



Segues

Dr. Sarah Abraham

University of Texas at Austin

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Segue Transitions

- ❖ Handle change in view controllers
- ❖ Provide developer with pre-built styles and view controller management
 - ❖ Show
 - ❖ Show detail
 - ❖ Present modally
 - ❖ Present as popover
 - ❖ Custom

Show versus Modal

- ❖ Two major types of segue
- ❖ Show presents new view controller within navigation controller framework
 - ❖ Built in navigation
 - ❖ Drill-down interface (provide more information about selection)
- ❖ Modal presents new view as an independent view controller
 - ❖ Navigation must be customized
 - ❖ Modal interface (action is complete and self-contained)

Triggered Segues

- ❖ Called when user interacts with interface object
 1. Control drag element (e.g. UIButton)
 2. Select segue target view controller
 3. Select segue type

Unwind Segues

- ❖ Move backward through one or more views
 - ❖ Returns user to previous instance of a view controller
 - ❖ Provides functionality for reverse navigation
 - ❖ More customization than navigation controller for finding a desired view target
- ❖ Note: placed in *destination* view controller to return to destination view controller

Using Unwind Segues

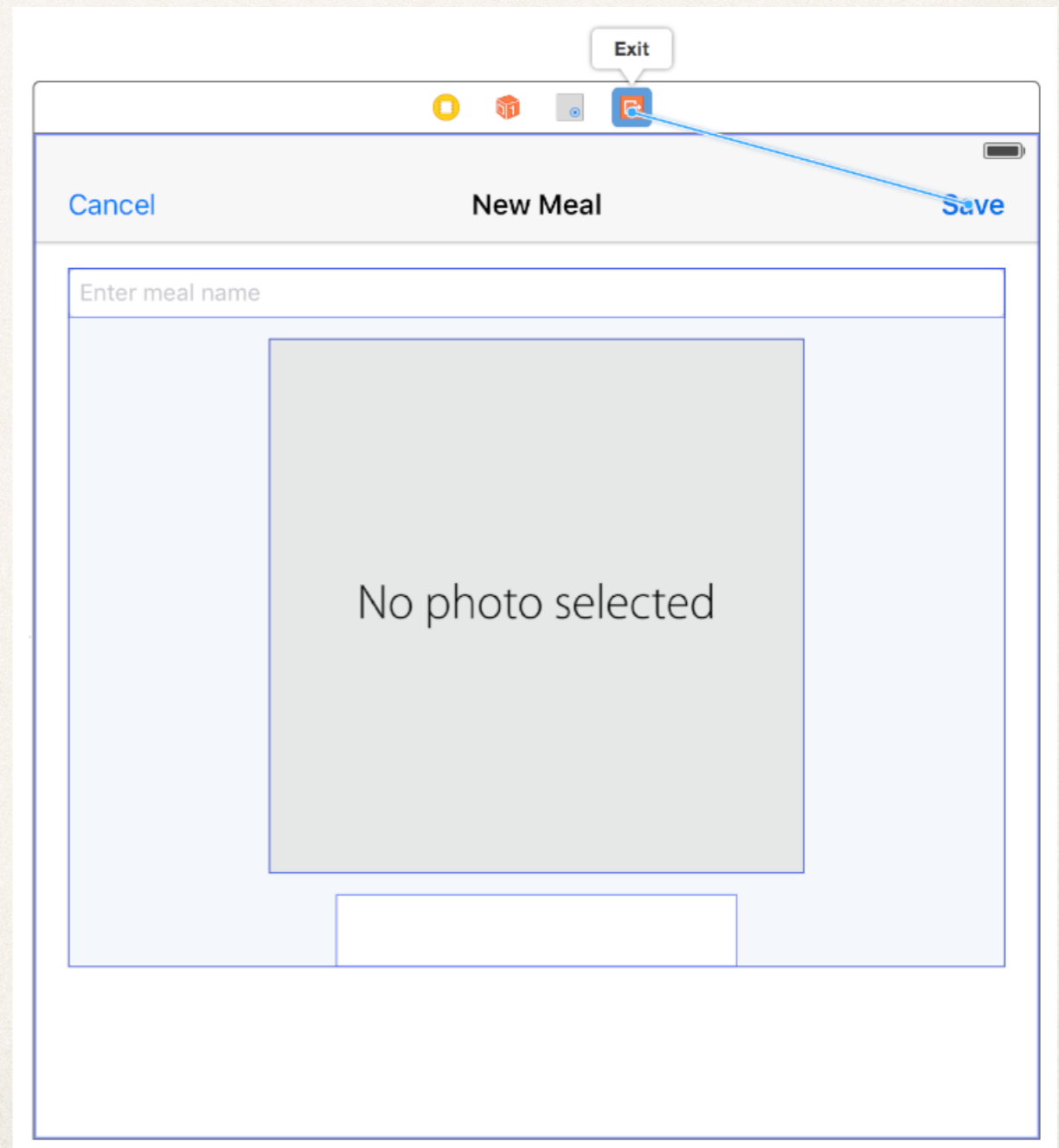
1. Create an unwind action in destination view controller of segue in Swift
 2. Associate action with unwinding view in Interface Builder
 3. Give unwind segue an identifier if necessary
- ❖ Note: this process is reversed from the usual development flow (i.e. IB to Swift) as you must create your action in Swift before you can associate it in IB

Unwind Action

- ❖ Create action in *destination* view controller:
 - ❖ `@IBAction func unwindFromView(_ sender: UIStoryboardSegue) {}`
 - ❖ `sender.source` accesses segue's source view controller
 - ❖ `sender.destination` accesses segue's destination view controller
- ❖ Add additional functionality to action

Link IBOutlets to Unwind Actions

- ❖ Access unwinding view controller in Storyboard
- ❖ Control drag from IBObject that triggers unwind to “Exit” item
- ❖ Select desired action segue



Preparing for Segues

- ❖ Often helpful to be notified *before* segues
 - ❖ Pass important data from current view to segue view
 - ❖ Ensure data is properly stored or saved in current view
- ❖ `prepare` function called before any segue occurs

Prepare Functionality

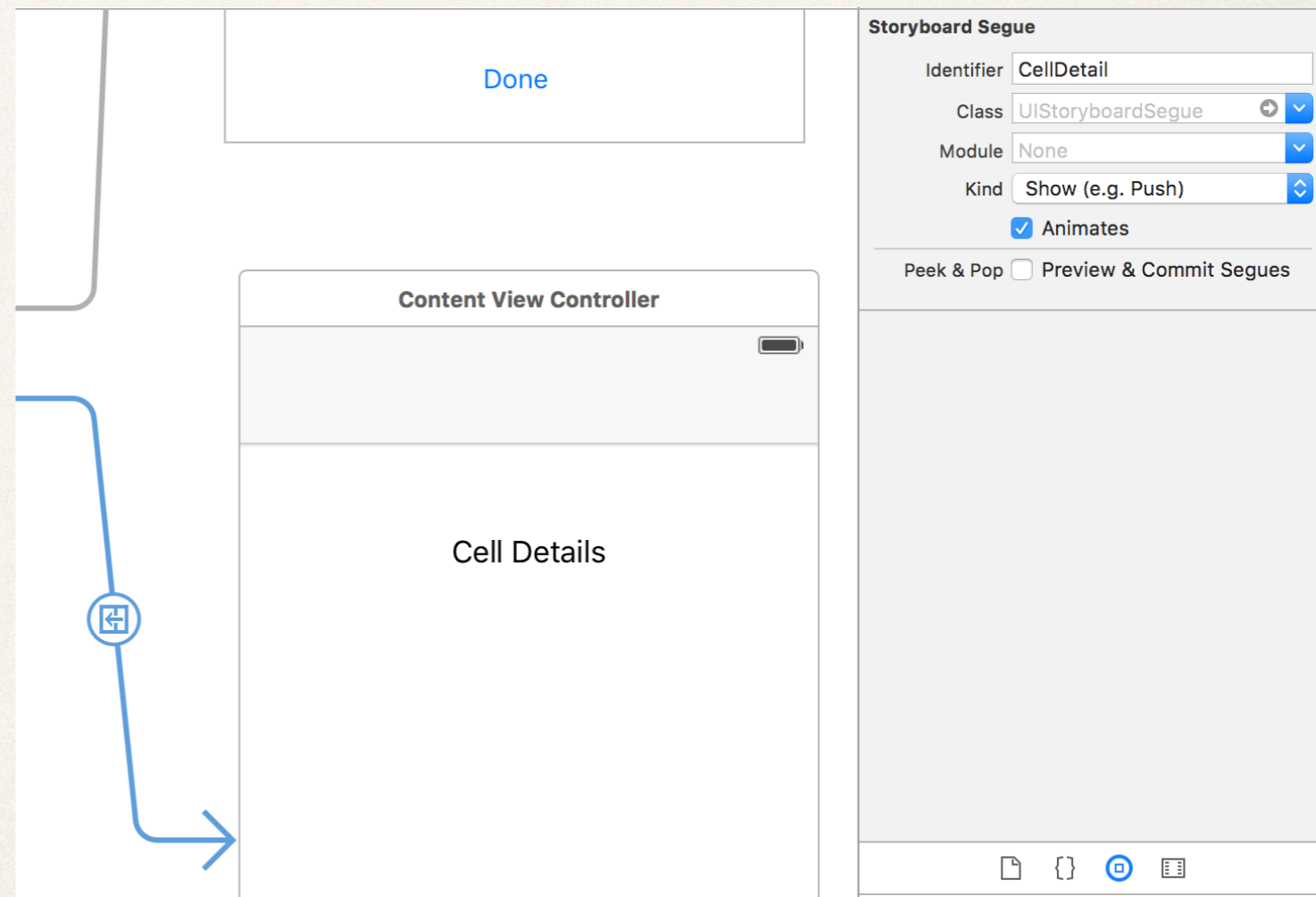
- ❖ `override func prepare(for segue: UIStoryboardSegue, sender: Any?)`
- ❖ Allows for necessary cleanup, data storage, etc
- ❖ `segue` refers to the storyboard segue about to be triggered
 - ❖ `segue.destination` accesses target view controller
- ❖ `sender` refers to the object triggering the segue request
 - ❖ `Any?` is optional containing an `IBOutlet`

Multiple Segues?

- ❖ `prepare` is called whenever a view controller's segue is used
- ❖ But it's possible to have multiple segues used by a single view controller
- ❖ What should `prepare` do in this case?

Segue Identifiers

- ❖ Strings attached to IB objects
- ❖ Provide a way for developers to access a specific IB object
- ❖ Created in Storyboard



Using Segue Identifiers

- ❖ prepare has argument segue
- ❖ segue.identifier corresponds to the String data assigned by Storyboard Identifier
- ❖ Check String in segue.identifier for correct flow control

```
if segue.identifier == "CellDetail" {  
    /* handle cell detailed display case */  
} else if segue.identifier == "PresentModally" {  
    /* handle screen presented modally case */  
}
```


Quiz Question!

- ❖ Where does the code for a segue unwind belong?
 - A. In the segue you are unwinding from
 - B. In the segue you are unwinding to