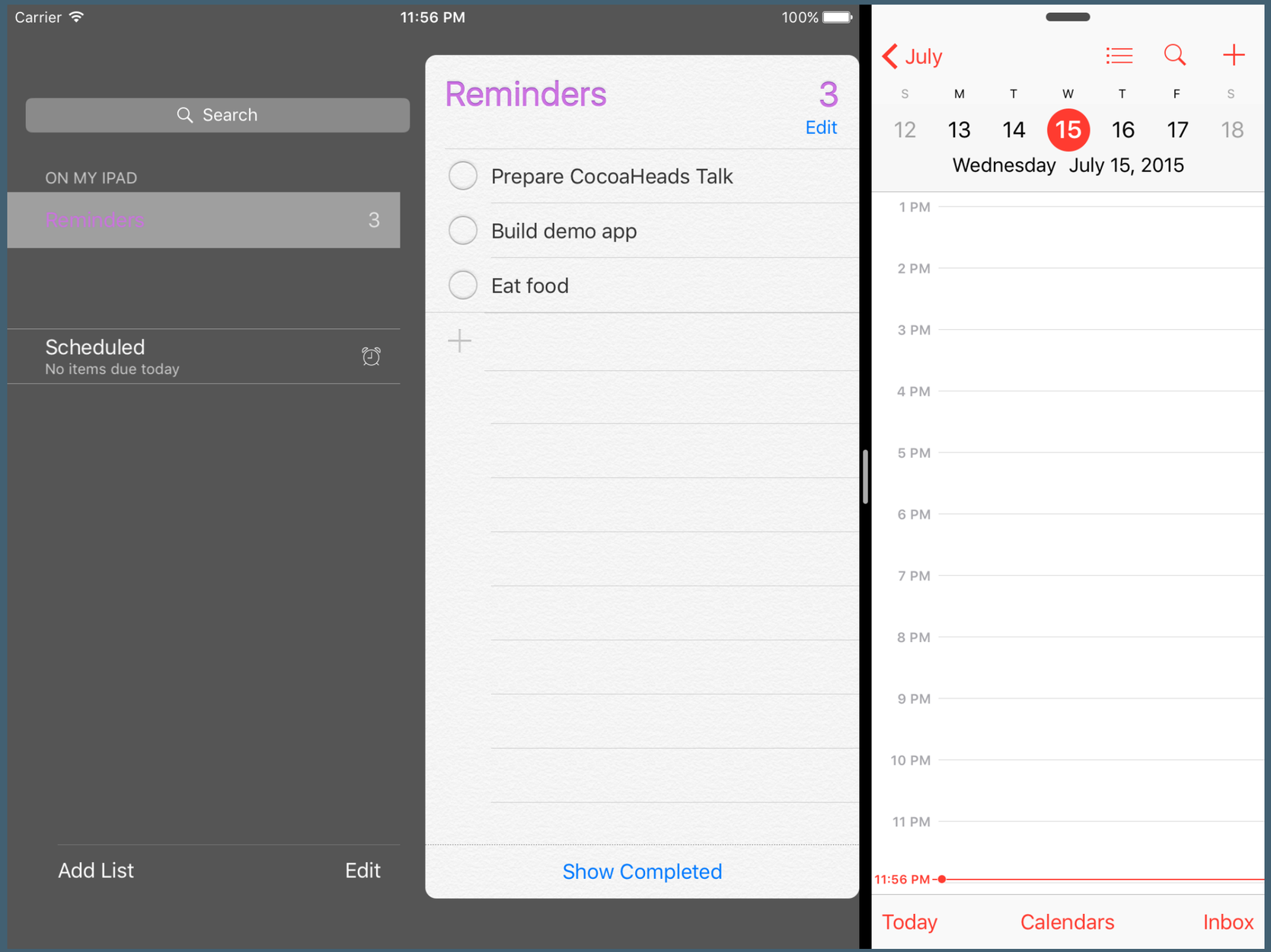
Multitasking and Adaptive Apps

"Adaptive apps"

UISplitViewController, right?

UISplitViewController

- Dual-pane when wide
- Single-pane when narrow


Carrier
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Search
ON MY IPAD
Reminders 3
Scheduled
No items due today
Add List
Edit
Reminders
3
Edit
Prepare CocoaHeads Talk
Build demo app
Eat food
Show Completed
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Wednesday July 15, 2015
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11 PM
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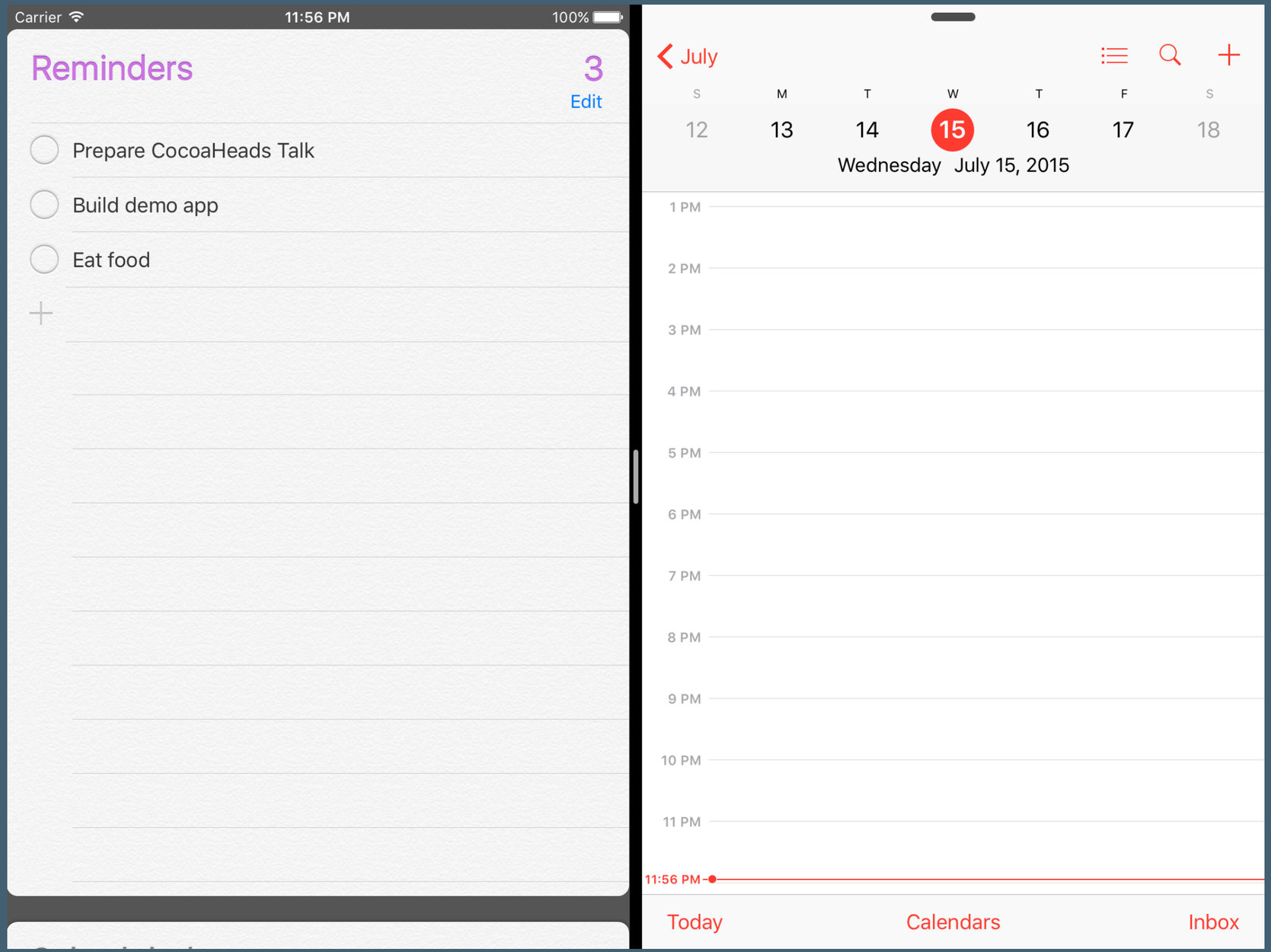
Today
Calendars
Inbox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1 PM
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Today
Calendars
Inbox

What else?

Carrier 8:30 AM 100%

Conversations

Bruce

A nice view of the lake

July

S M T W T F S

12 13 14 15 16 17 18

Wednesday July 15, 2015

Noon

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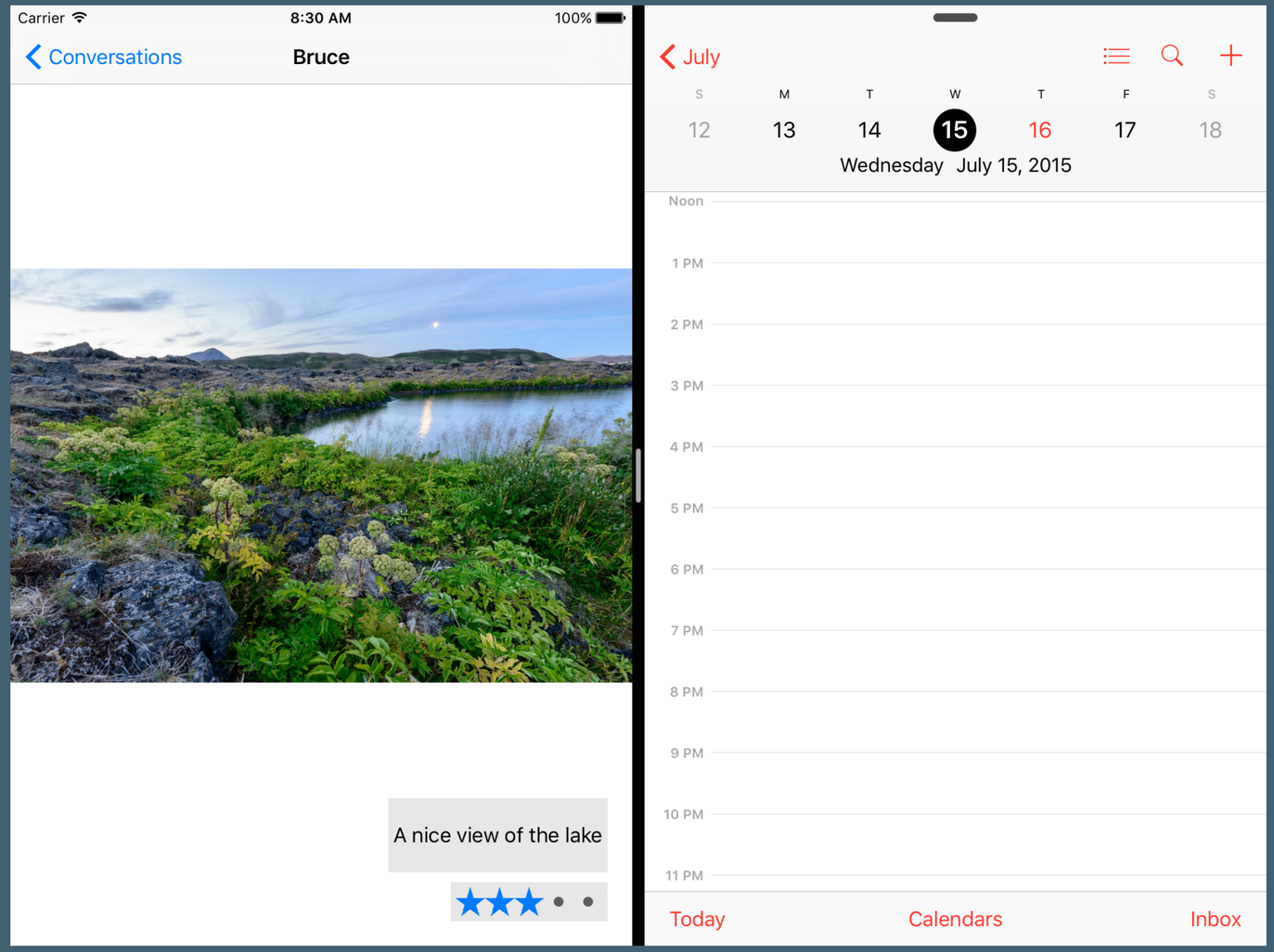
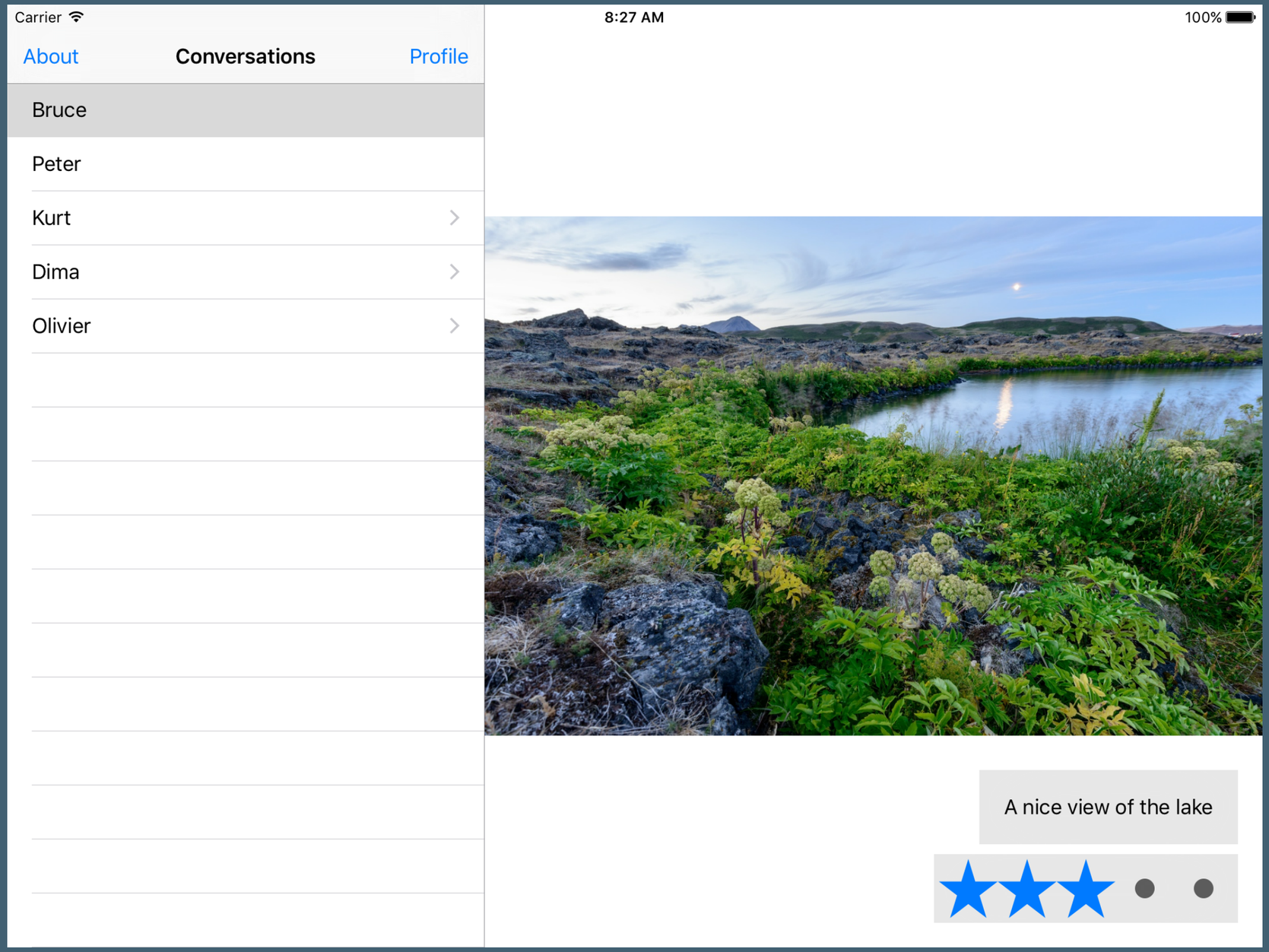
Today Calendars Inbox

[self.navigationController pushViewController:]




Carrier
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100%
About
Conversations
Profile
Bruce
Peter
Kurt
Dima
Olivier
A nice view of the lake

```
[self.navigationController
    pushViewController:]
```

becomes

```
[nil pushViewController:]
```

```
switch traitCollection.horizontalSizeClass {

  case .Compact:
    self.navigationController?.pushViewController(vc)

  case .Regular:
    self.presentViewController(vc, animated: true, completion: nil)

}
```

Adaptivity is not just
about UISplitViewController

Adaptivity decouples controllers

and

context

Navigation controller

```
// Don't do this:
[self.navigationController pushViewController:vc]


// do this:
[self showViewController:vc sender: self]
```

Split view controller

```
// Don't do this:
self.splitViewController.viewControllers[1] = vc;


// do this:
[self showDetailViewController:vc sender: self]
```

How does this work?

1. Does `self` define `showDetailViewController:`?
2. Does some parent controller define `showDetailViewController:`?
3. Does `parentViewController.parentViewController` define it?
4. … etc …
5. Else, `presentViewController:`

How `UISplitViewController` implements `showDetailViewController:`

1. If !collapsed: show in the detail pane
2. If collapsed, call `showViewController:` on master pane
3. Else, `presentViewController:`

SplitViewController

```
extension UIViewController {
  func showDetailViewController(vc: UIViewController, sender: AnyObject?) {
    if let target =
      targetViewControllerForAction("showDetailViewController:sender:", sender: nil)
    {
      target.showDetailViewController(vc, sender:sender)
    }
    else {
      presentViewController(vc, animated: true, completion: nil)
    }
}
```

```
extension UISplitViewController {
  override func showDetailViewController(vc: UIViewController, sender: AnyObject?) {
    // If expanded, show in the detail pane
    if collapsed == false {
      self.viewControllers[1] = vc
      return
    }

    // If collapsed, try 'showViewController' on the master
    if let masterVC = self.viewControllers[0],
       let target = masterVC.targetViewControllerForAction("showViewController:sender:")
    {
      target.showViewController(vc, sender: sender)
    }

    else { // Present modal
      self.presentViewController(vc, animated: true, completion: nil)
    }
  }
}
```

What if you need something else?

I'm out of slides.

Let's demo.