View Controllers (iOS)

Lecture 10

UIViewController

UIViewController

- Primary method for structuring user interface code
- Each view controller displays one "pane" of a user interface
- Can be put inside specialized view controllers to form more complex UIs

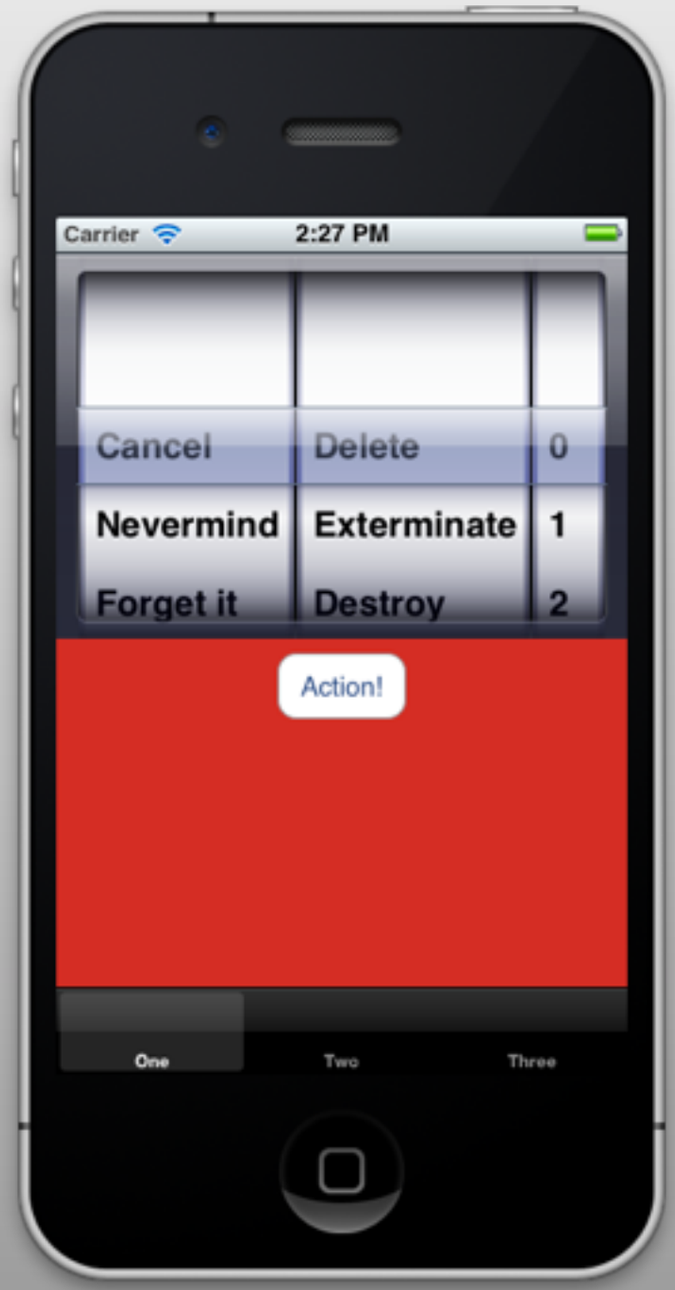
UIViewController

- How many view controllers do you need?
- One per view?
- One per application?

"Screenful of content"

- Apple's (and others') recommendation is that each view controller manages one "screenful" of content
- The content of each "screen" of your application is managed by a single view controller
- This is, however, just a rule of thumb

UIViewController



UIViewController

```
- (id) initWithNibName: (NSString *) nibName
                bundle: (NSString *) nibBundle;
```

- Default initializer for view controllers
- The nib name parameter specifies a nib for a view (the view this controller will manage)
- Pass `nil` for the nib name if you plan to create the view programmatically

UIViewController

```
- (void) loadView;
```

- Override point for programmatically creating the view hierarchy
- Called *automatically* by the view controller when the view property is requested, but is currently `nil`

UIViewController

```
- (void) loadView;
```

- If you use a nib, do NOT override this (it won't be called)
- IMPORTANT!: The `view` property of the controller must be set (either by calling `[super loadView];` or by assigning it manually)

UIViewController

```
- (void) viewDidLoad;
```

- "This method is called after the view controller has loaded its associated views into memory."
- Regardless of nib-loaded or programmatically
- Used to perform additional setup after the view hierarchy has been loaded

UIViewController

```
- (void) viewDidUnload;
```

- "Called when the view controller is released from memory."
- Used as the counterpart to `-viewDidLoad`
- Release any memory you `alloc`/`copy`/`retain`'d in `-viewDidLoad` or `-loadView`

UIViewController

```
- (void) viewWillAppear: (BOOL) animated;
- (void) viewDidAppear: (BOOL) animated;
- (void) viewWillDisappear: (BOOL) animated;
- (void) viewDidDisappear: (BOOL) animated;
```

- Called automatically as the controller's view appears (comes on screen) and disappears (goes off screen)

UIViewController

```
- (BOOL) shouldAutorotateToInterfaceOrientation:
                (UIInterfaceOrientation) orientation;
```

- Return YES for all orientations that this view controller allows

UIViewController

- There are a lot more!
- Check out the documentation for more view controller methods

Multiple NIBs and Interface Builder

- Common practice to provide one NIB per view controller
- Interface Builder makes this easy
  - Create a View nib, then set the class of File's Owner to be your view controller class