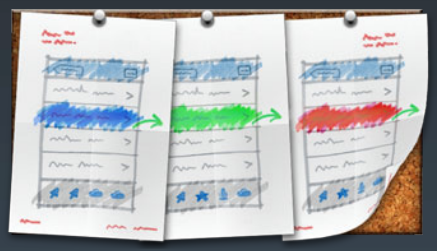
Adopting Storyboards in Your App

Session 407

Joshua Pennington
Interface Builder

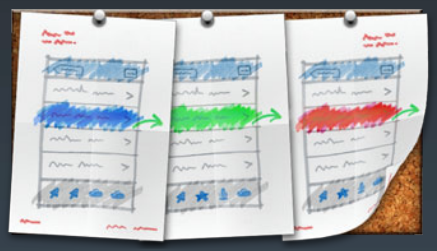
These are confidential sessions—please refrain from streaming, blogging, or taking pictures



Intro to Storyboards

Mixing Storyboards with code/XIBs

New in iOS 6



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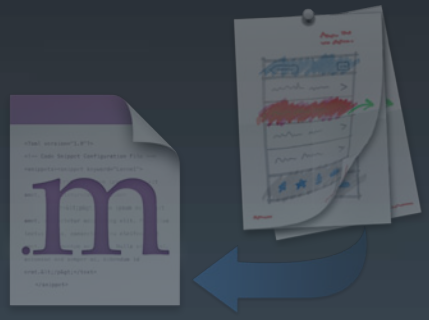

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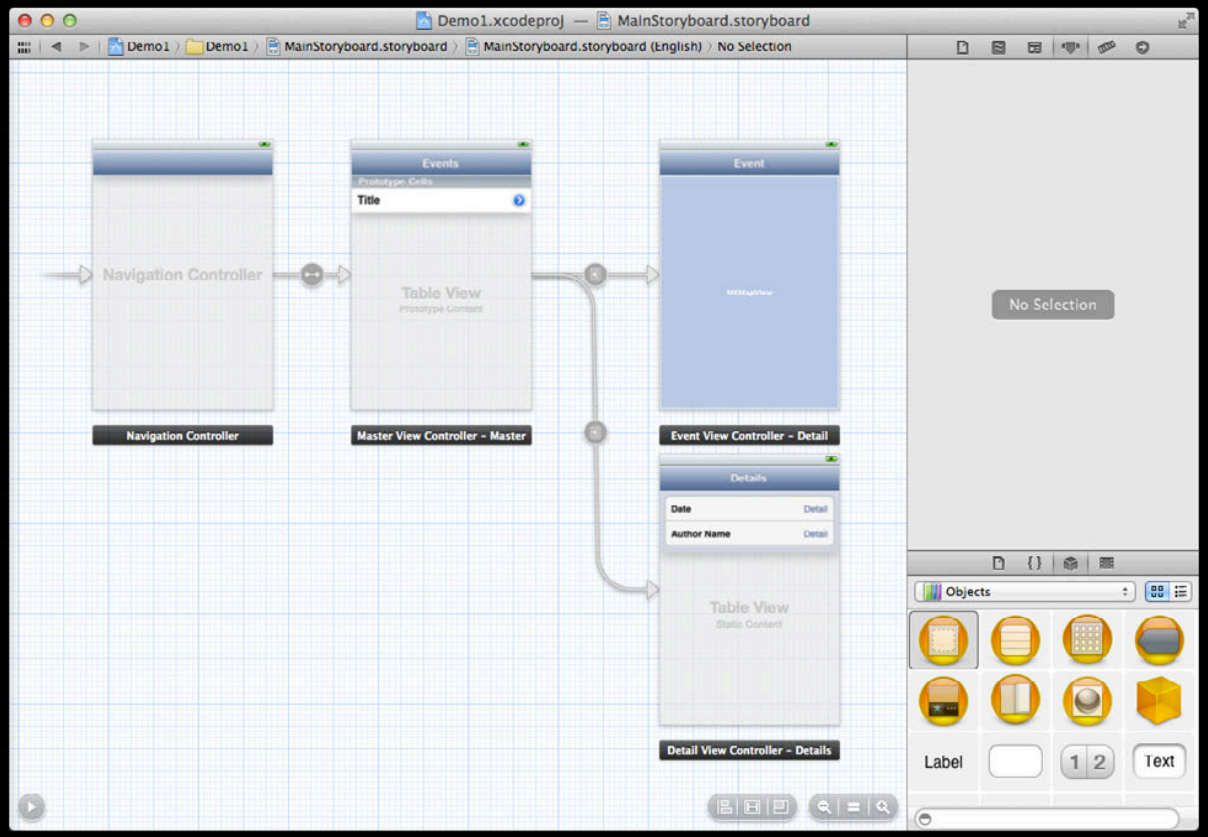
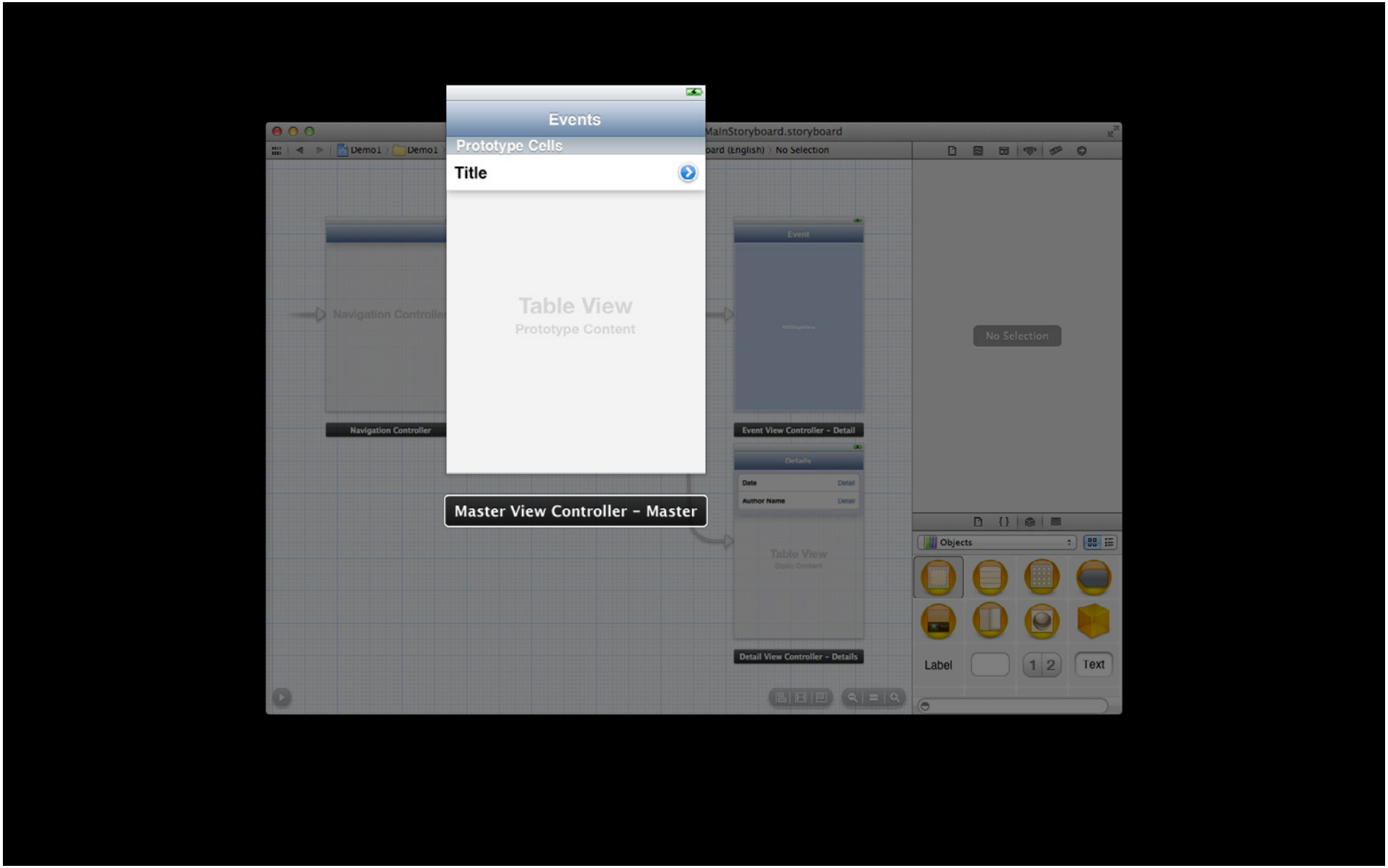

Demo1.xcodeproj — MainStoryboard.storyboard
Demo1 〉 Demo1 〉 MainStoryboard.storyboard 〉 MainStoryboard.storyboard (English) 〉 No Selection
Navigation Controller
Events
Prototype Cells
Title
Table View
Prototype Content
Event
Navigation Controller
Master View Controller – Master
Event View Controller – Detail
Details
Date
Detail
Author Name
Detail
Table View
Static Content
Detail View Controller – Details
No Selection
Objects
Label
1 2
Text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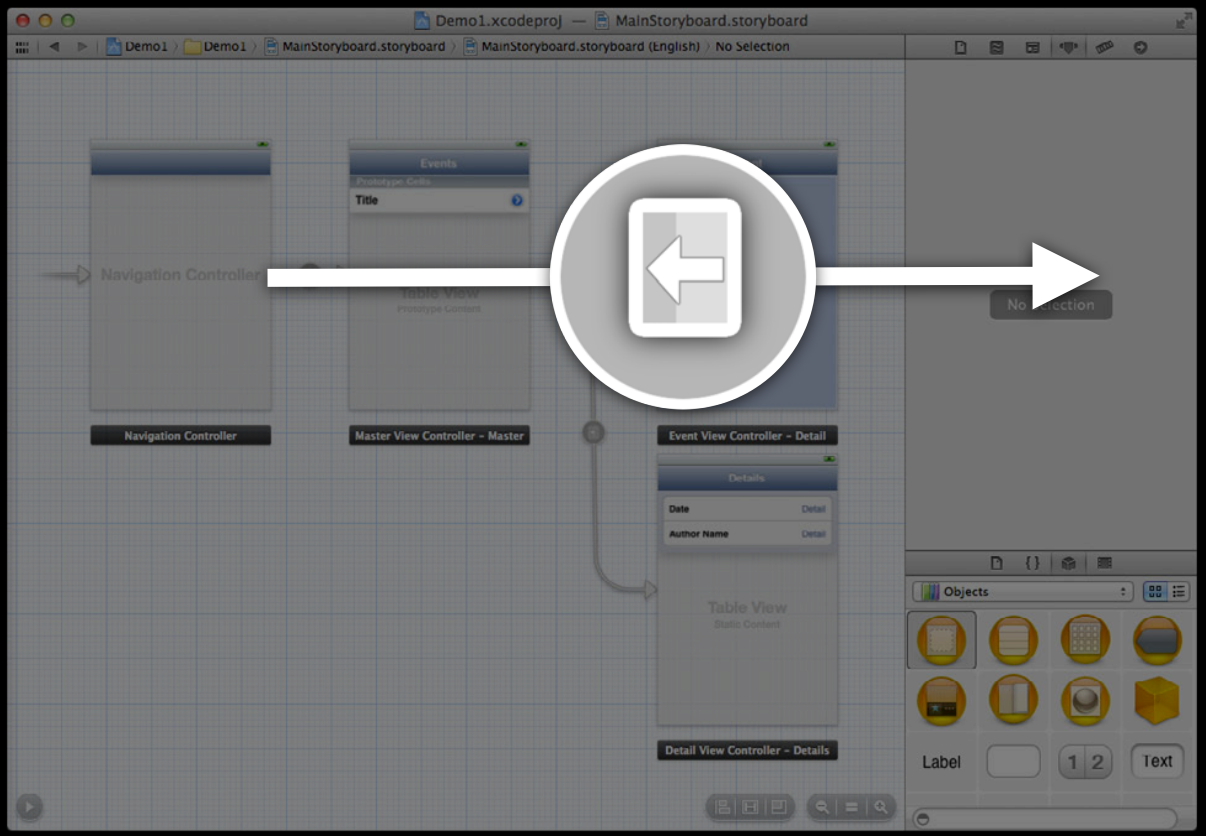
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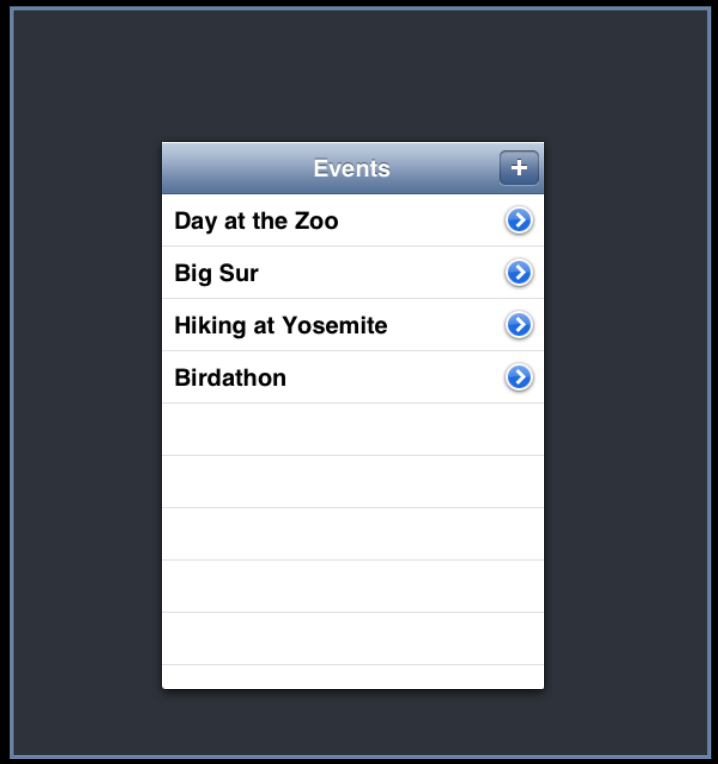
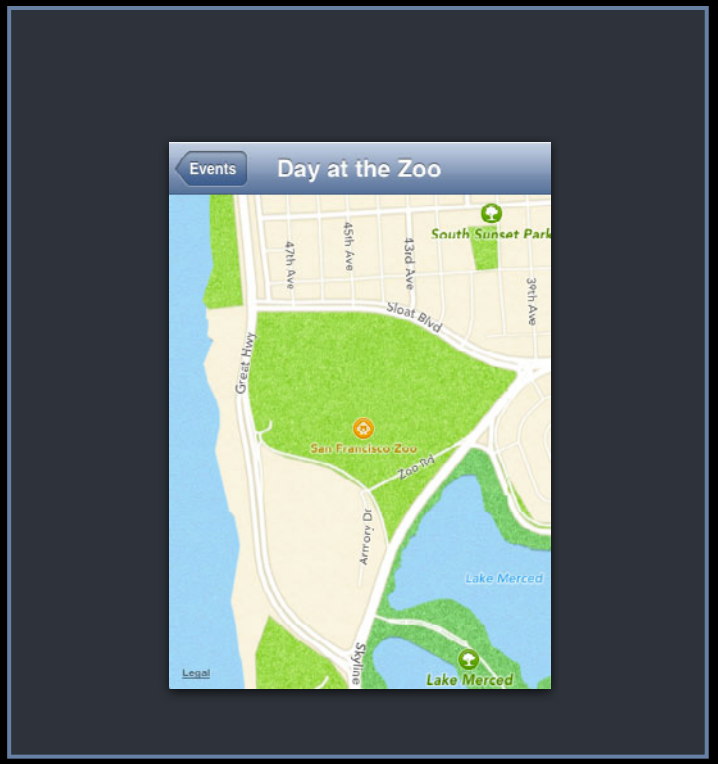
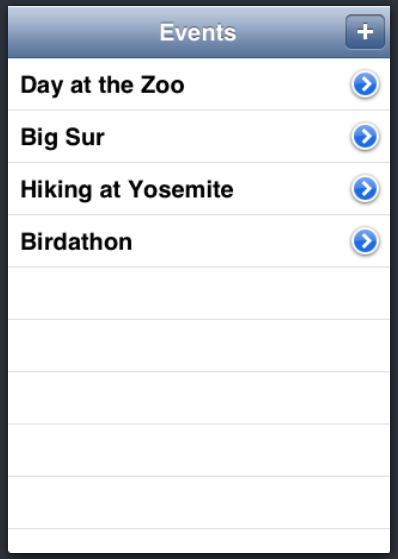
Passing Data

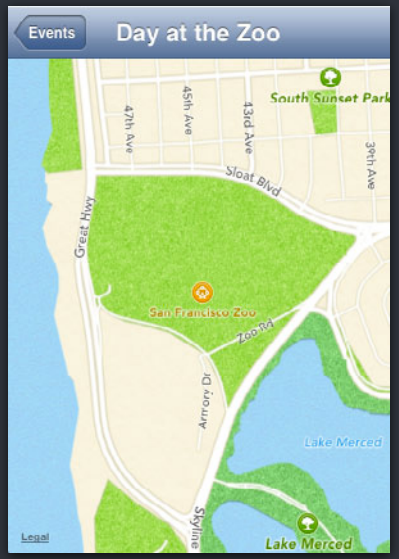




Passing Data

```
-prepareForSegue:sender:
```





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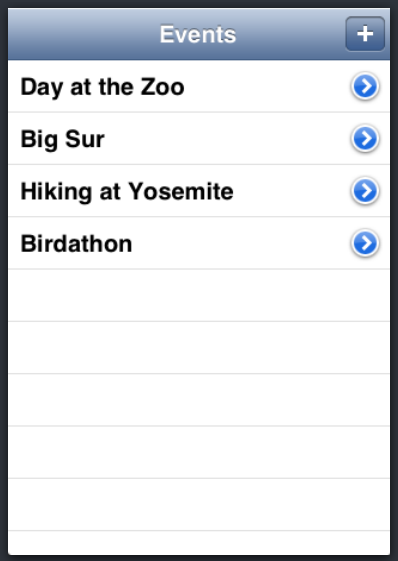

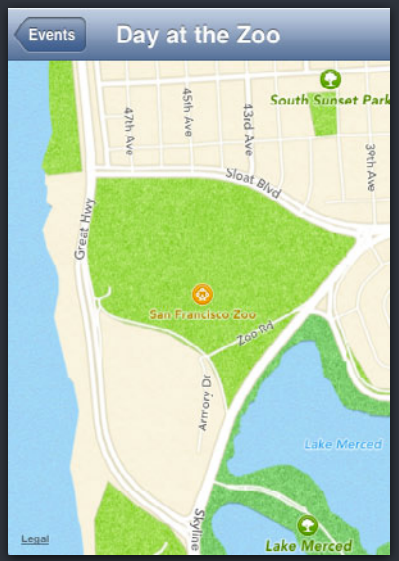

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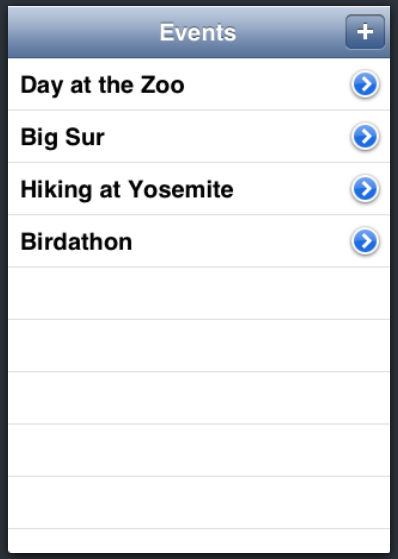
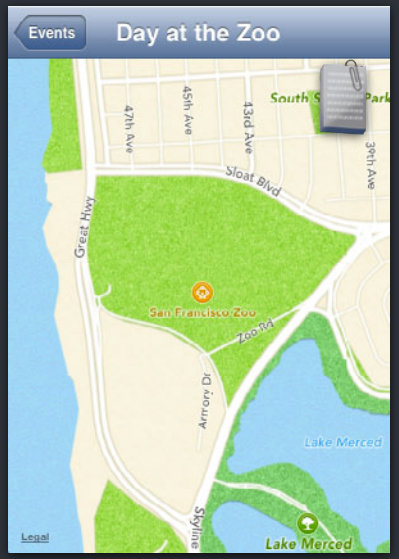




Demo

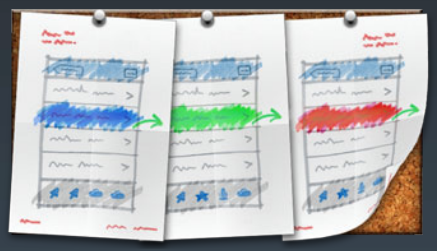
Storyboards

Storyboards

Recap

- Two main concepts: Scenes and Segues

`-prepareForSegue:sender:`



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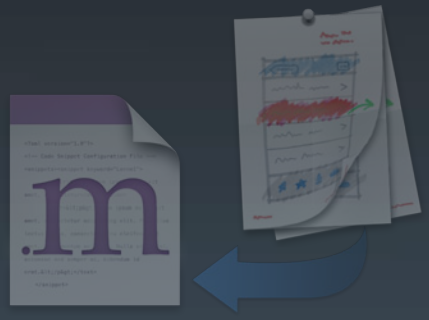

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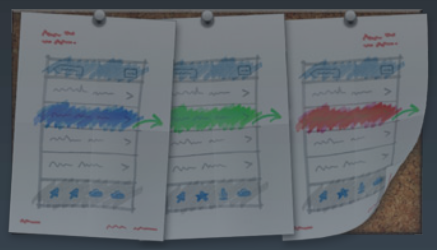

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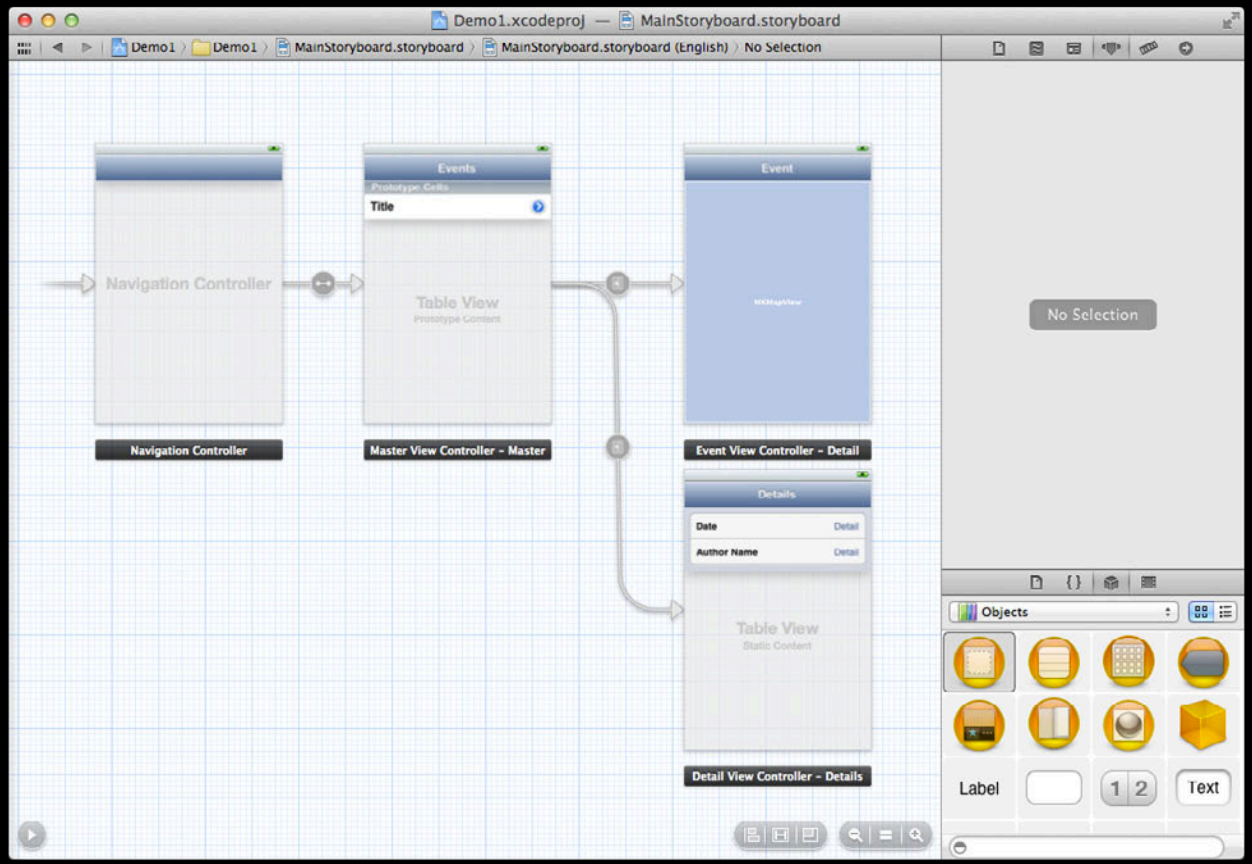
Tony Ricciardi
Interface Builder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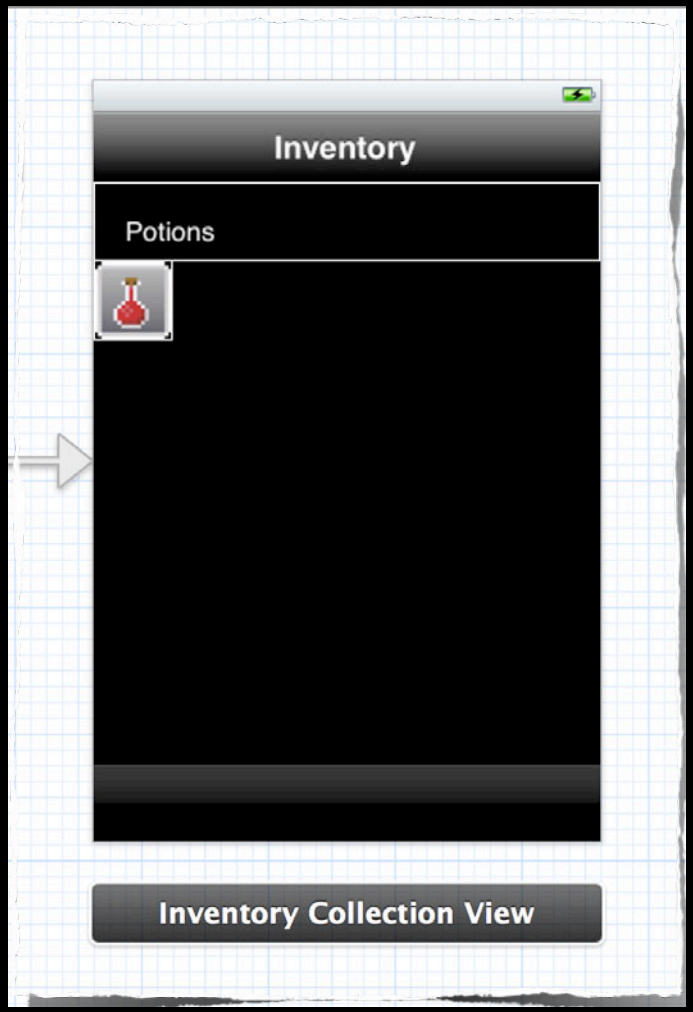
1 2
Text

Storyboards and Code

- Integrating with code-based views
- Customizing transitions

Carrier
10:47 AM
LV 1
Game
Map

Carrier
2:55 PM
Inventory
Weapons
Armor
Potions
Books
Game
Map
Inventory


Inventory
Potions
Inventory Collection View

Storyboards and Code

UIStoryboard.h

`+storyboardWithName:bundle:`

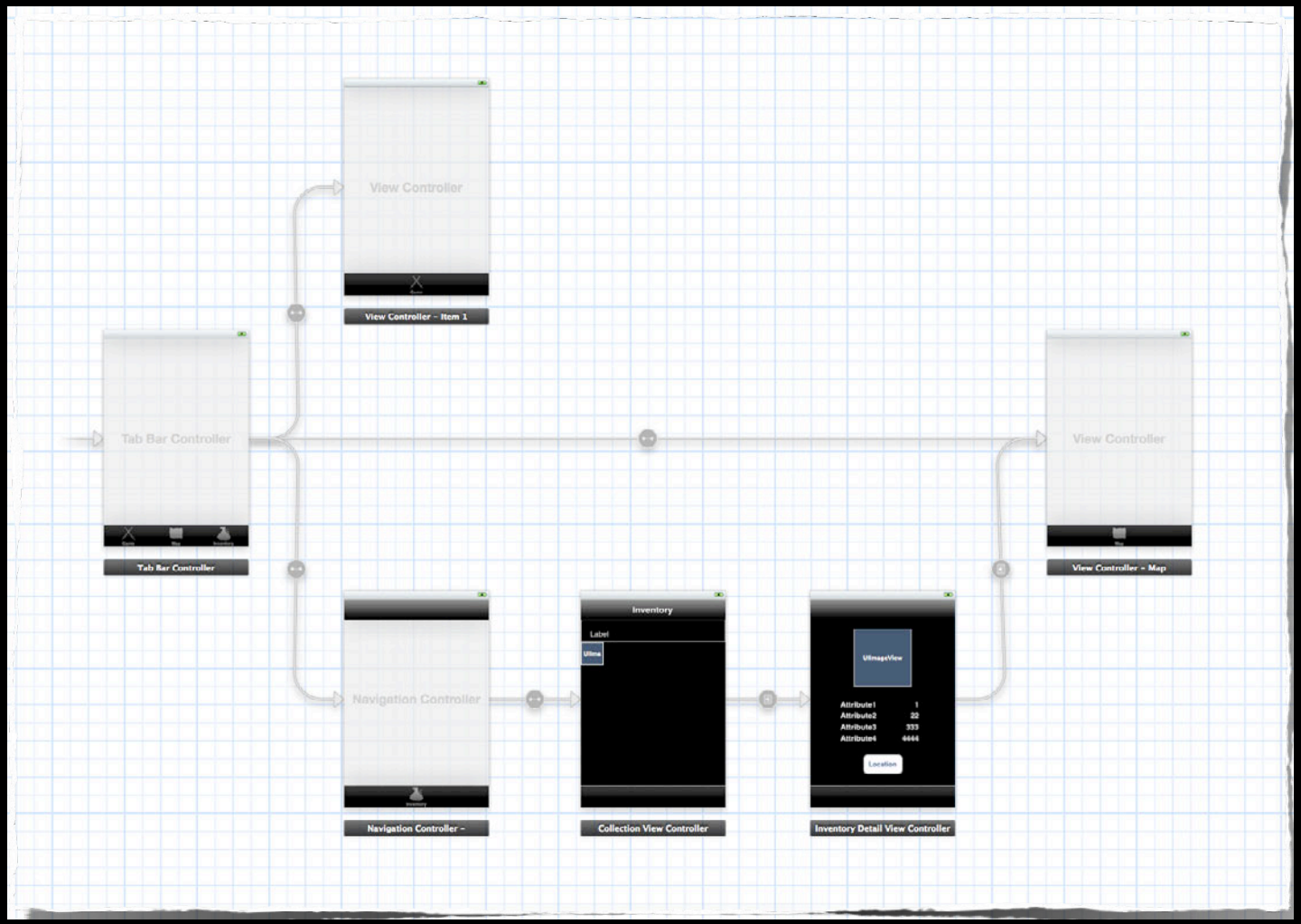
- Returns a new instance of UIStoryboard

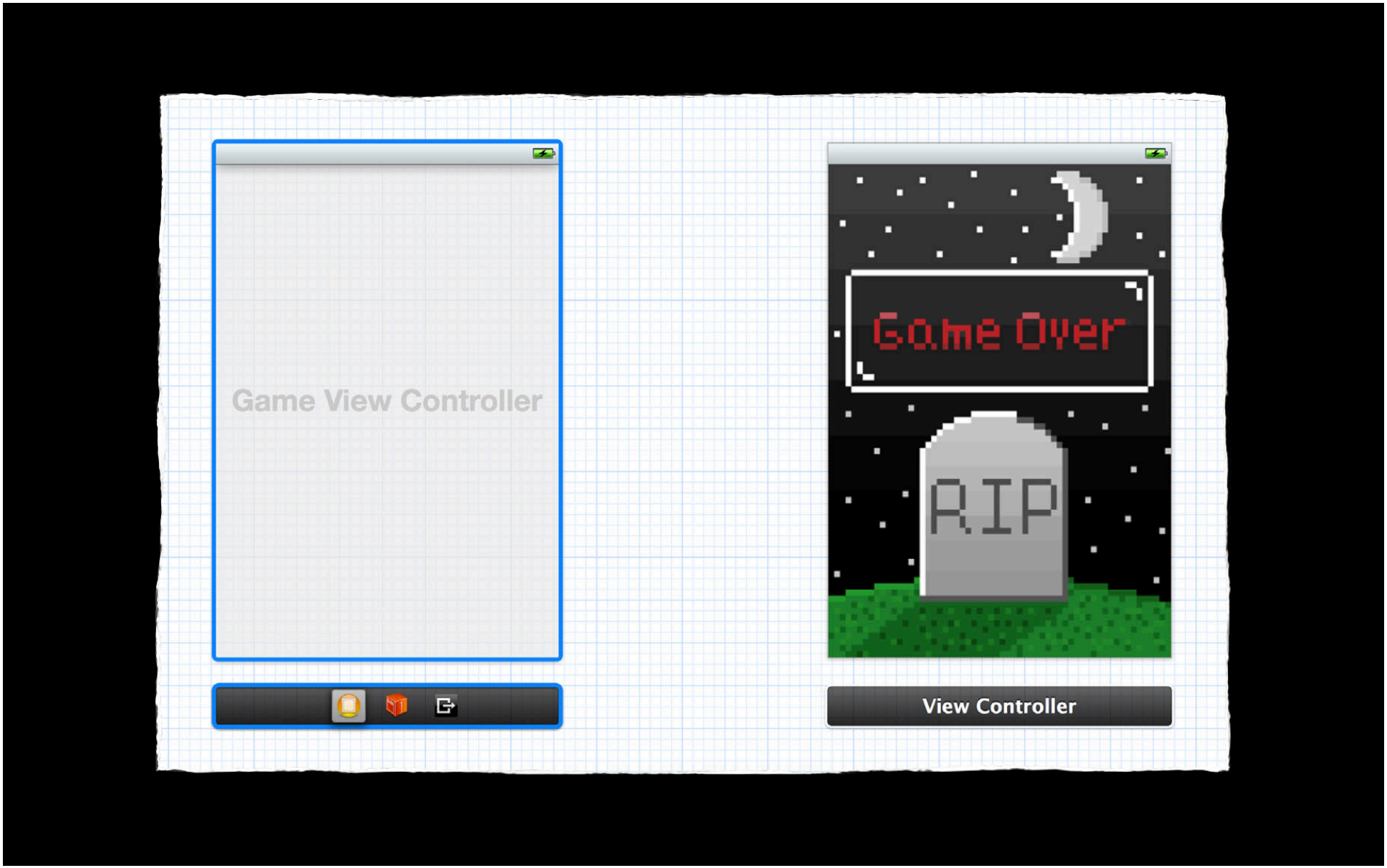
`-instantiateInitialViewController`

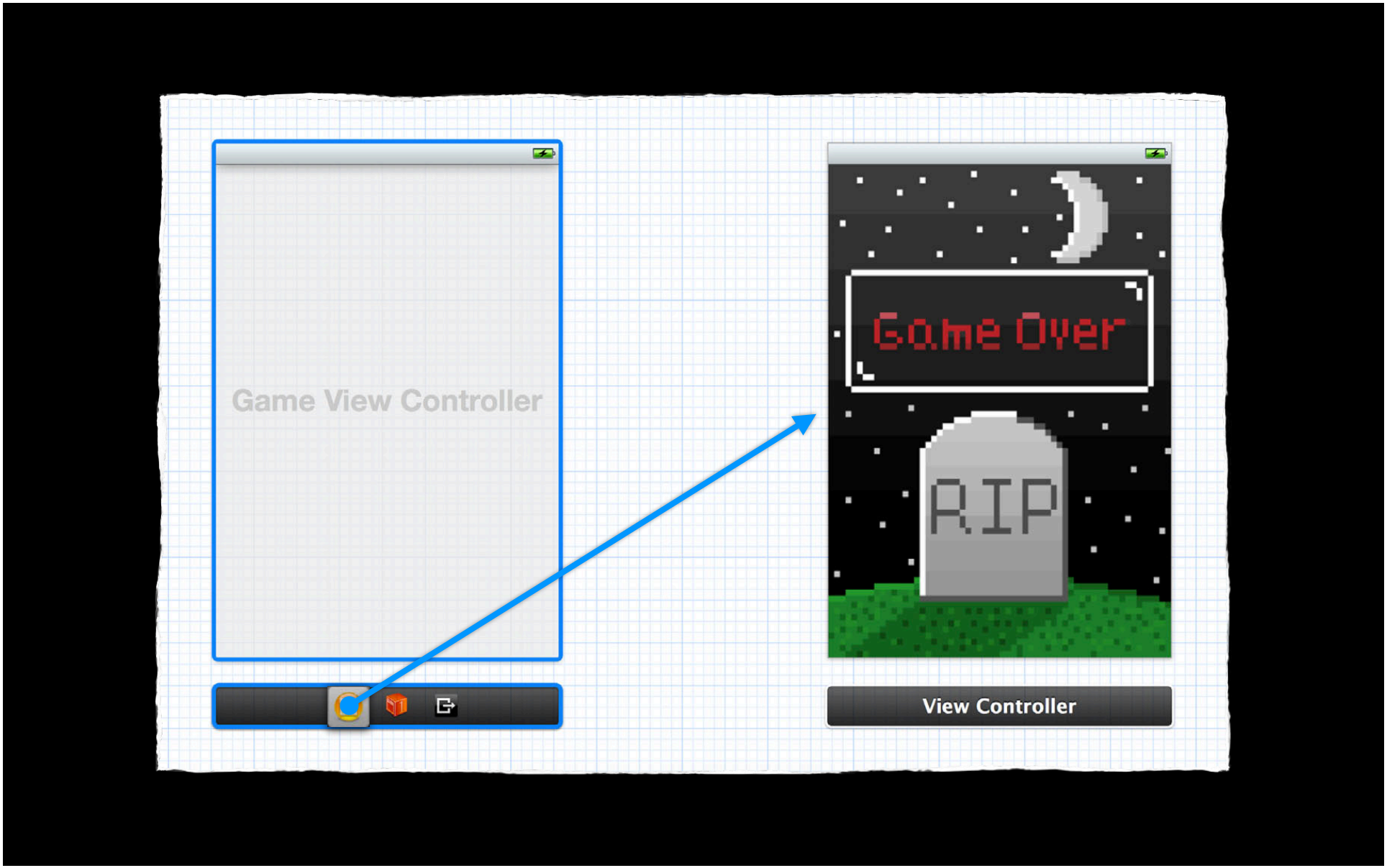
- Returns a copy of the storyboard's initial view controller

Demo

Integrating Storyboards with code-based views


View Controller
View Controller - Item 1
Tab Bar Controller
Tab Bar Controller
View Controller
View Controller - Map
Navigation Controller
Navigation Controller -
Inventory
Label
UIIma
Collection View Controller
UIImageView
Attribute1 1
Attribute2 22
Attribute3 333
Attribute4 4444
Location
Inventory Detail View Controller


Game View Controller
Game Over
RIP
View Controller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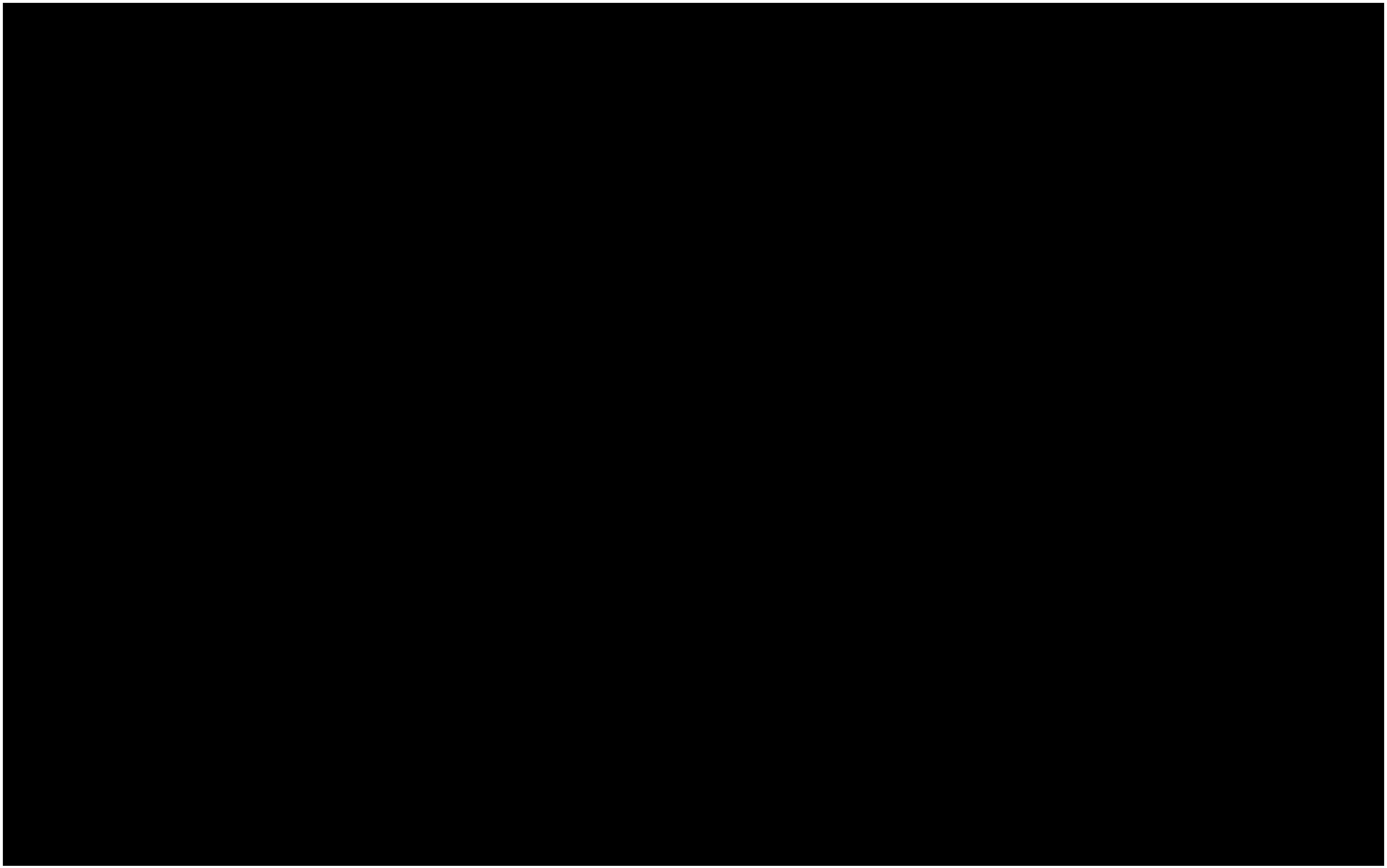
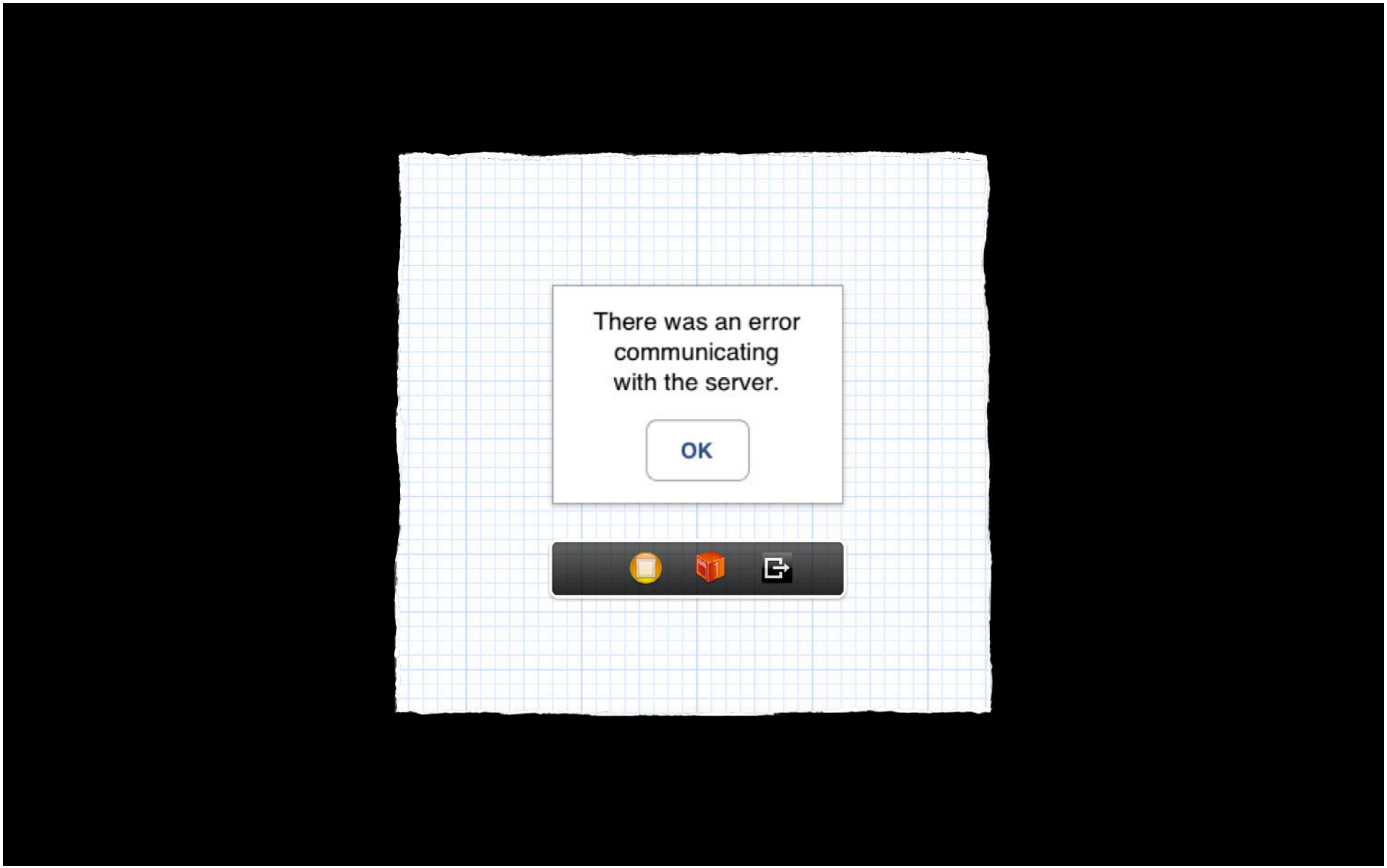
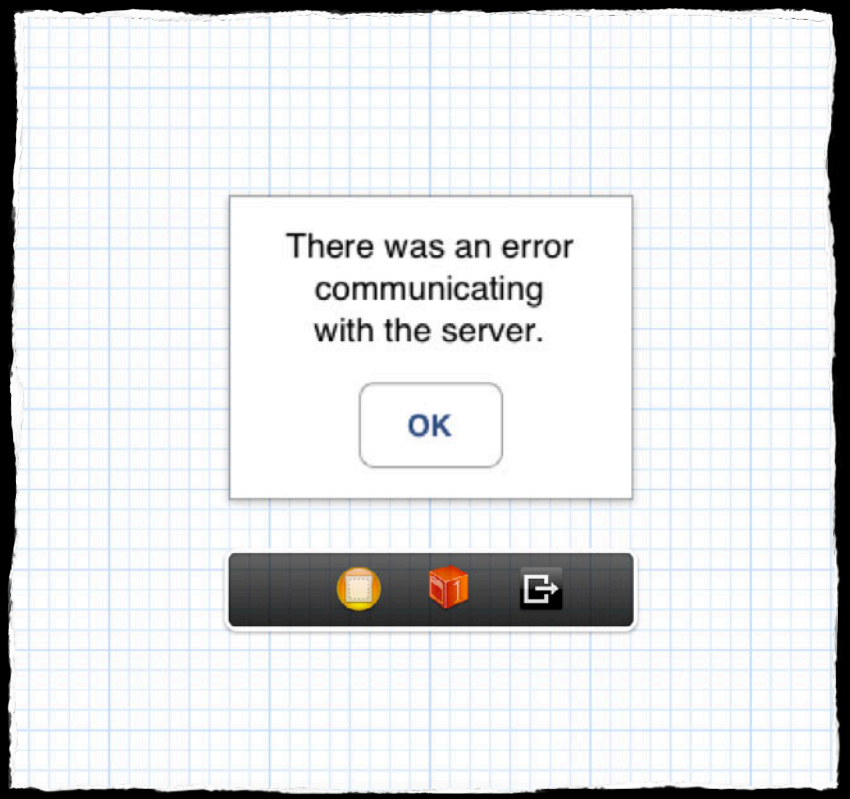


`-performSegueWithIdentifier:sender:`

UIViewController


There was an error
communicating
with the server.
OK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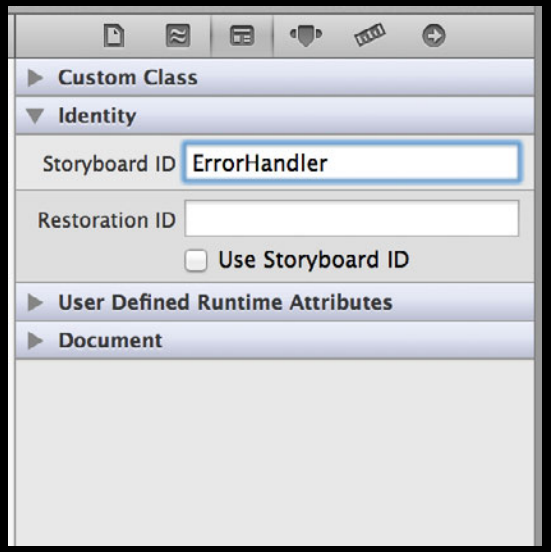
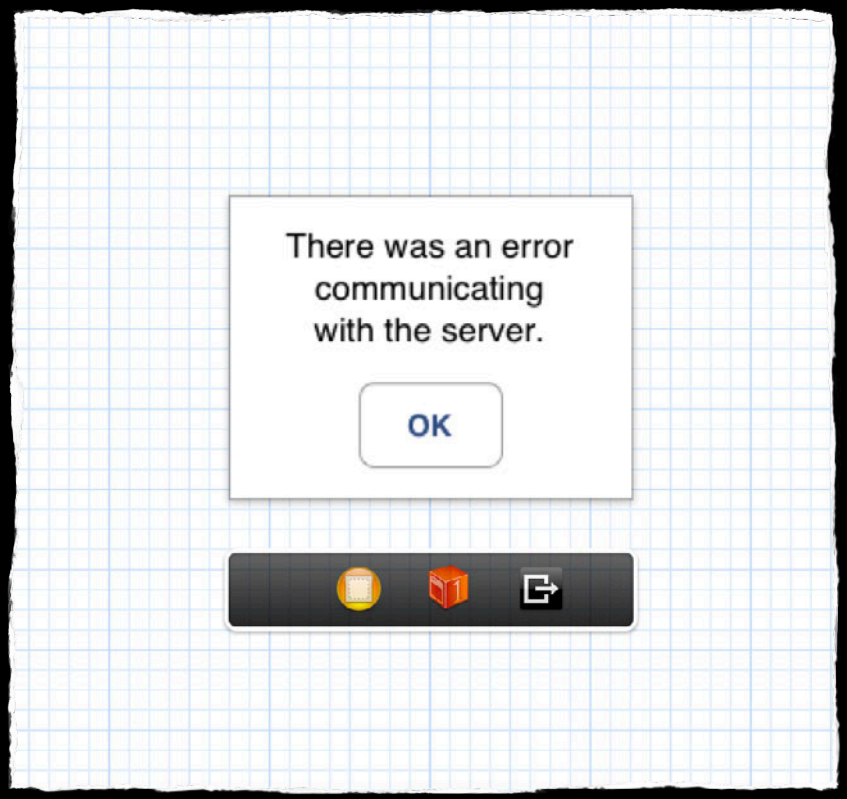

Custom Class
Identity
Storyboard ID
ErrorHandler
Restoration ID
Use Storyboard ID
User Defined Runtime Attributes
Document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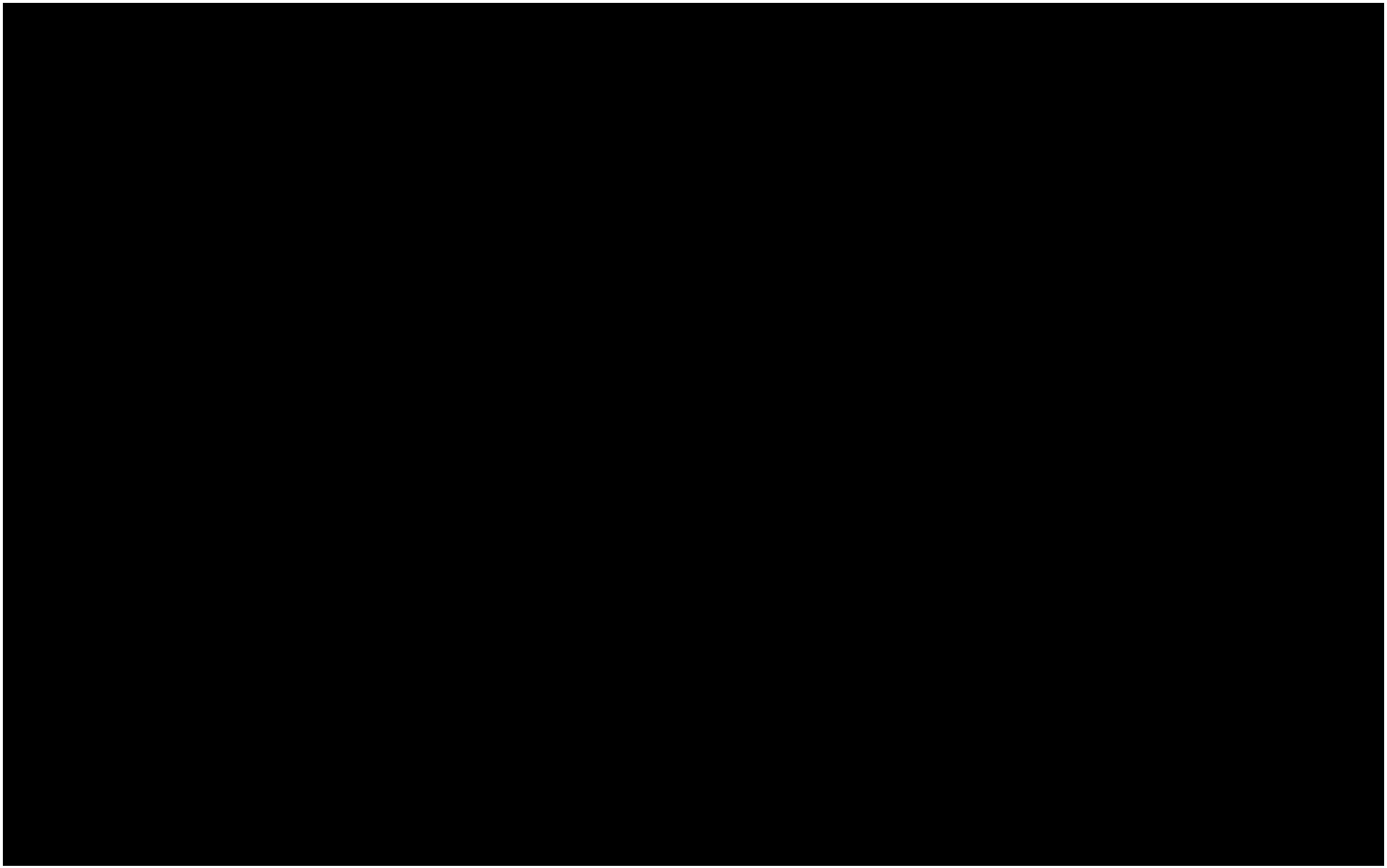


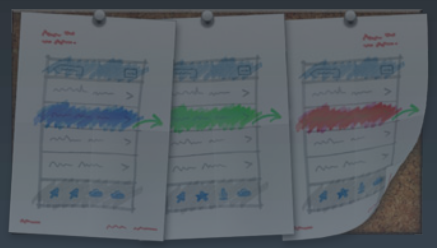
`-instantiateViewControllerWithIdentifier:`

UIStoryboard

Storyboards and Code

Recap

- Storyboards in code
- Code-based views in Storyboards
- Manual Segue triggers
- Scenes without Segues



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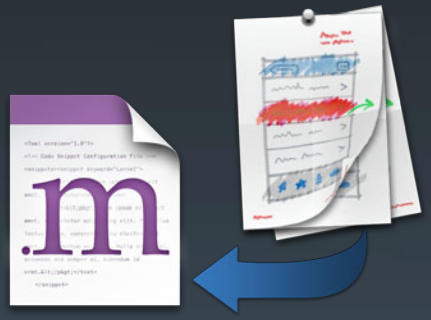

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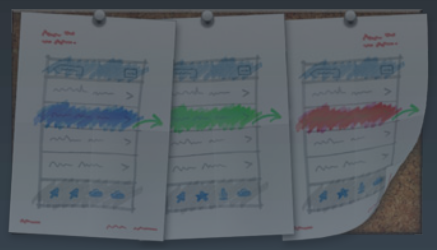

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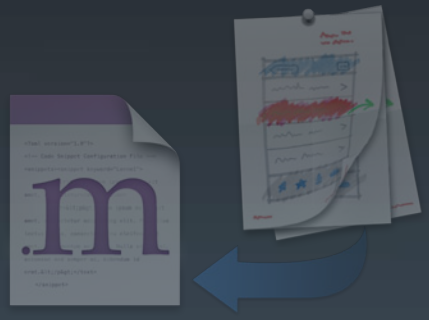

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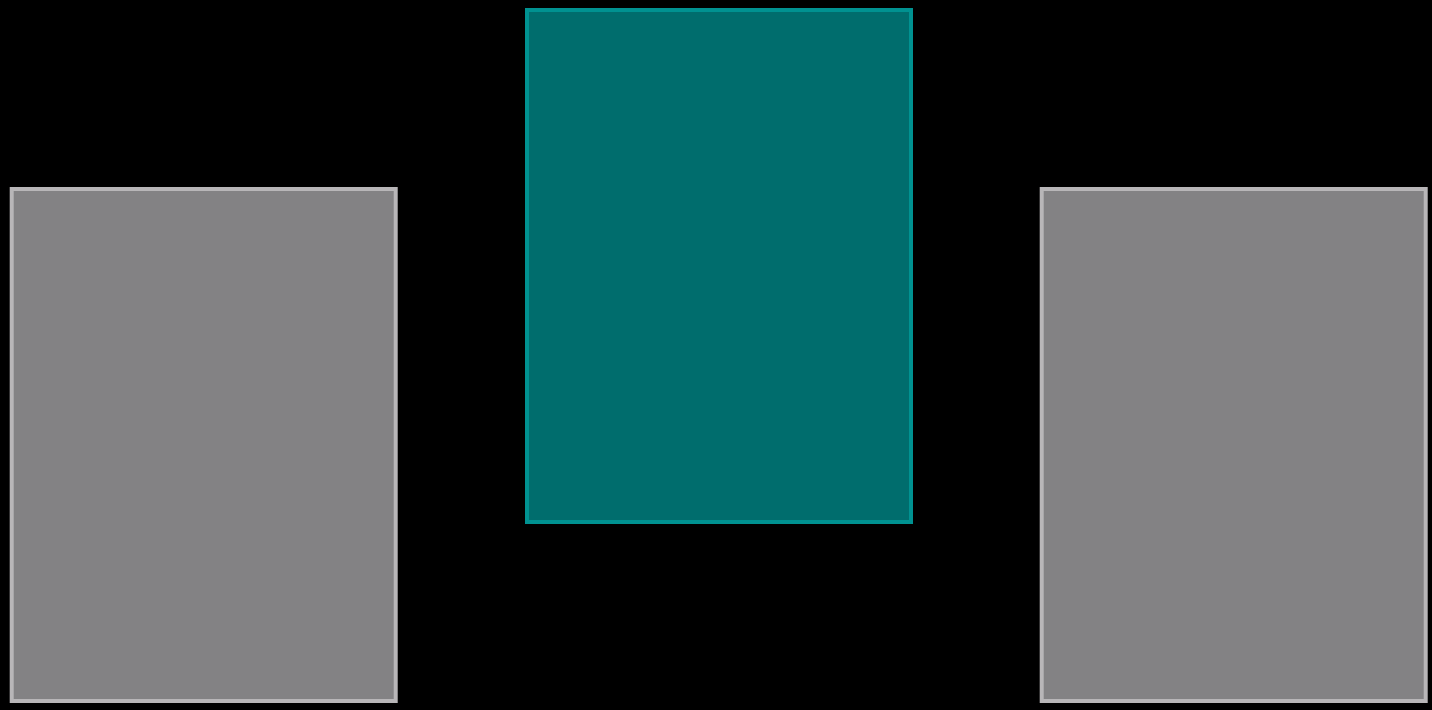
New in iOS 6

New Ways to Use Storyboards

Embed Segues



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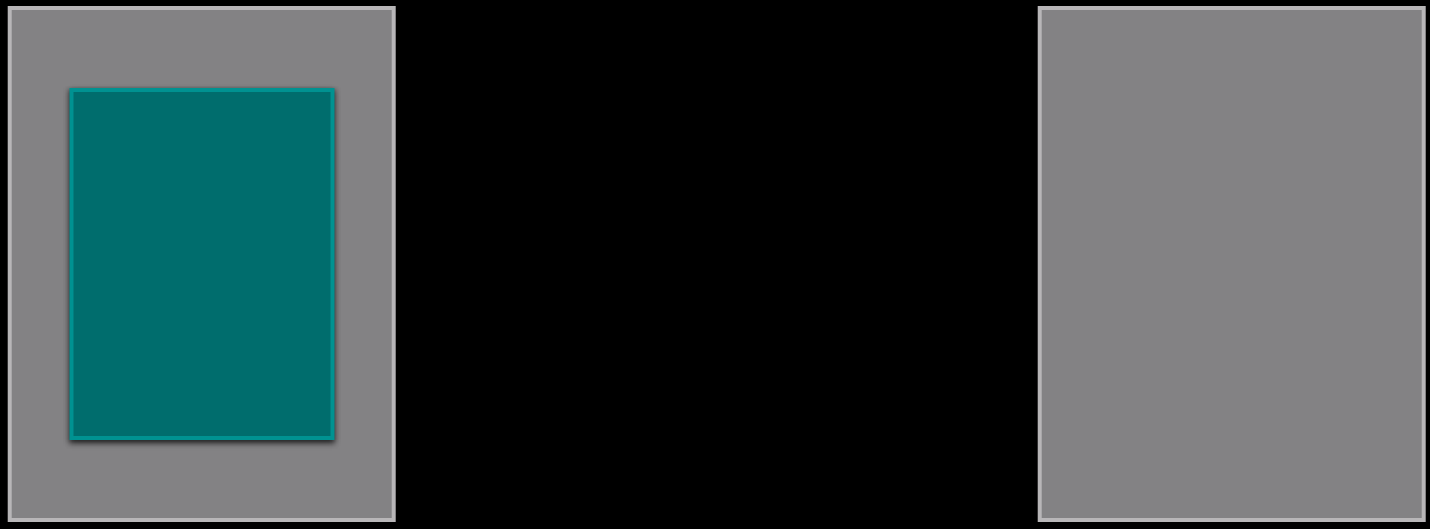
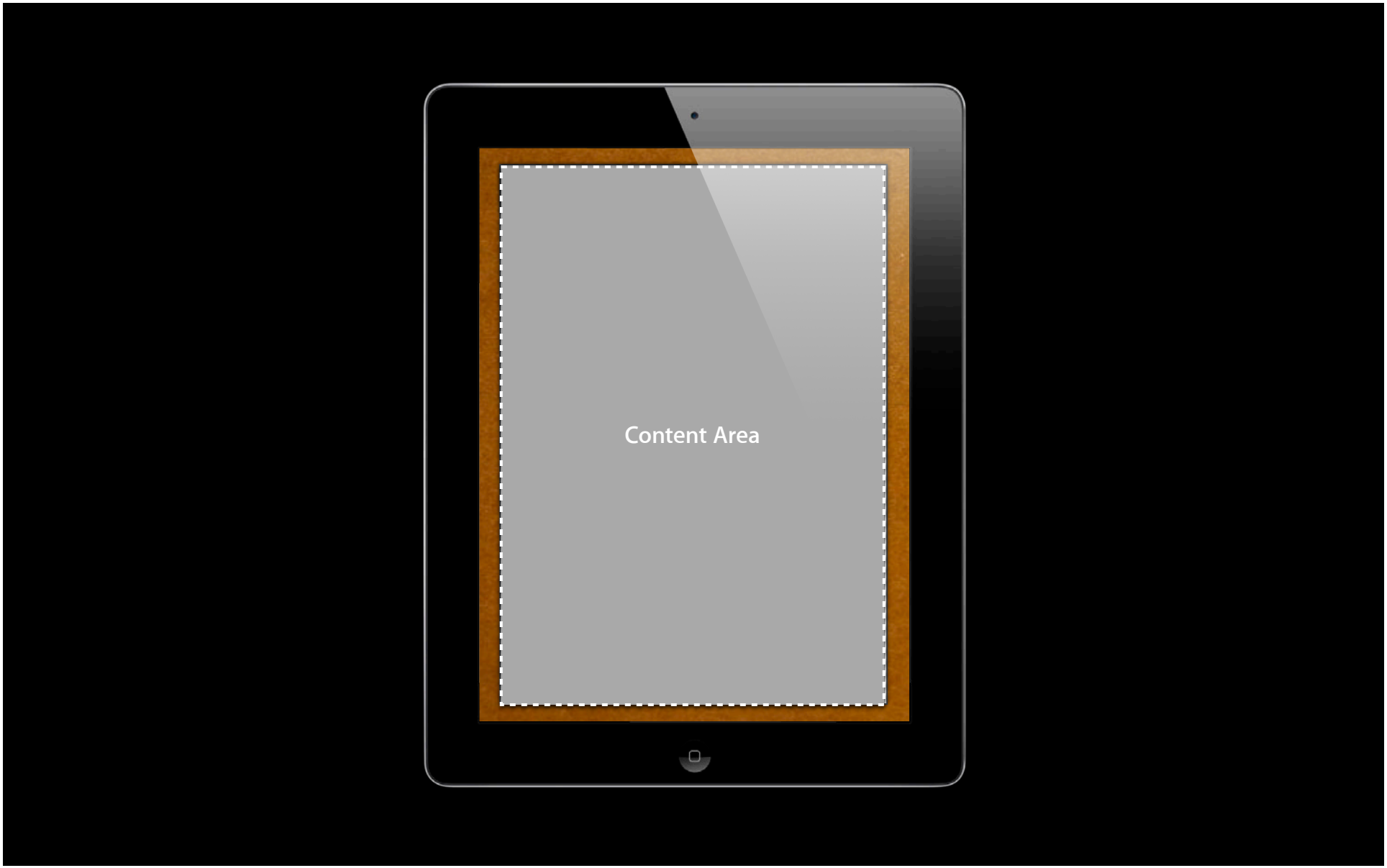
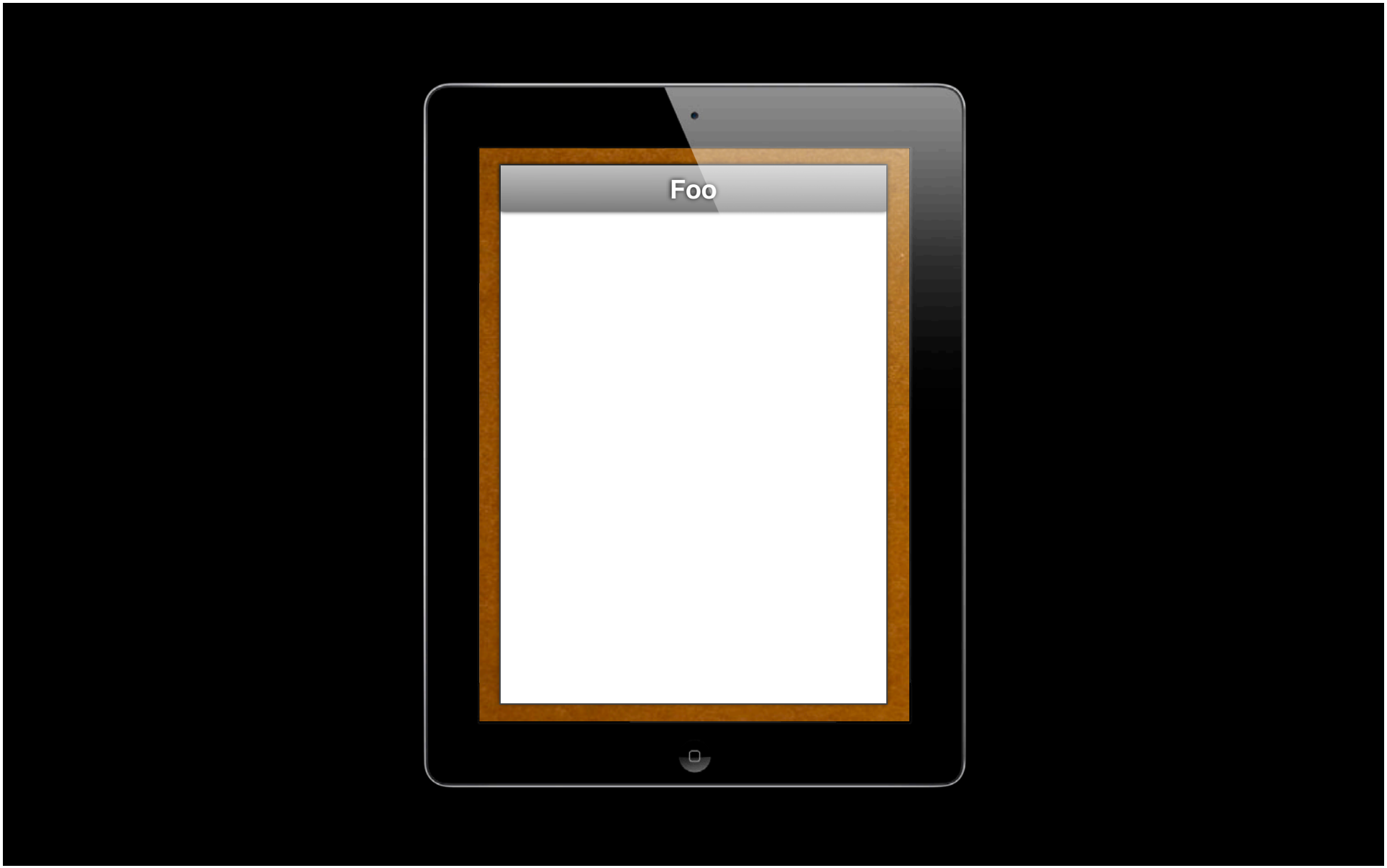
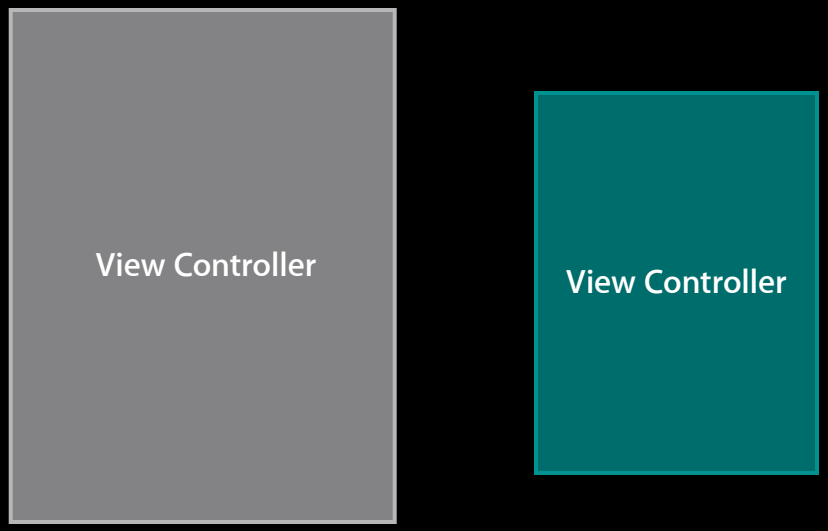



Content Area


Foo

How It Works Today



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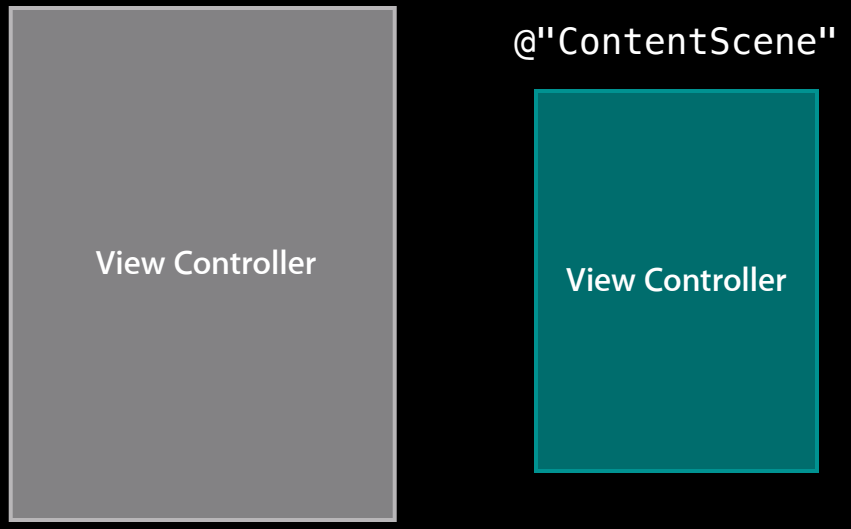

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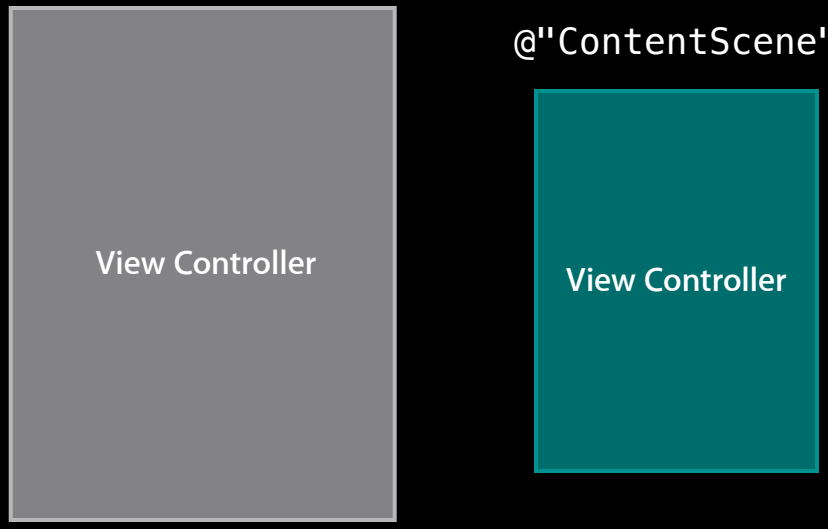


```
UIViewController *child =
  [[self storyboard] instantiateViewControllerWithIdentifier:@"ContentScene"];
[self addChildViewController:child];
[[self view] addSubview:[child view]];
[[child view] setFrame:frame];
```

How It Works Today

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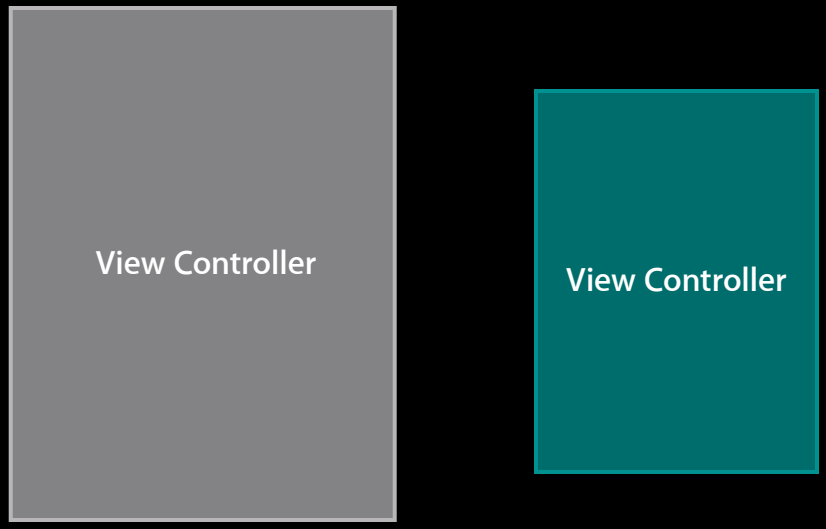

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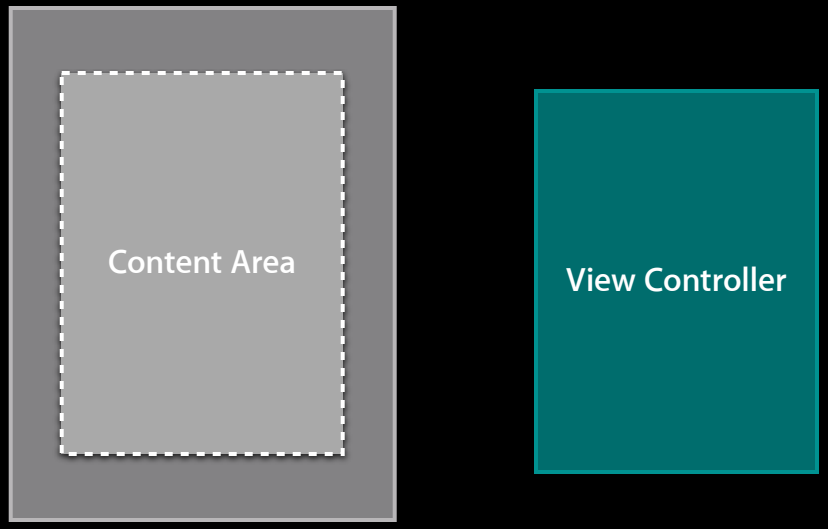


Embed Segues

Embed Segues

There is no code.

Demo

Embed Segues

Embed Segues

Recap

- Add a container view
- Create a segue from the container view to the destination scene
- Use `-prepareForSegue:sender:` if needed

New Ways to Use Storyboards

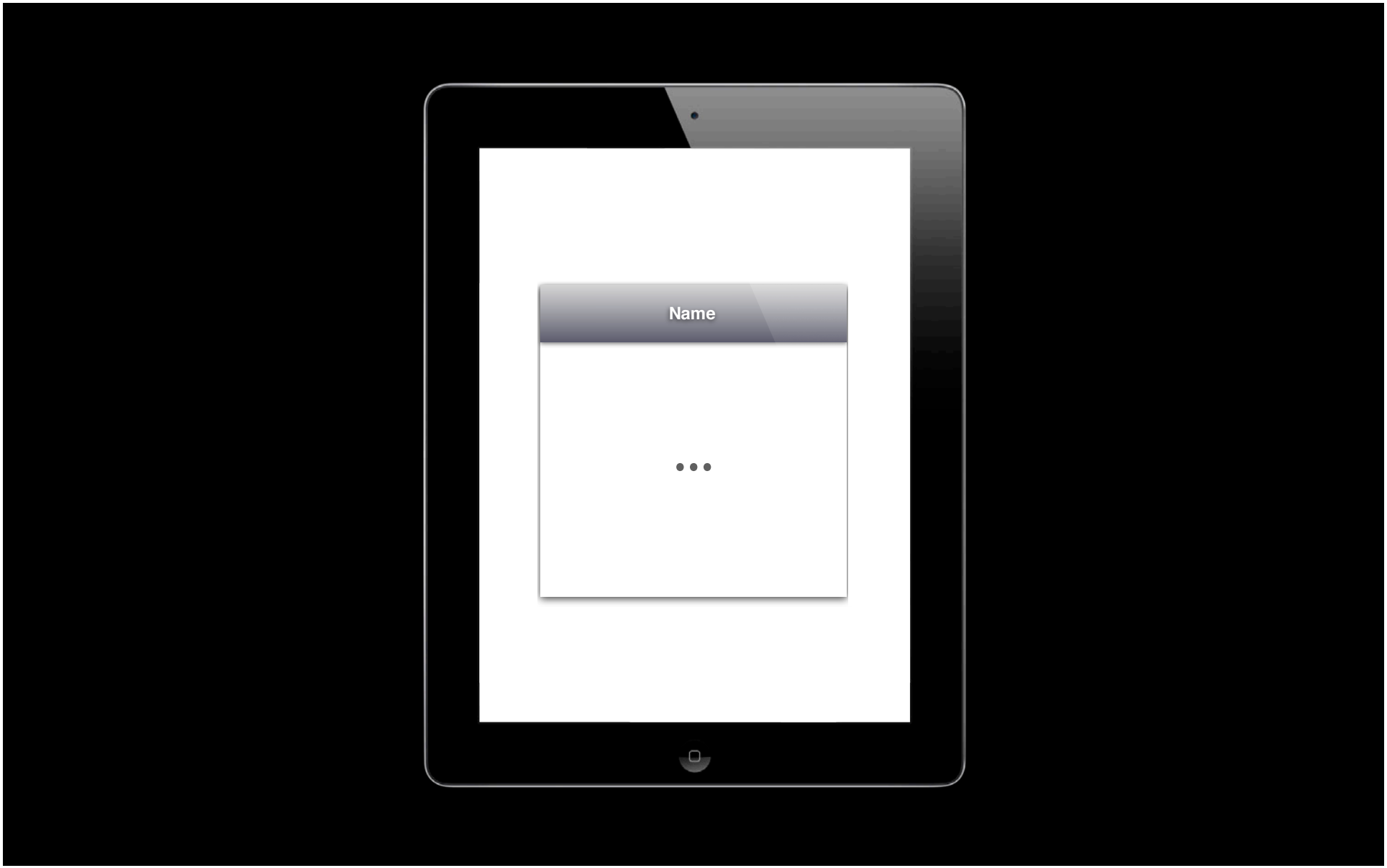
Unwind Segues

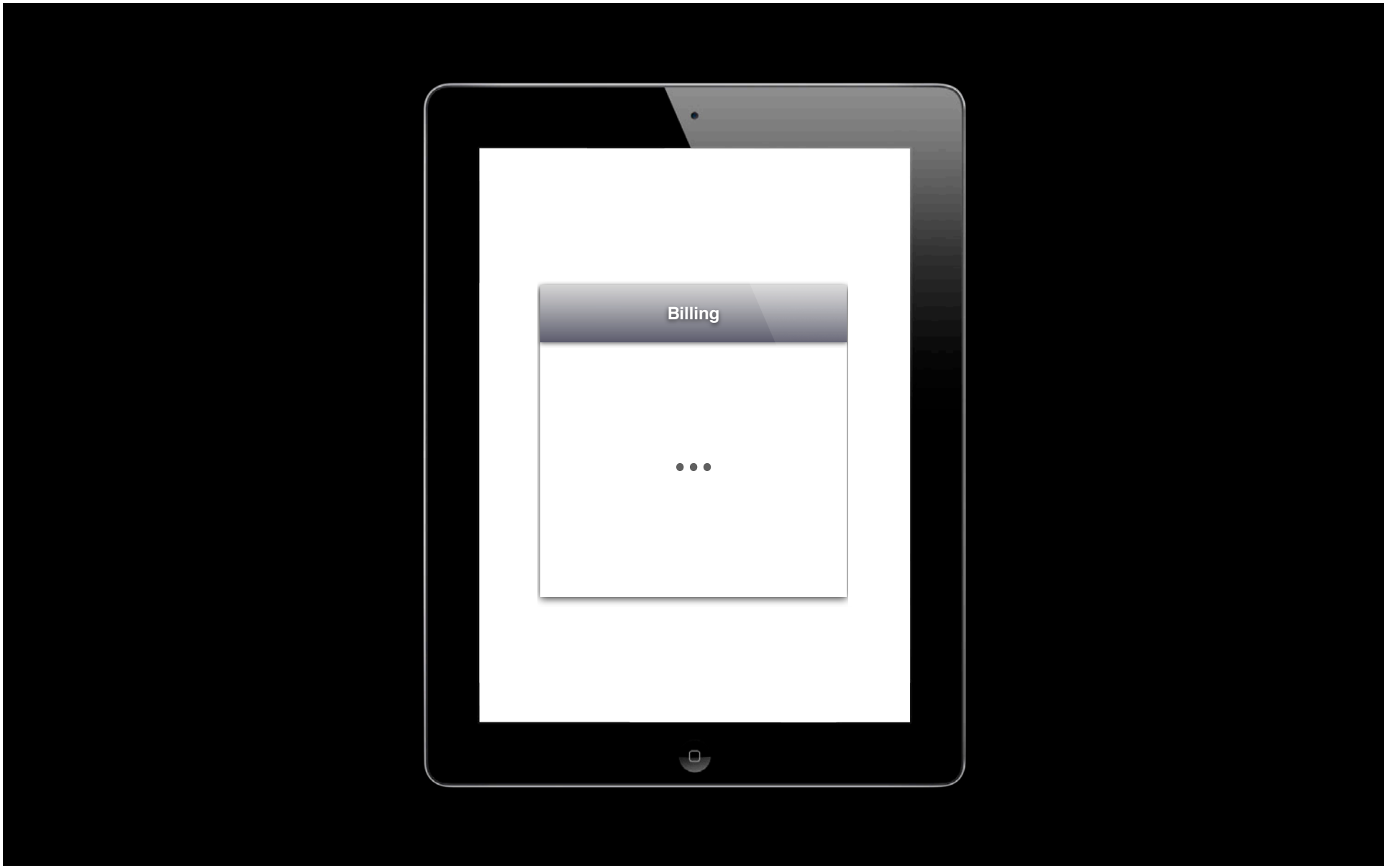
- Segues go to new instances only
- Returning to previous controllers is a manual process

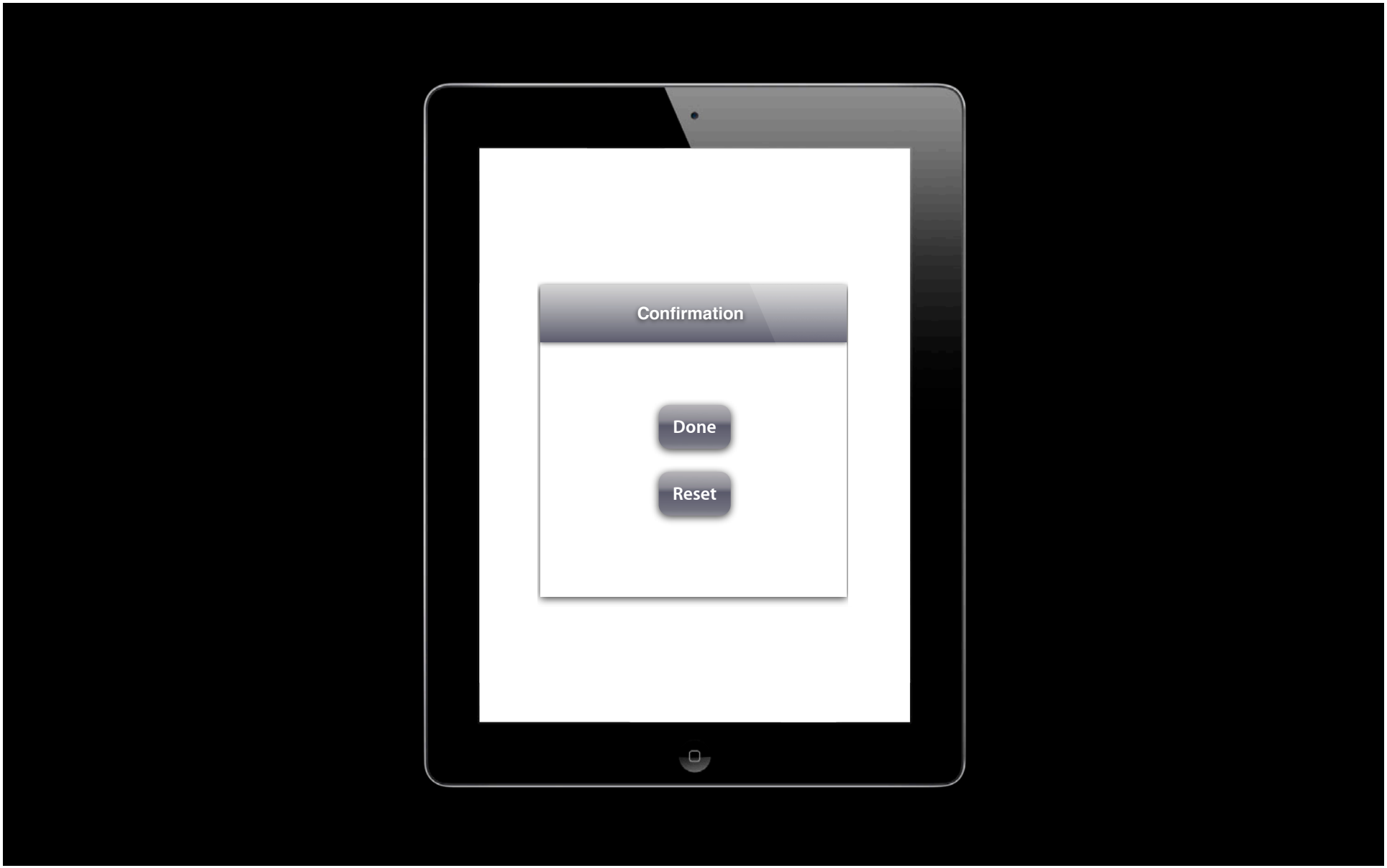
New Ways to Use Storyboards

Unwind Segues

- Segues go to new instances only
- Returning to previous controllers is a manual process
  - Define a delegate
  - Use `-prepareForSegue:` to wire up the delegate
  - Invoke the delegate
  - Return any data; trigger navigation

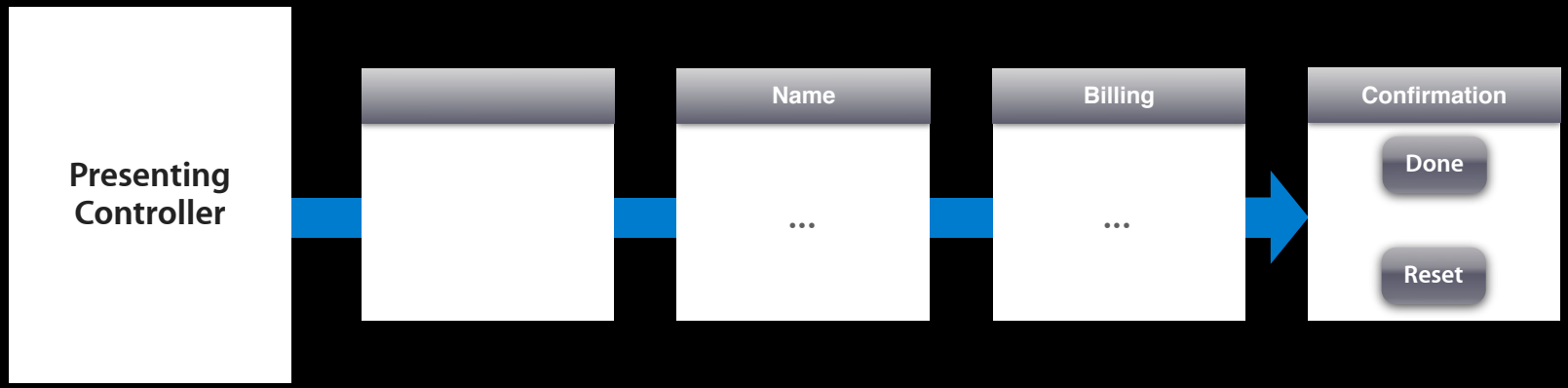

Name


Billing


Confirmation
Done
Reset

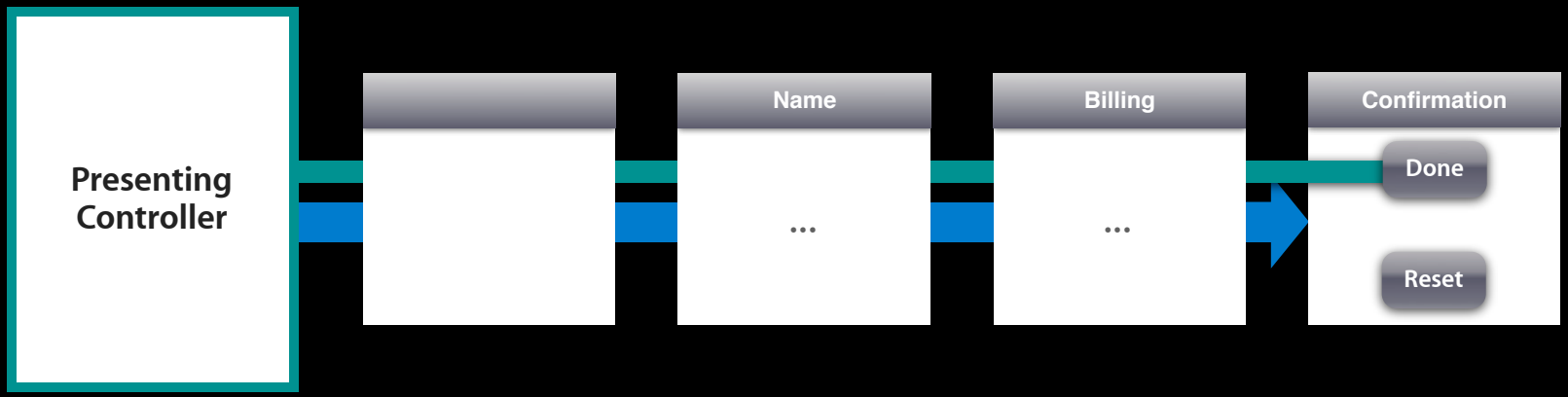
New Ways to Use Storyboards

Unwind Segues



New Ways to Use Storyboards

Unwind Segues



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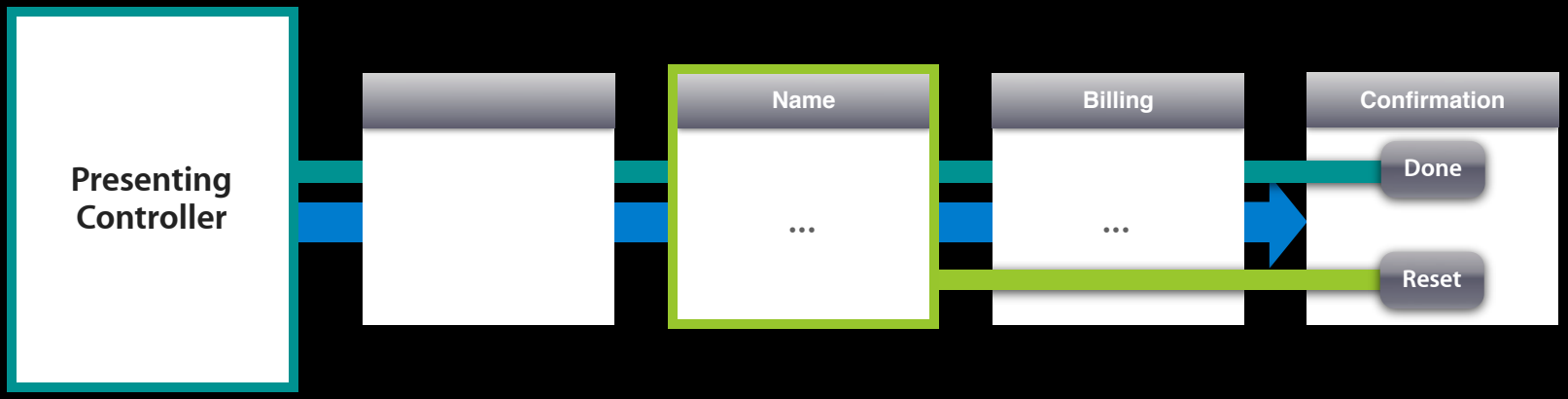

Unwind Segues

Picking the destination

- View controllers created in code/XIBs
- Multiple paths back and forth

Unwind Segues

Picking the destination

- Resolve destination at runtime

```
- (IBAction)done:(UIStoryboardSegue *)segue {
        // React to the impending segue
        // Pull state back, etc.
}
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Unwind Segues

Picking the destination

- Resolve destination at runtime

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Unwind Segues

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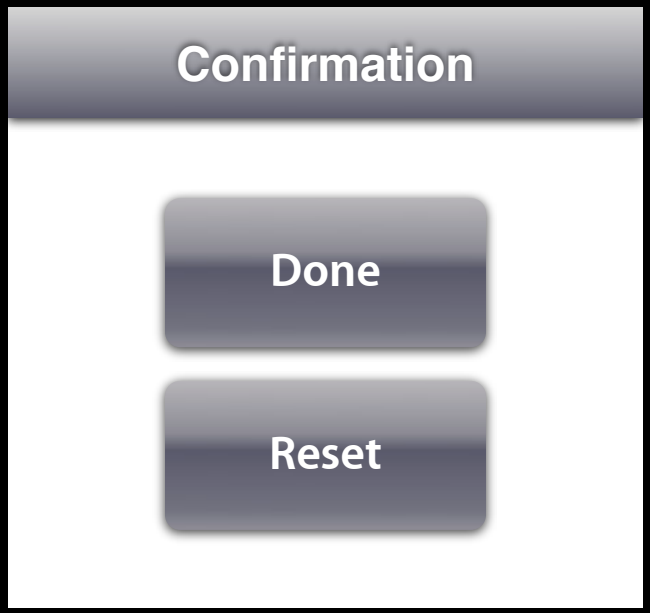
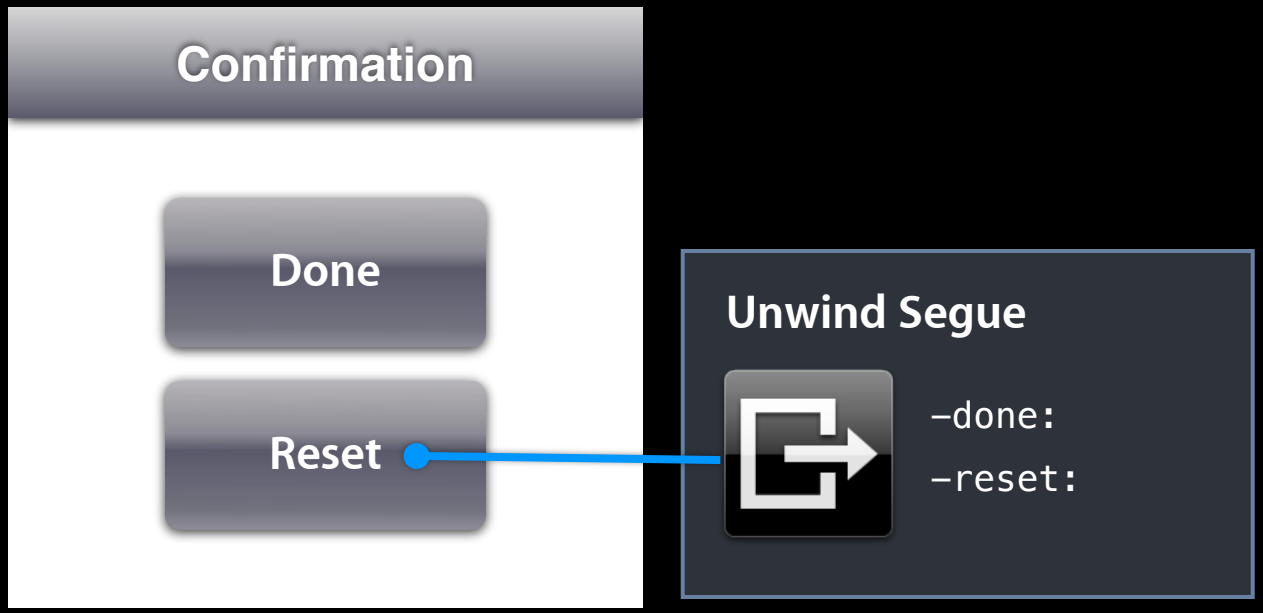


Unwind Segues

Picking the destination



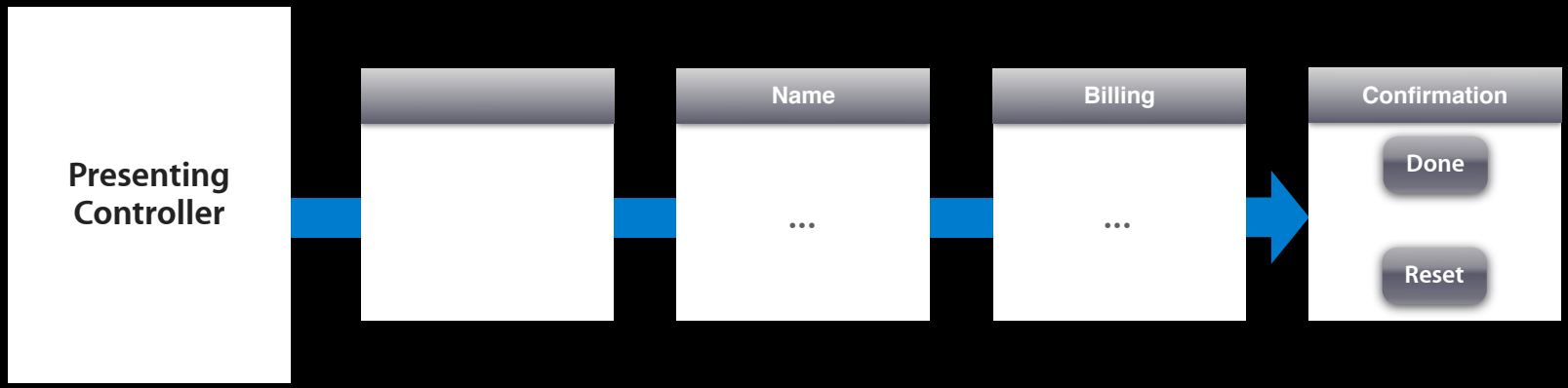
Unwind Segues

Callback order

- Find the destination
- Invoke `-prepareForSegue:sender:` on the source
- Run the unwind action
- Perform the segue

Unwind Segues

Runtime searching



Unwind Segues

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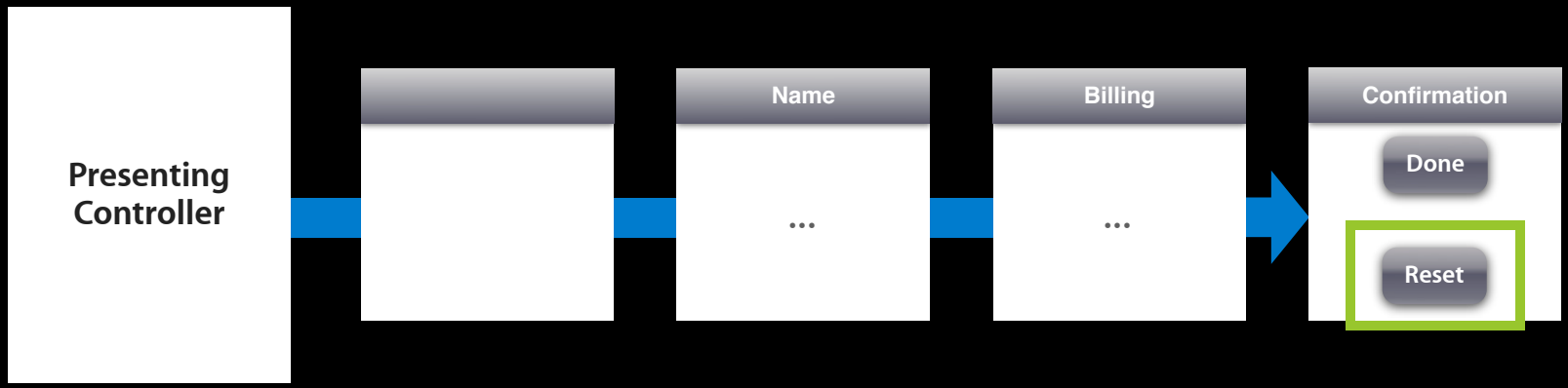

Unwind Segues

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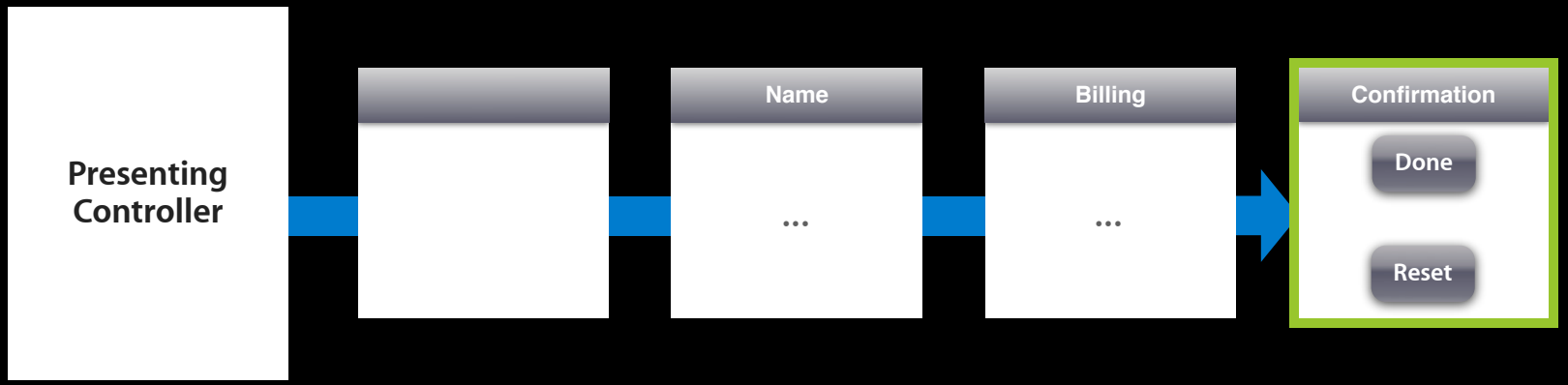
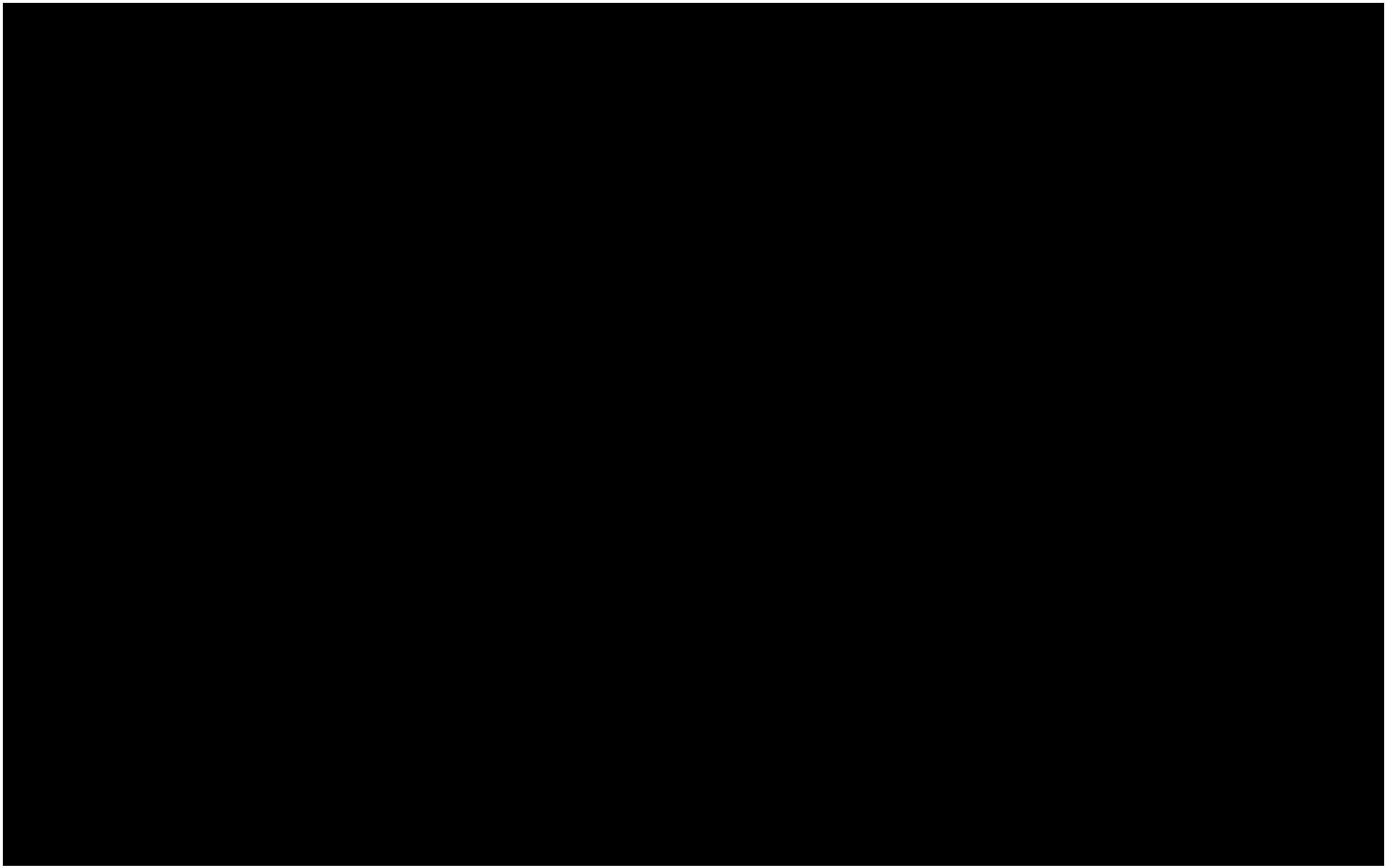
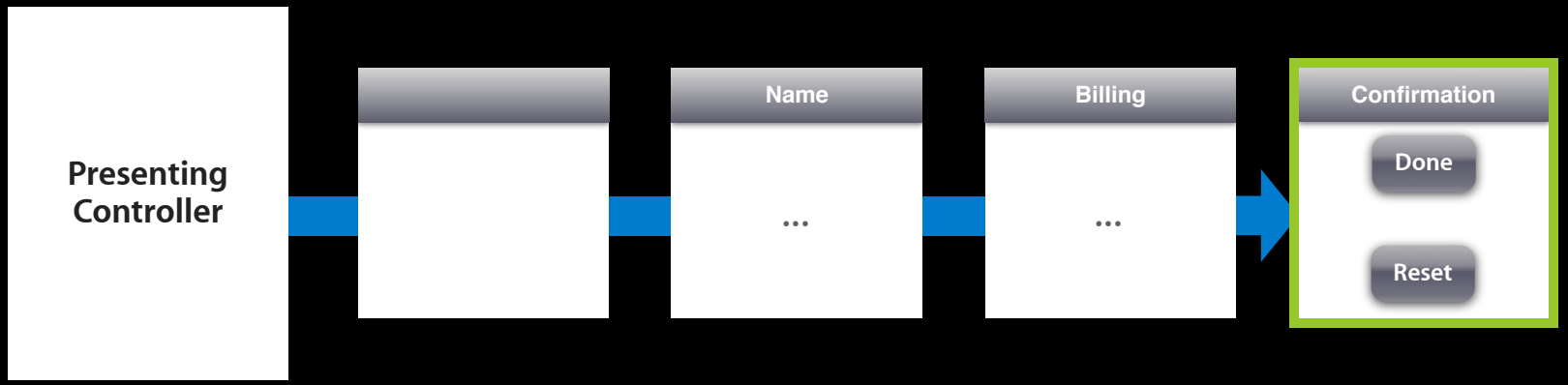


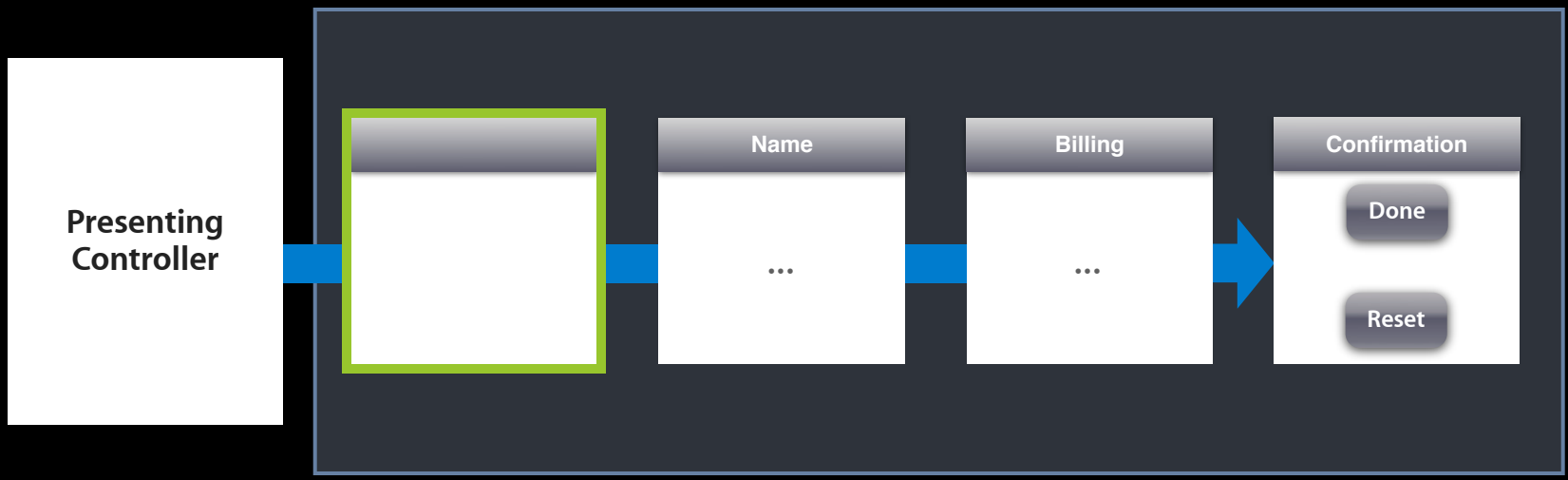


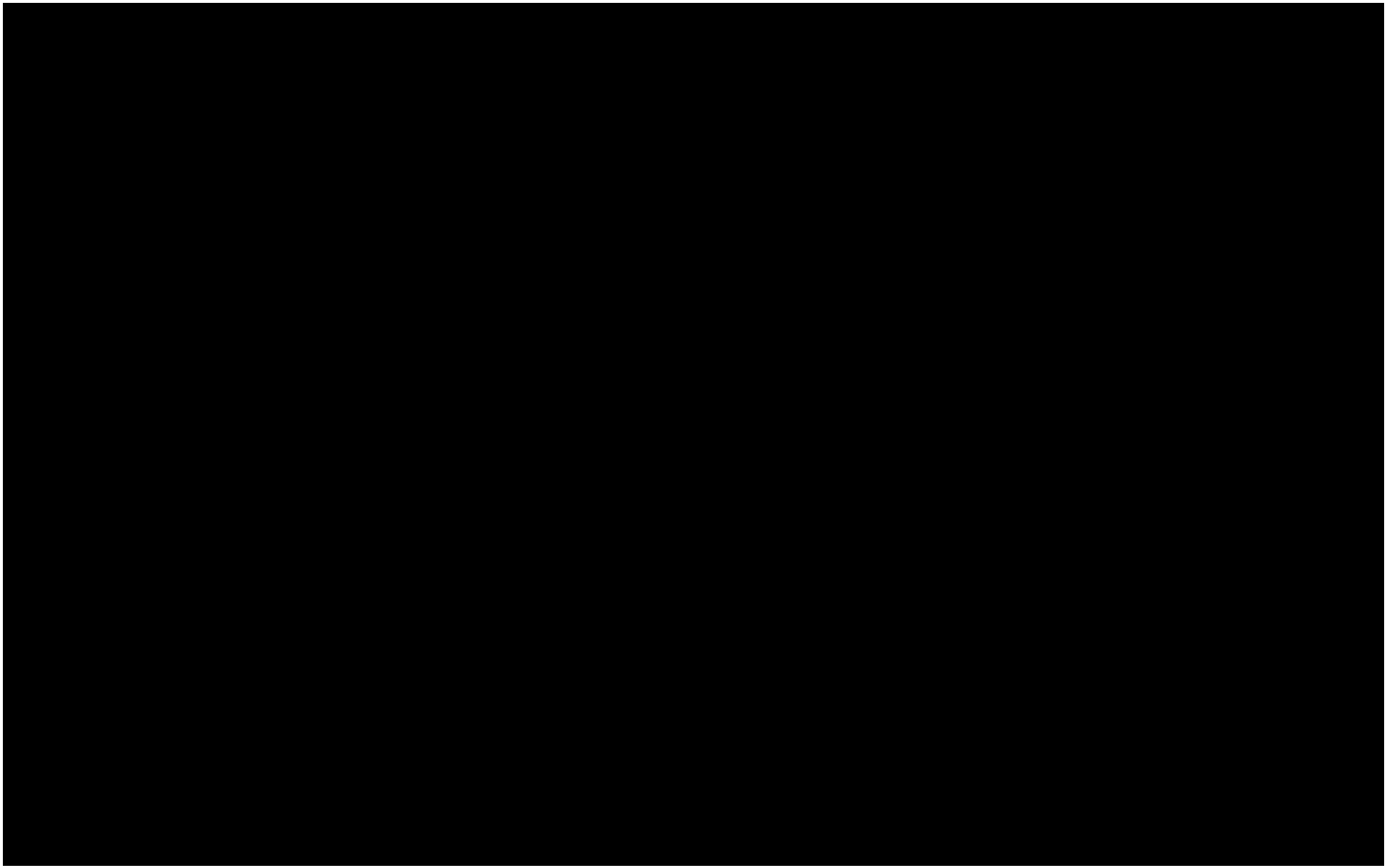
```
-canPerformUnwindSegueAction:
  fromViewController:sender:
```

Unwind Segues



Unwind Segues



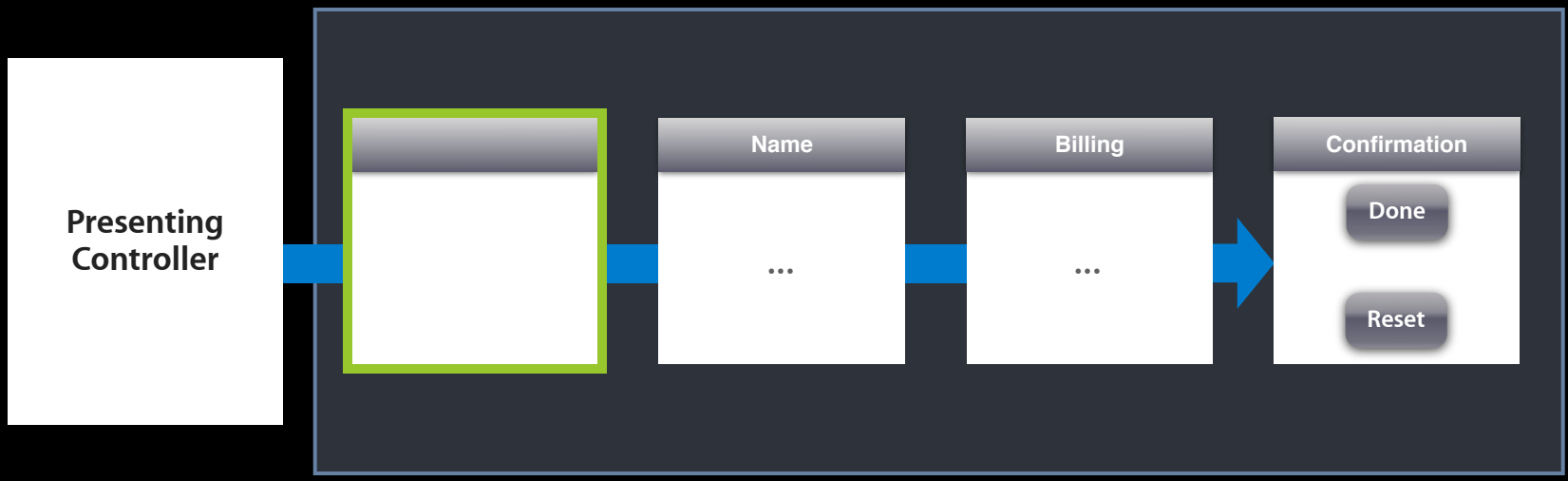


```
-viewControllerForUnwindSegueAction:
    fromViewController:withSender:
```

For custom containers

Unwind Segues

Runtime searching



Unwind Segues

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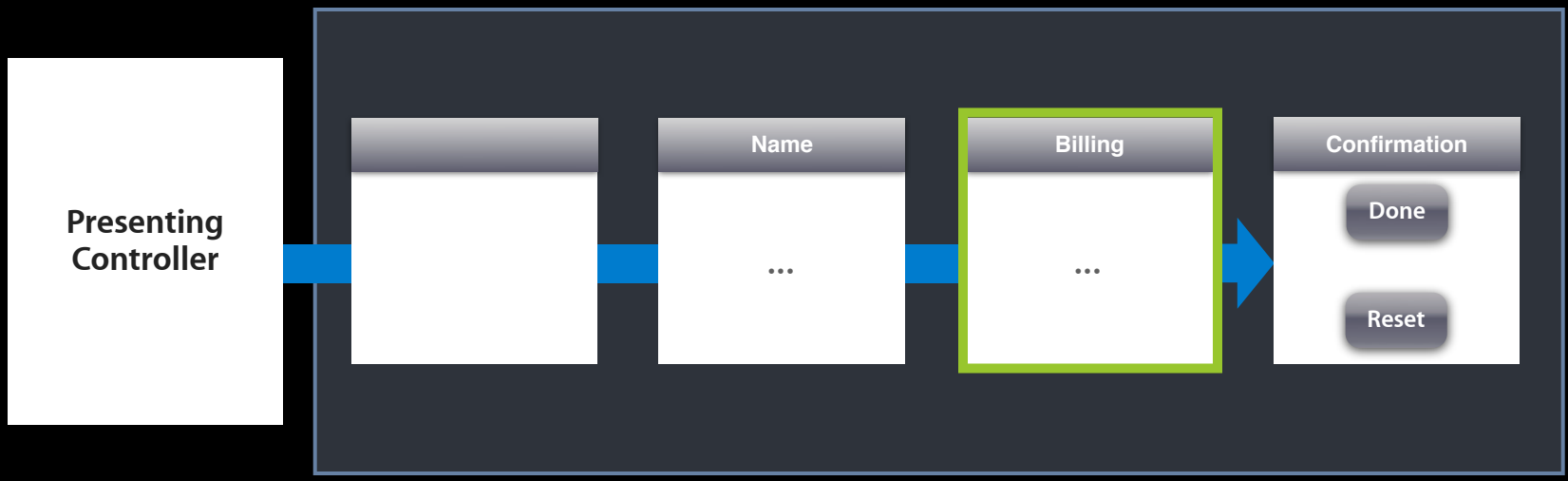

Unwind Segues

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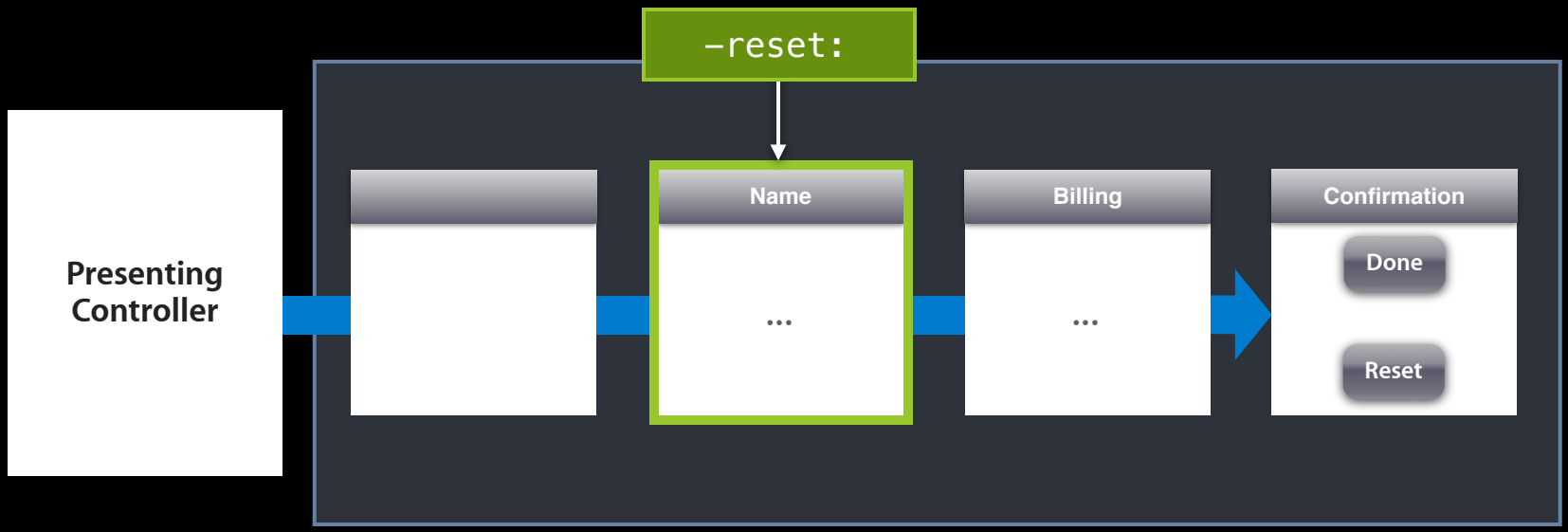
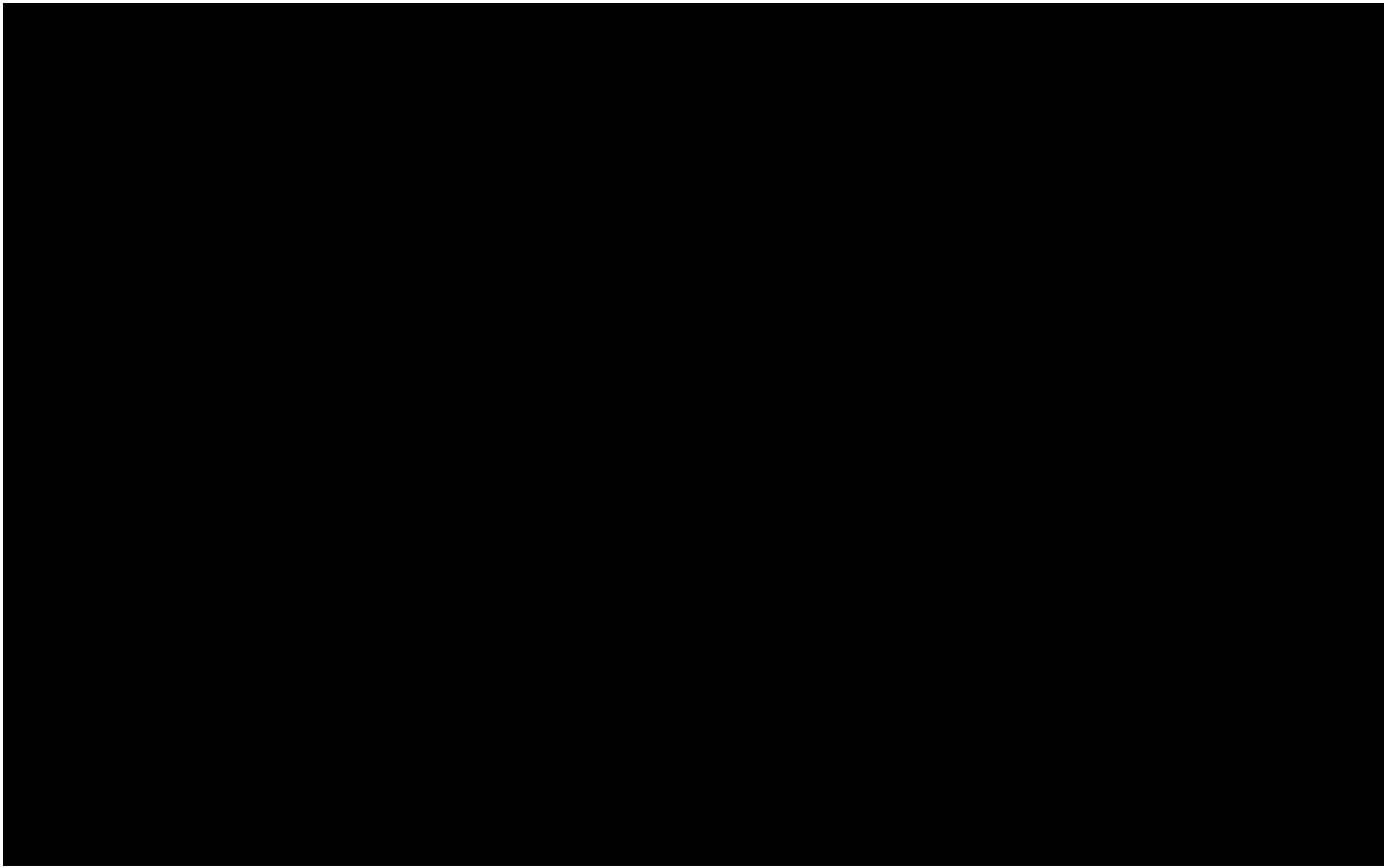


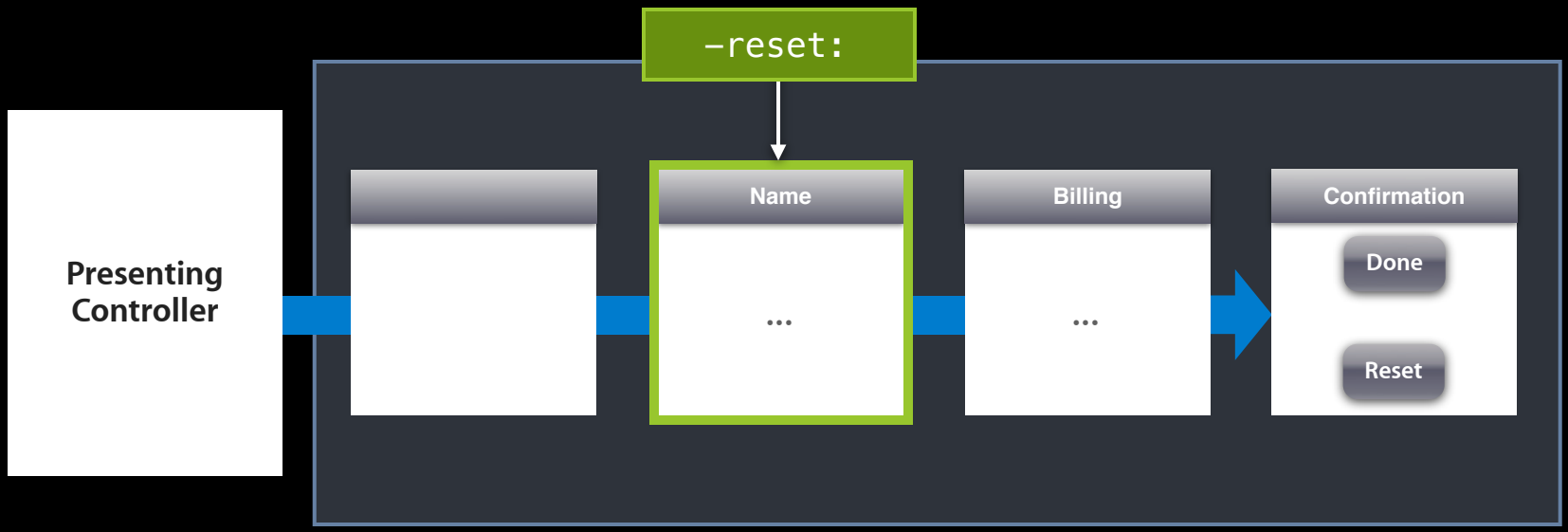


```
-segueForUnwindingToViewController:
    fromViewController:sender:
```

For custom containers

Unwind Segues

Runtime searching



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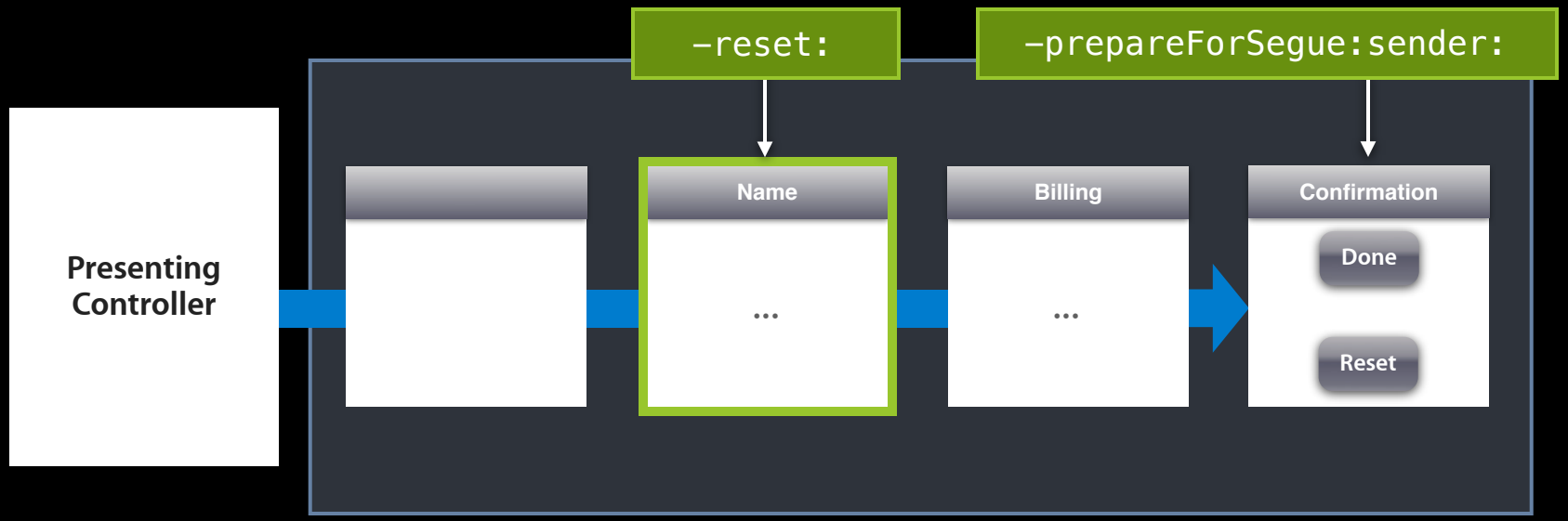

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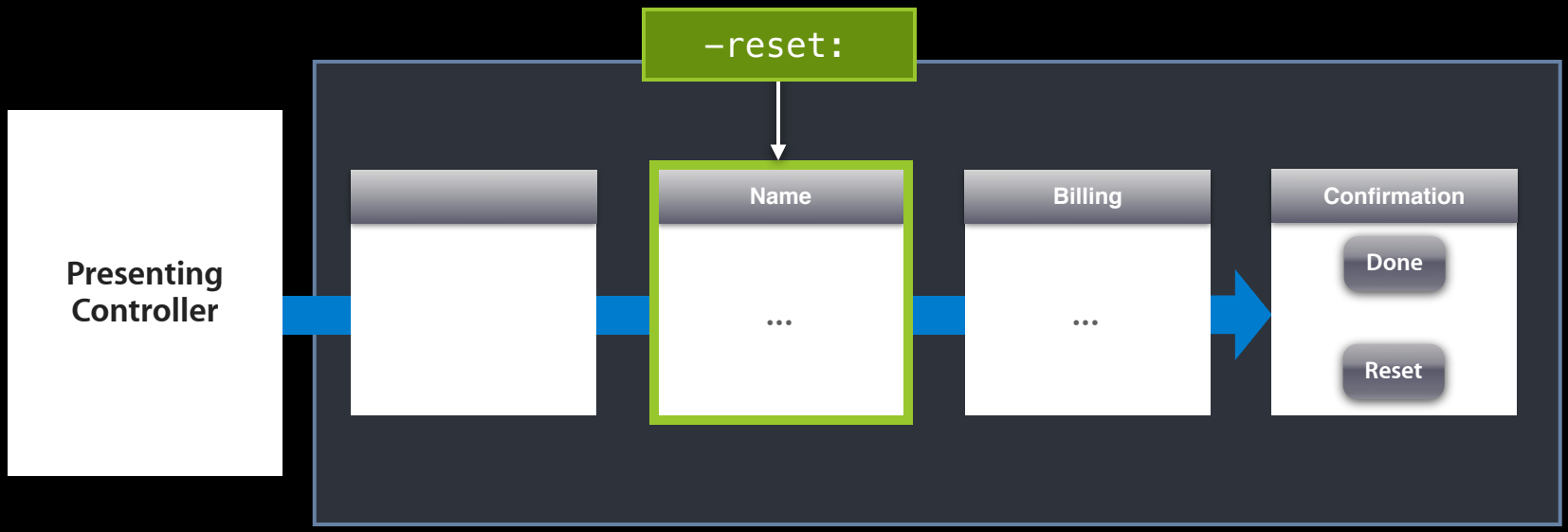

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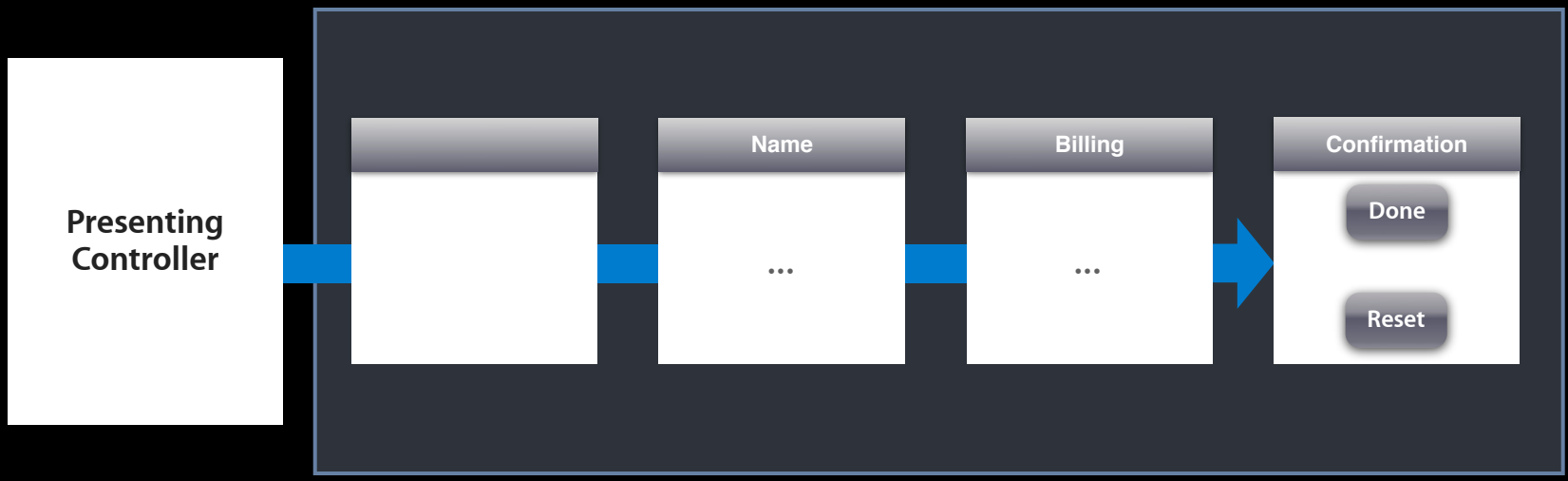

Unwind Segues

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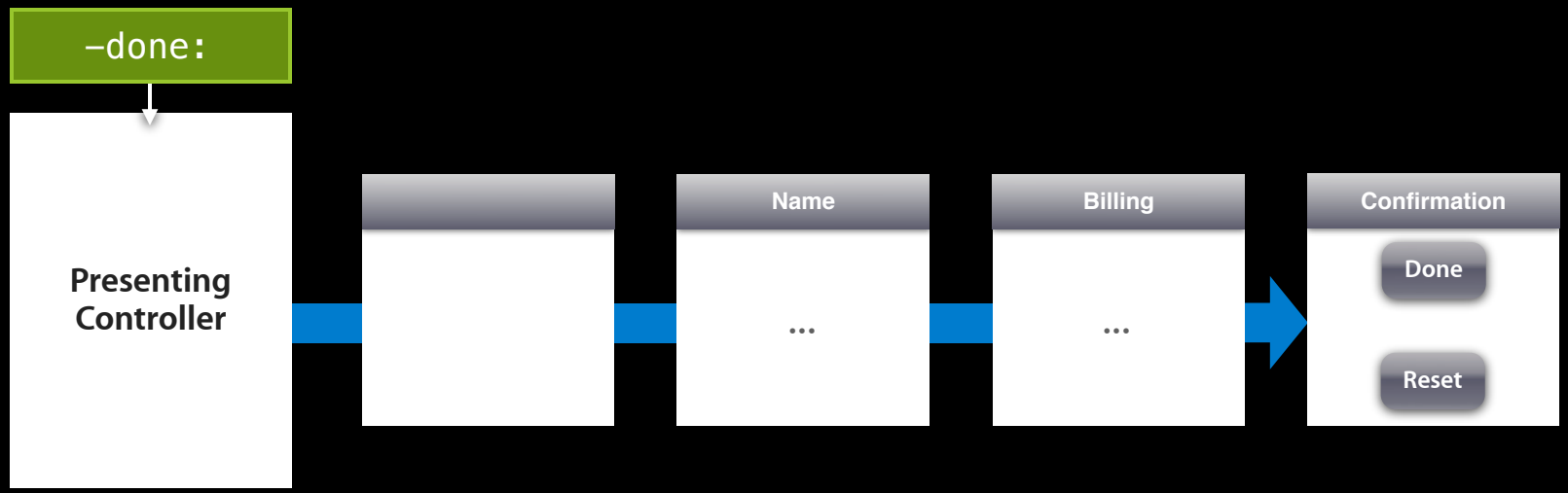


Demo

Unwind Segues

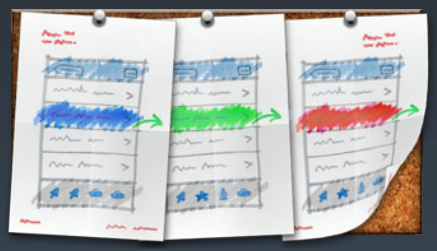
More Information

Michael Jurewitz
Developer Tools Evangelist
jury@apple.com

Apple Developer Forums
http://devforums.apple.com

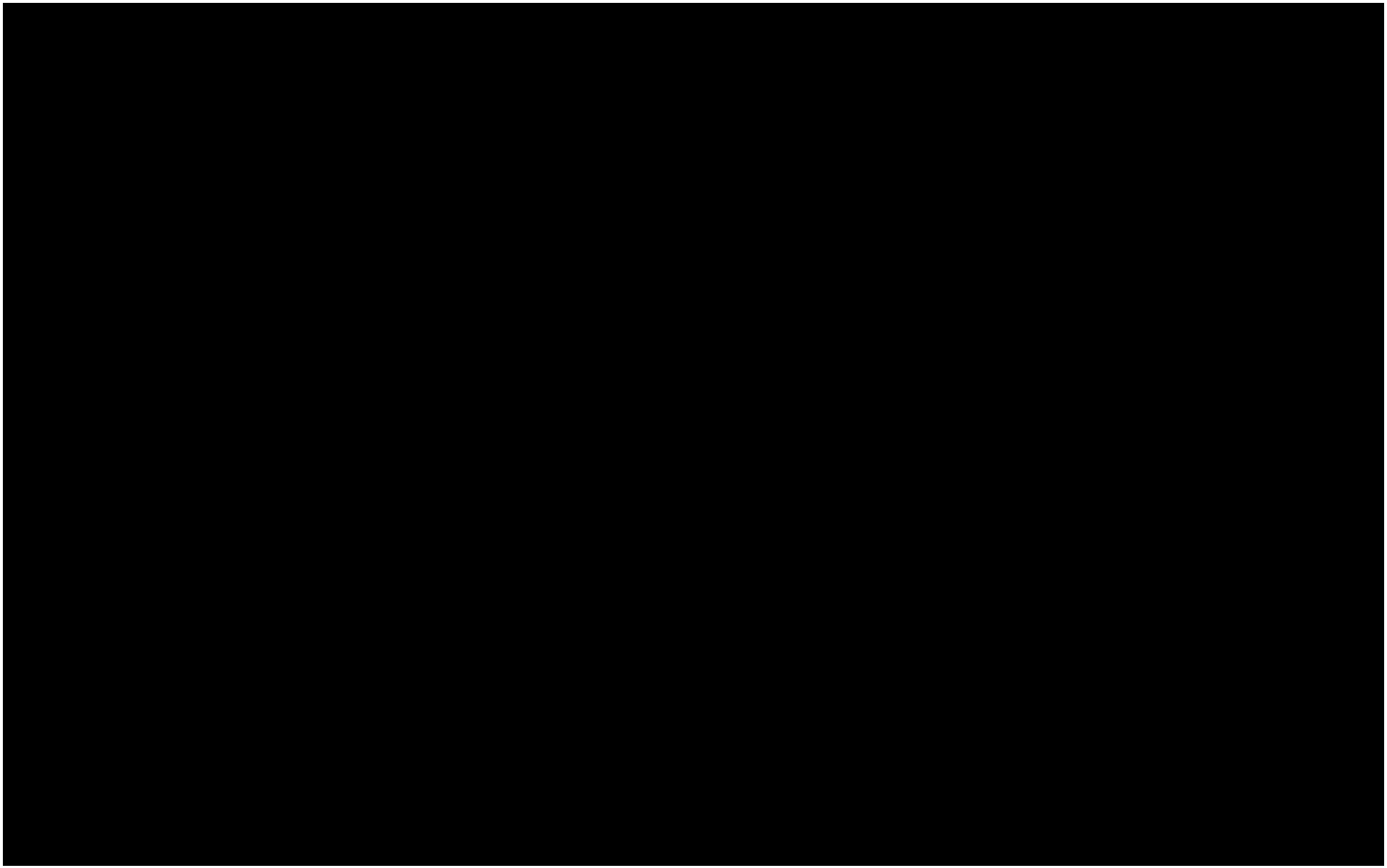
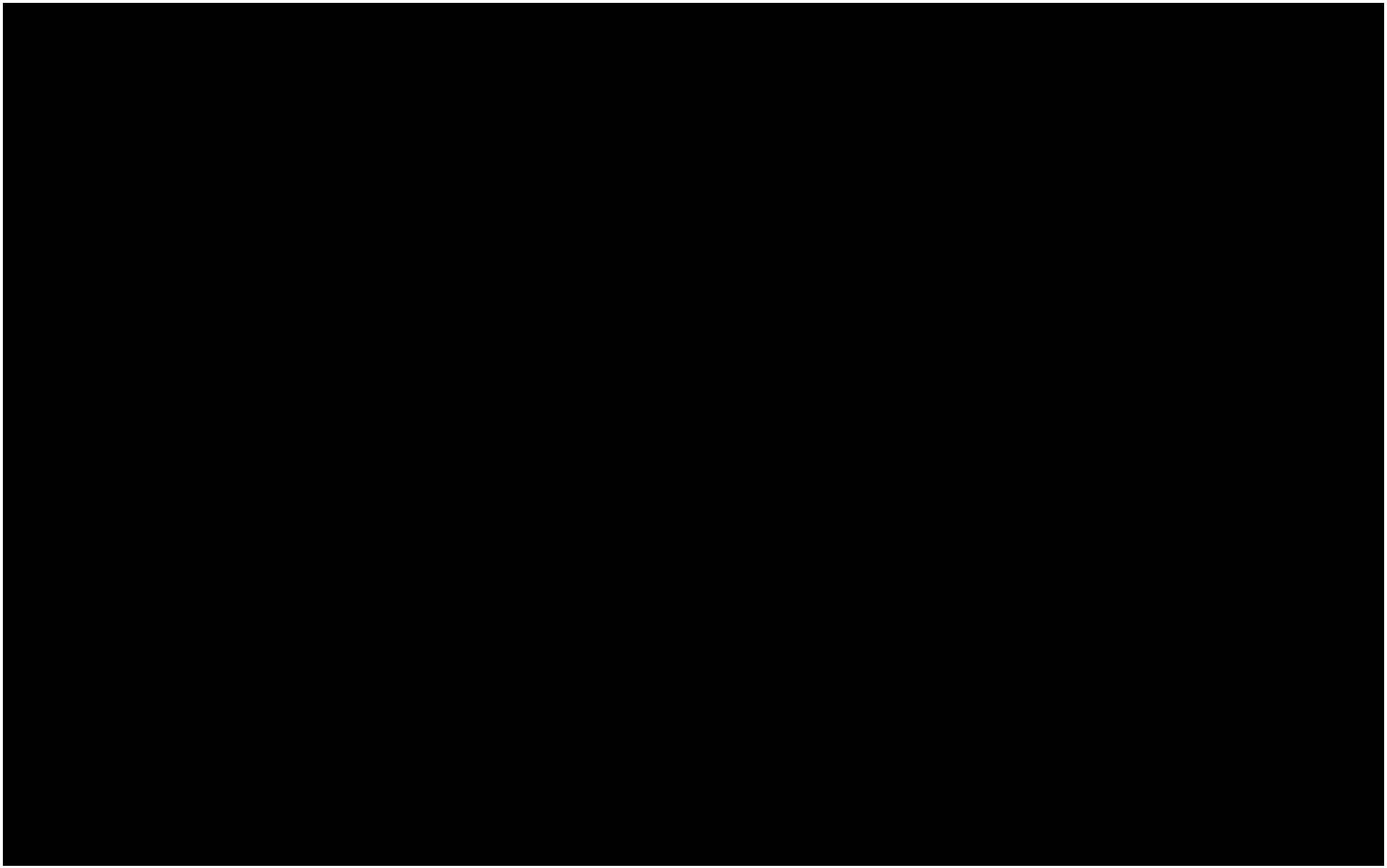
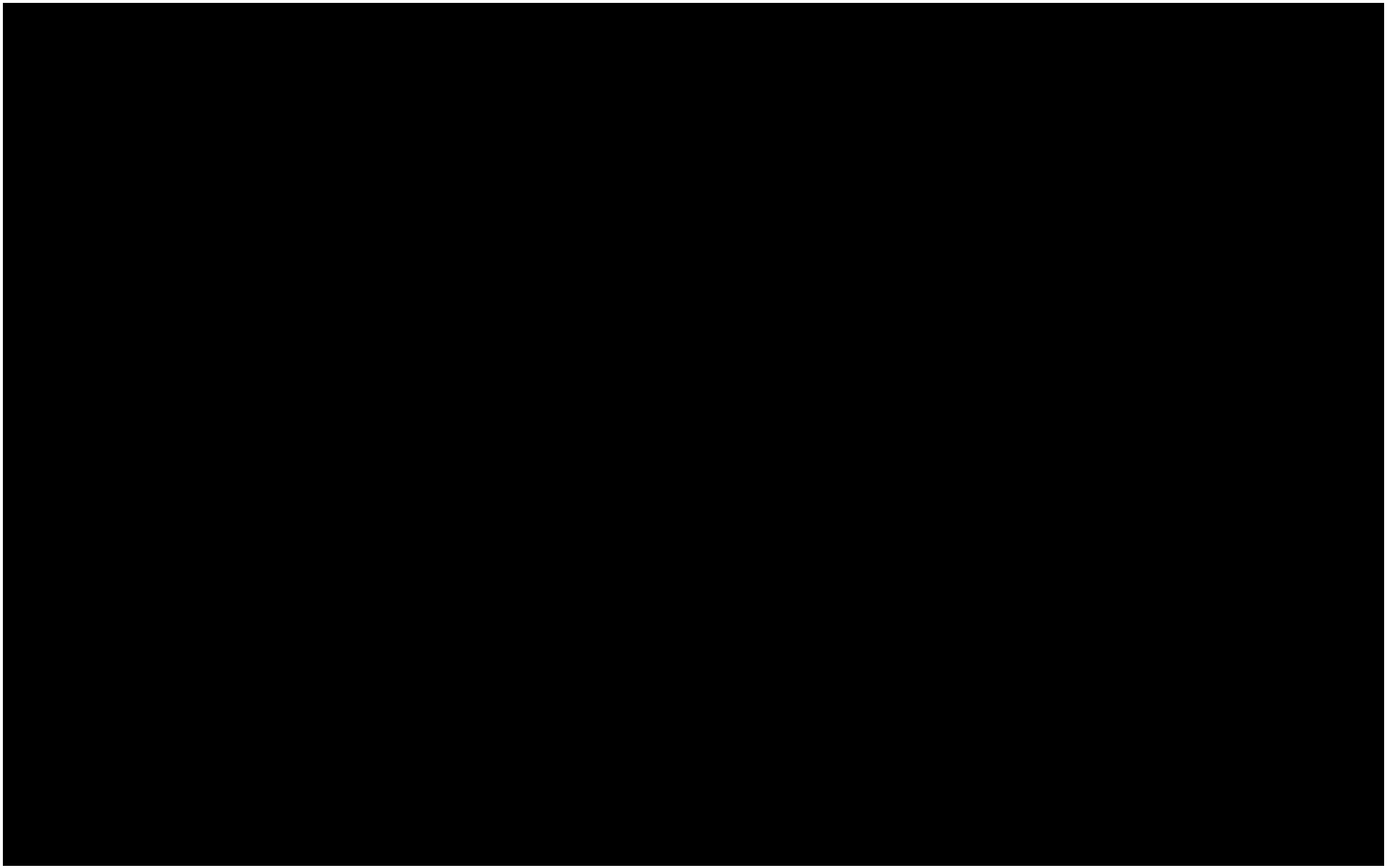
Labs

Interface Builder Lab	Developer Tools Lab C Thursday 9:00AM



Intro to Storyboards

Mixing Storyboards with code/XIBs

New in iOS 6

WWDC2012