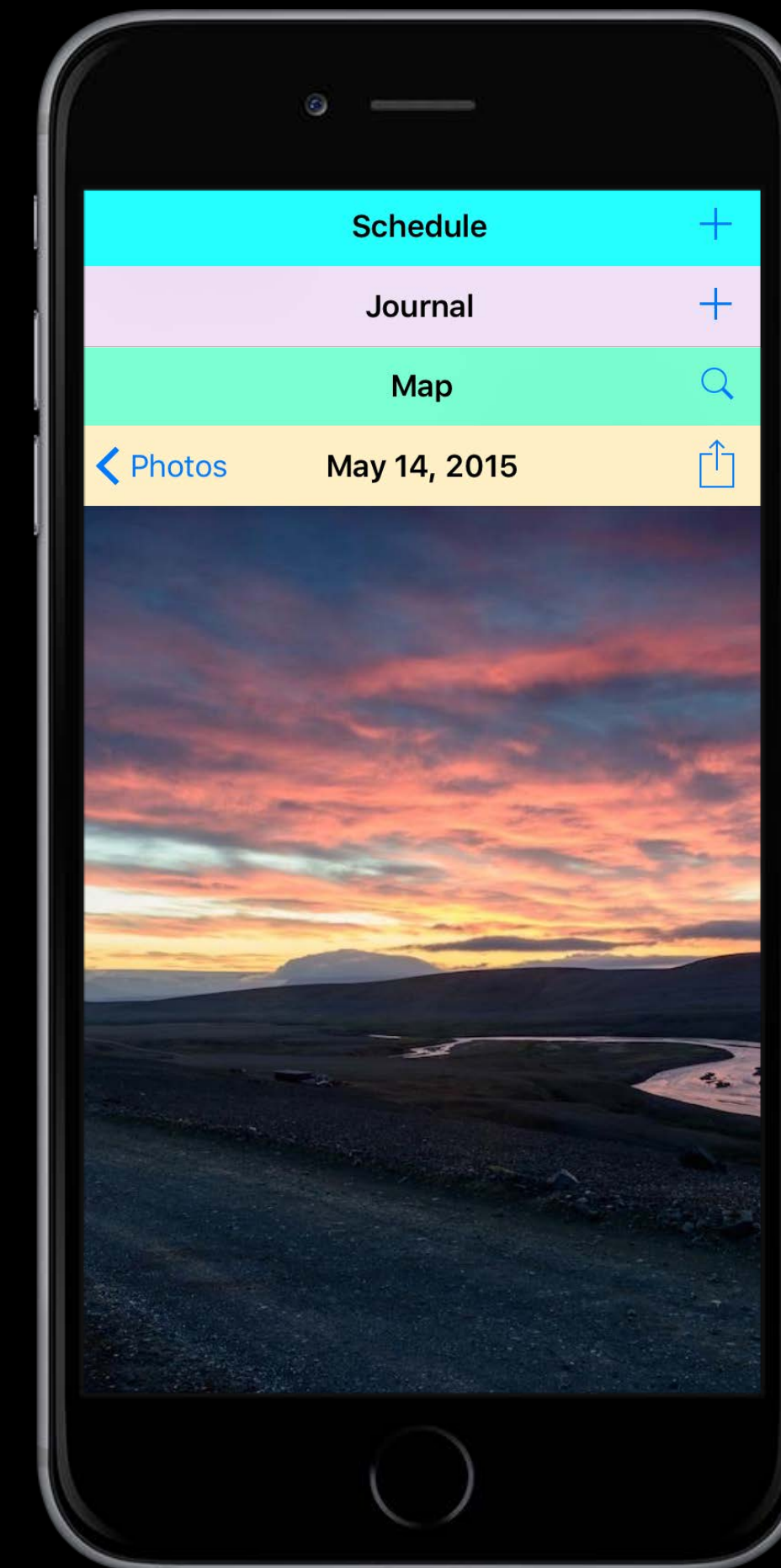
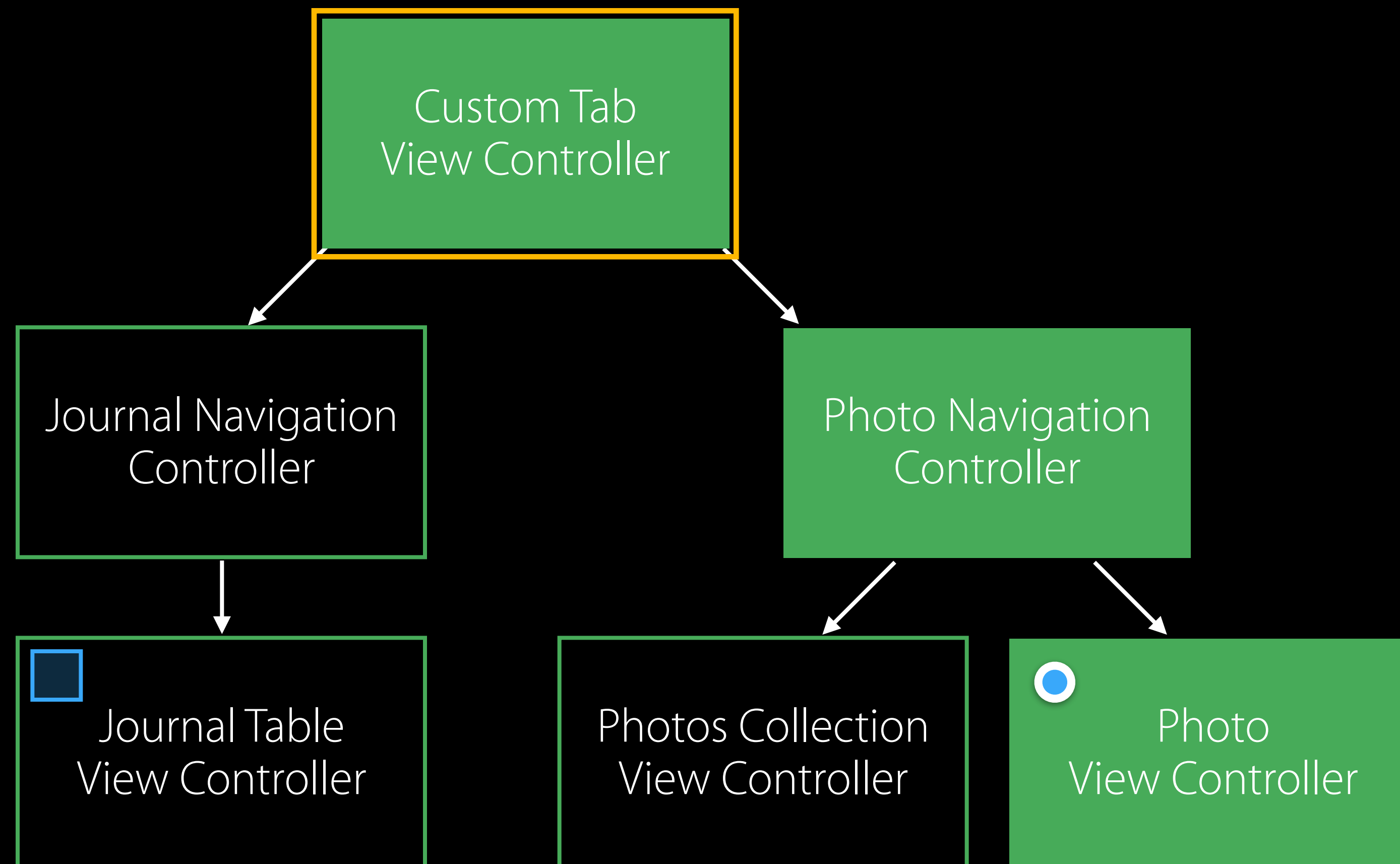


Unwind Segues



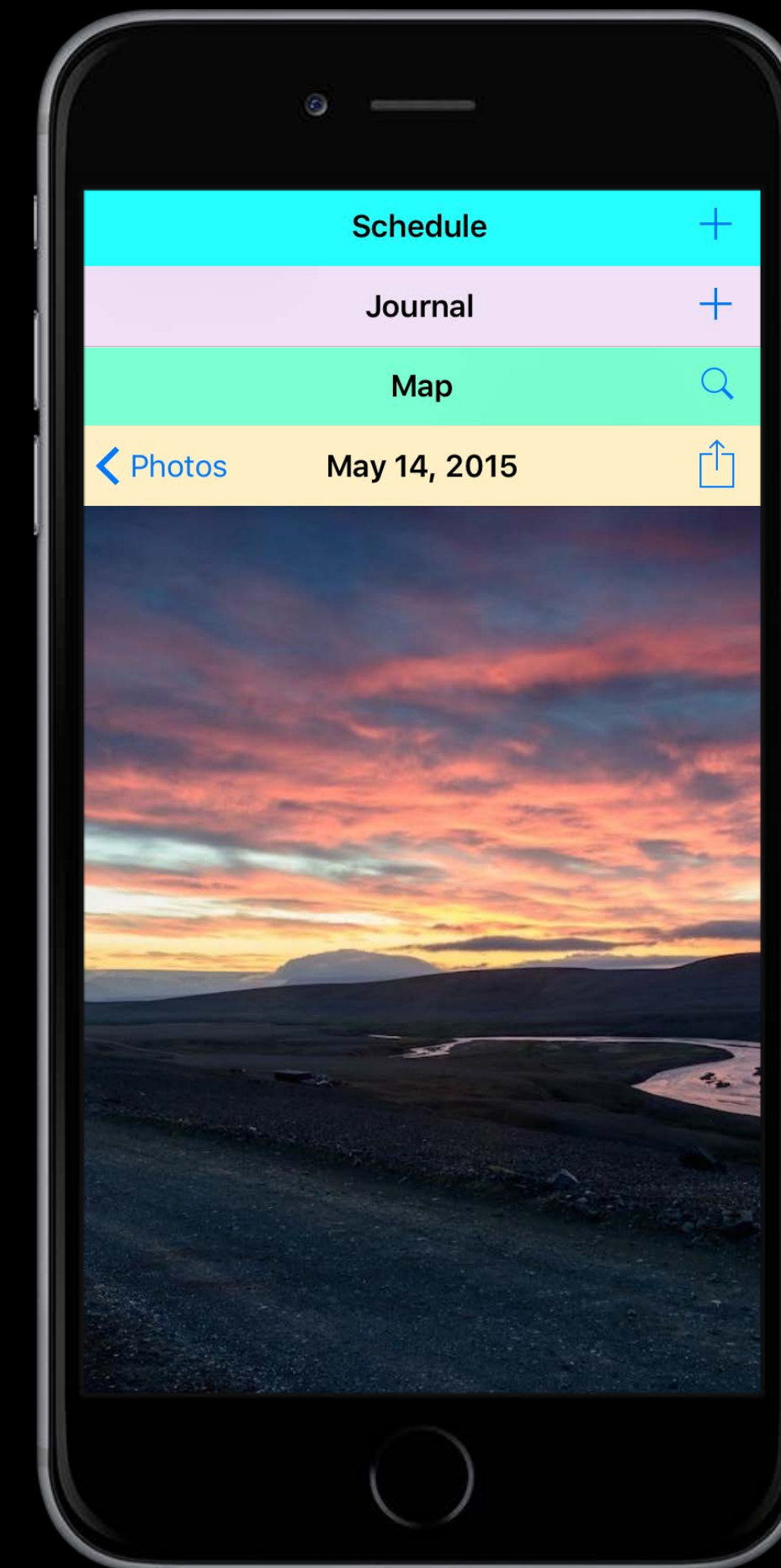
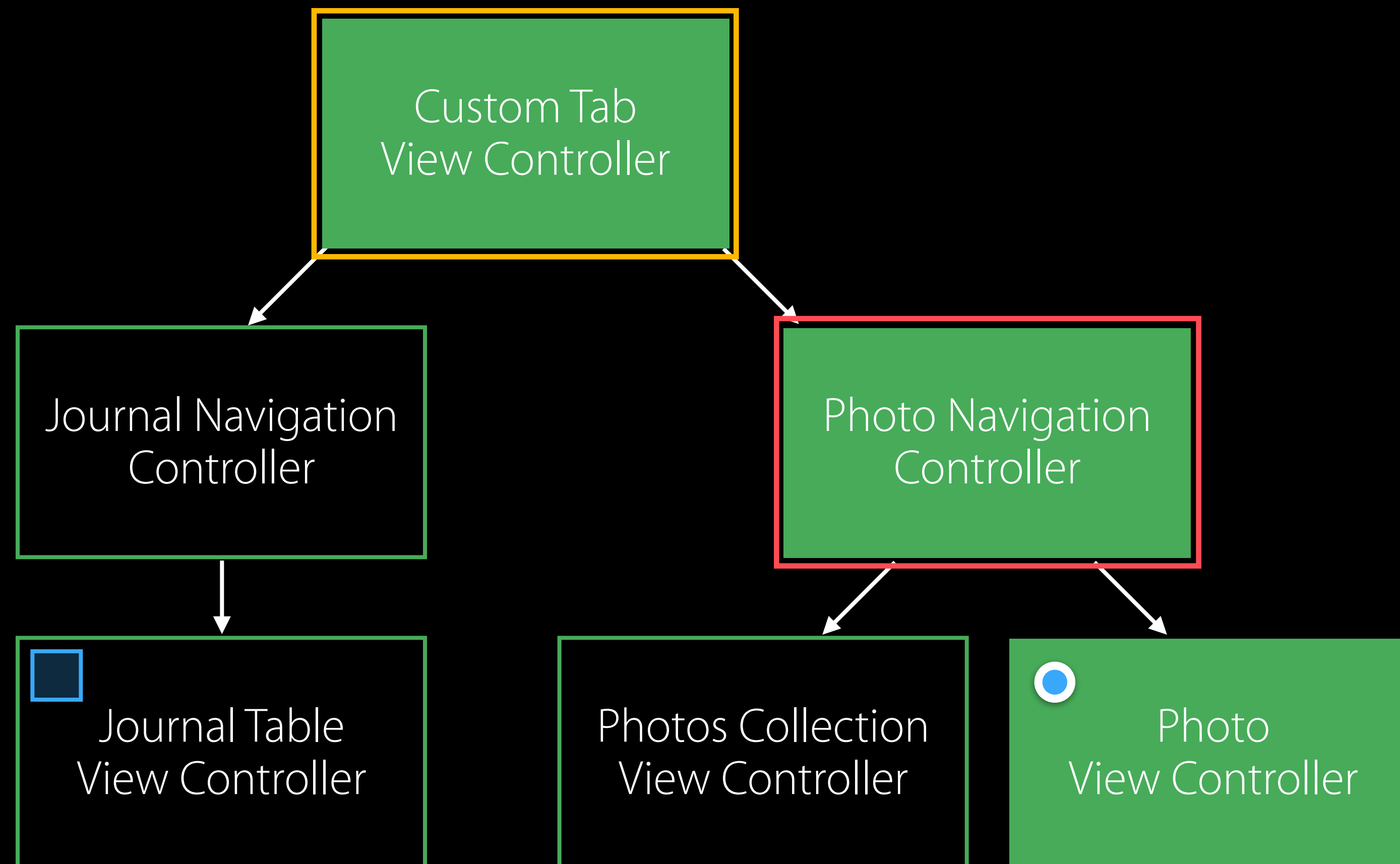
Unwind Segues

`childViewControllerContainingSegueSource(_:)`

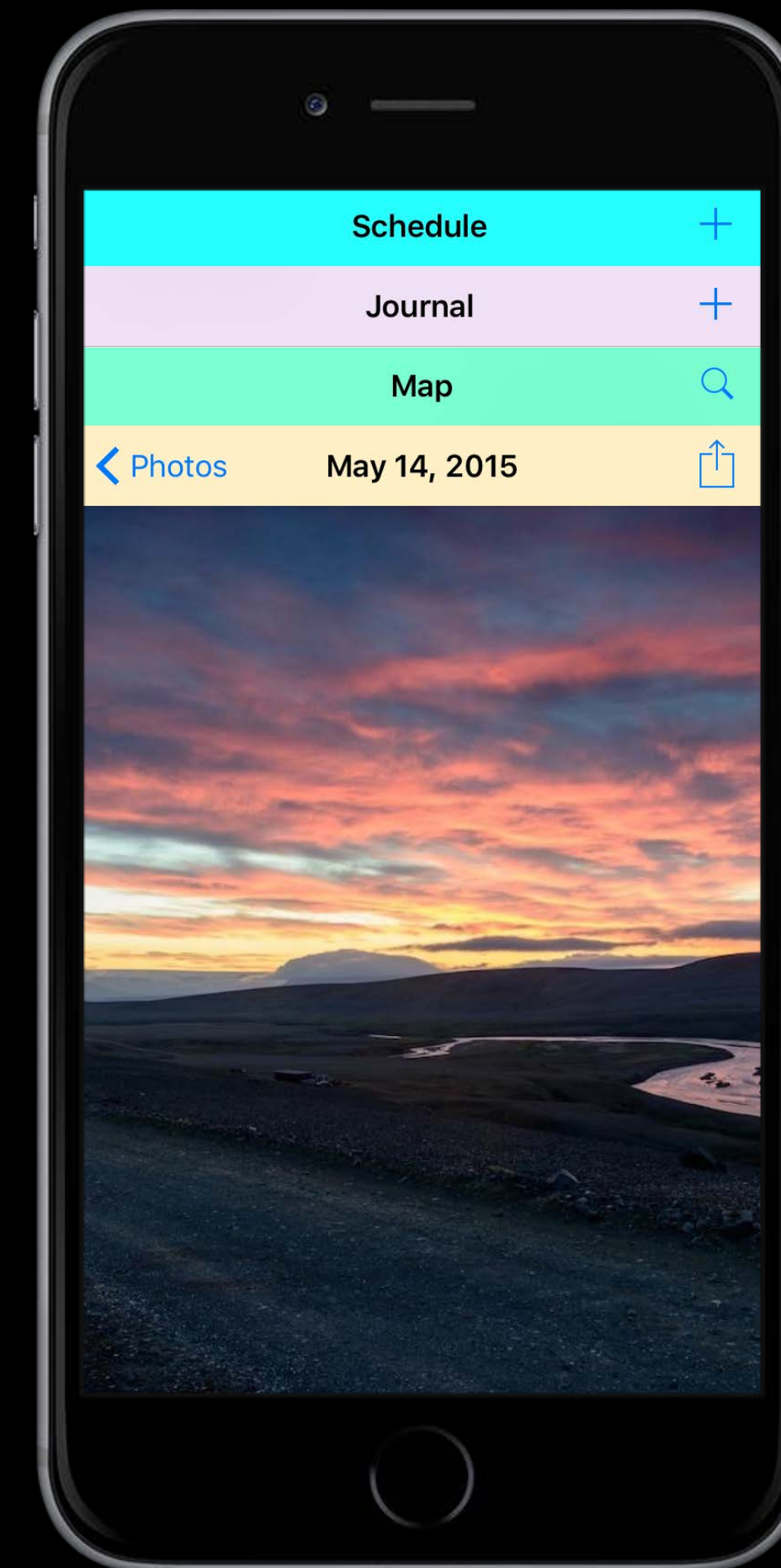
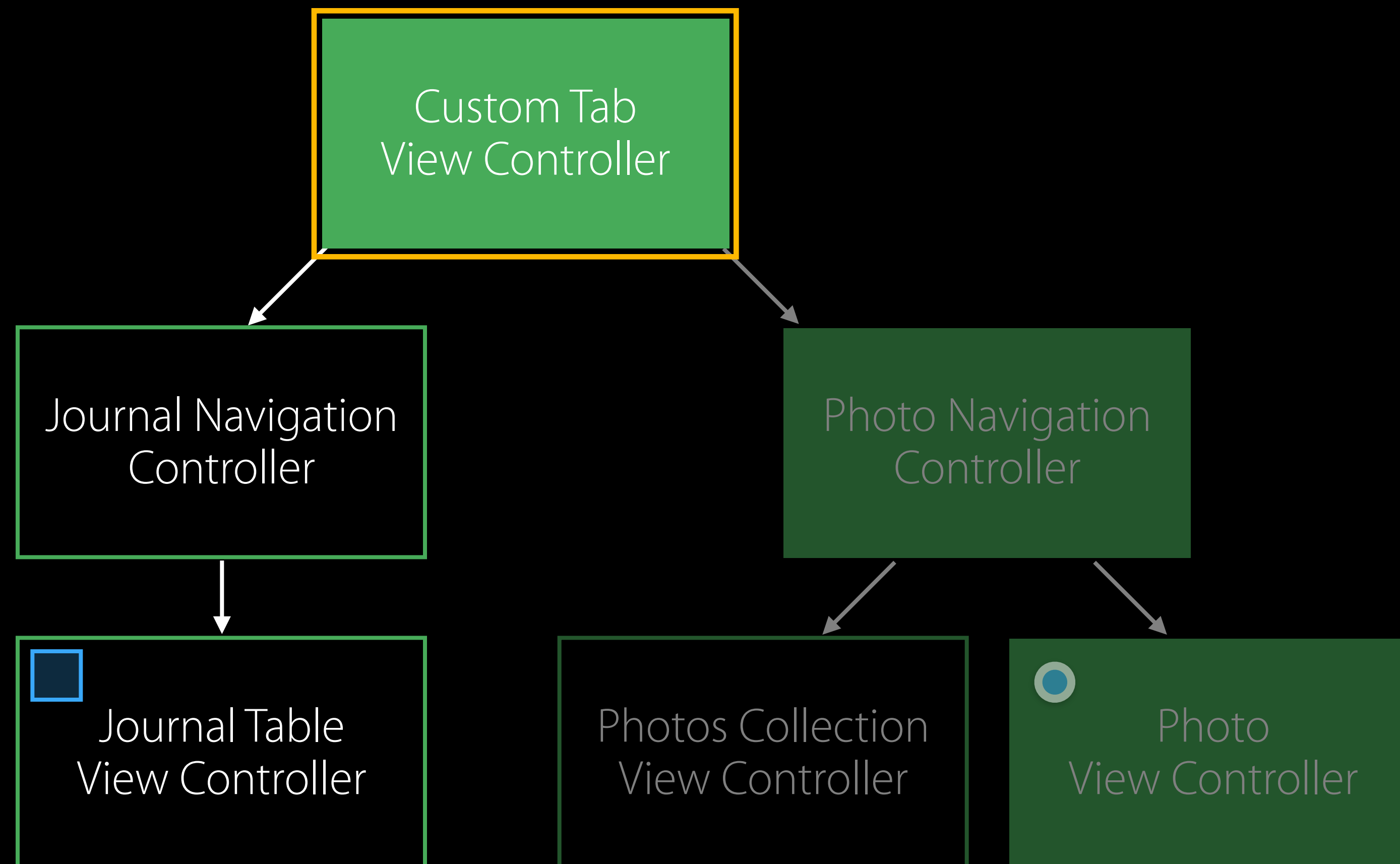


Unwind Segues

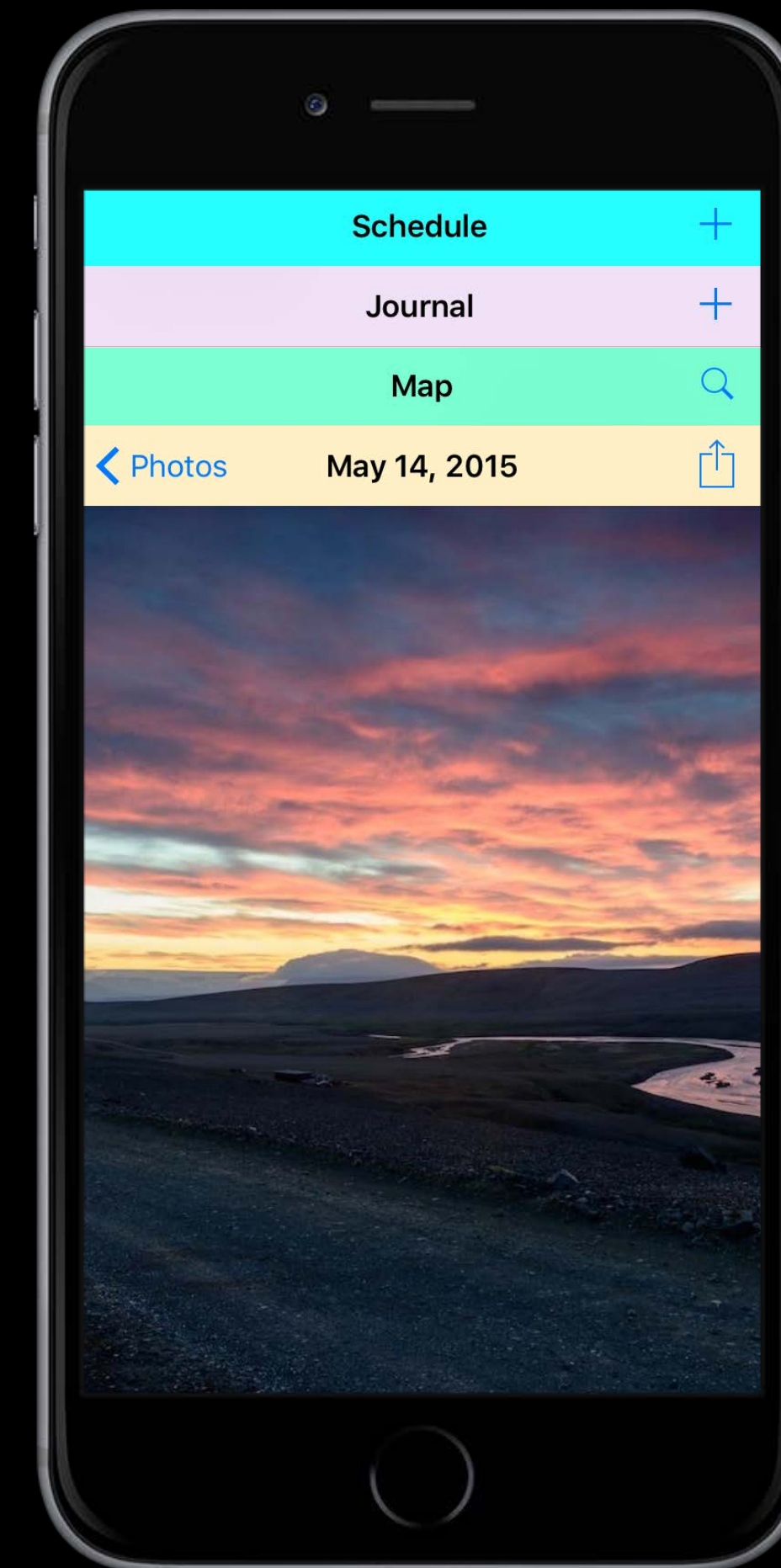
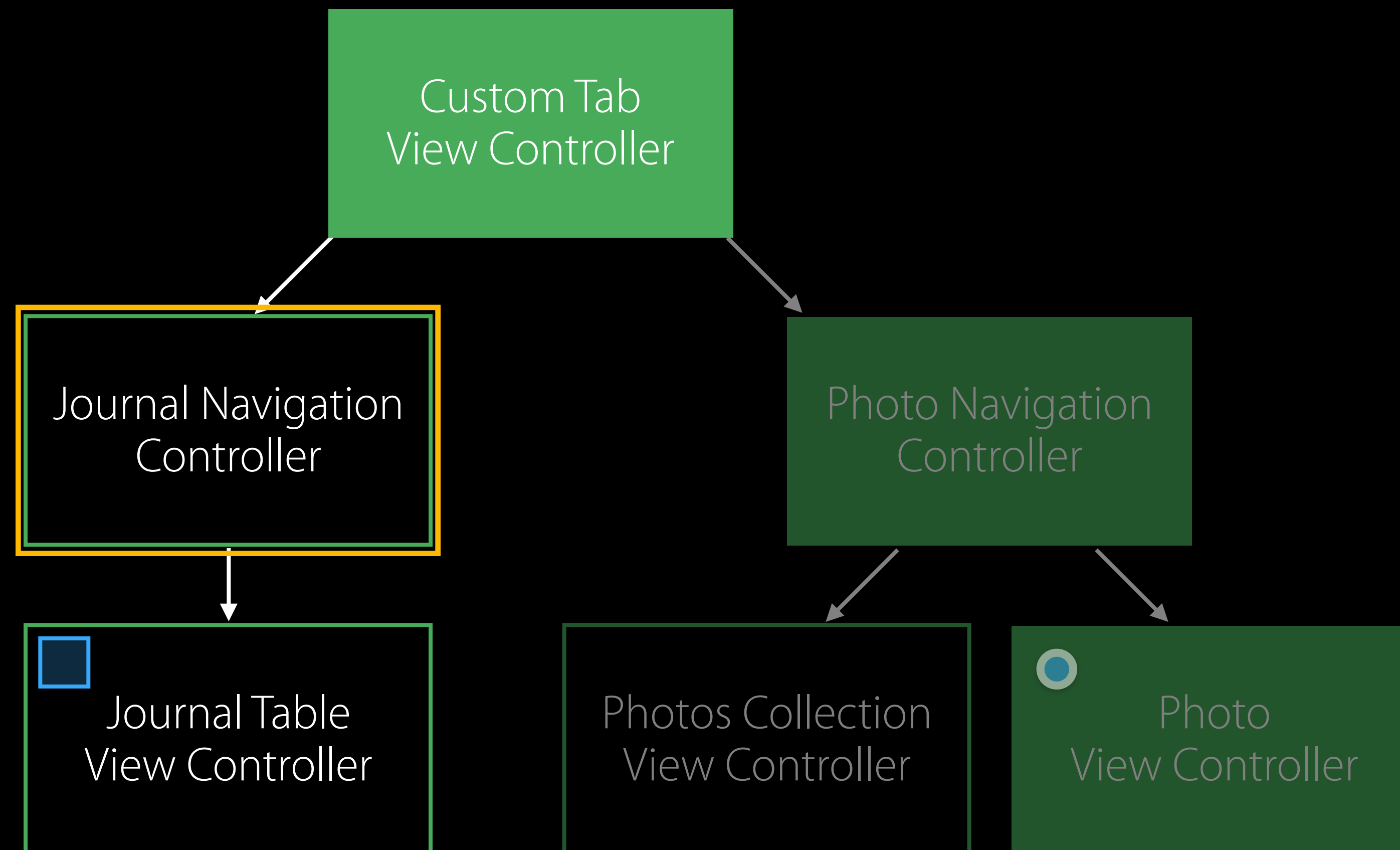
`childViewControllerContainingSegueSource(_:)`



Unwind Segues

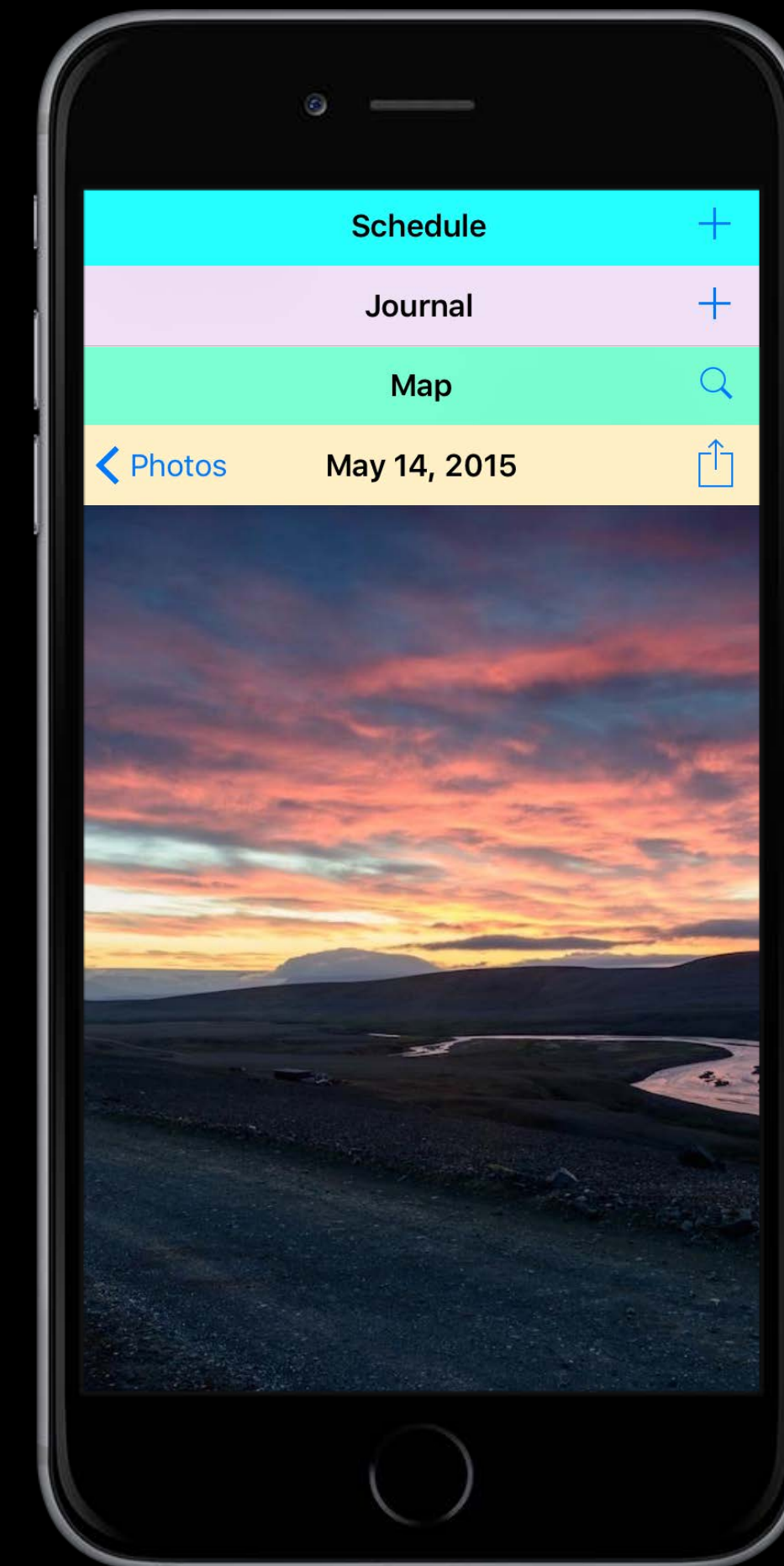
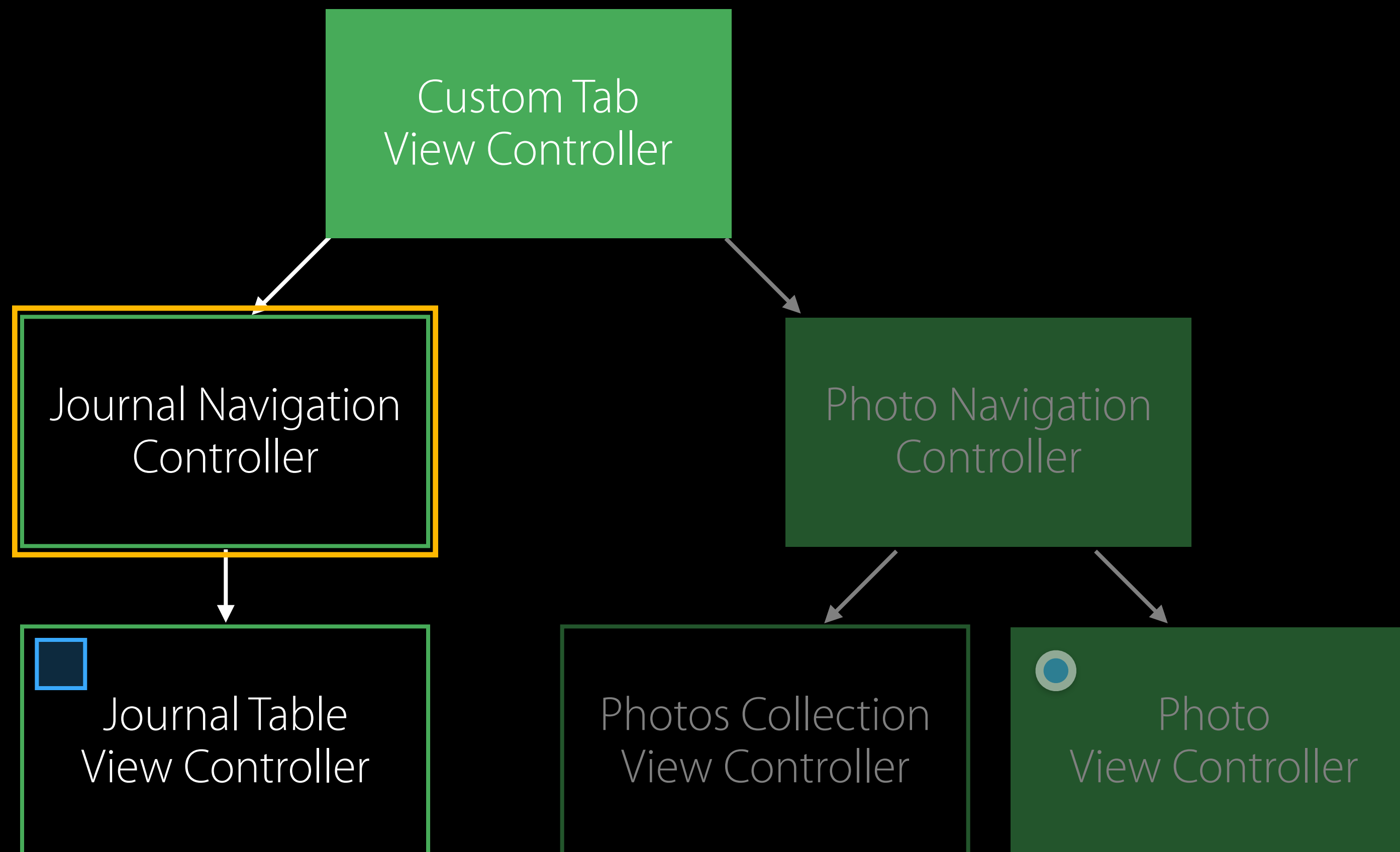


Unwind Segues



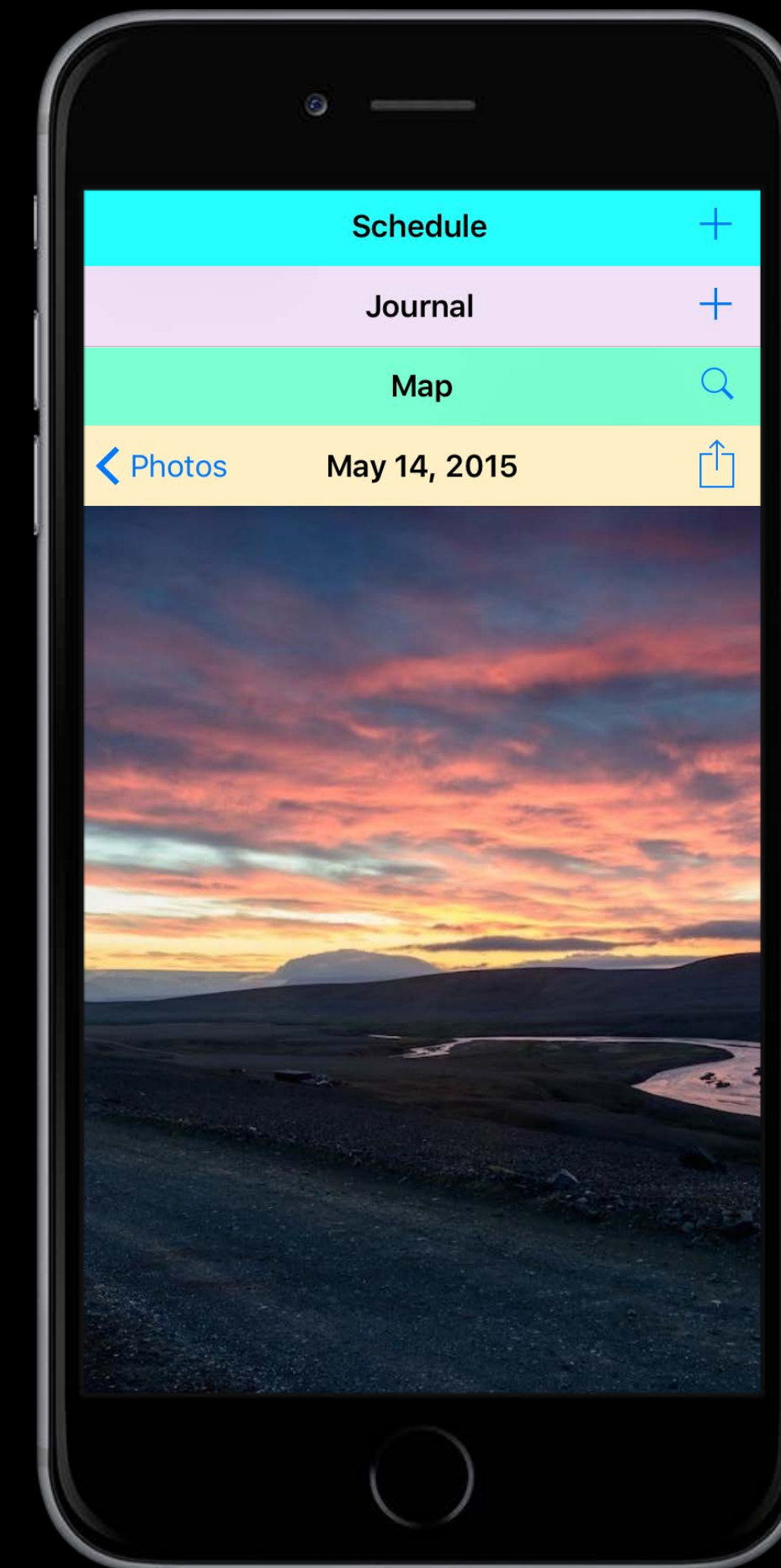
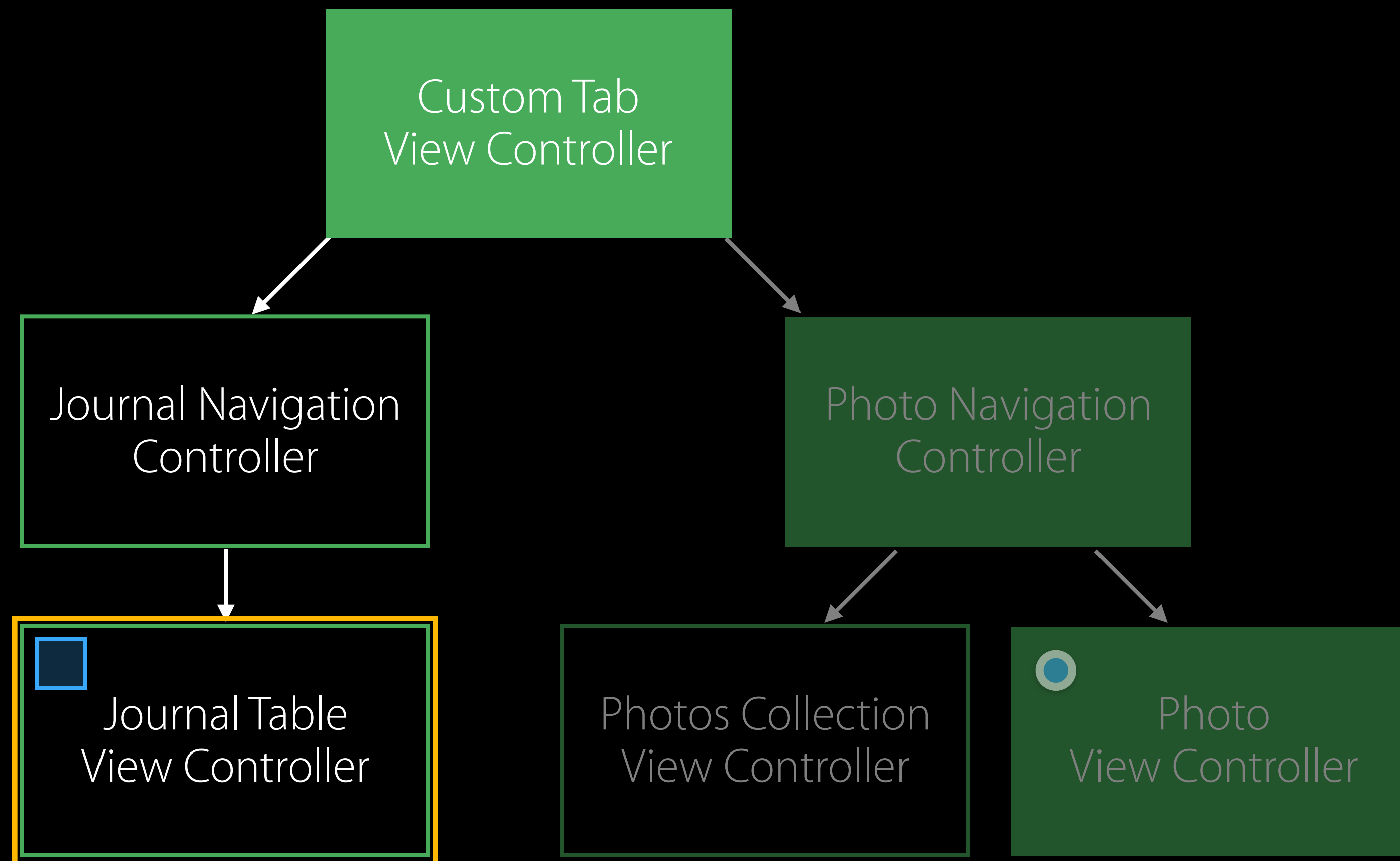
Unwind Segues

override `allowedChildViewControllersForUnwindingFromSource(_:)`

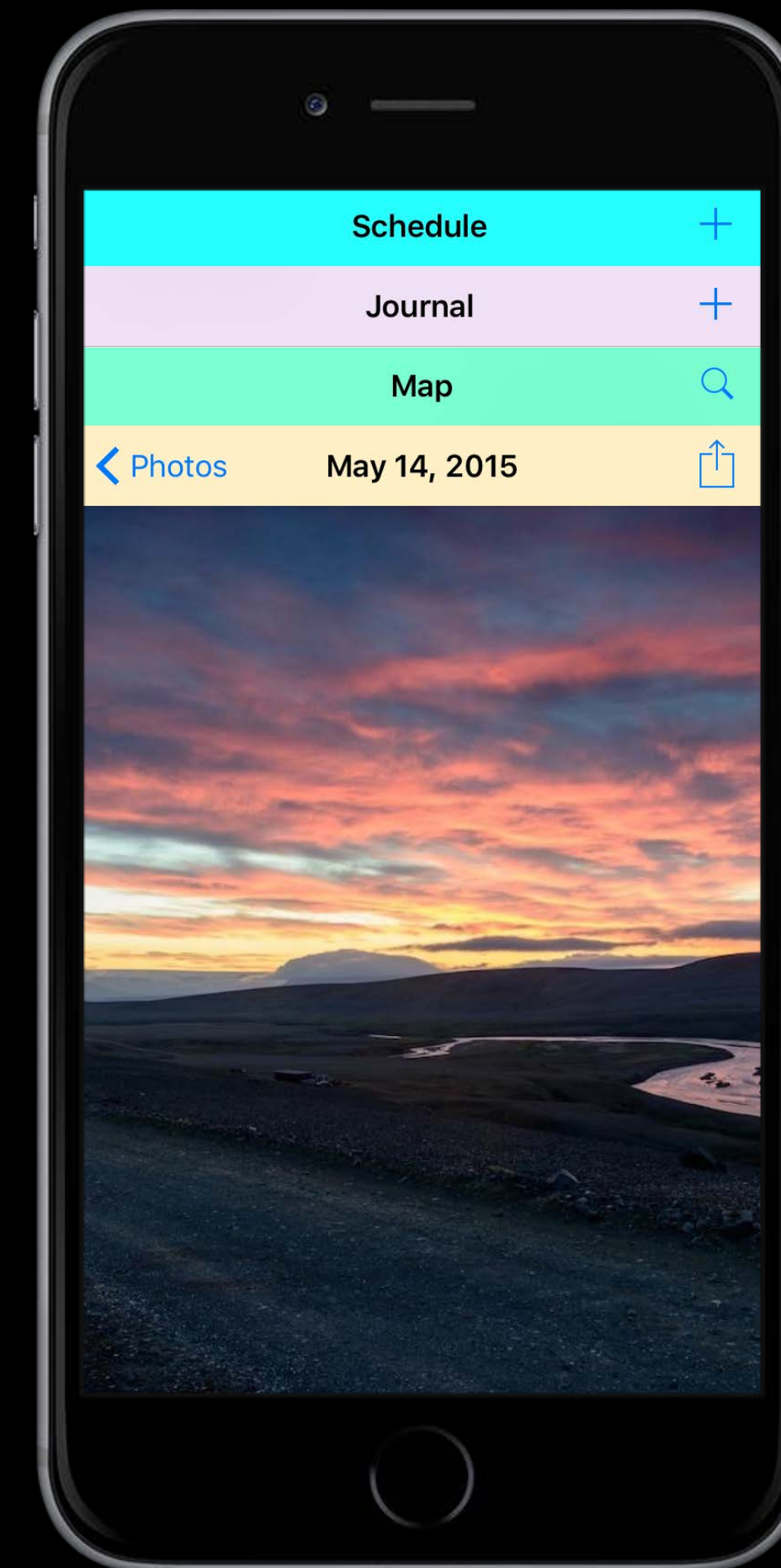
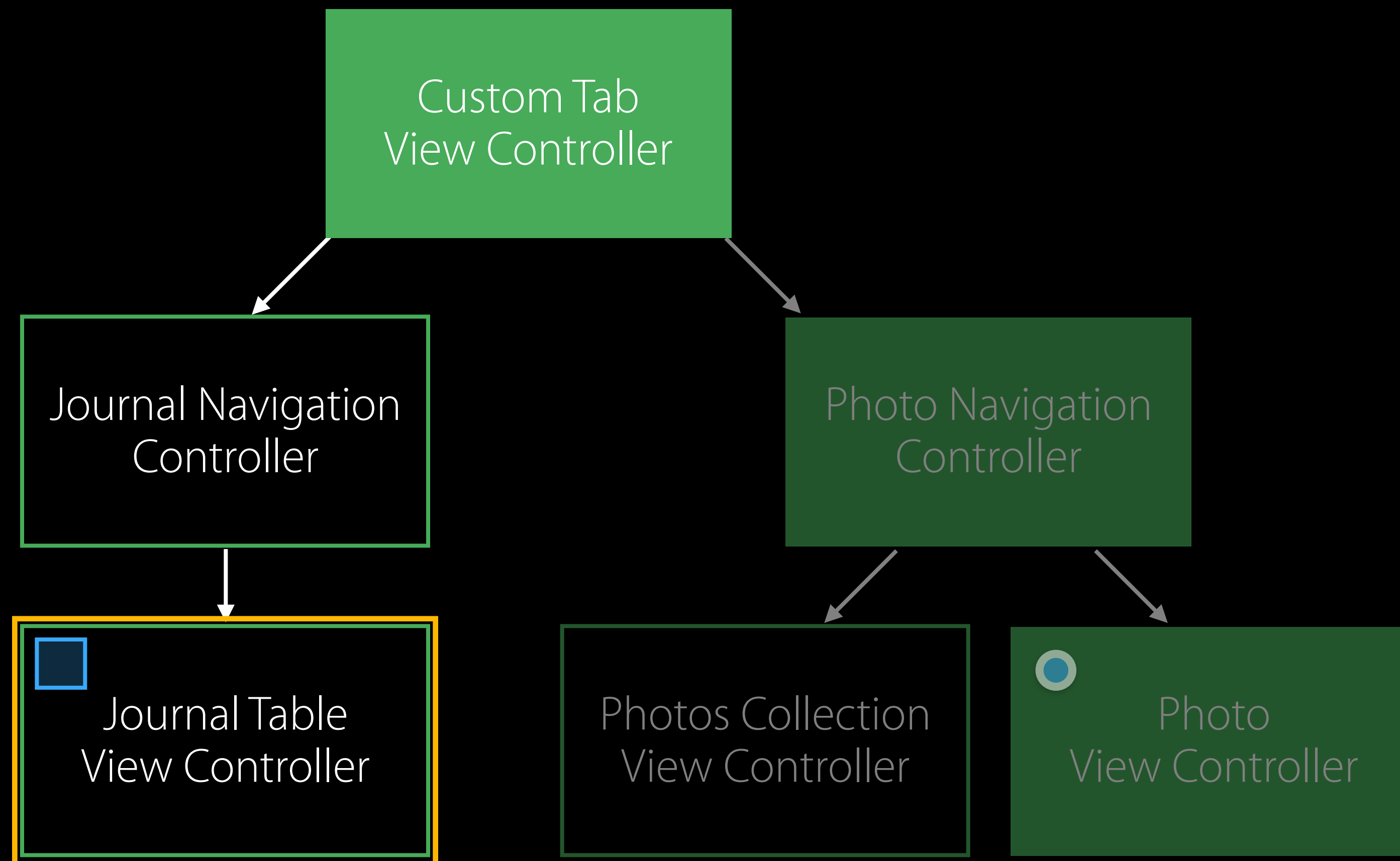


Unwind Segues

`override allowedChildViewControllersForUnwindingFromSource(_:)`

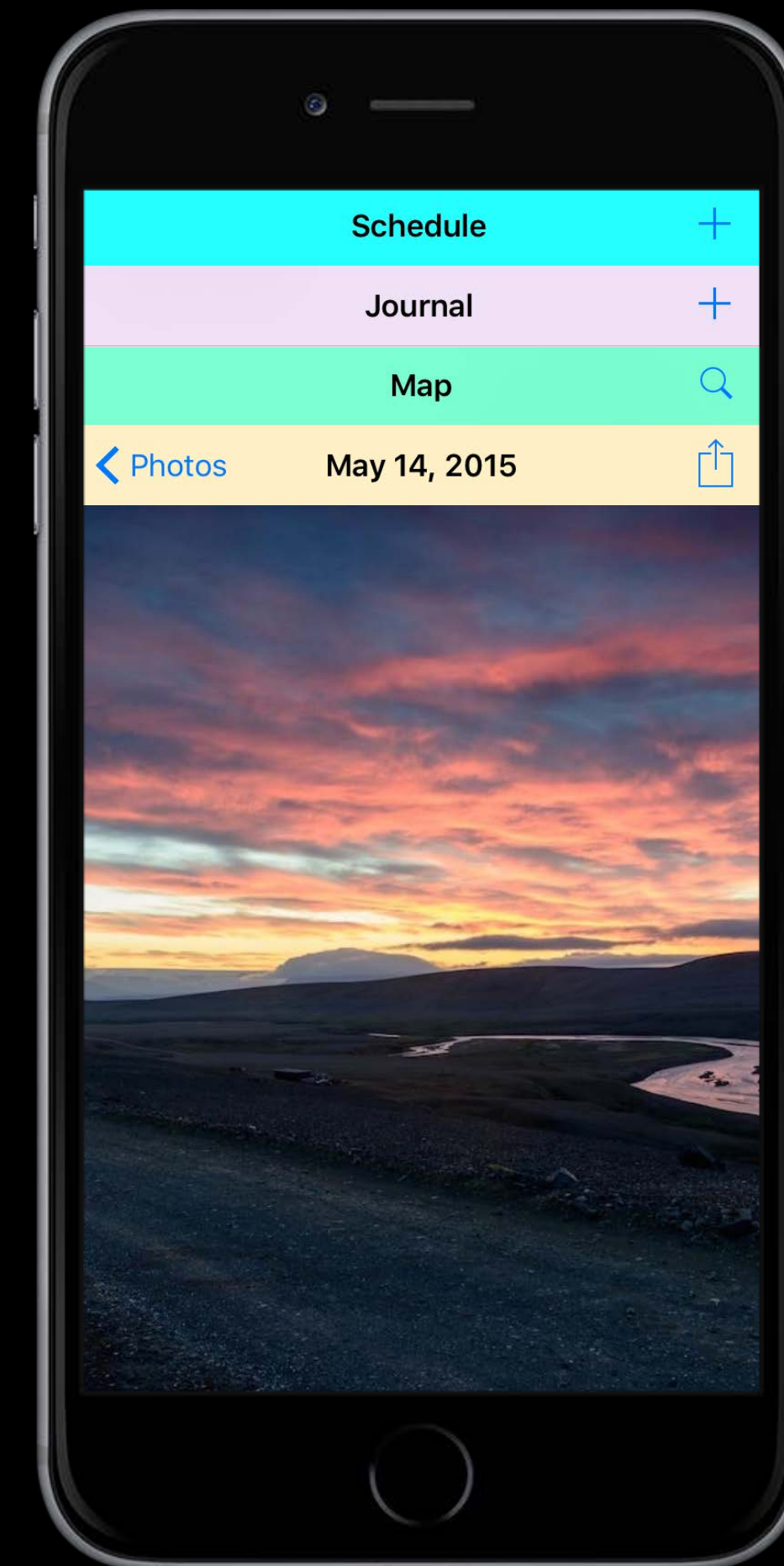
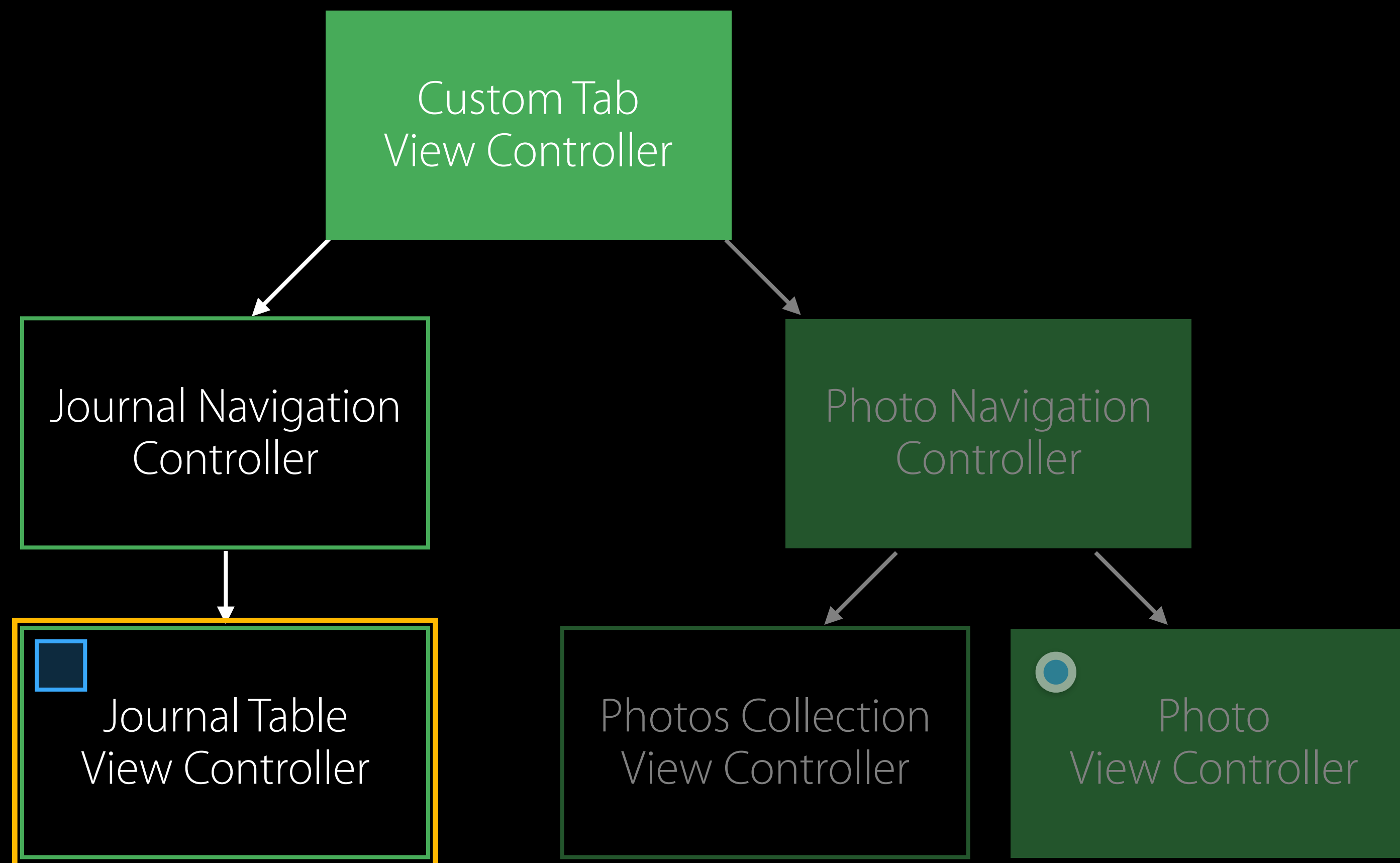


Unwind Segues



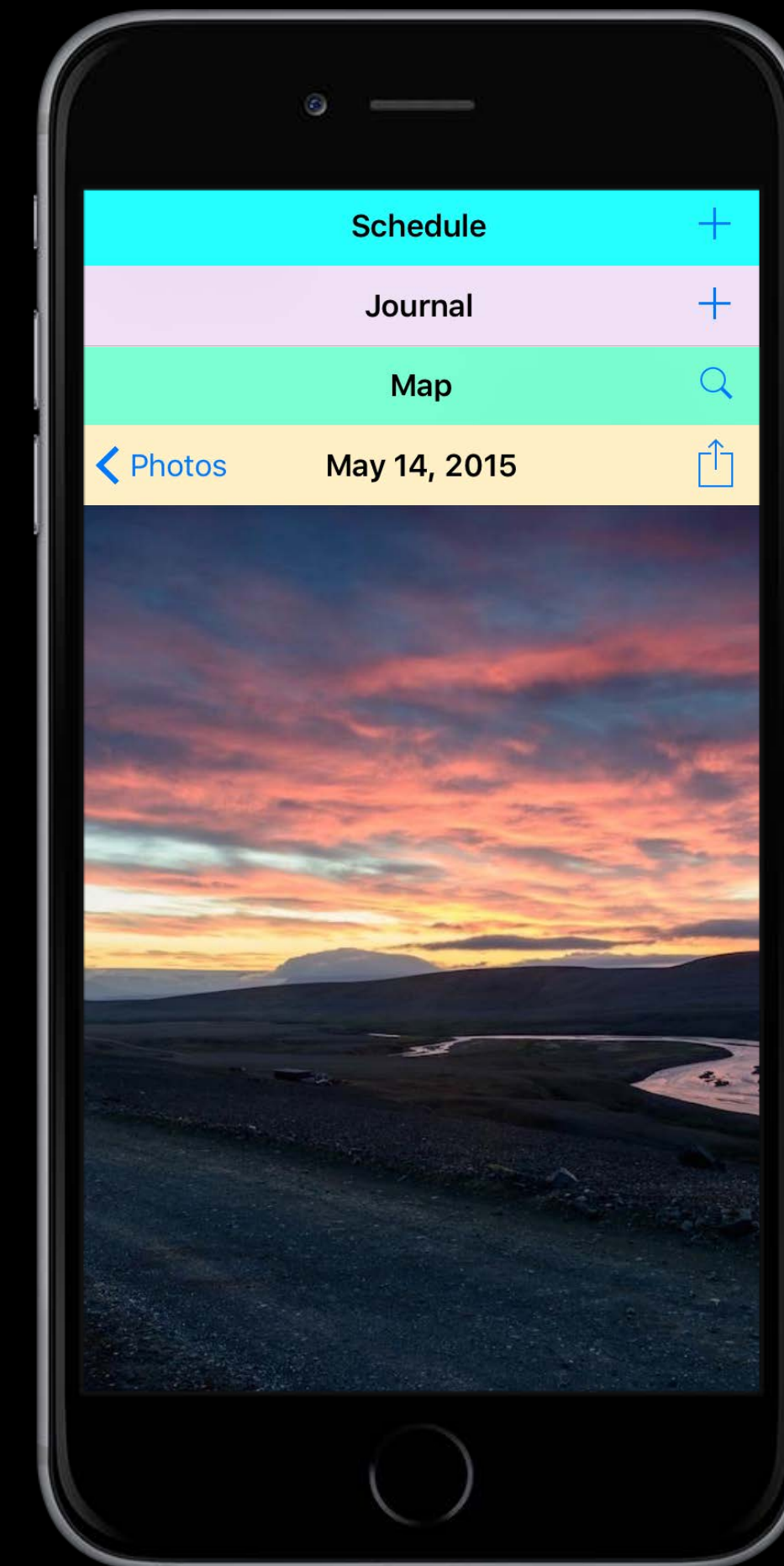
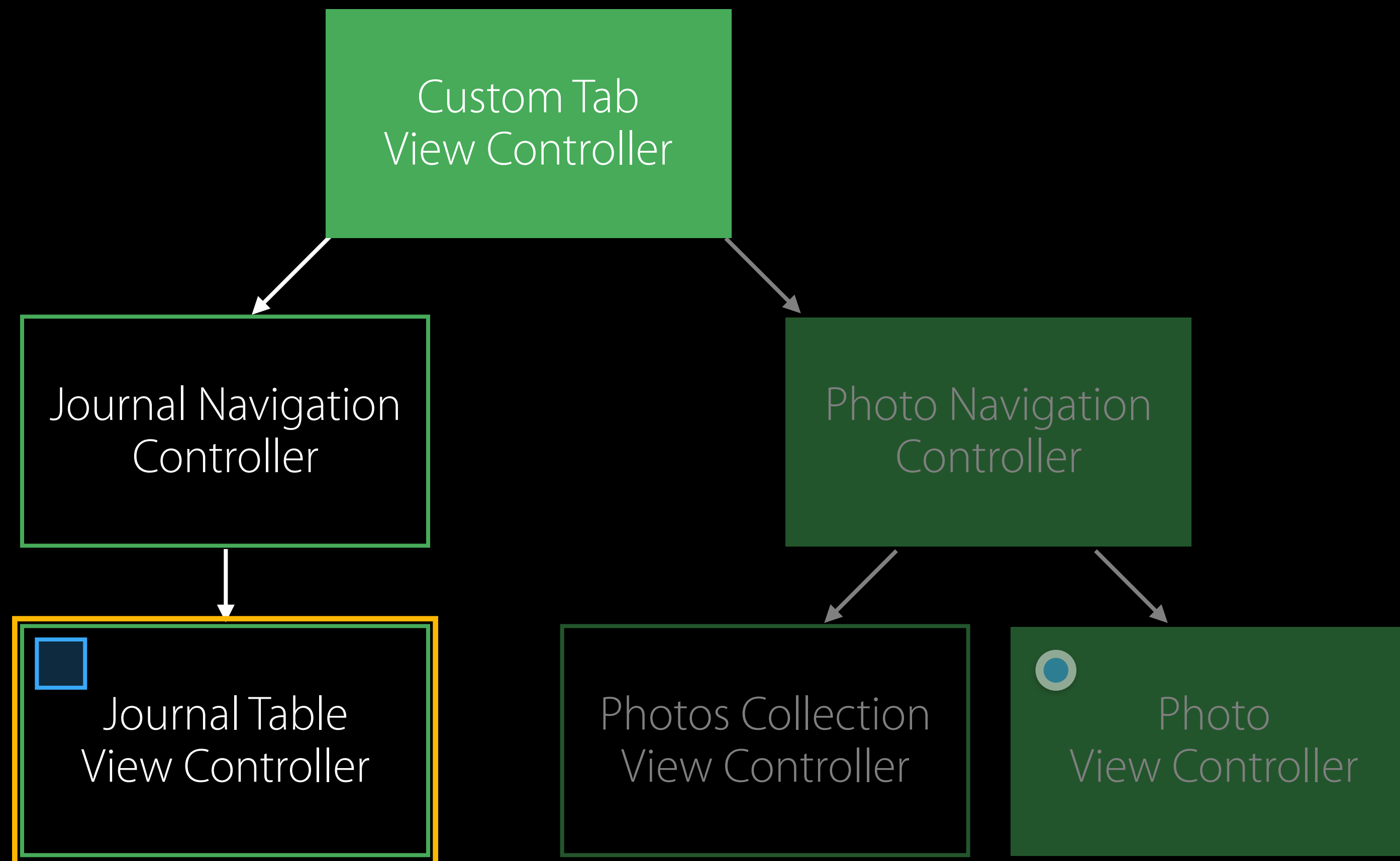
Unwind Segues

`canPerformUnwindSegueAction("iAmTheJournal:", fromViewController:...)`

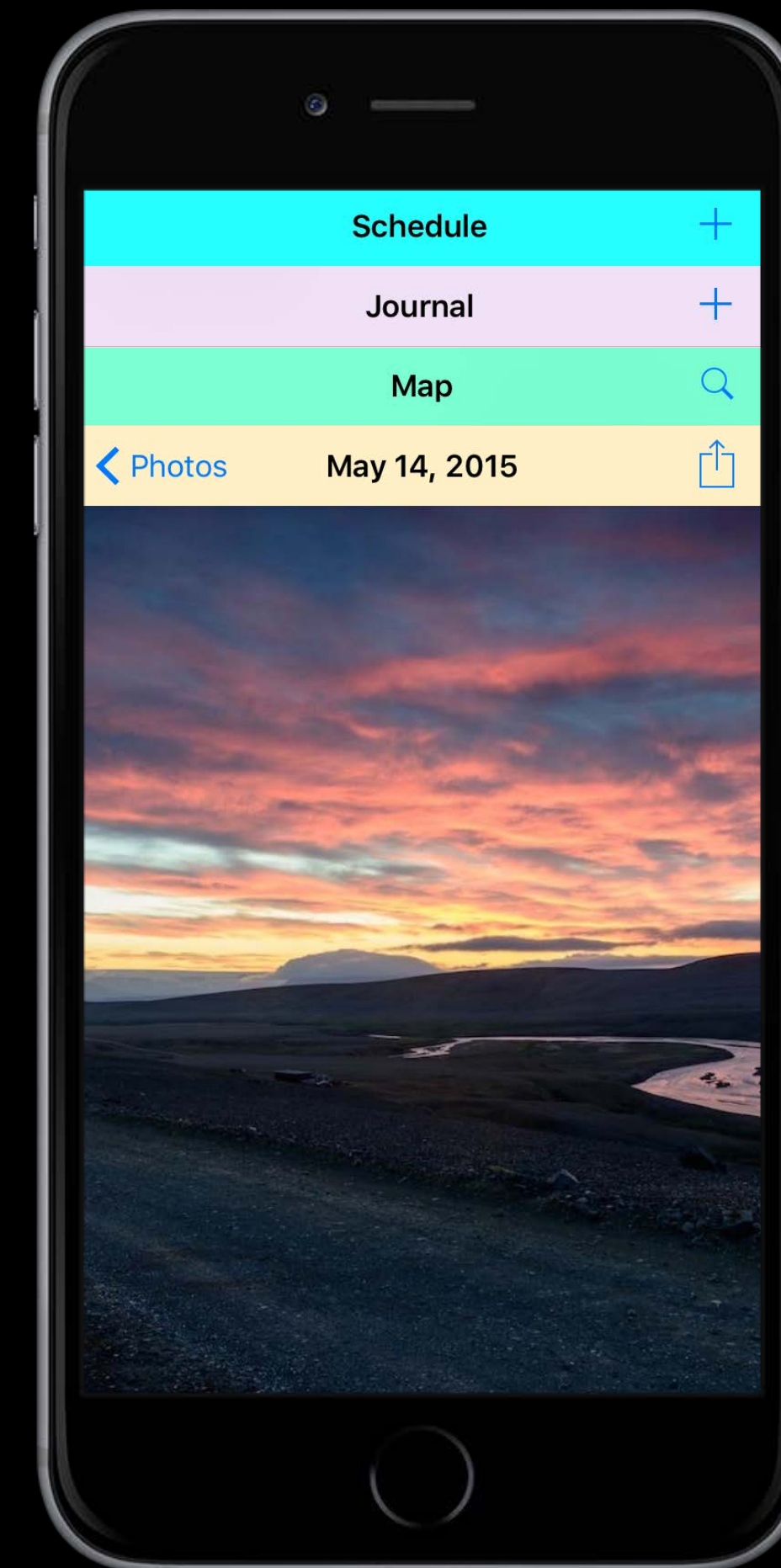
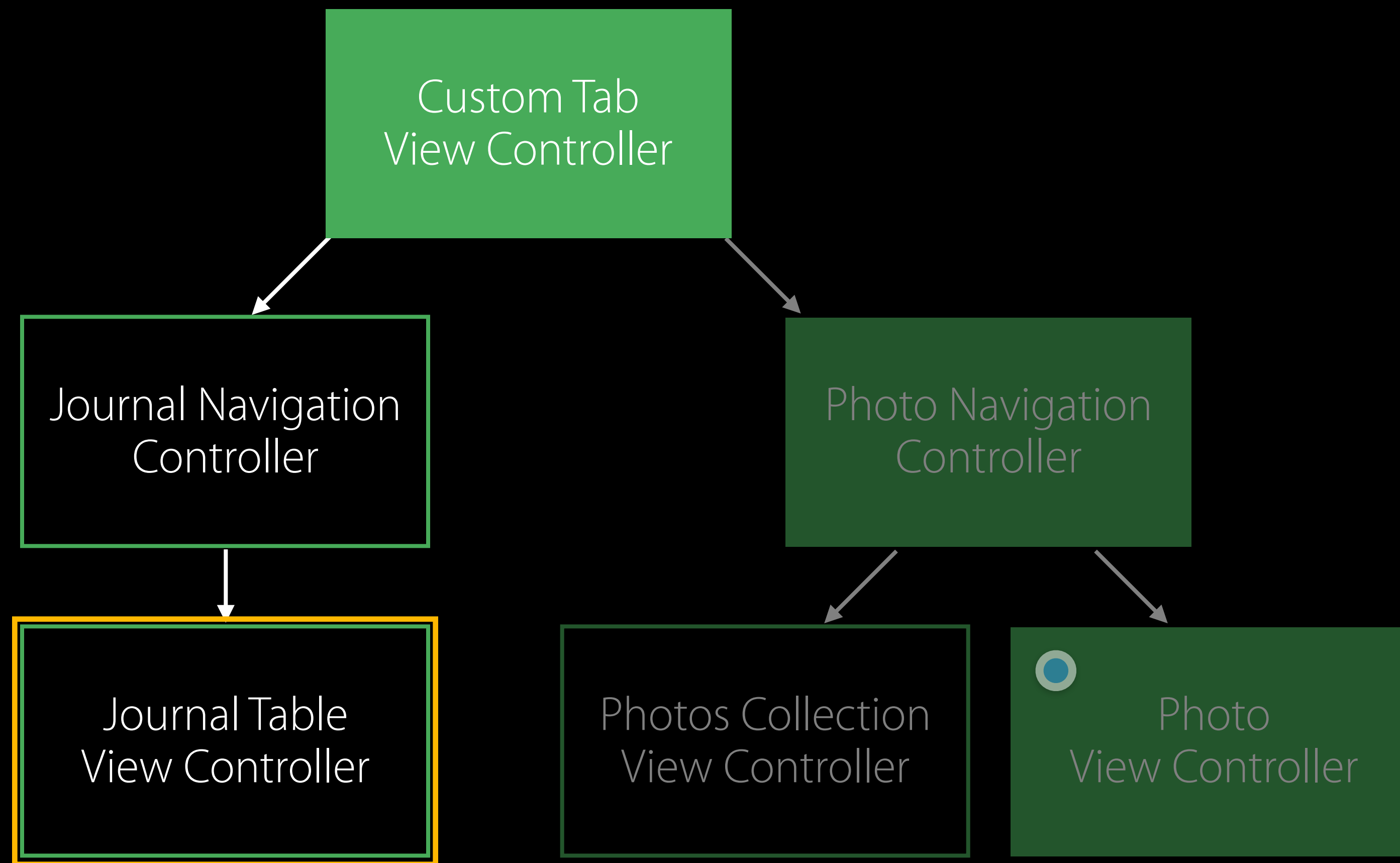


Unwind Segues

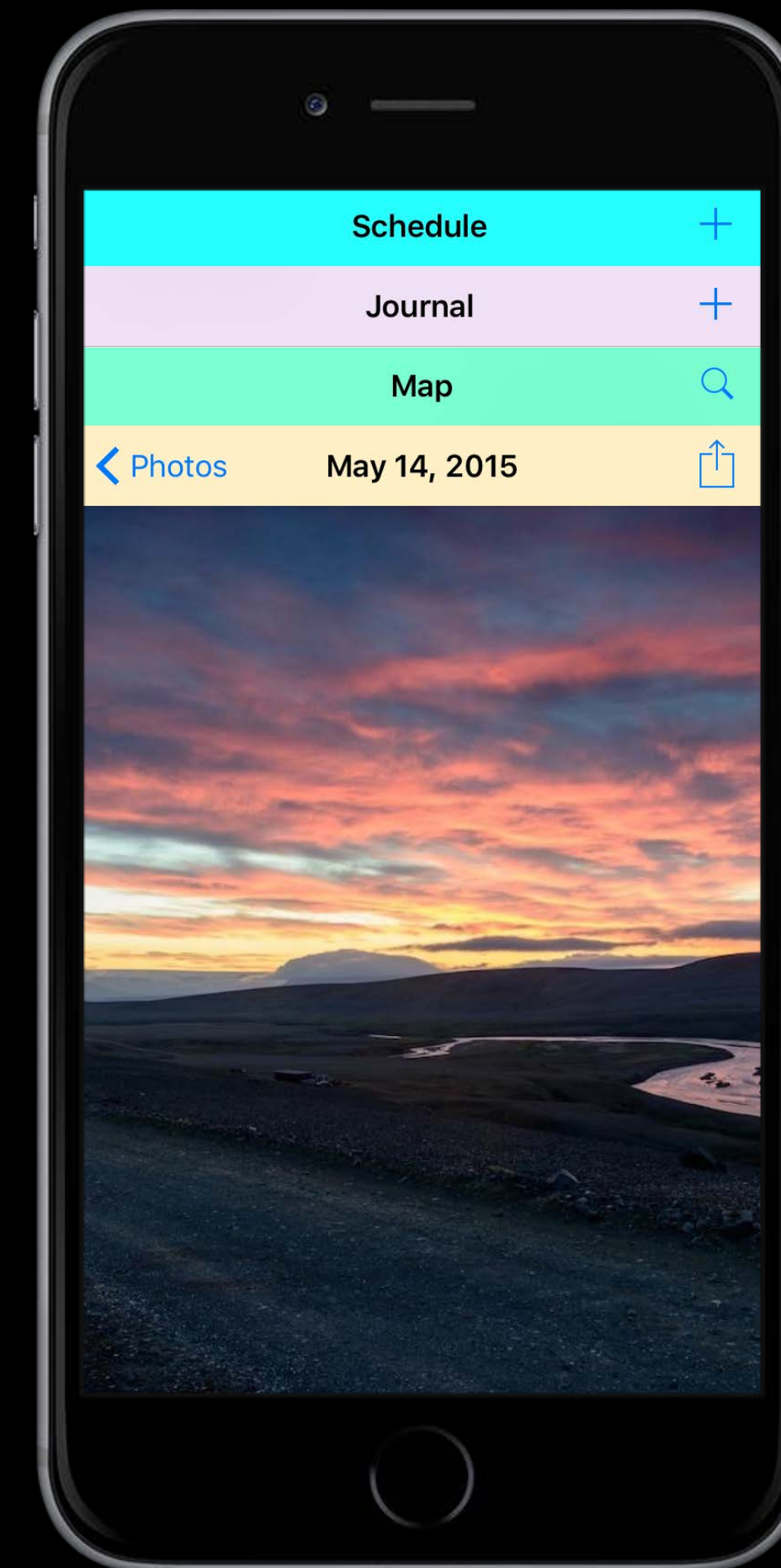
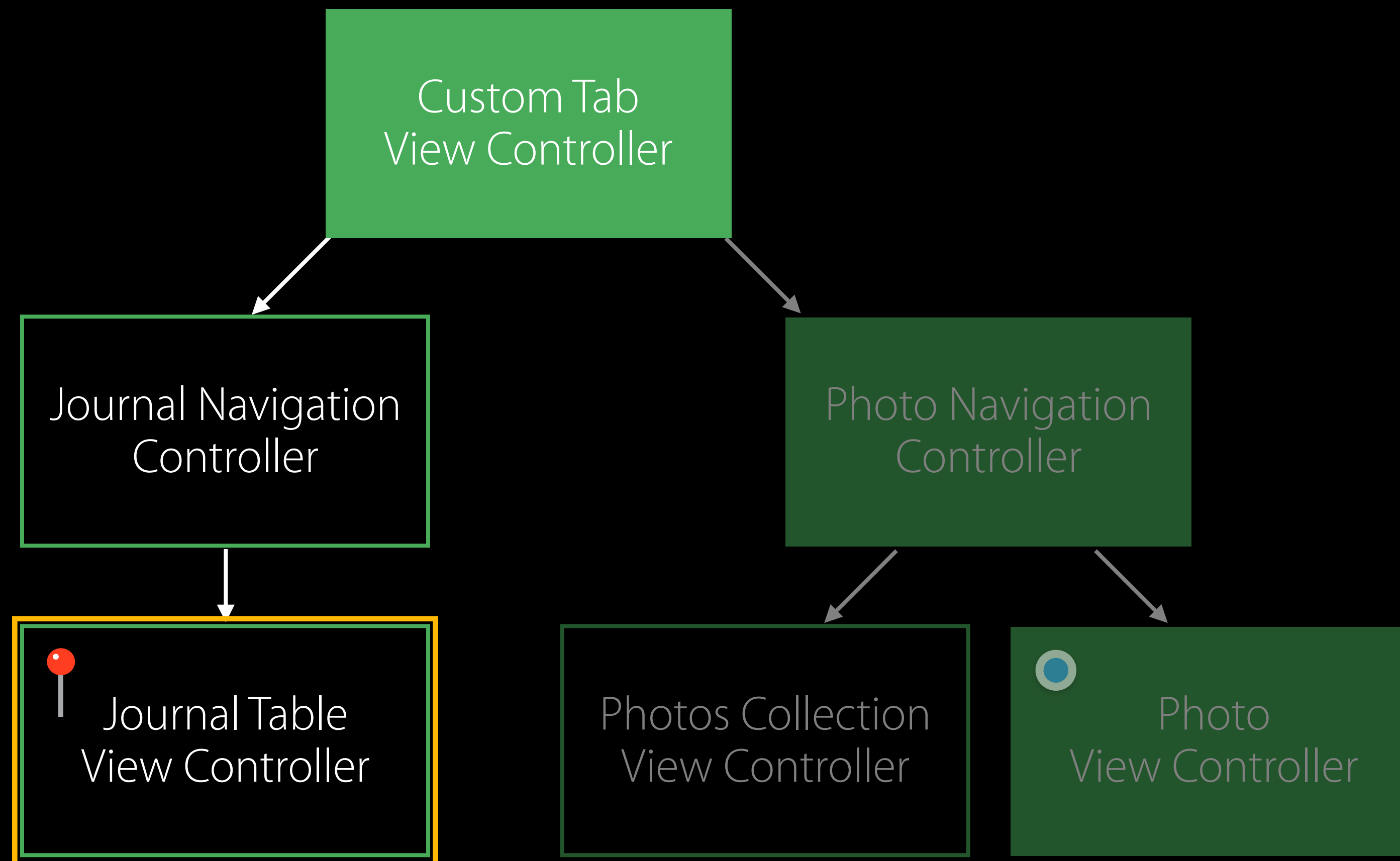
✓ canPerformUnwindSegueAction("iAmTheJournal:", fromViewController:...)



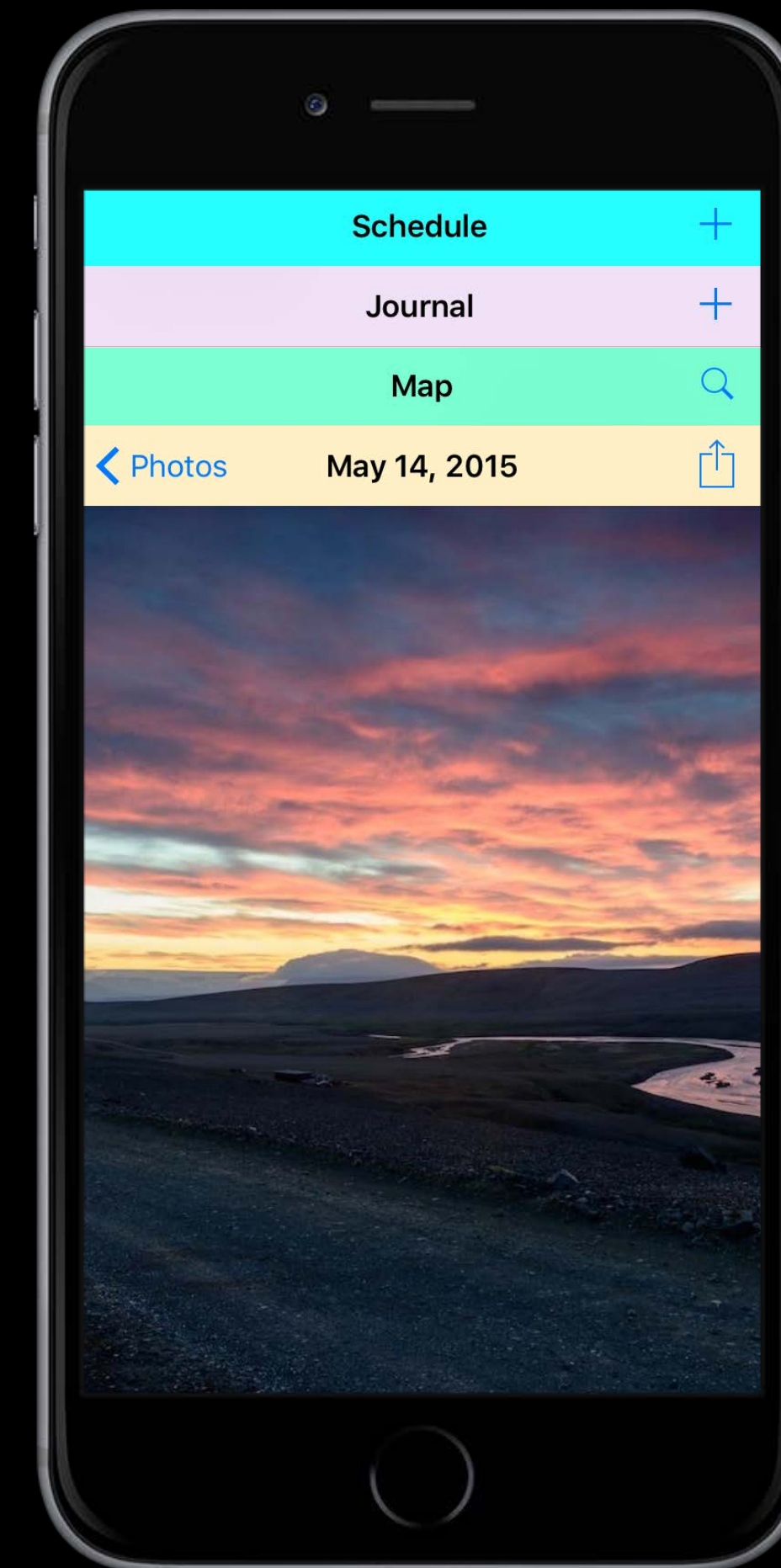
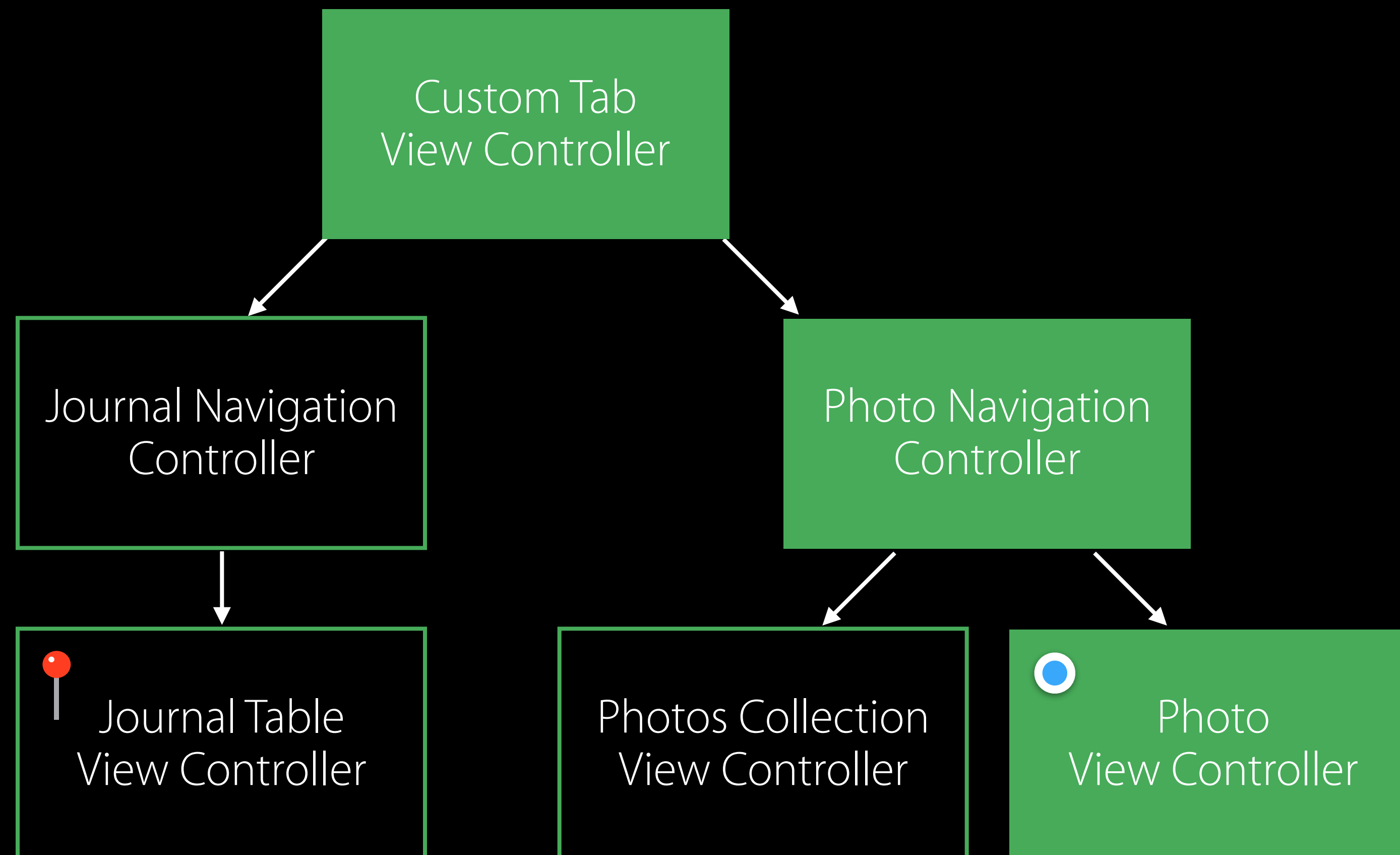
Unwind Segues



Unwind Segues



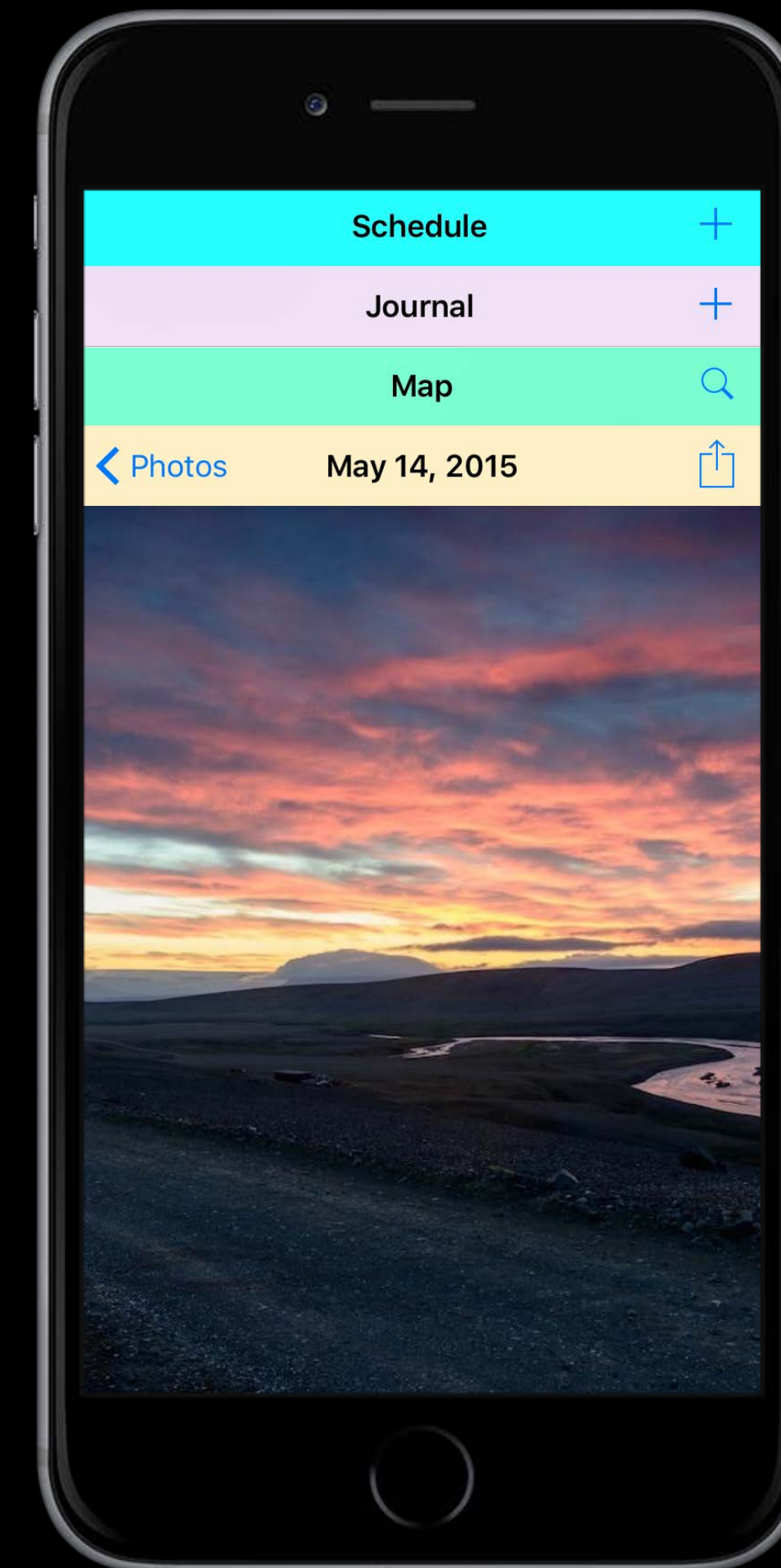
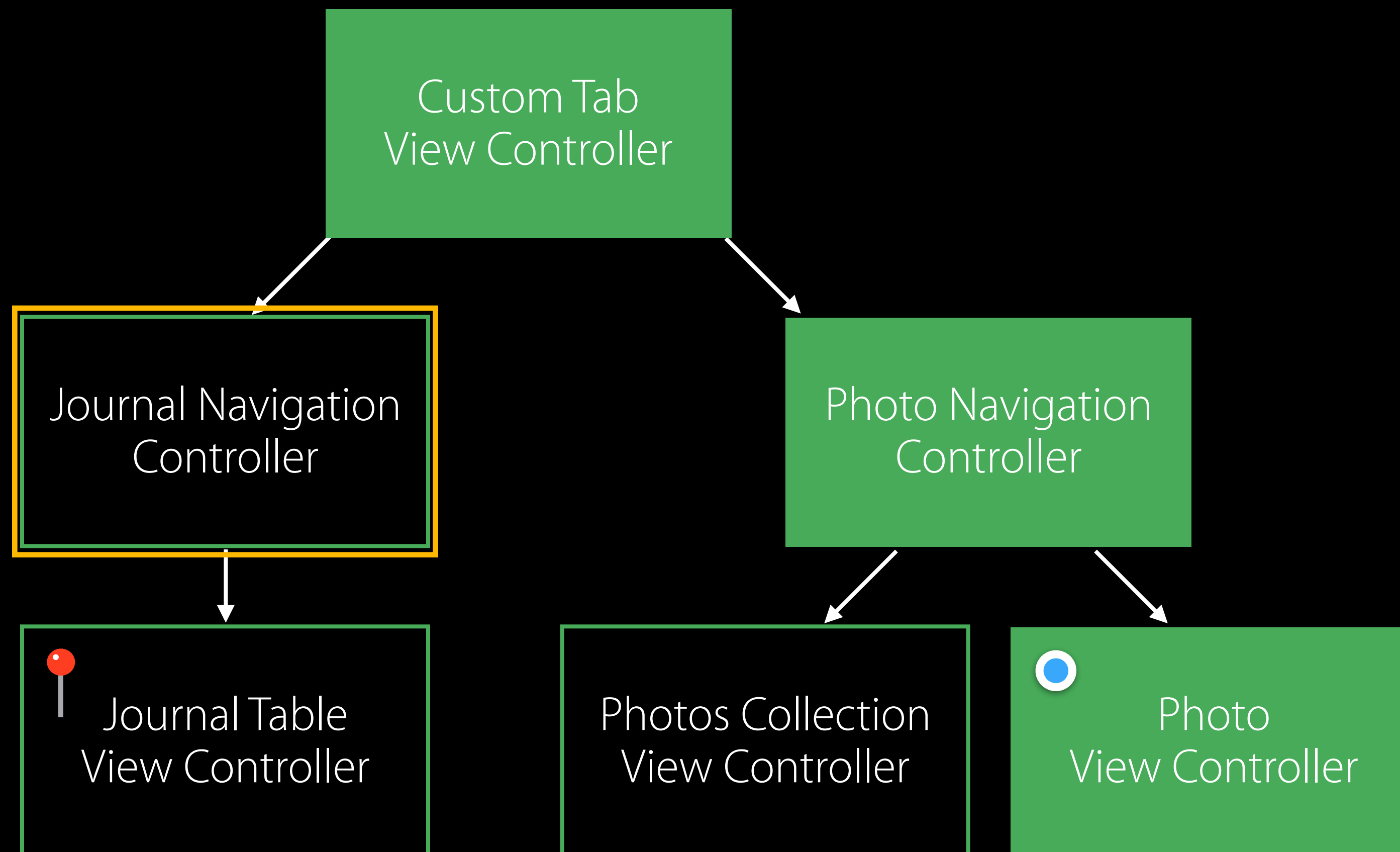
Unwind Segues



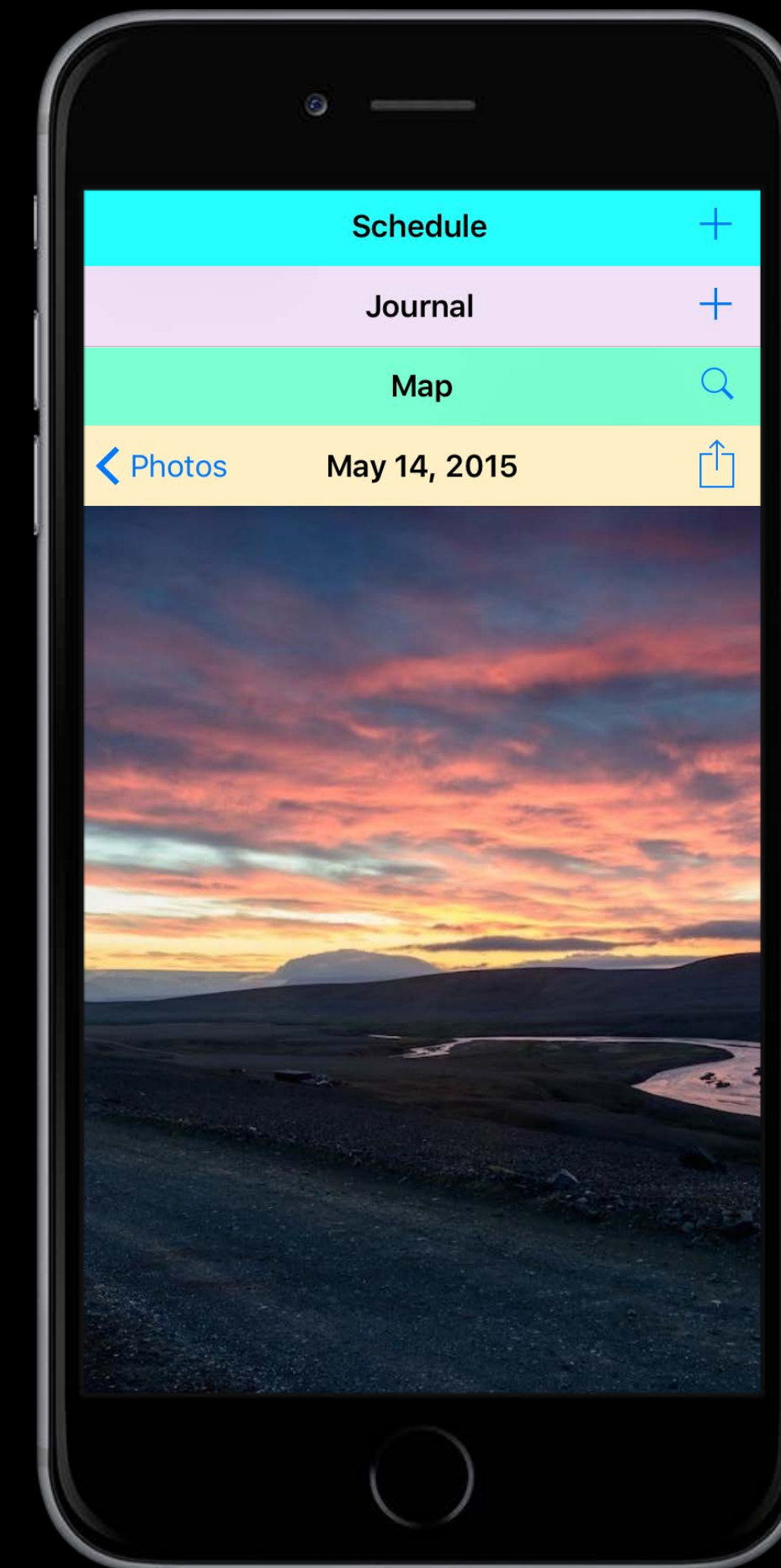
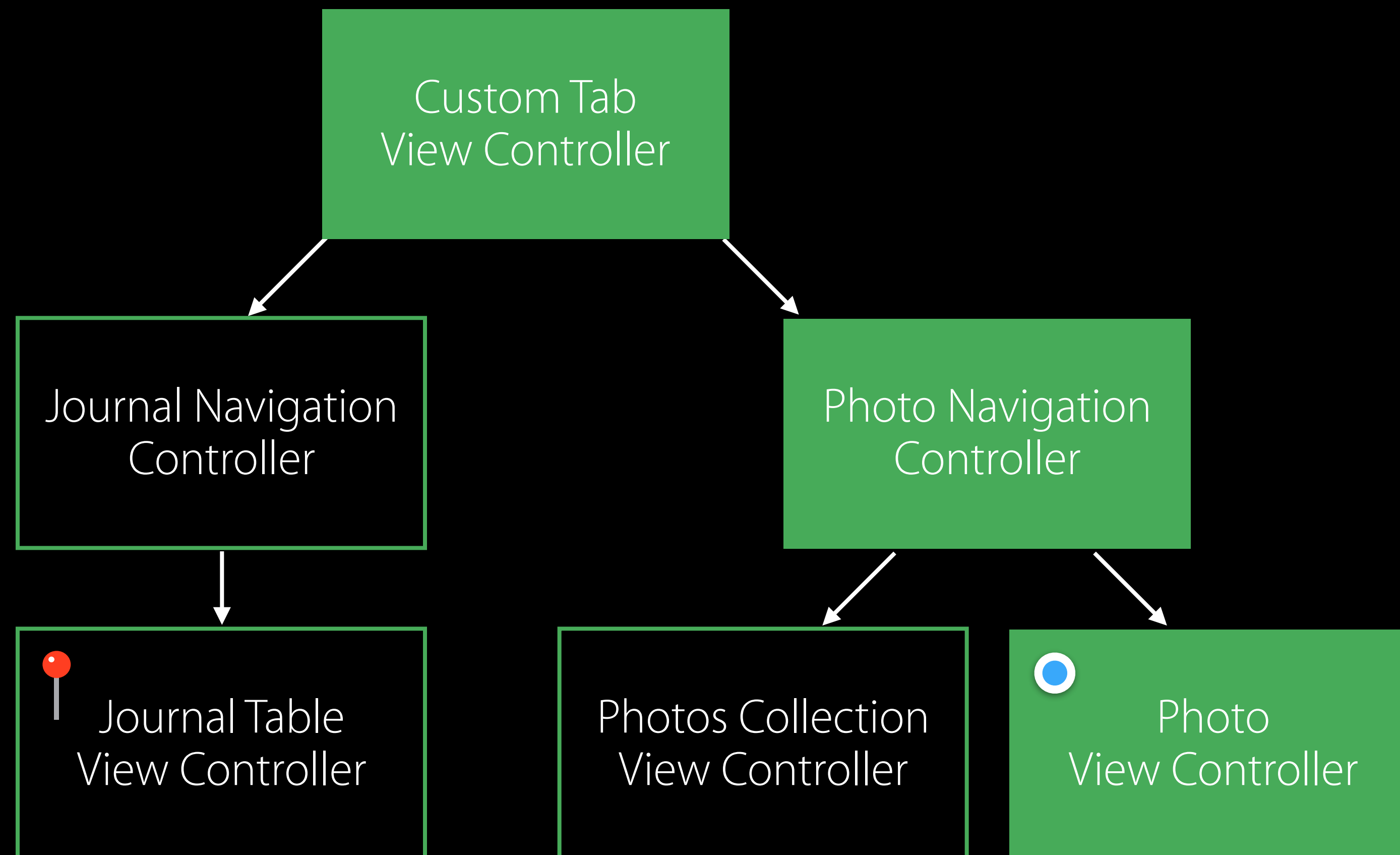
Unwind Segues



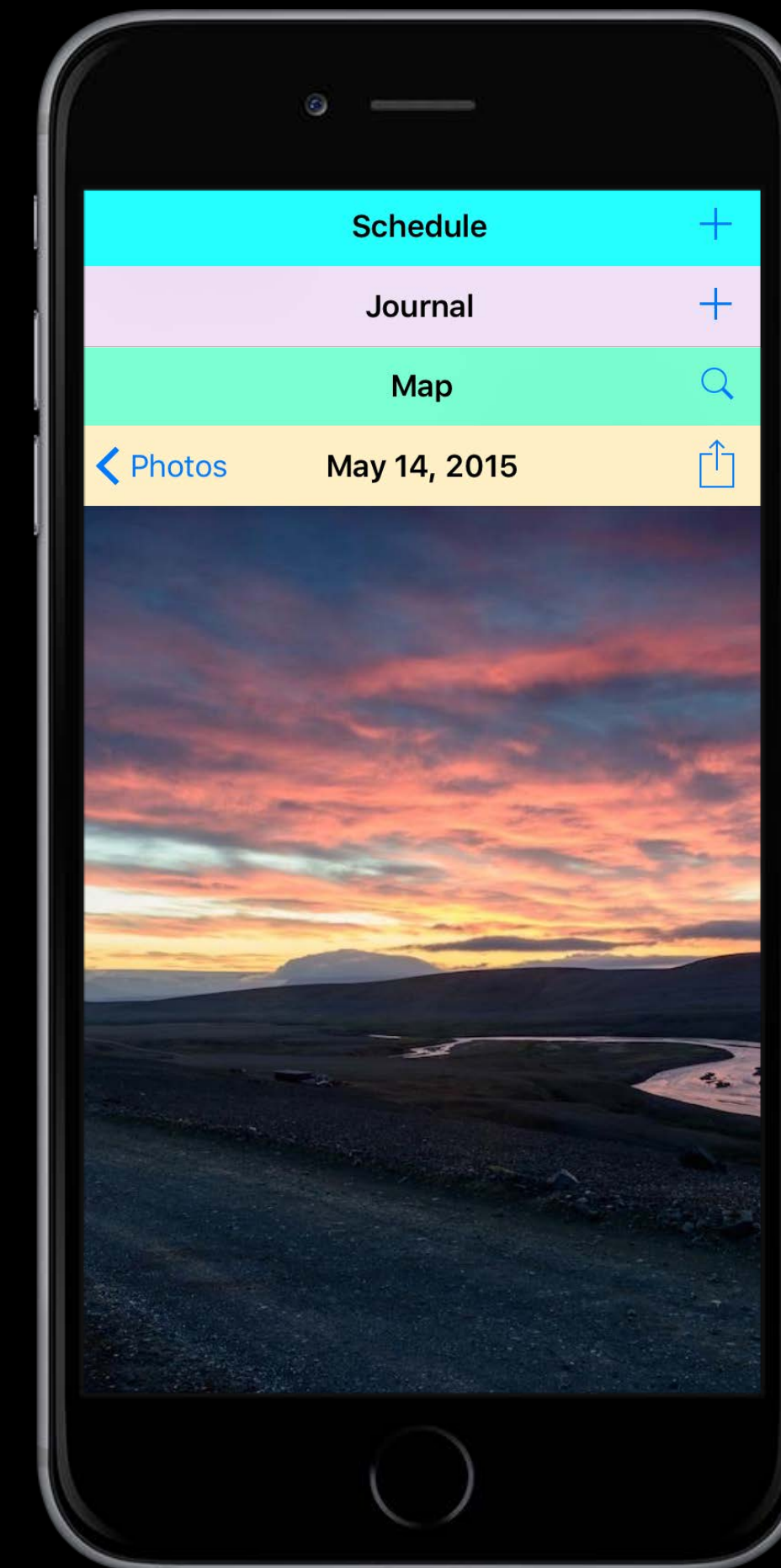
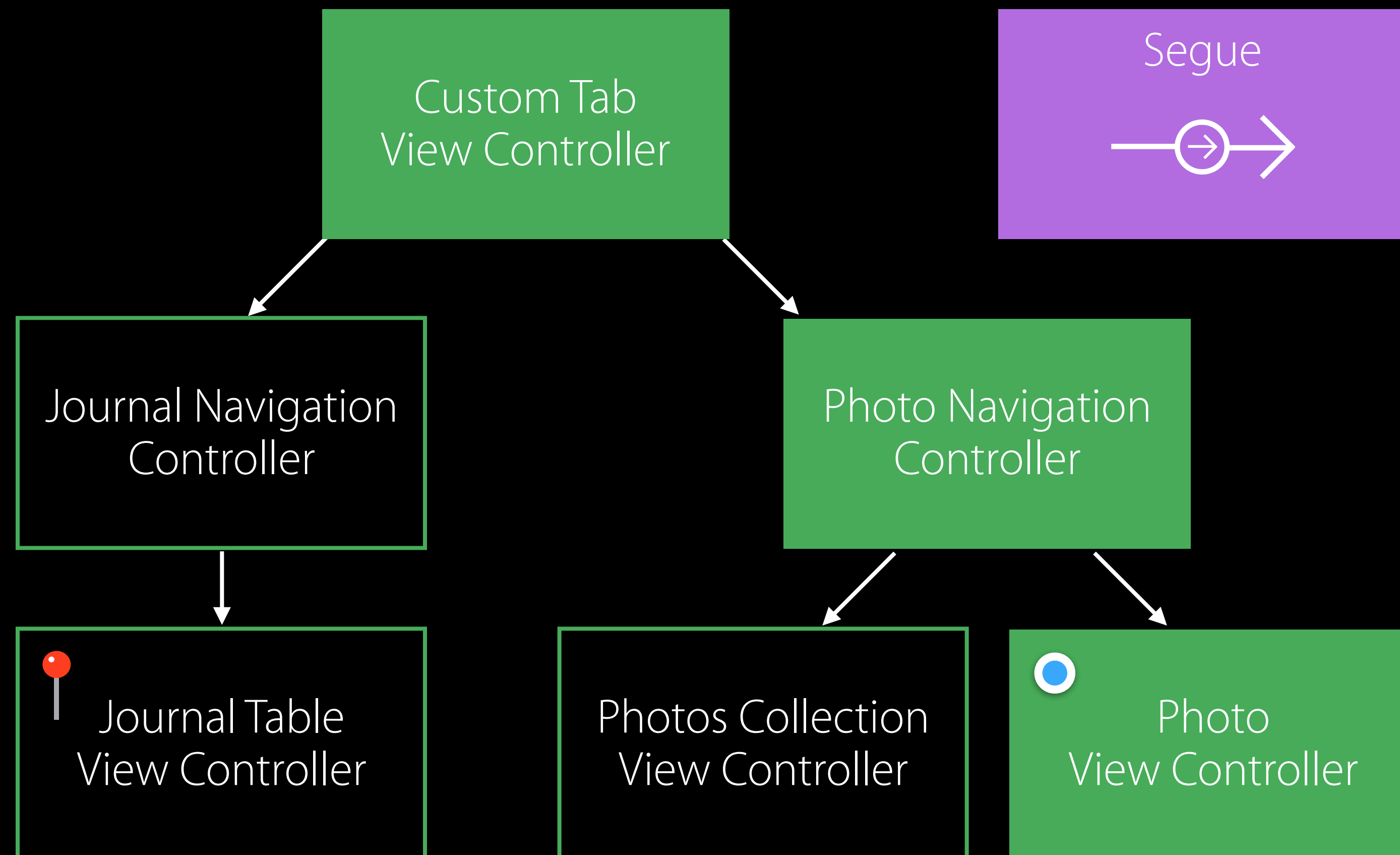
override segueForUnwindingToViewController(_:fromViewController:identifier:)



Incremental Unwinding



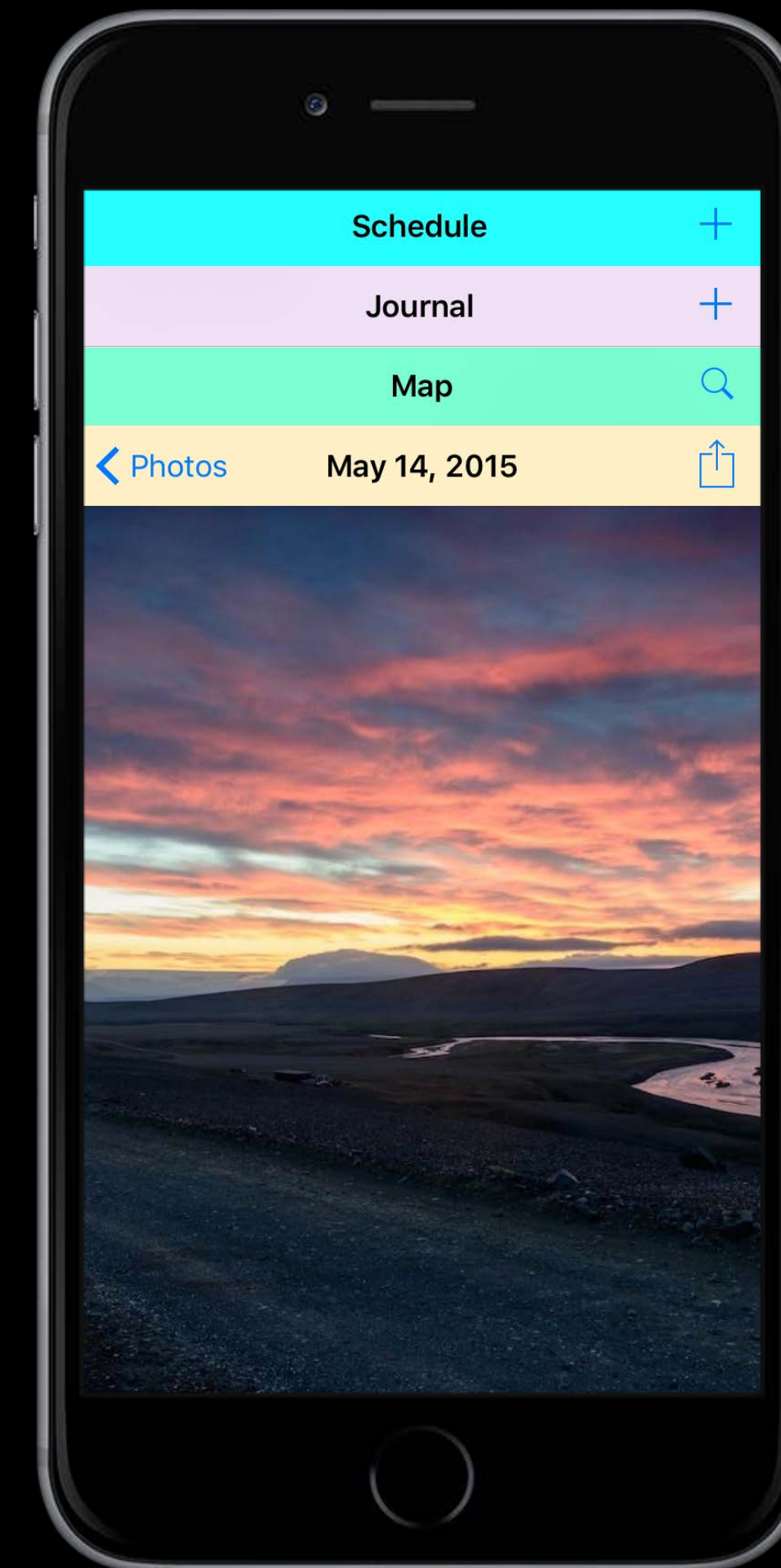
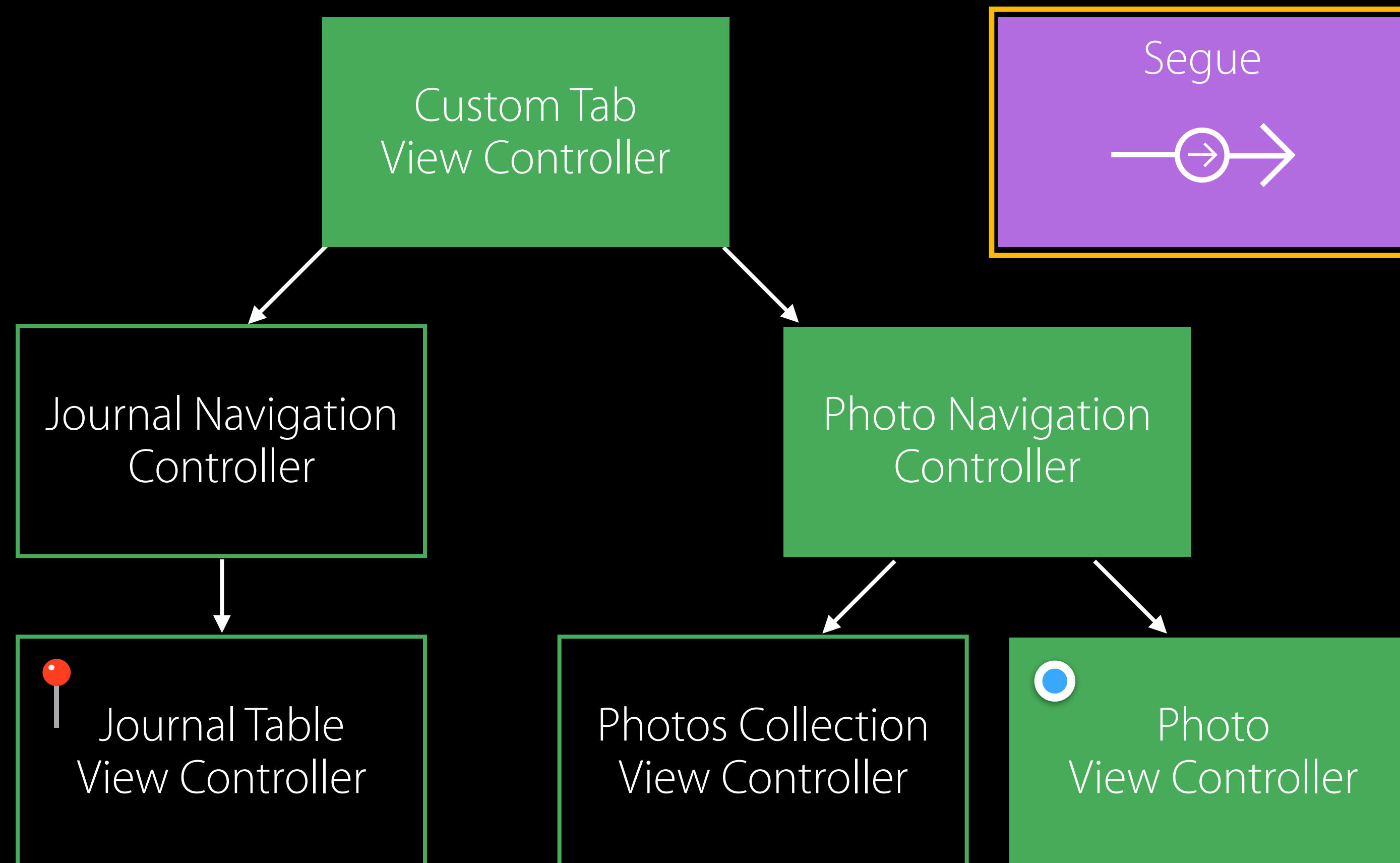
Incremental Unwinding



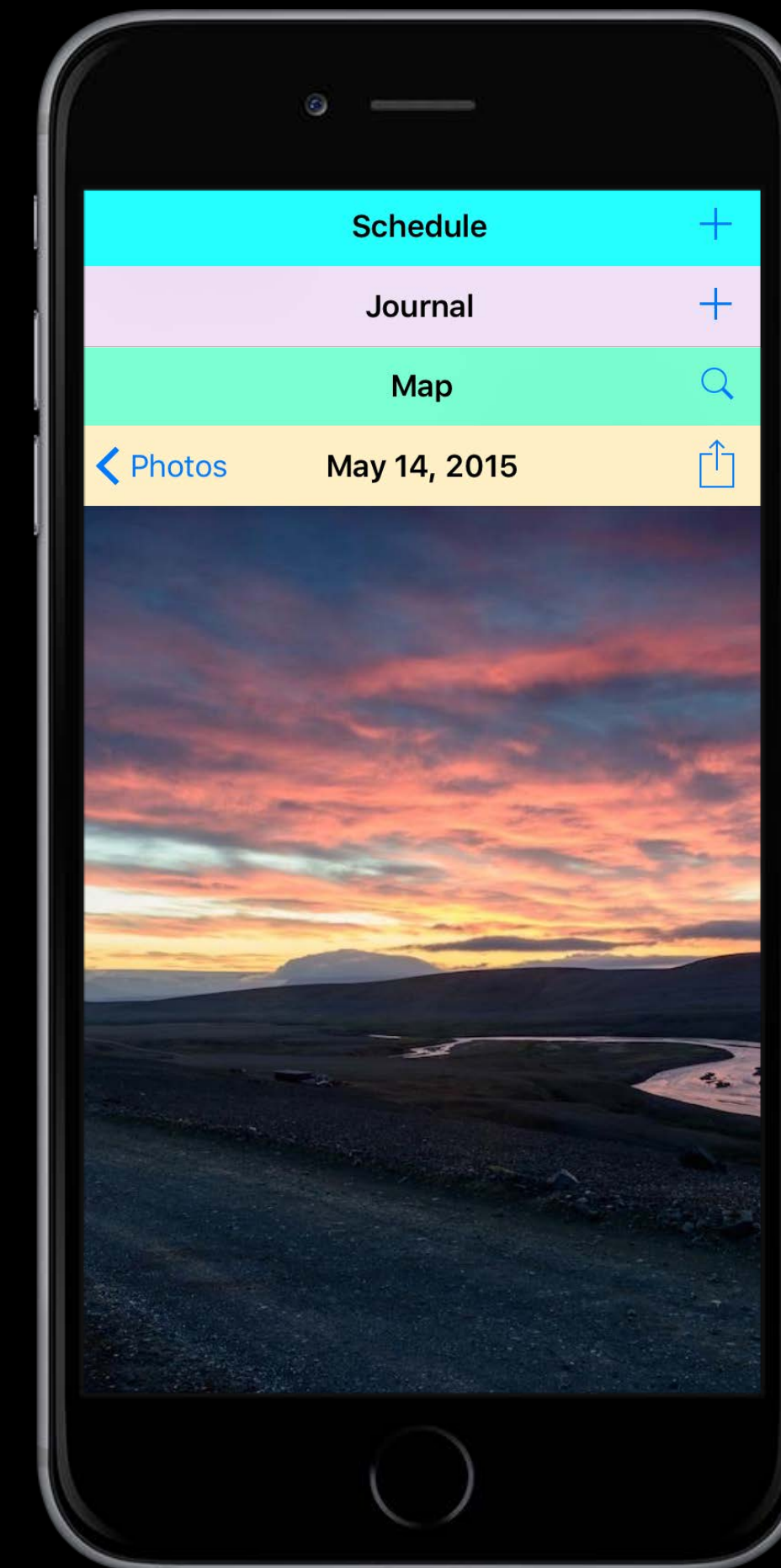
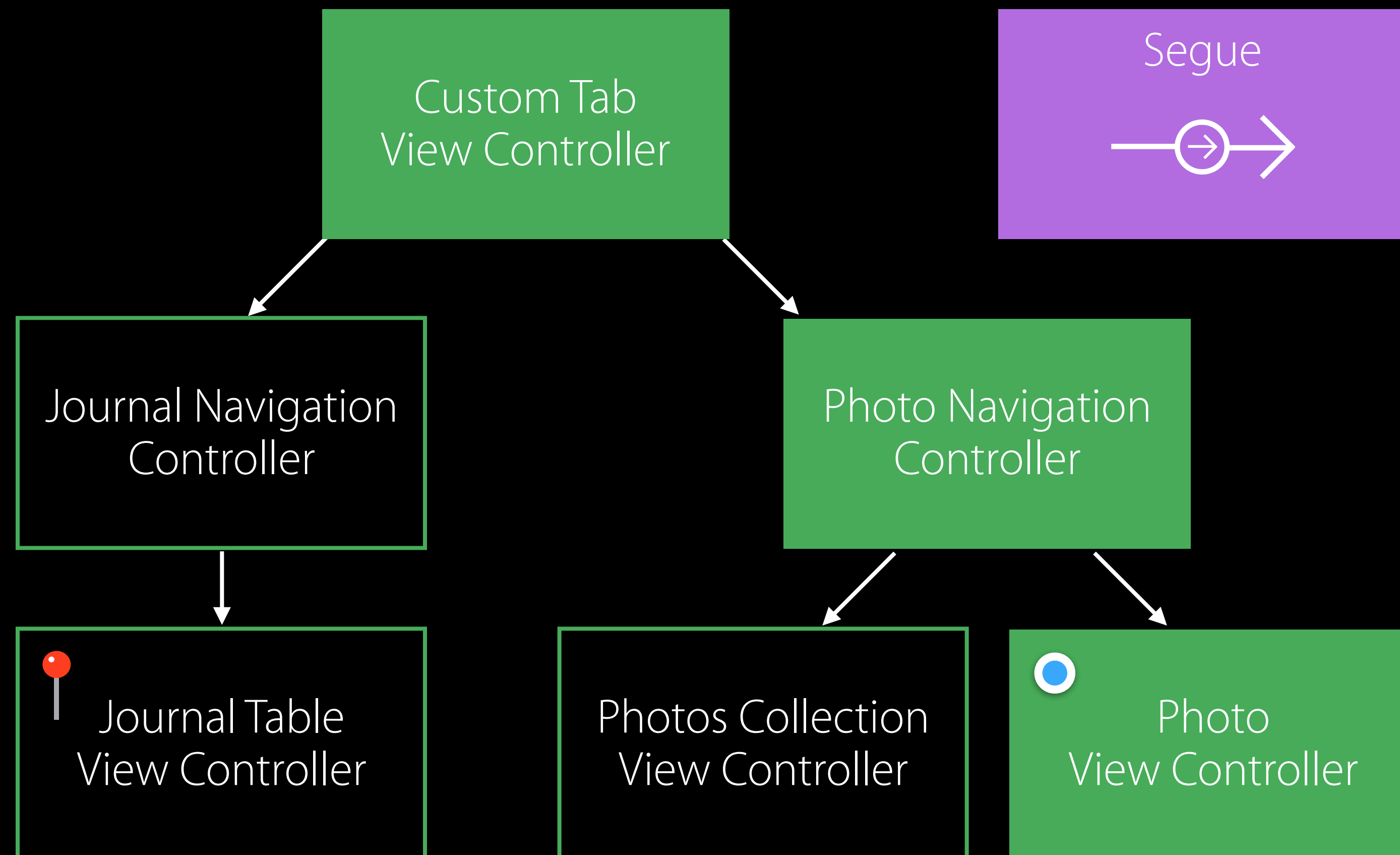
Incremental Unwinding



perform()

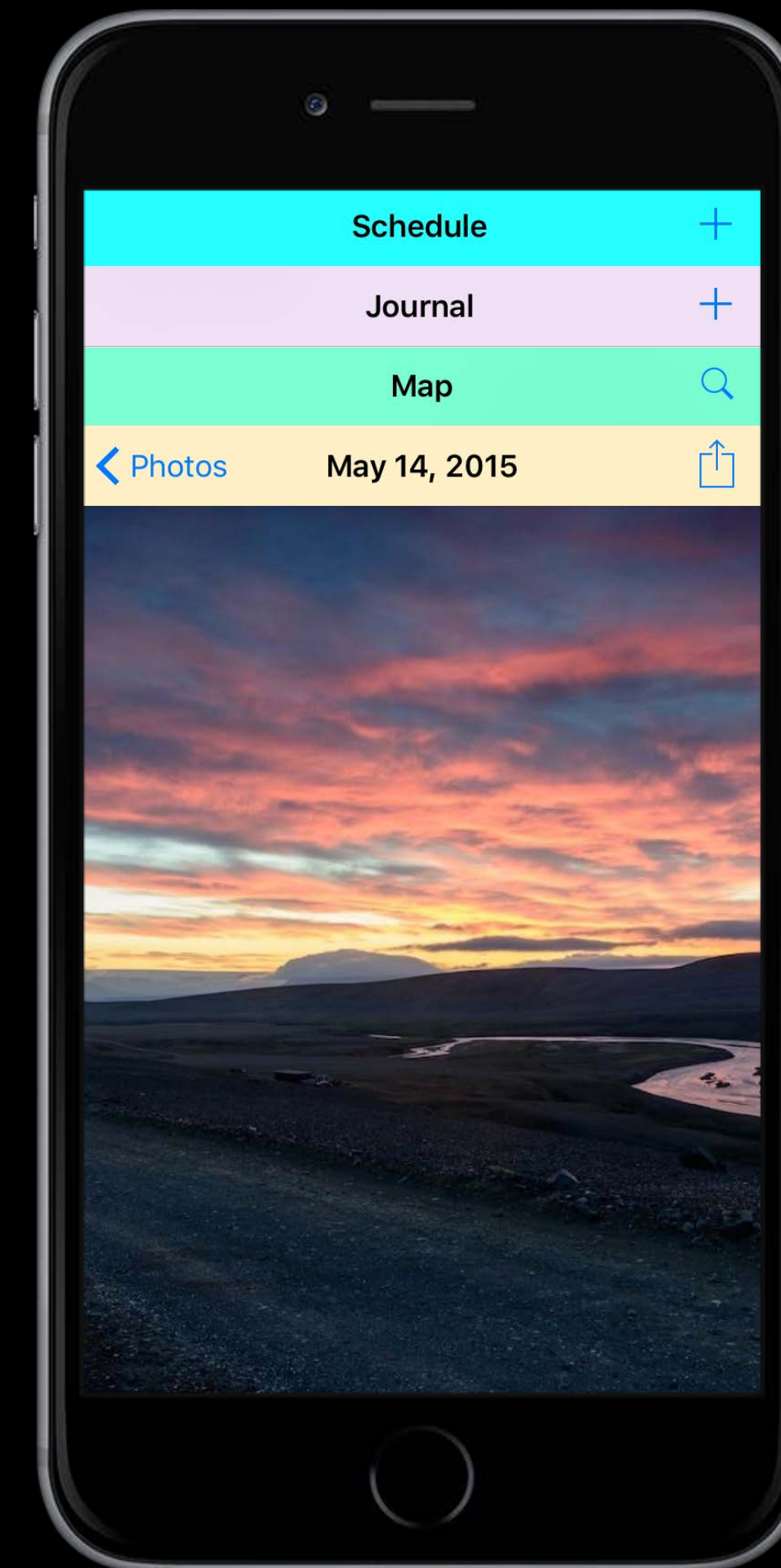
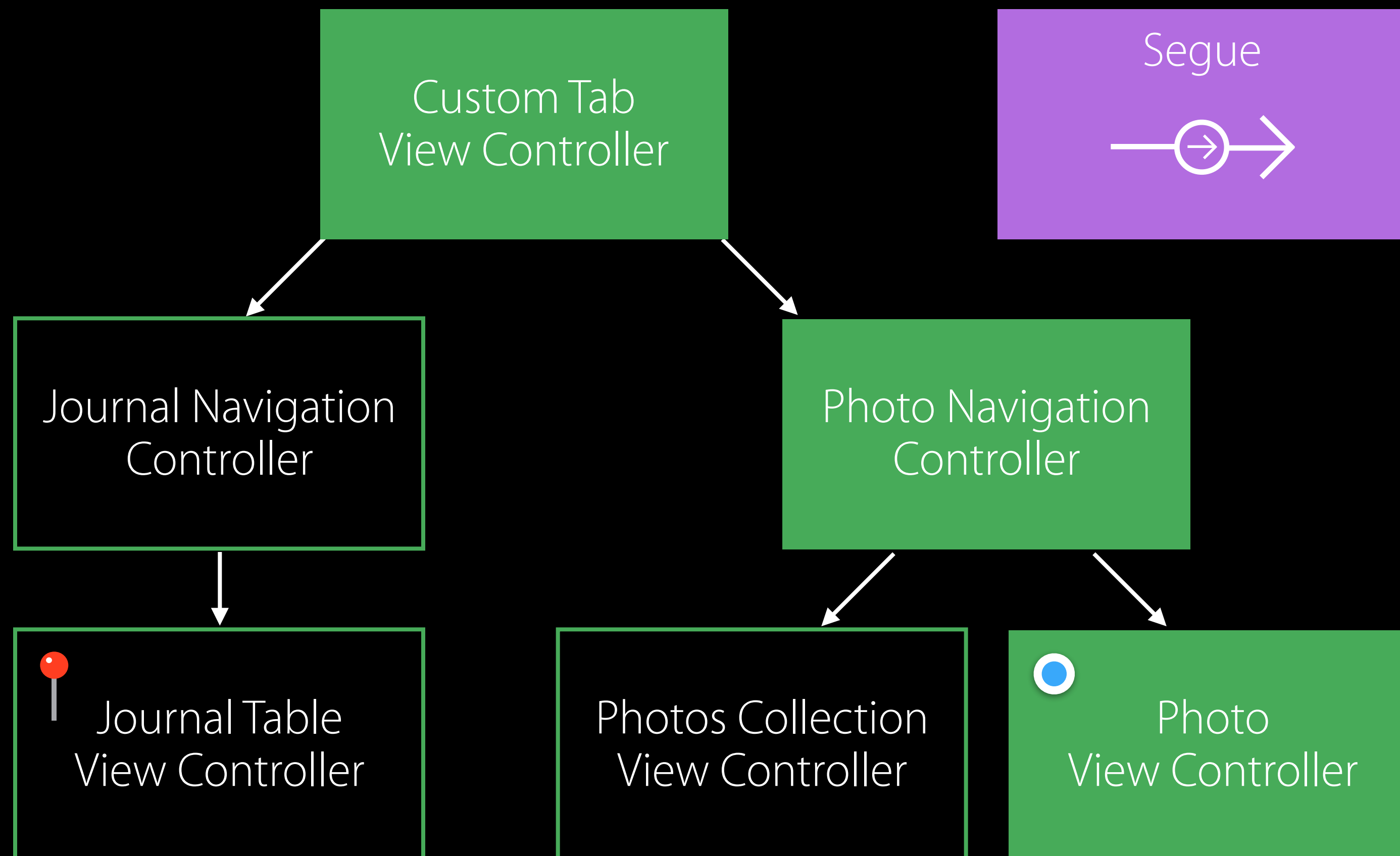


Incremental Unwinding



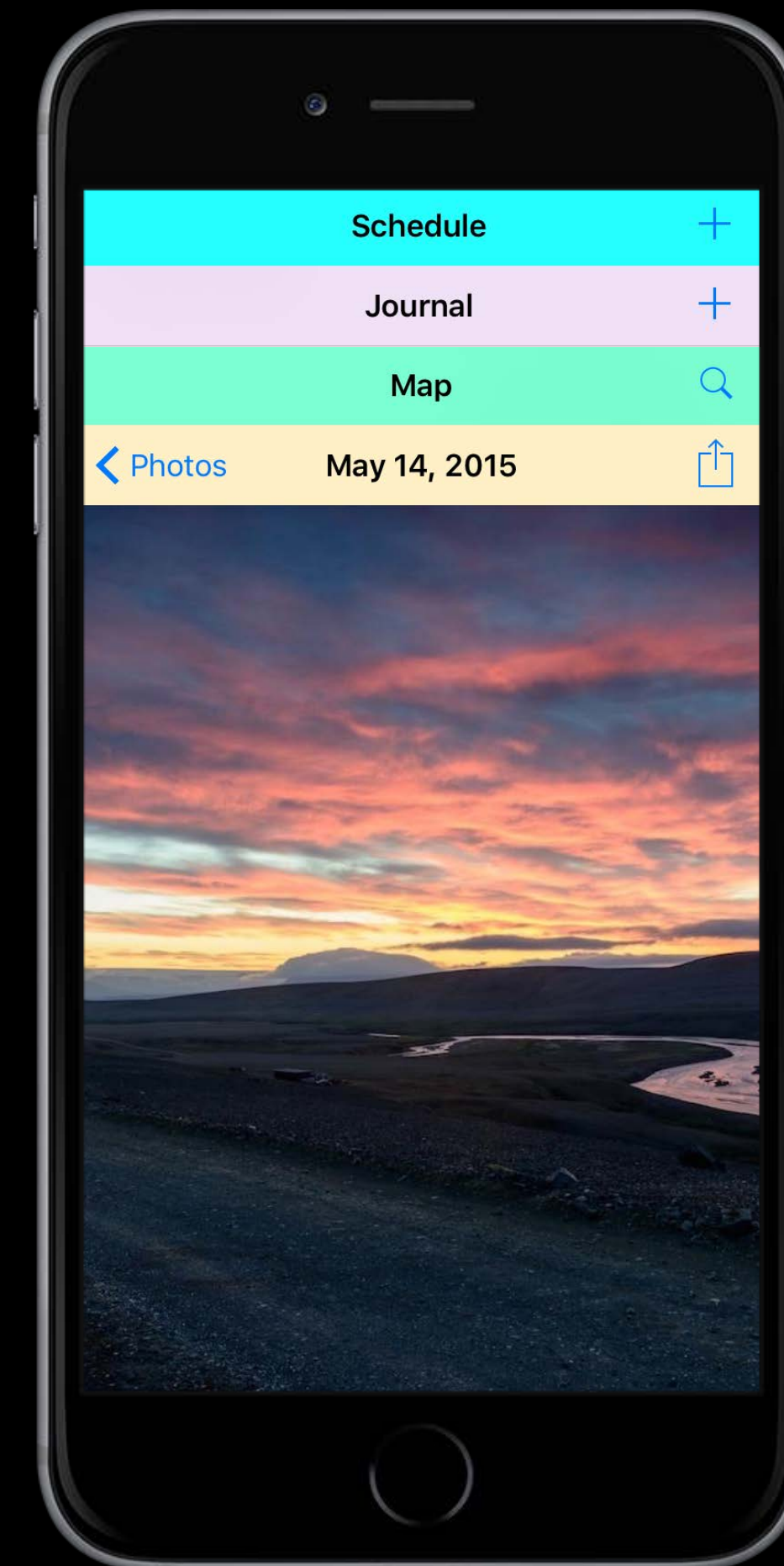
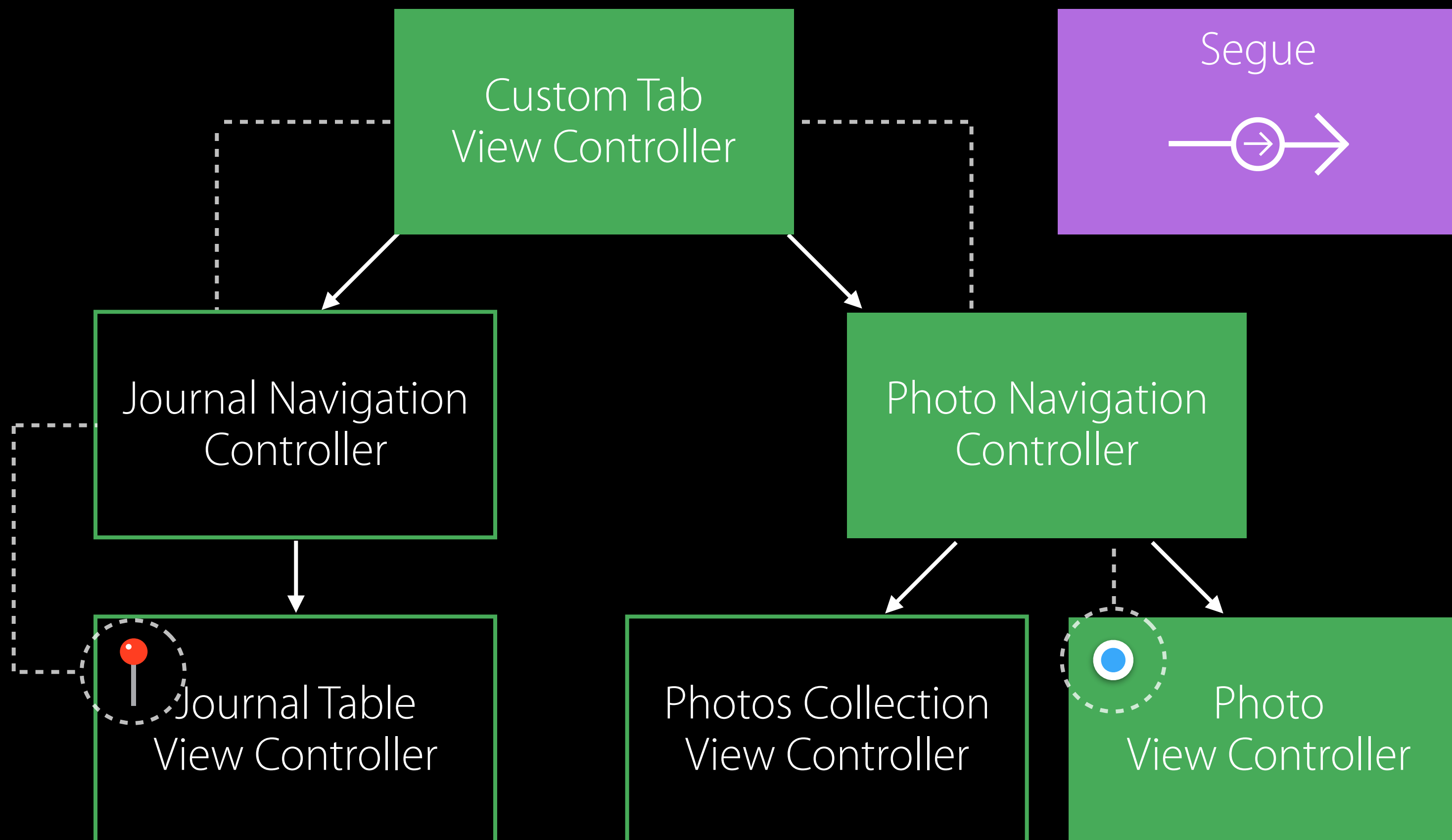
Incremental Unwinding

Follow the route

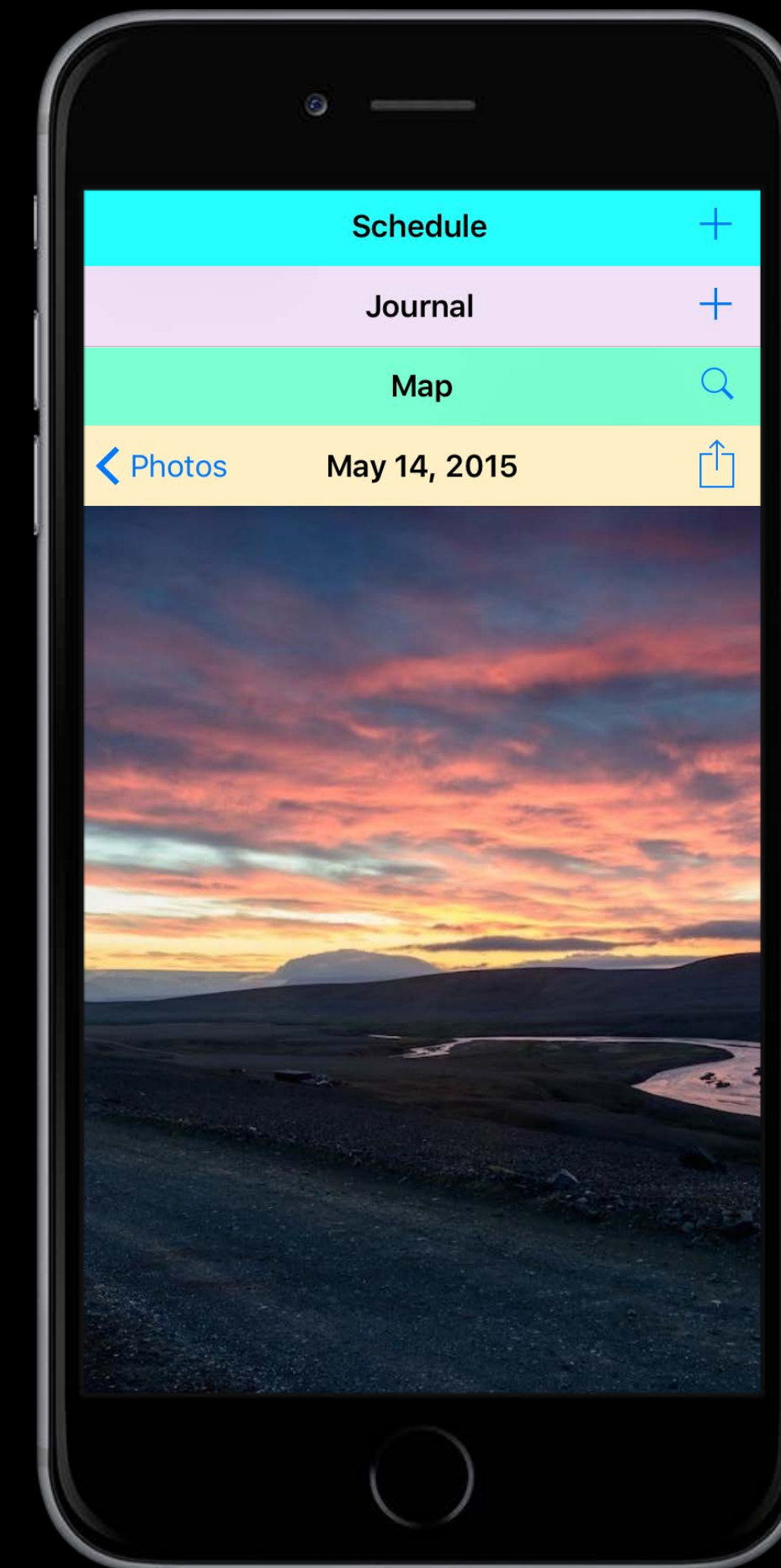
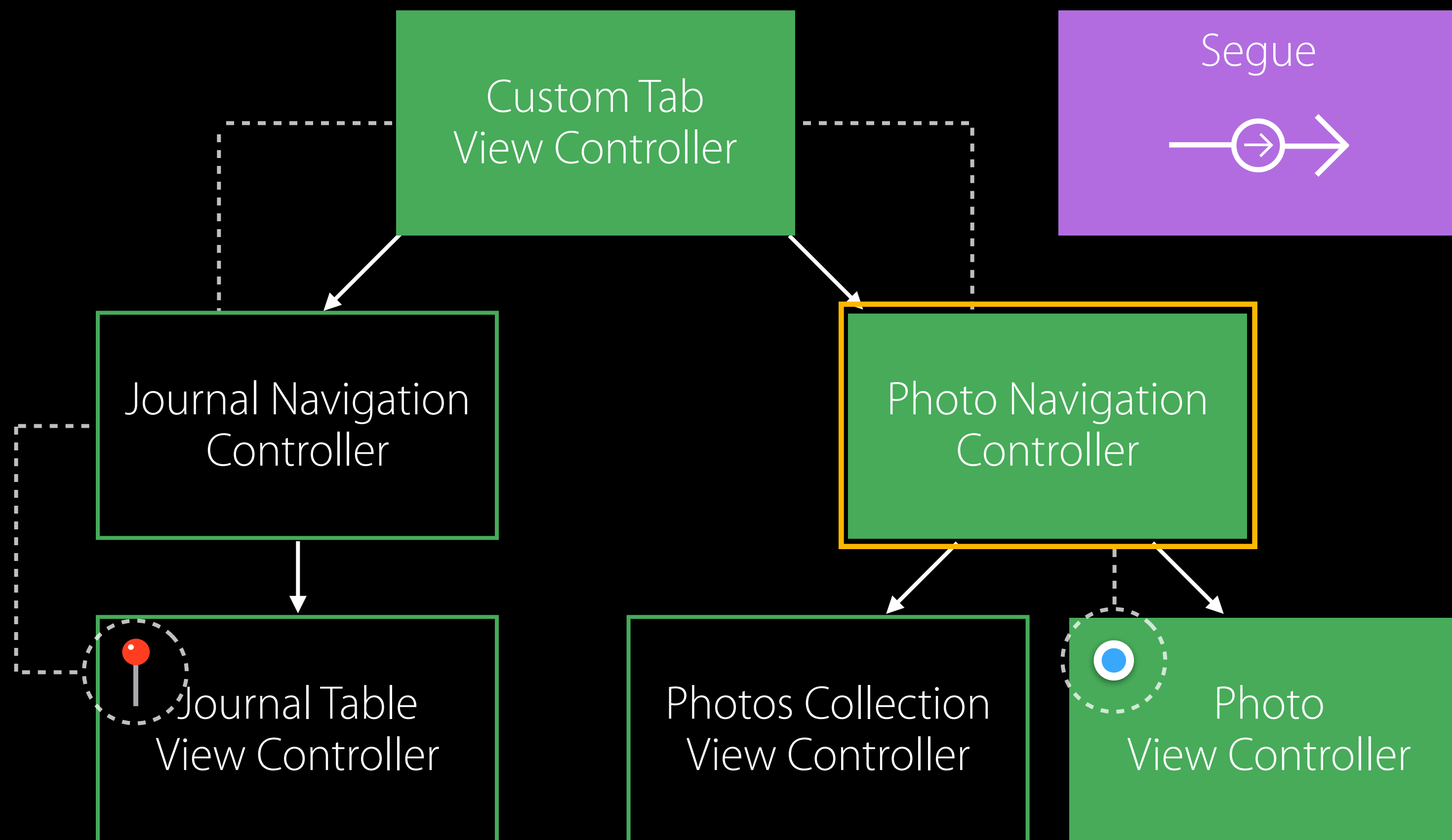


Incremental Unwinding

Follow the route



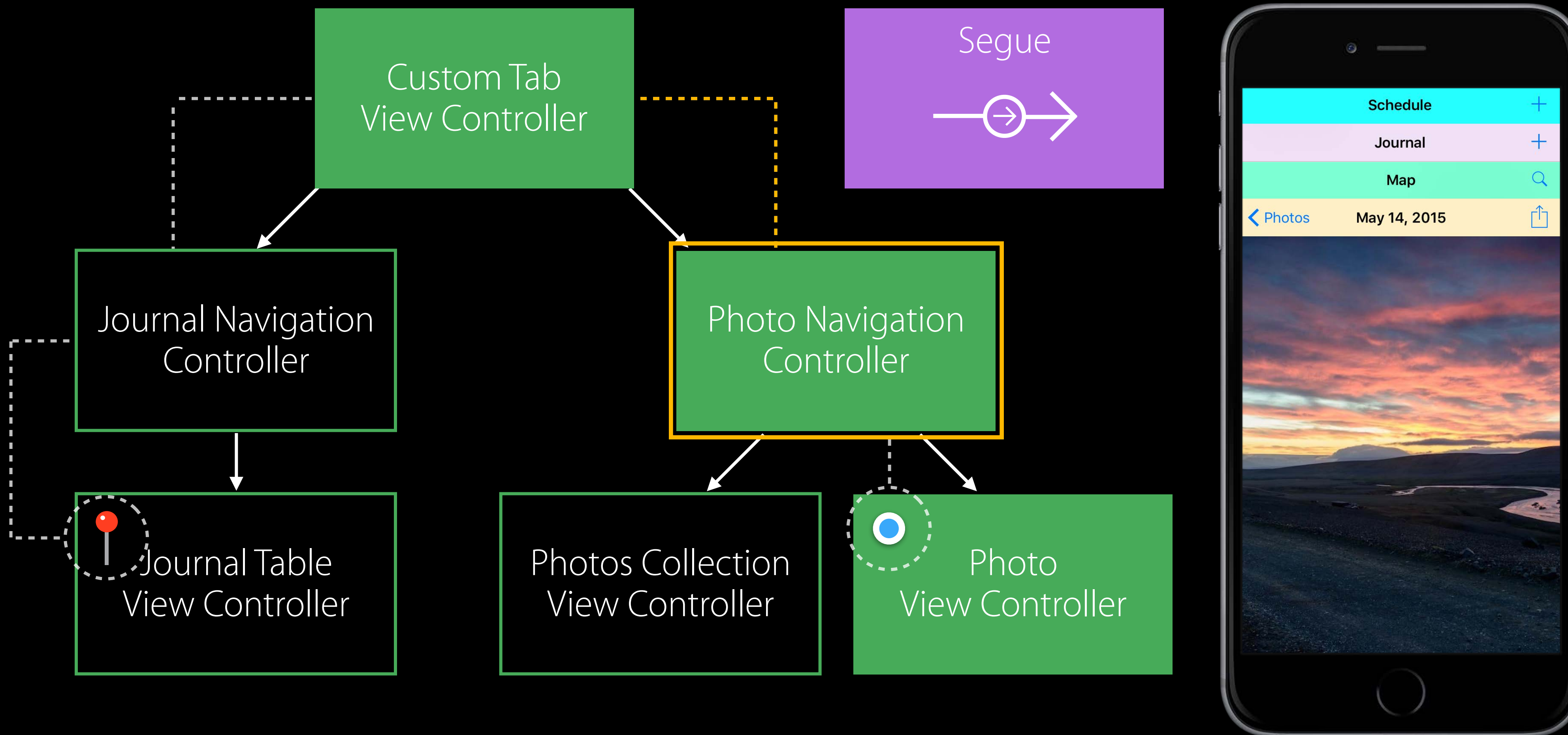
Incremental Unwinding



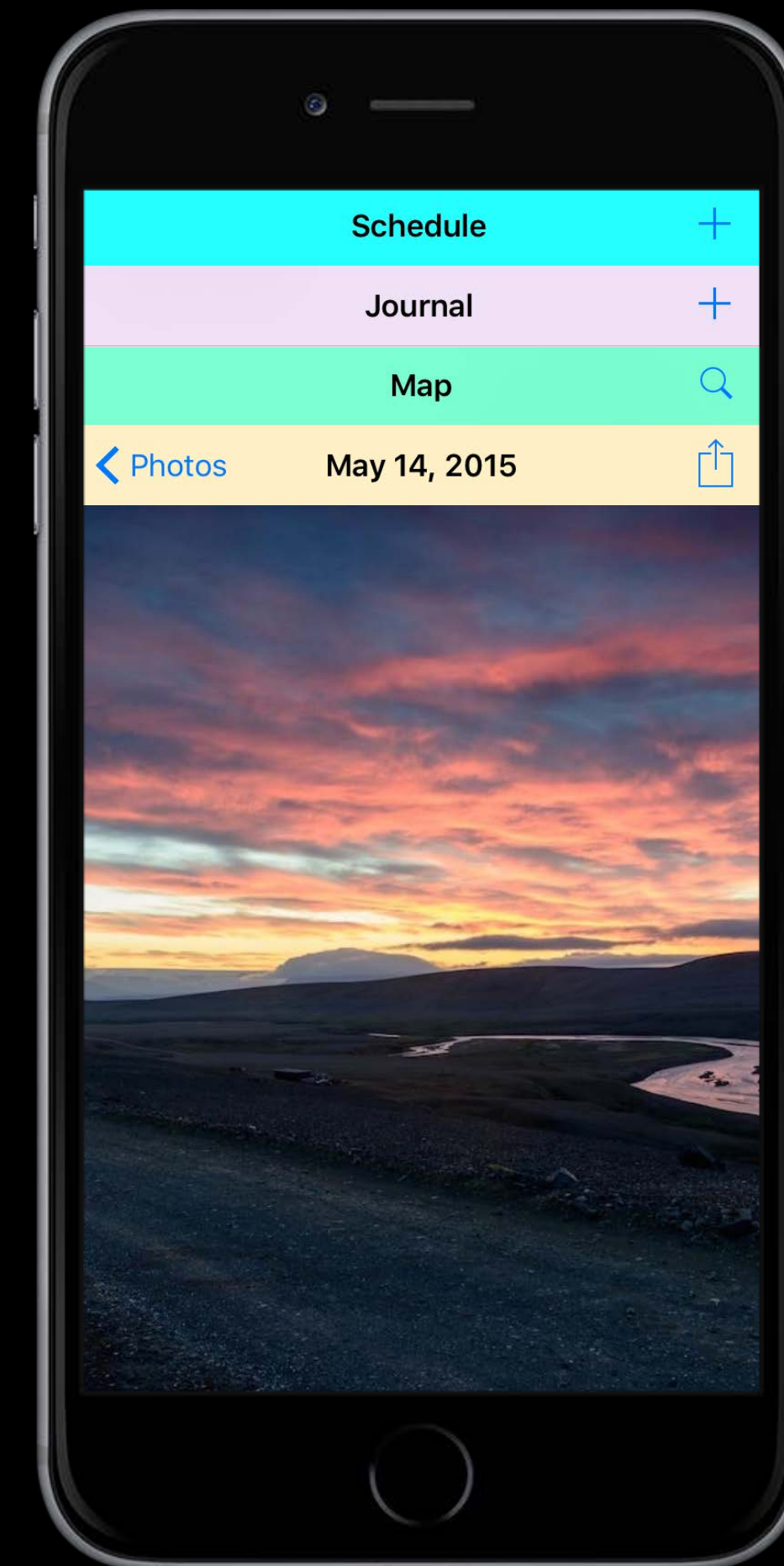
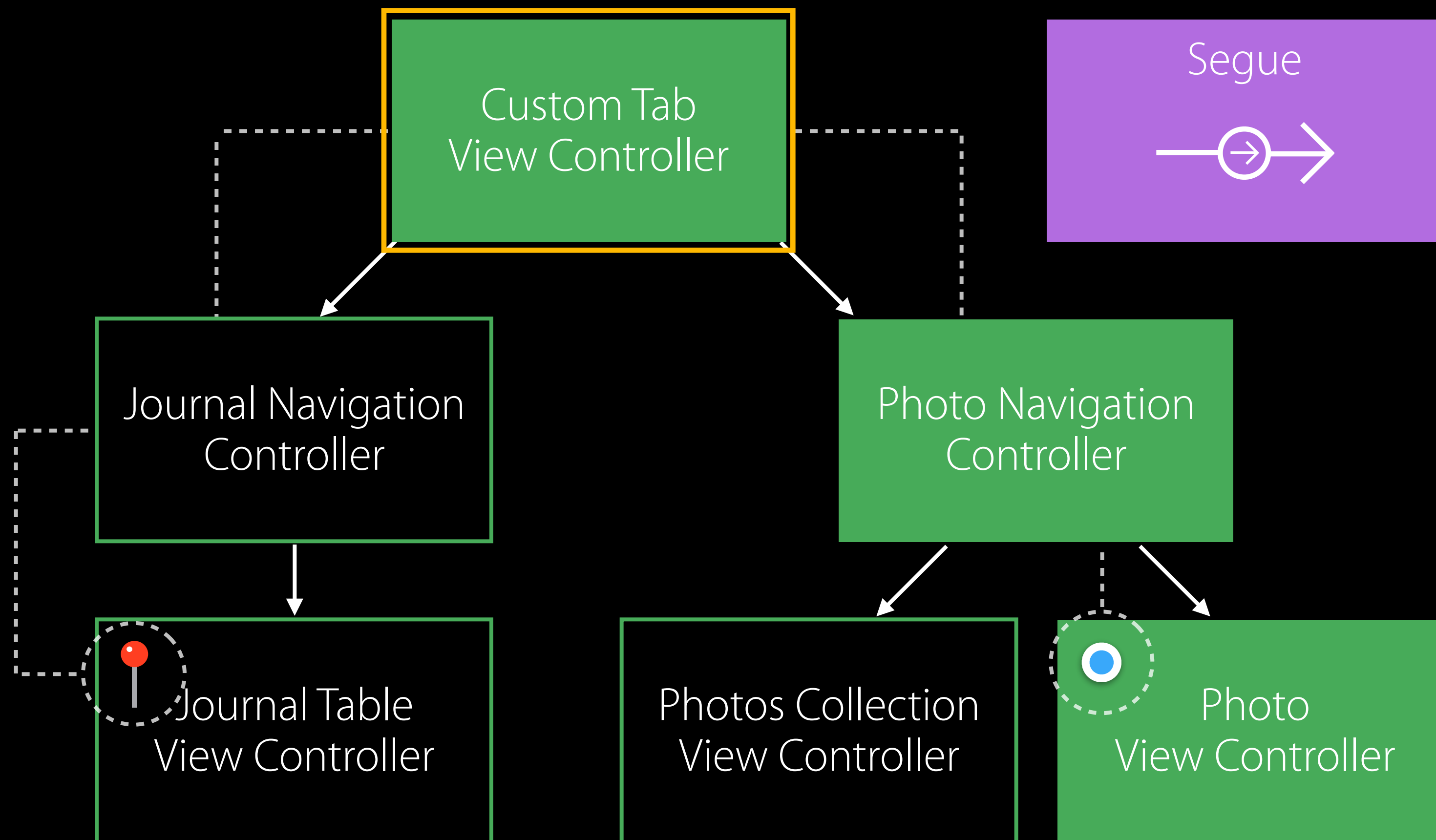
Incremental Unwinding



override `unwindForSegue(segue, towardsViewController:custom tab)`



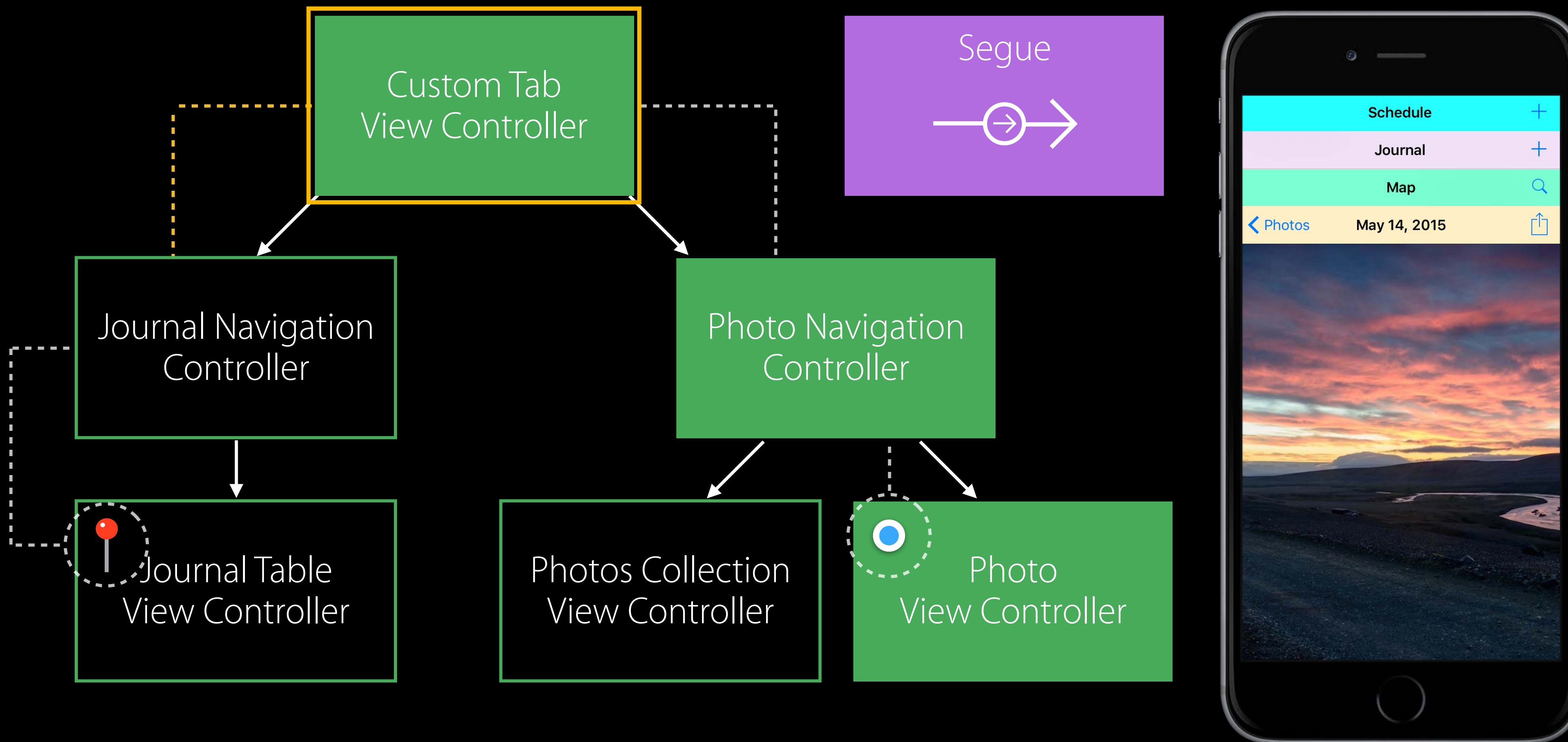
Incremental Unwinding



Incremental Unwinding



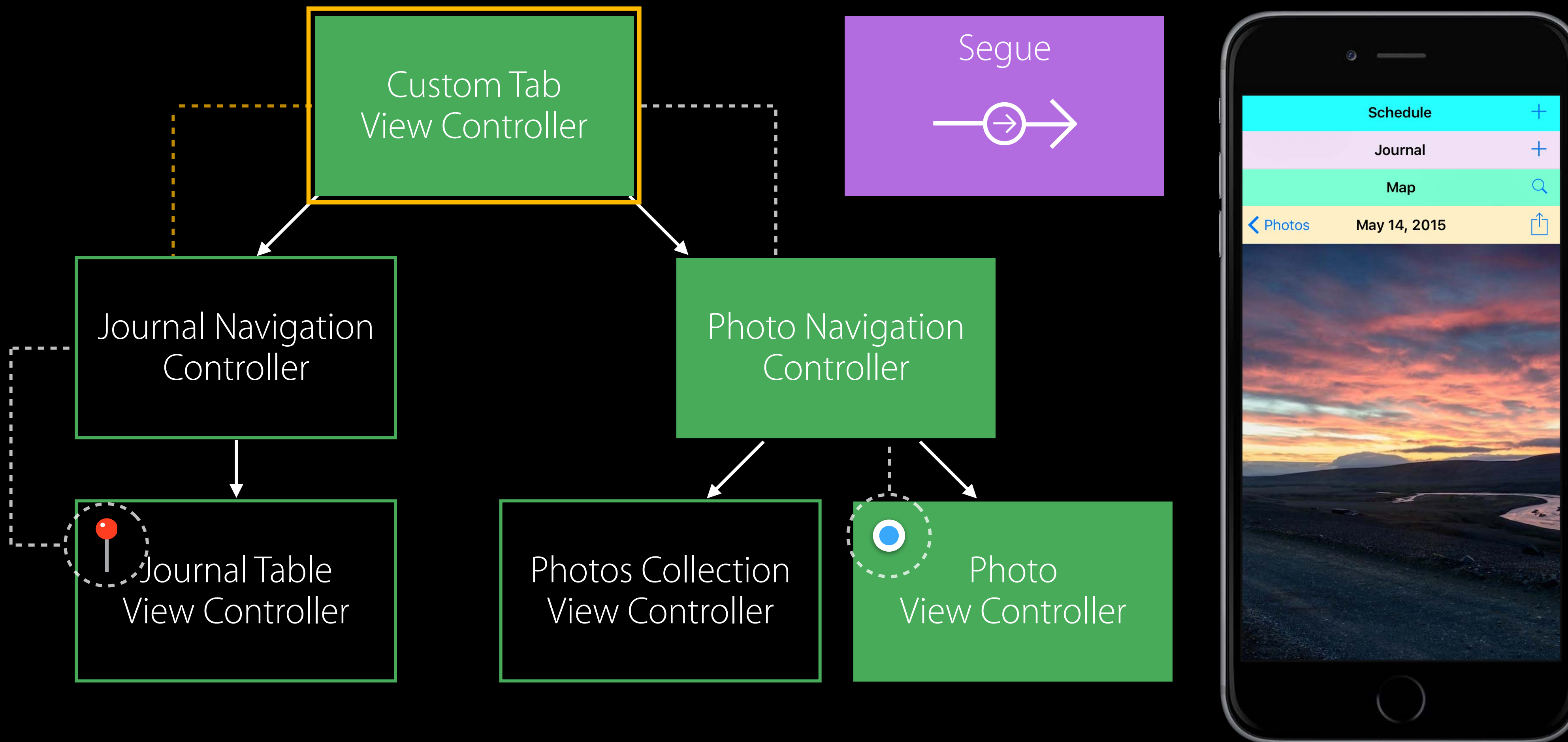
override `unwindForSegue(segue, towardsViewController:journal nav)`



Incremental Unwinding



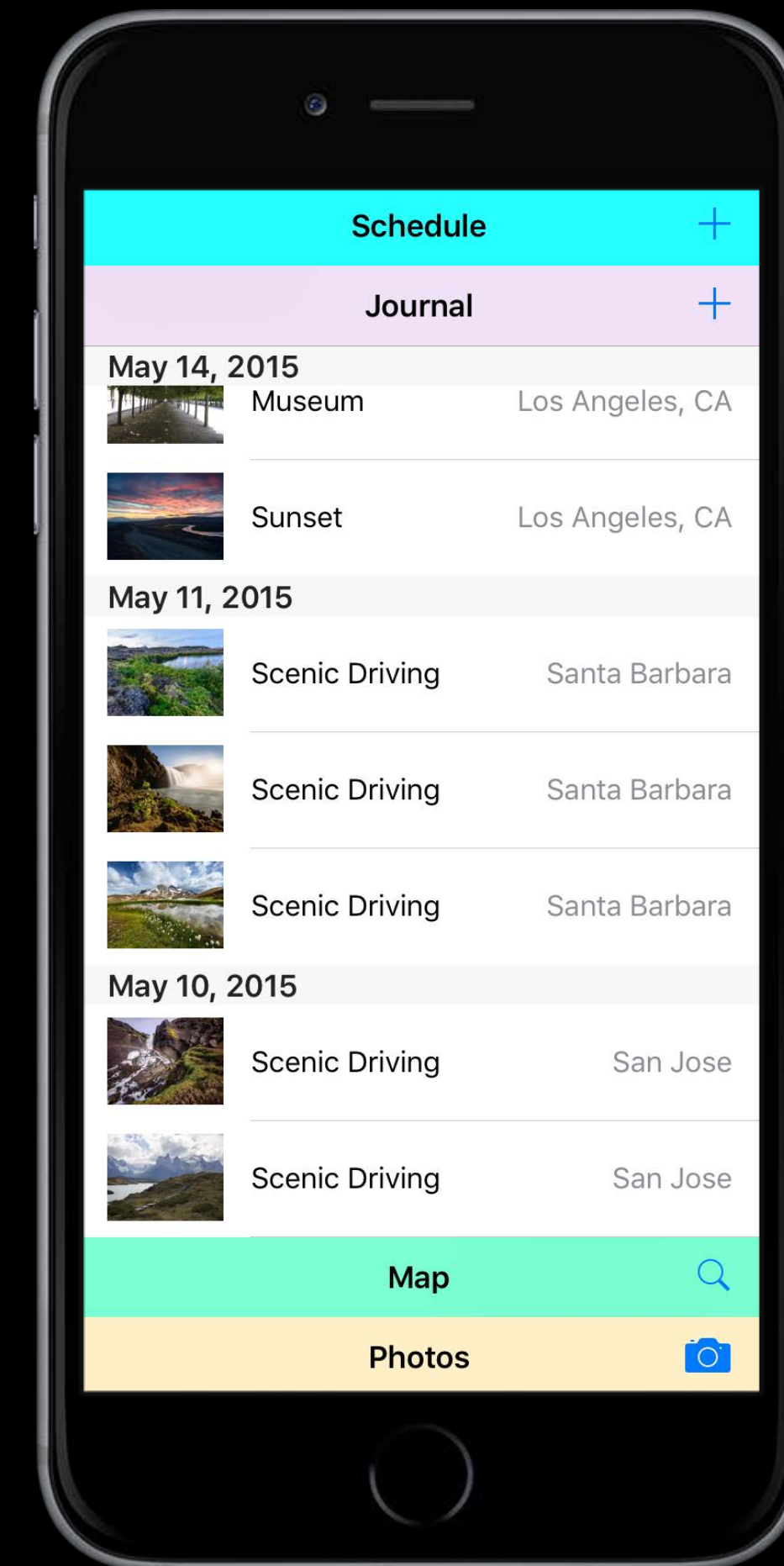
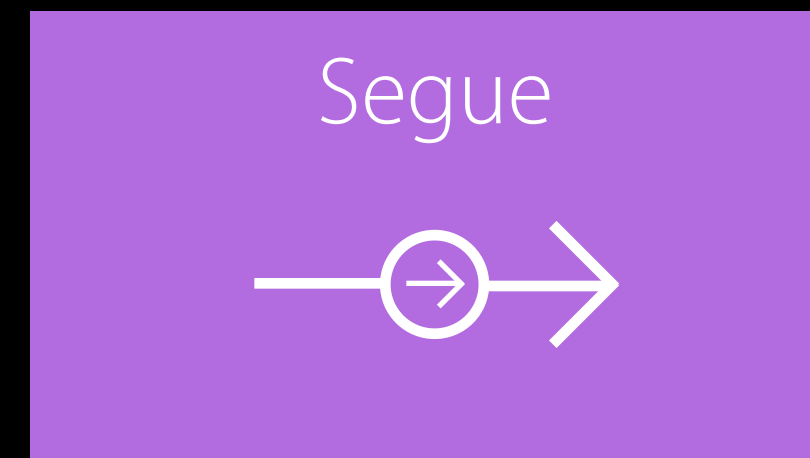
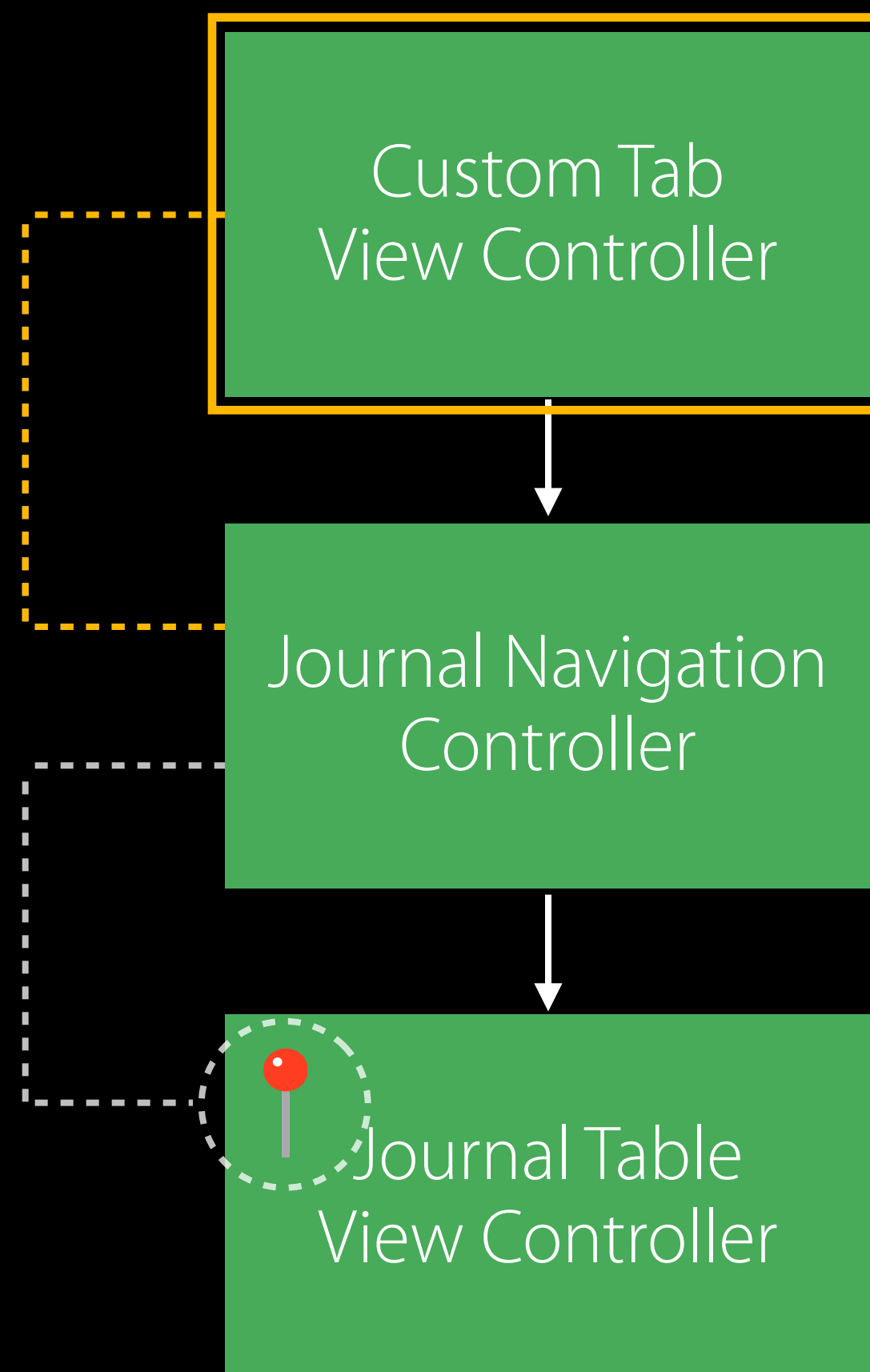
override `unwindForSegue(segue, towardsViewController:journal nav)`



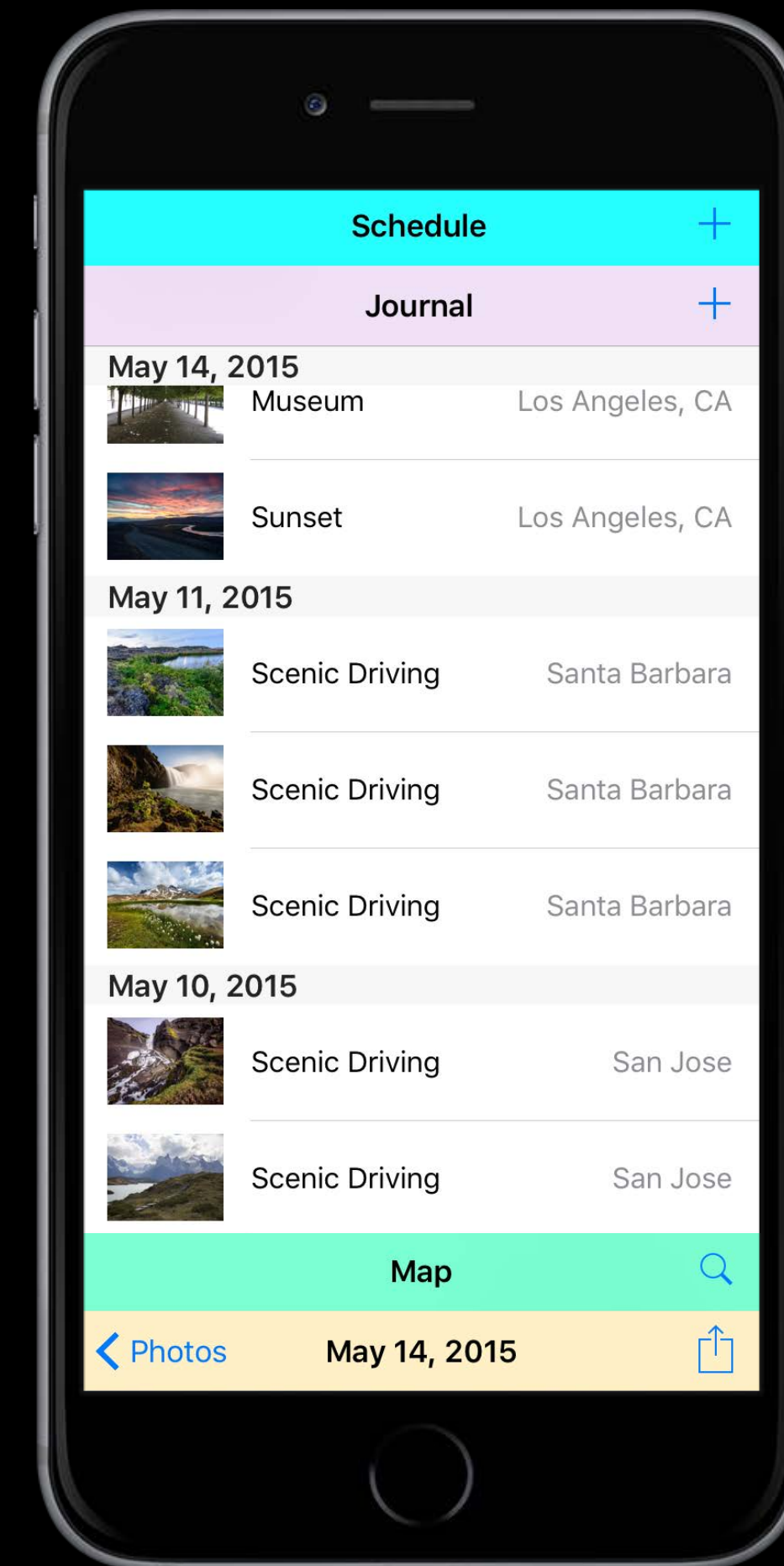
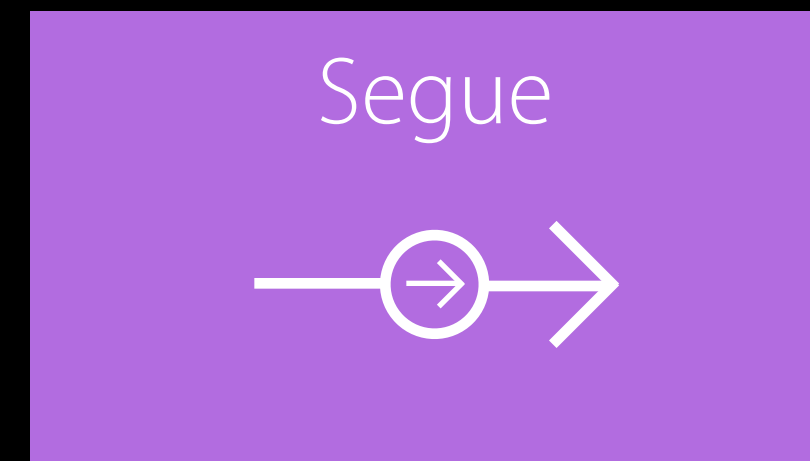
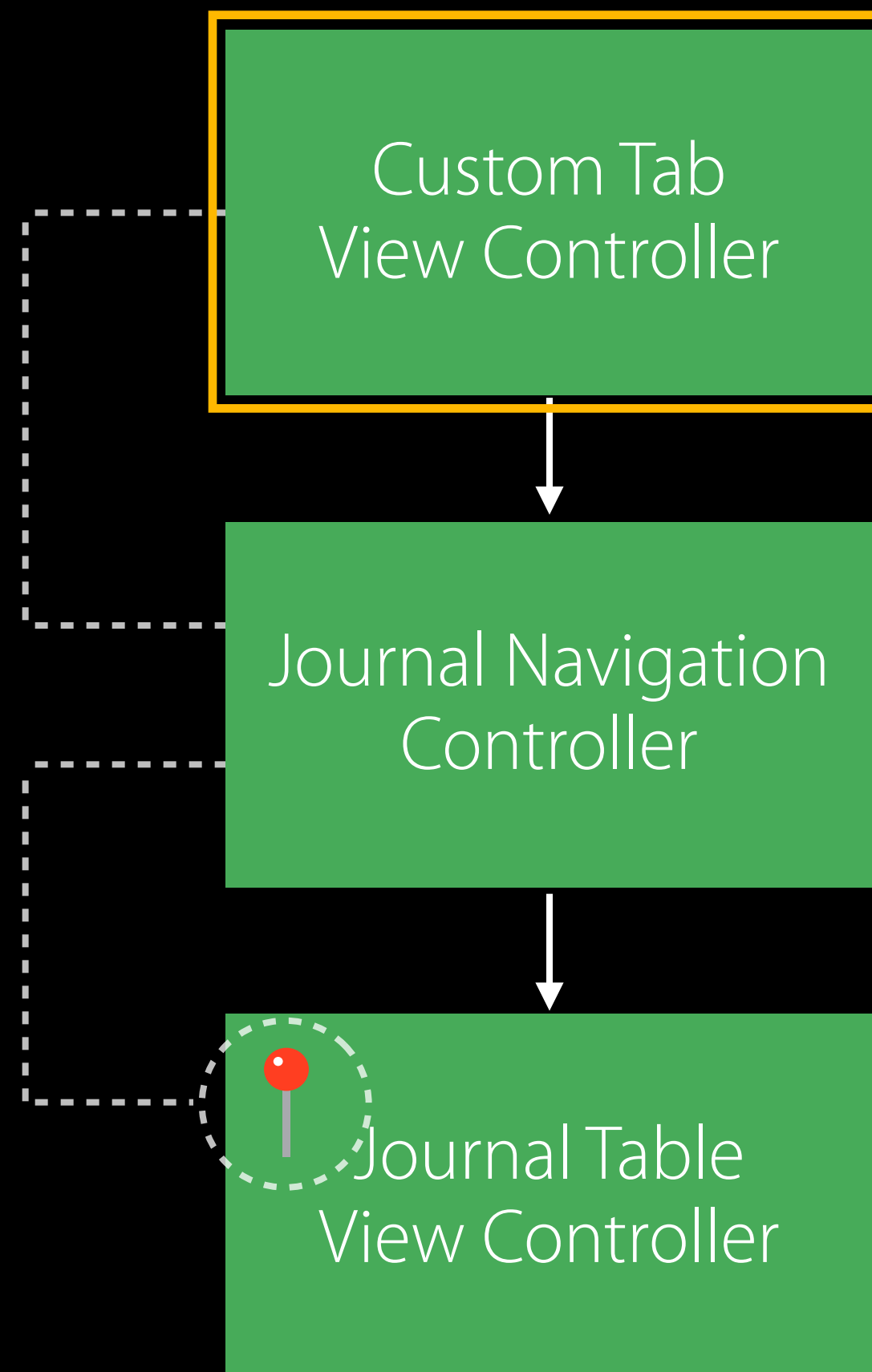
Incremental Unwinding



override `unwindForSegue(segue, towardsViewController:journal nav)`



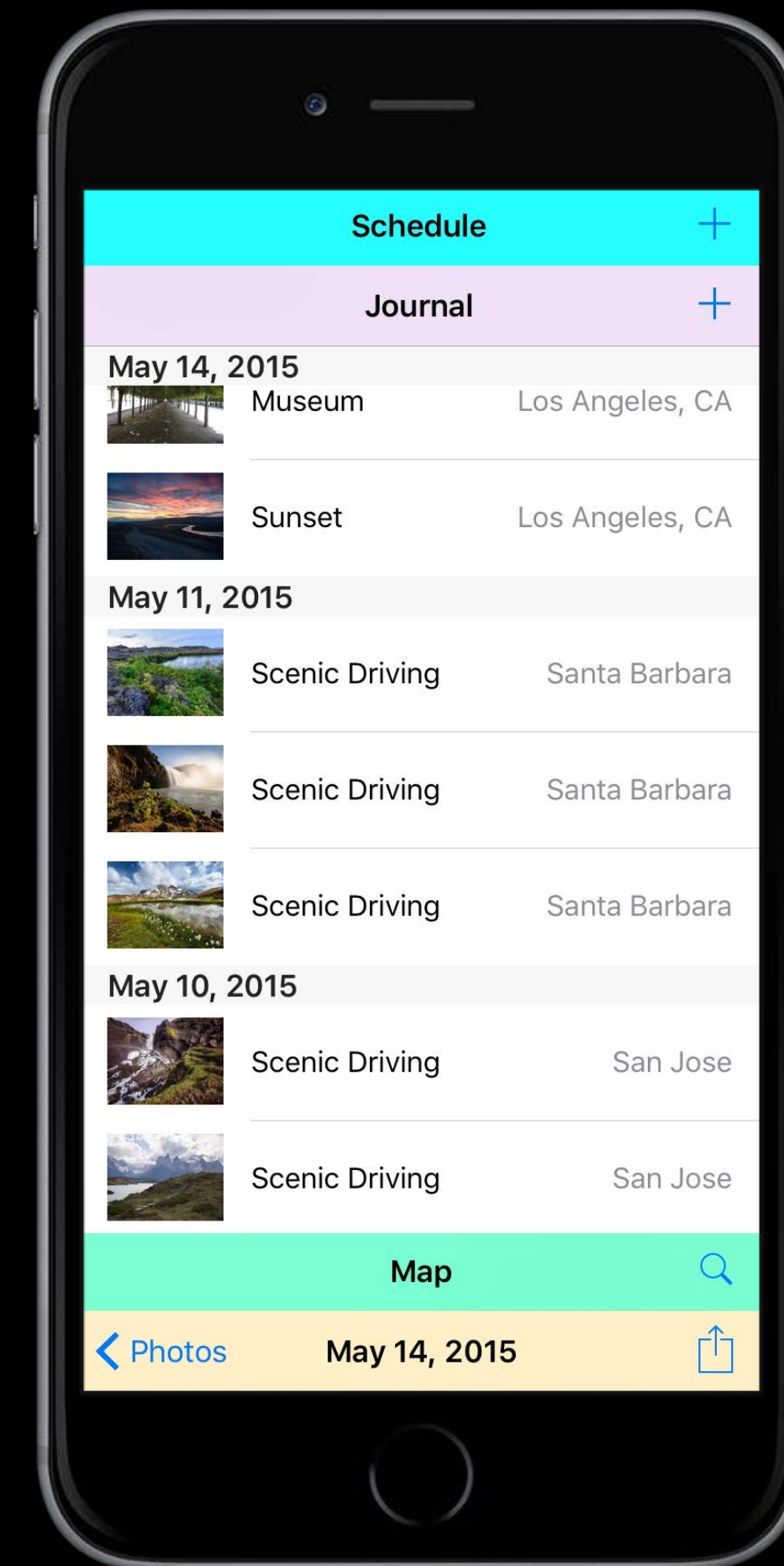
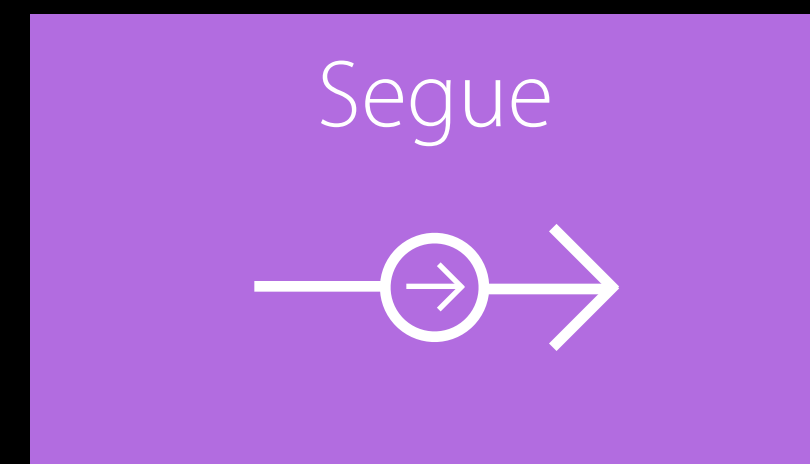
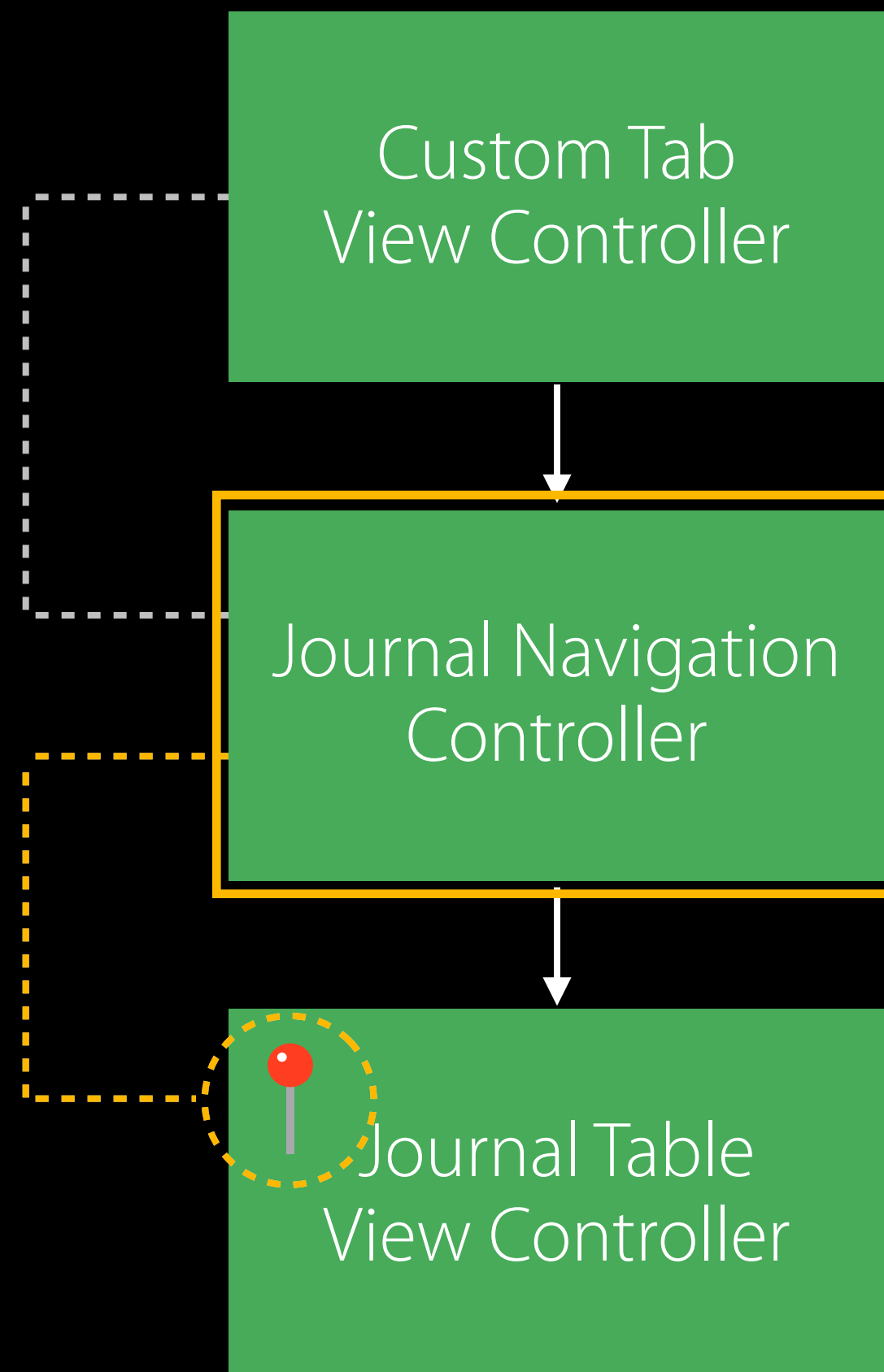
Incremental Unwinding



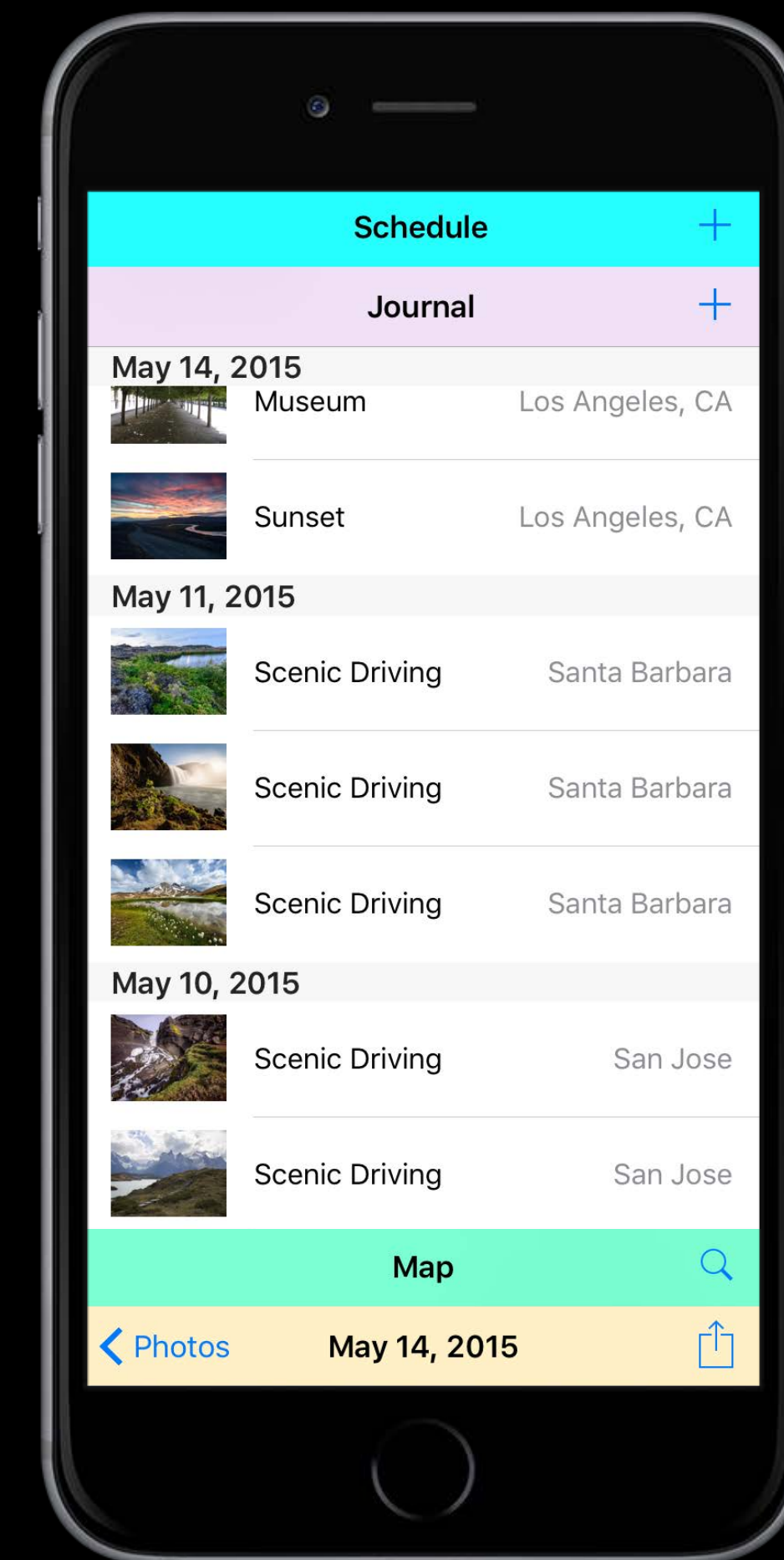
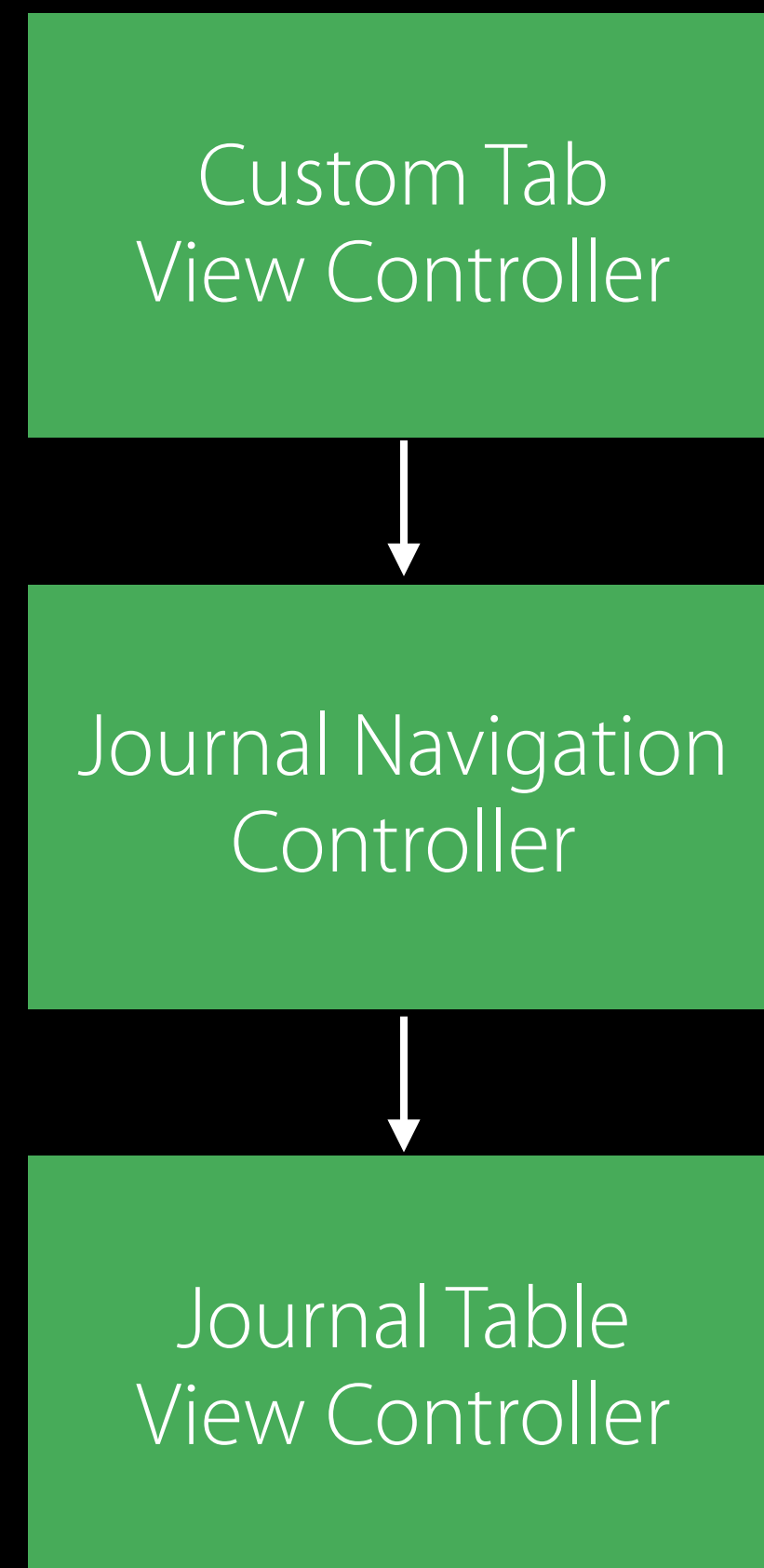
Incremental Unwinding



override `unwindTowardsViewController(CustomTab, fromViewController:Photo)`



Incremental Unwinding



Demo

Unwind segues and custom containers

Unwinding APIs

Finding the destination

- ❌ `viewControllerForUnwindSegueAction(_:fromViewController:sender:)`
- ✅ `override allowedChildViewControllersForUnwindingFromSource(_:)`
`childViewControllerContainingSegueSource(_:)`
`override canPerformUnwindSegueAction(_:fromViewController:sender:)`

Unwinding APIs

Following the route

❌ `segueForUnwindingToViewController(_:fromViewController:identifier:)`

✅ `override unwindForSegue(_:towardsViewController:)`

Summary

Summary

Organize your storyboards using Storyboard References

Summary

Organize your storyboards using Storyboard References

Customize triggered and unwind segues by subclassing

Summary

Organize your storyboards using Storyboard References

Customize triggered and unwind segues by subclassing

- Present Modally and Popover Presentation segues have extended lifetimes

Summary

Organize your storyboards using Storyboard References

Customize triggered and unwind segues by subclassing

- Present Modally and Popover Presentation segues have extended lifetimes

Unwind segues move backward through application flow

Summary

Organize your storyboards using Storyboard References

Customize triggered and unwind segues by subclassing

- Present Modally and Popover Presentation segues have extended lifetimes

Unwind segues move backward through application flow

- Support unwind segues in custom containers

Summary

Organize your storyboards using Storyboard References

Customize triggered and unwind segues by subclassing

- Present Modally and Popover Presentation segues have extended lifetimes

Unwind segues move backward through application flow

- Support unwind segues in custom containers
- Remove implementations of deprecated API to get new behavior

More Information

Documentation

Storyboard Help

Sample Code

SegueCatalog

<http://developer.apple.com/library>

Technical Support

Apple Developer Forums

Developer Technical Support

General Inquiries

Curt Rothert, App Frameworks Evangelist

rothert@apple.com

Related Session and Lab

Implementing UI Designs in Interface Builder	Pacific Heights	Wednesday 1:30PM
Interface Builder and Auto Layout Lab	Developer Tools Lab B	Thursday 1:30PM

