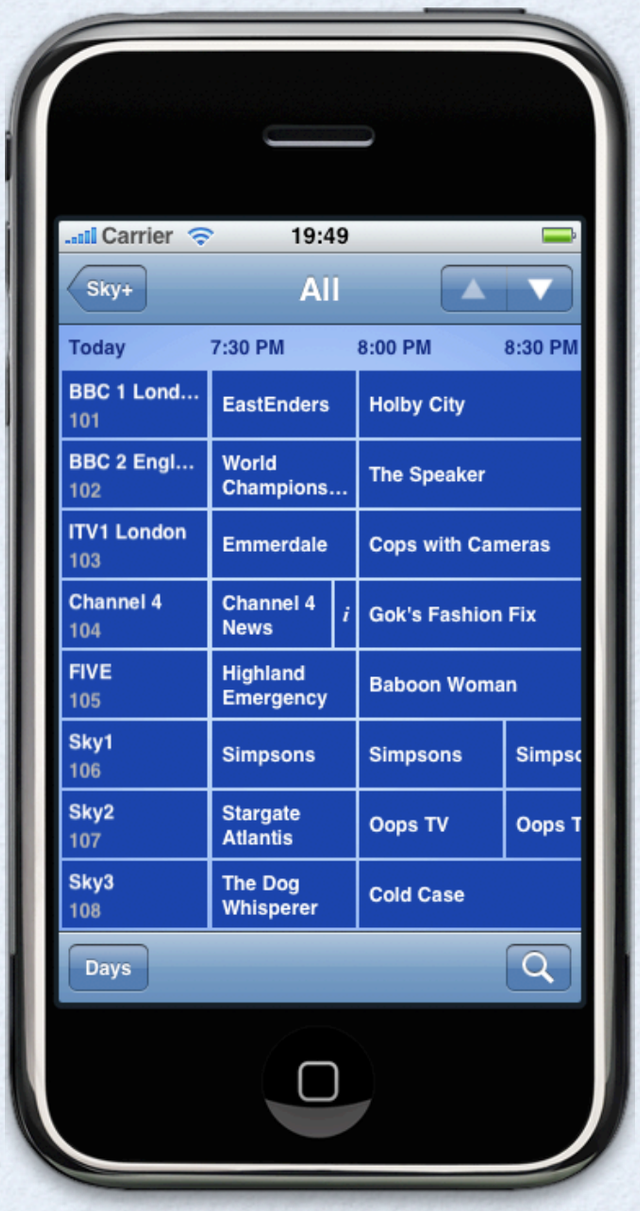
Utilising View Controllers

Daniel Tull

A Small Plug...

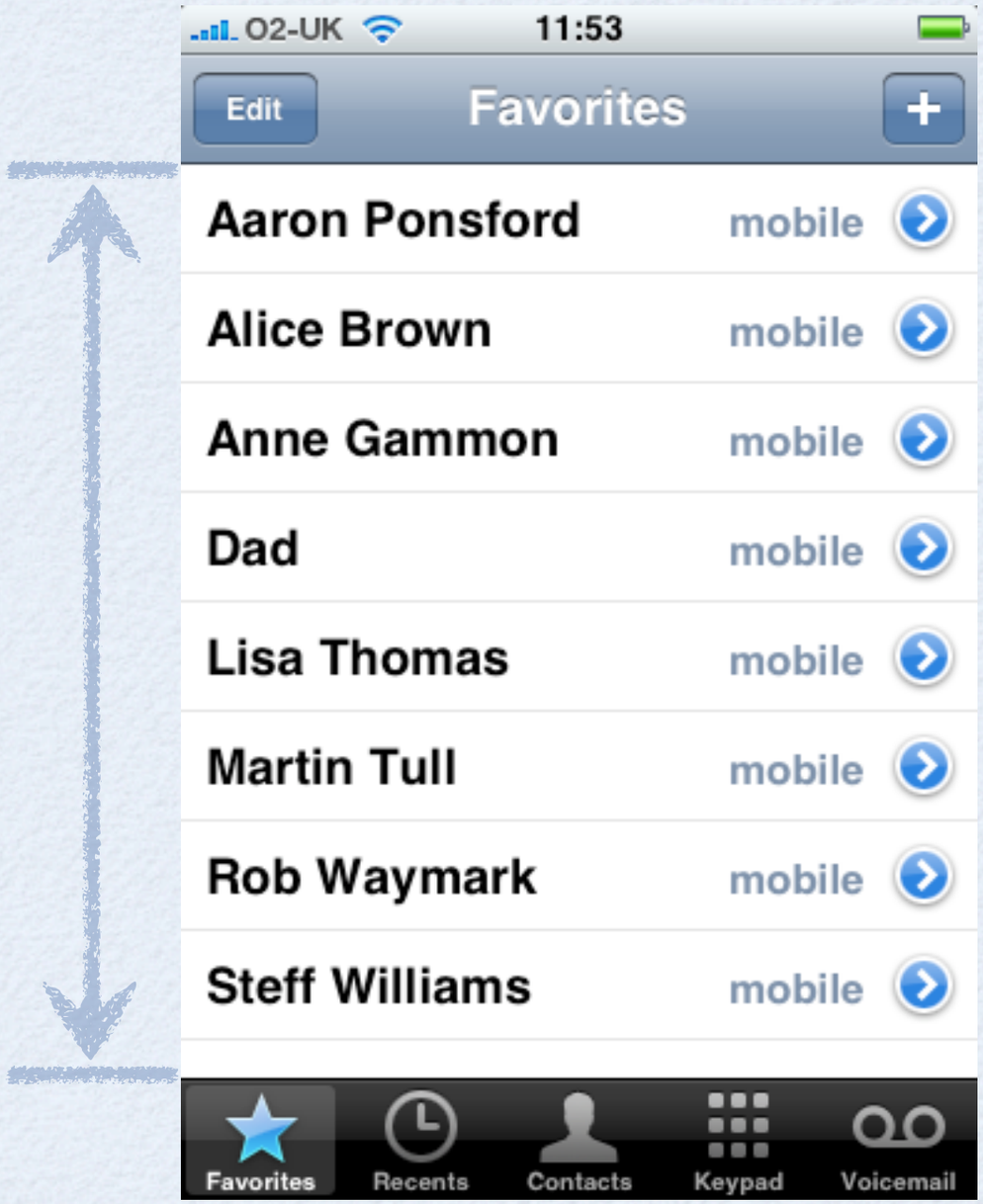
Sky+



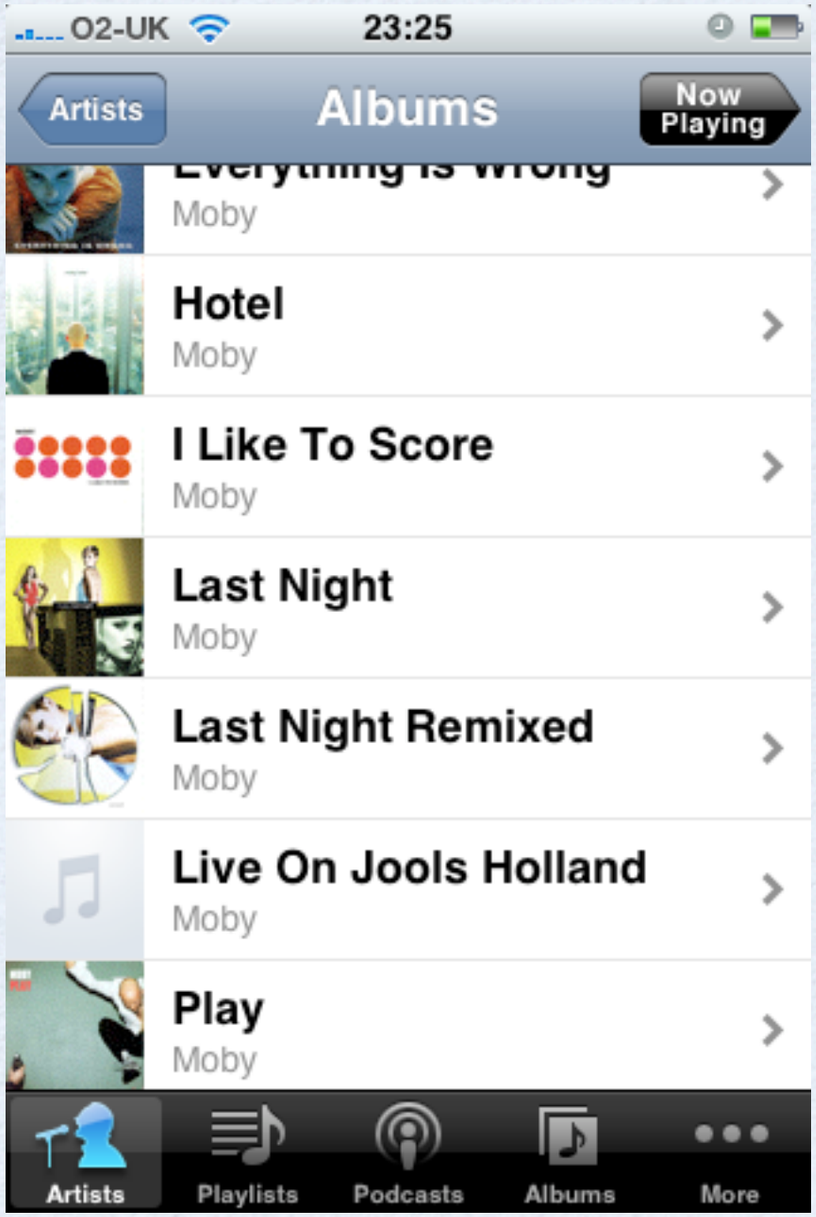
Weather Maps

What is a view controller?

A class to manage **user interface** logic for a view.



What is a view controller?



Provides the structure and functionality of the Apple-developed UI design patterns.

What is a view controller?

Navigation Bar

Title

Navigation Back Button

Bar Button

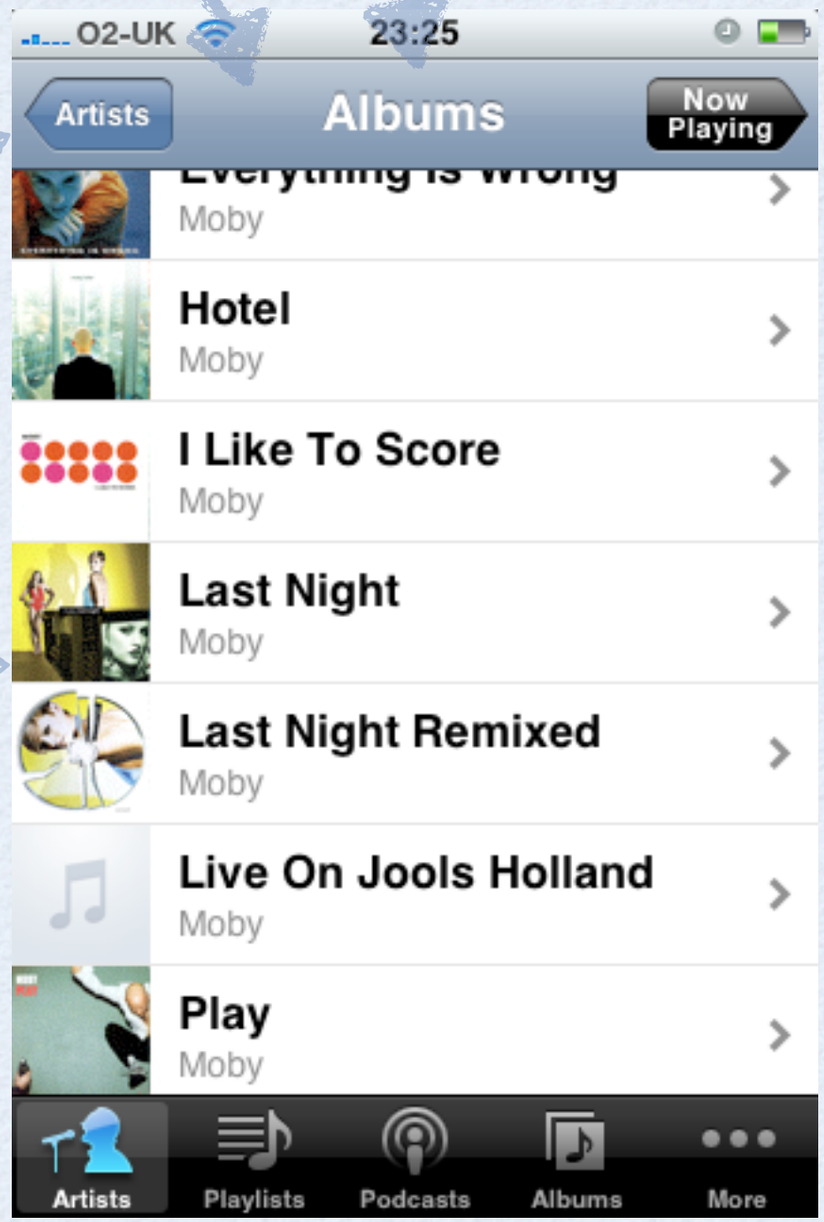


Table View

Tab Bar

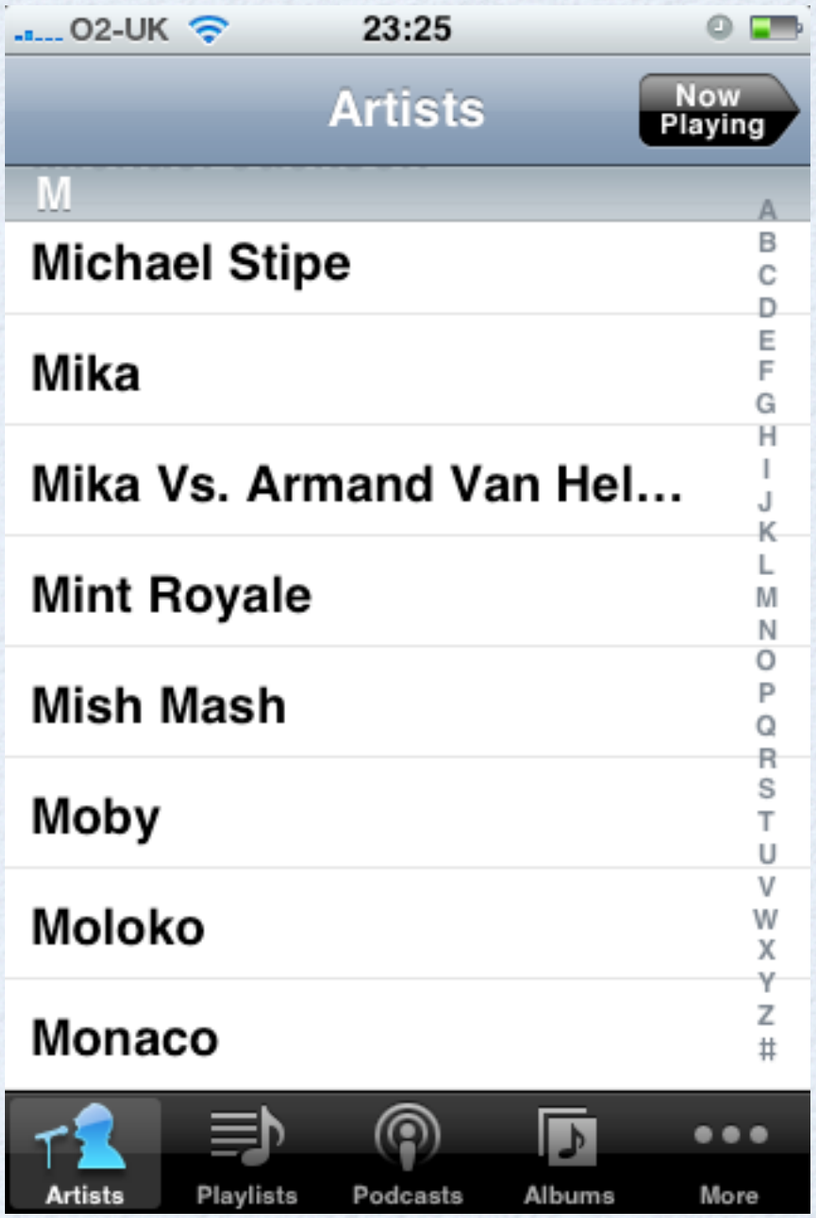
'More' Tab Item

Why use a view controller?

- Almost zero code to use Tab and Navigation Bars.
- Use to display a modal view (like a login page).
- Get a message when the orientation of the device changes so you can handle landscape mode.
- Memory warnings enable you to avoid crashing out due to too many views in memory.

Navigation Controller

- Allows navigation through a hierarchy of view controllers.
- You don't need to write (much) code for it.



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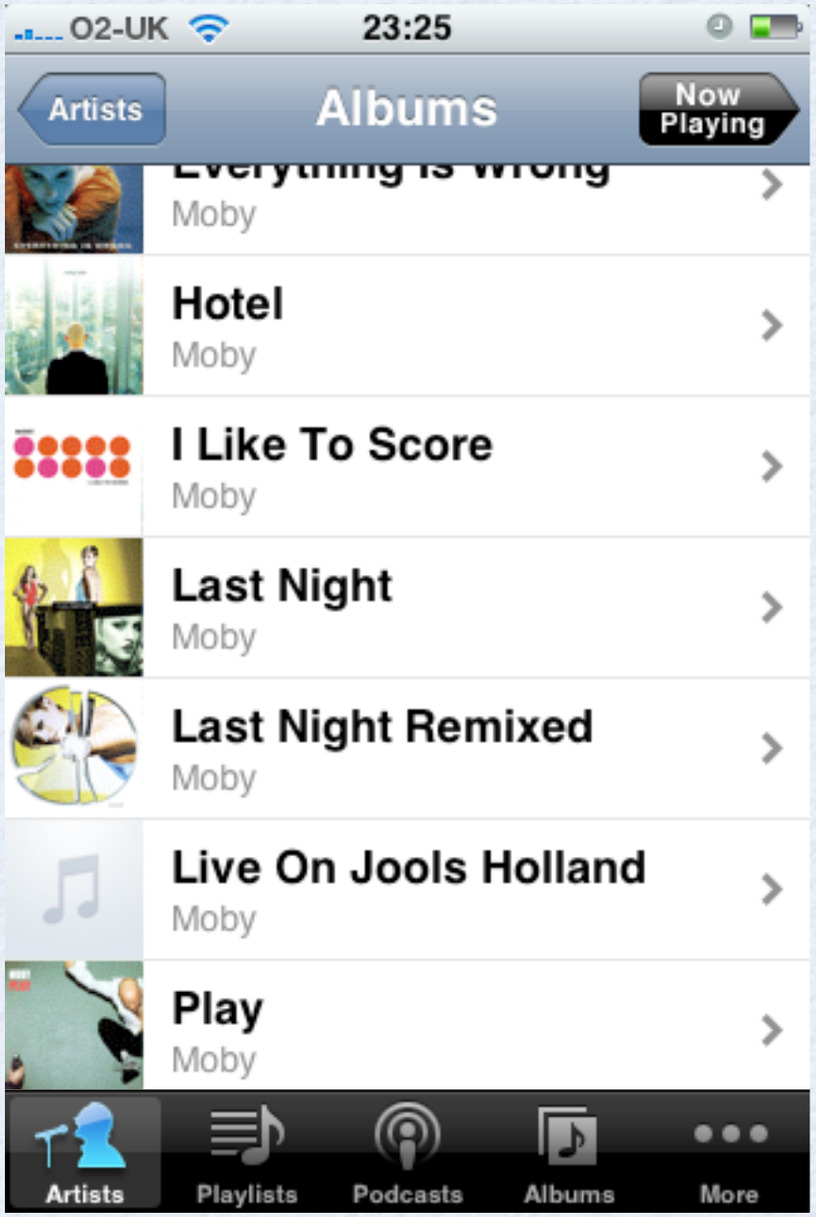


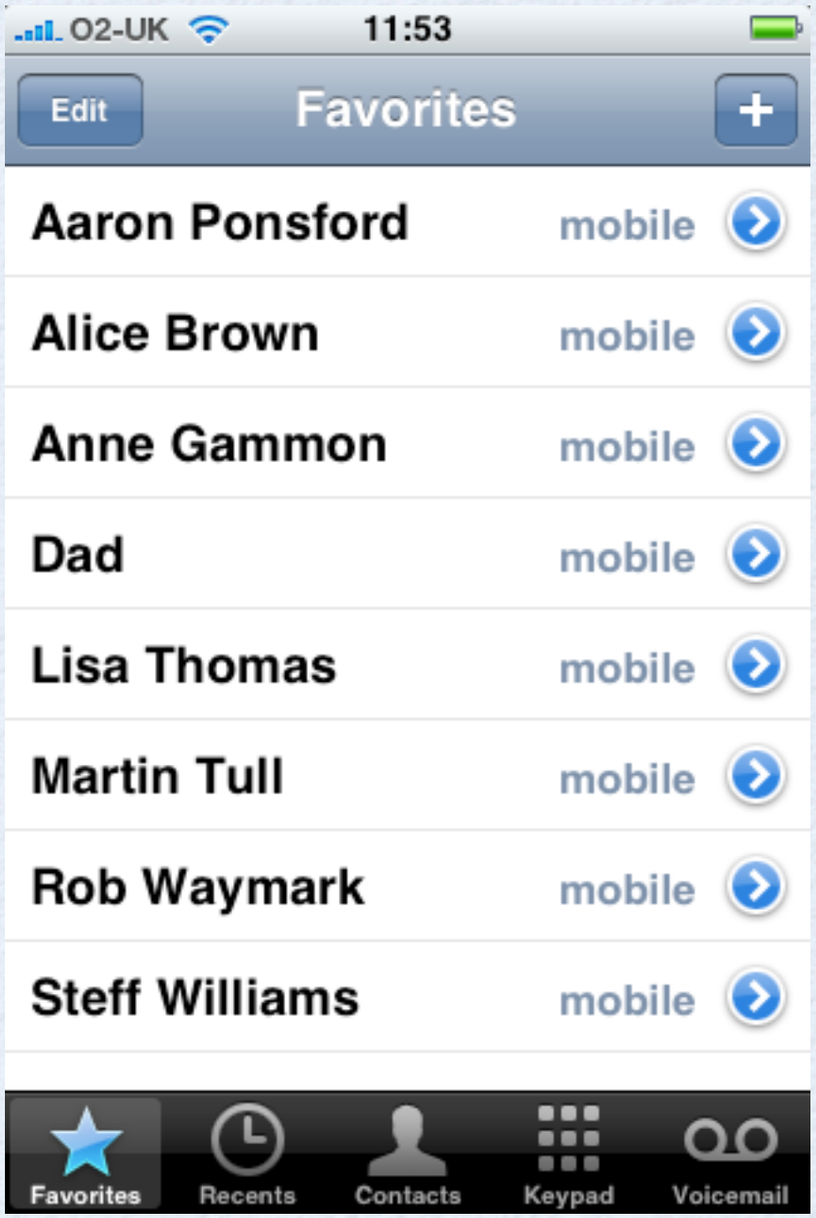
Navigation Controller

```
[self.navigationController pushViewController:vc
animated:YES];

[self.navigationController
popViewControllerAnimated:YES];
```

Tab Bar Controllers

- Allow quick switching of view controllers.
- You don’t need to write (much) code for them; Send it an array of view controllers and it works!



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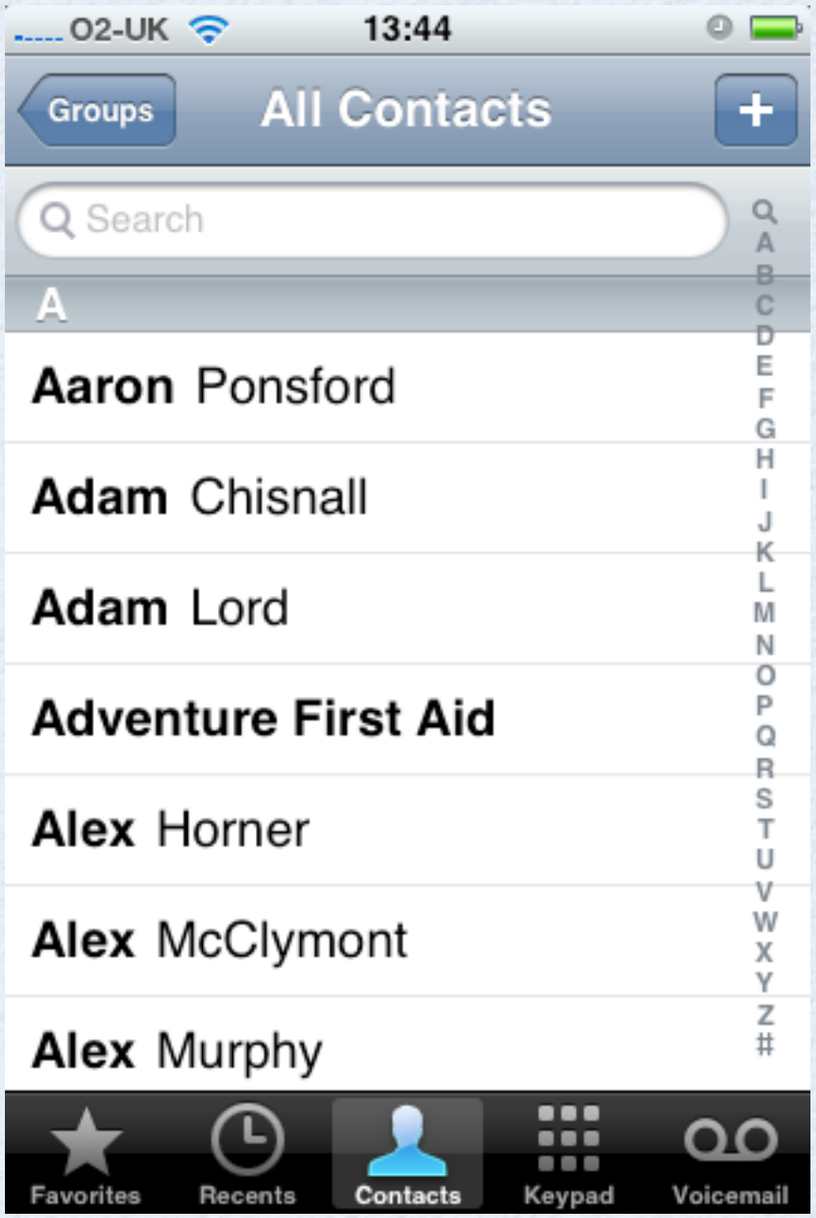

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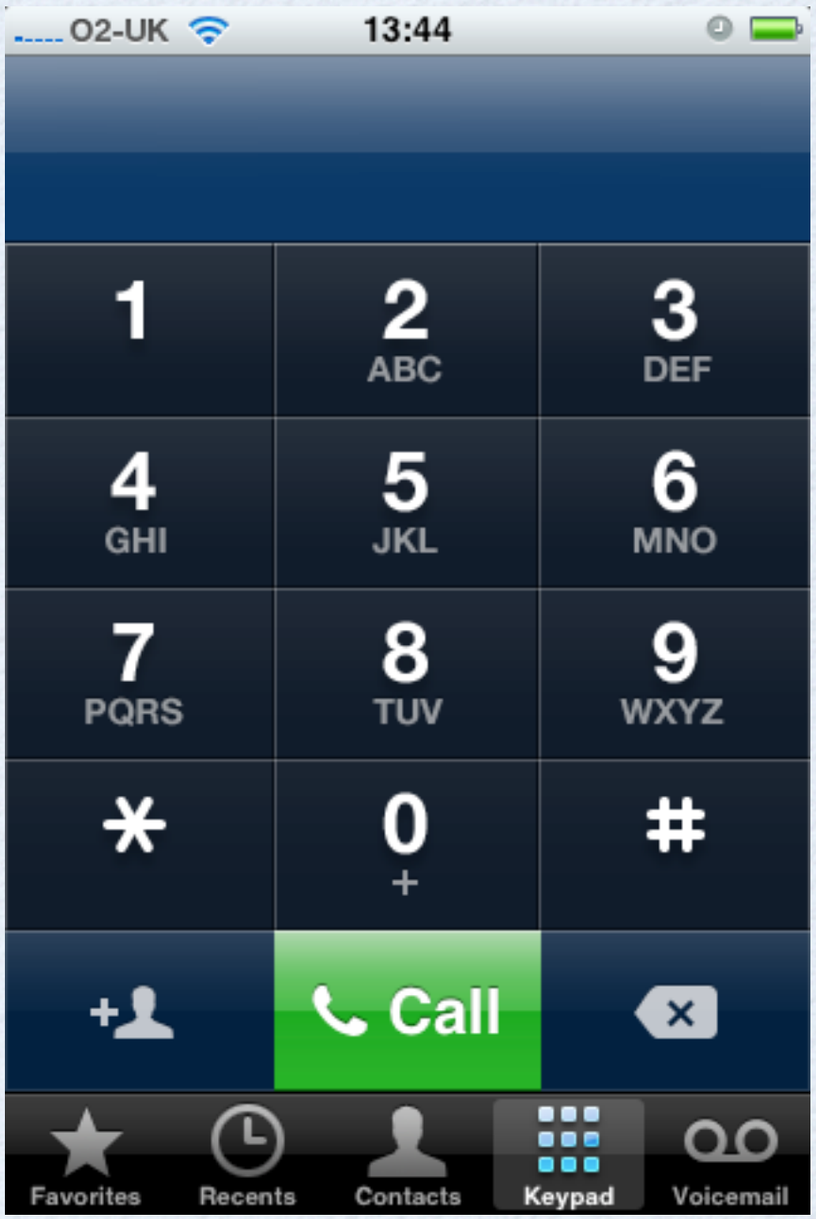


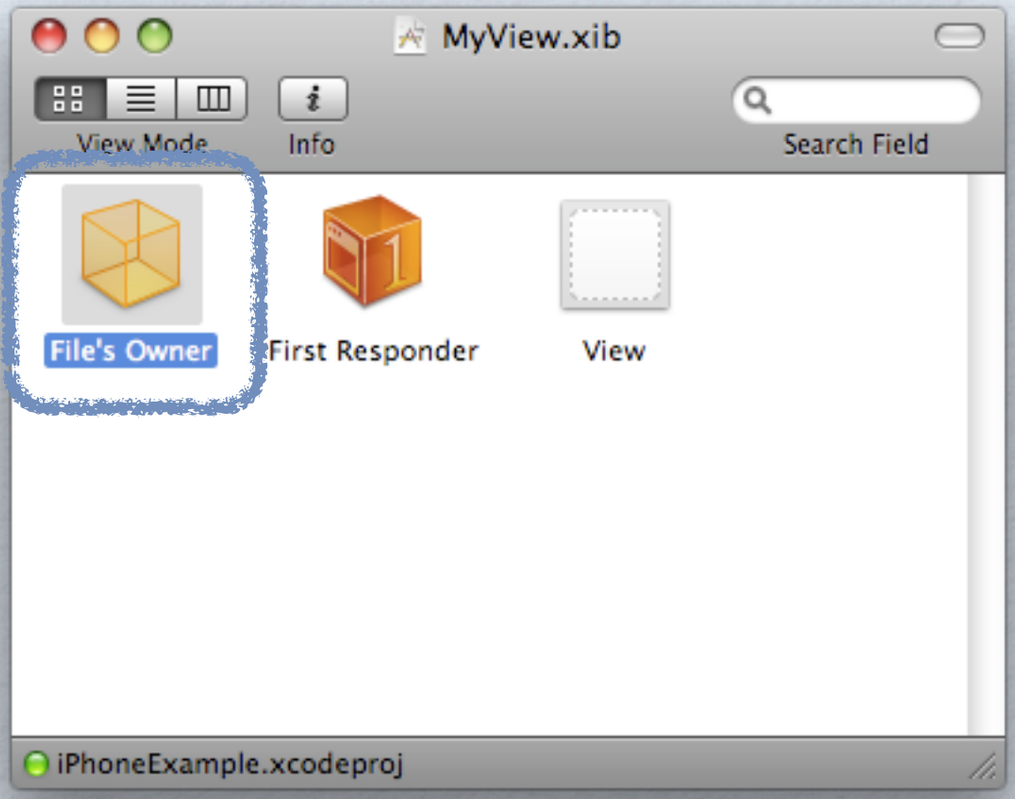
Subclassing UIViewController

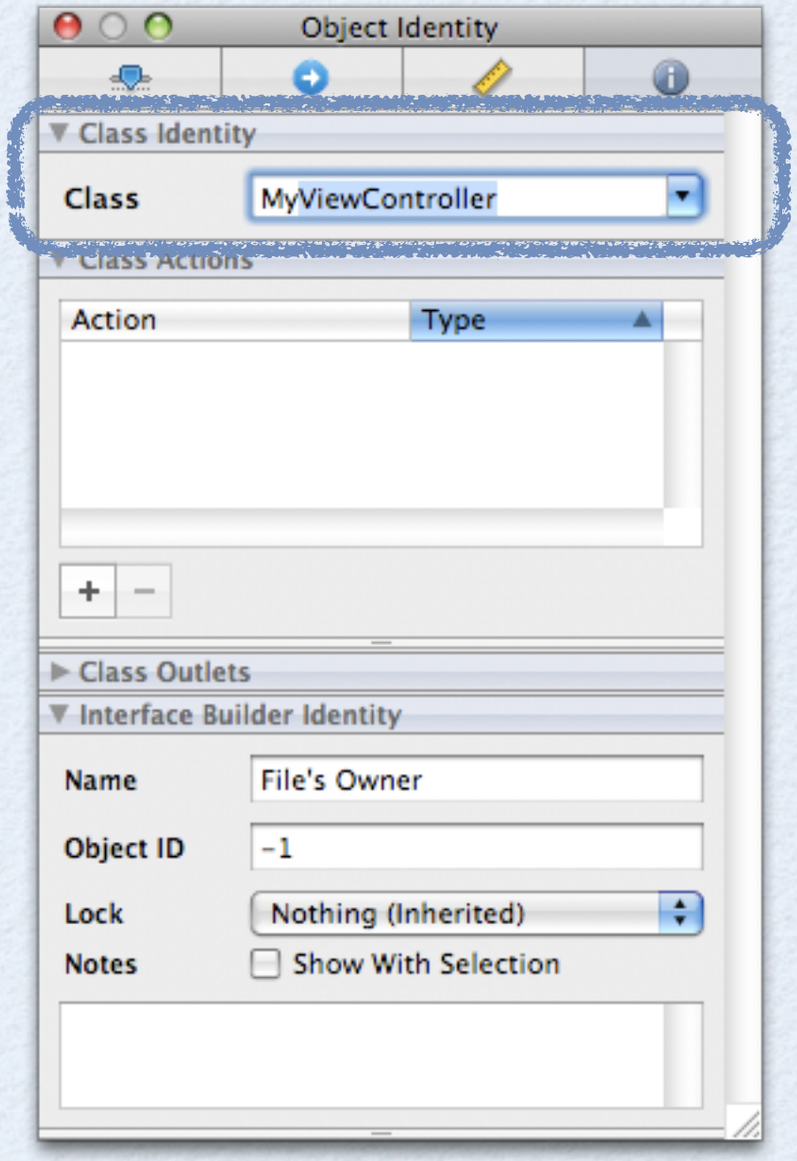
Implement *initWithNibName:bundle:* if you need to handle any specific logic when creating your view controller.

This finds the view XIB of the provided details and loads it for use.

The File Owner of the XIB is the view controller subclass, so we set that in Interface Builder.

Subclassing UIViewController





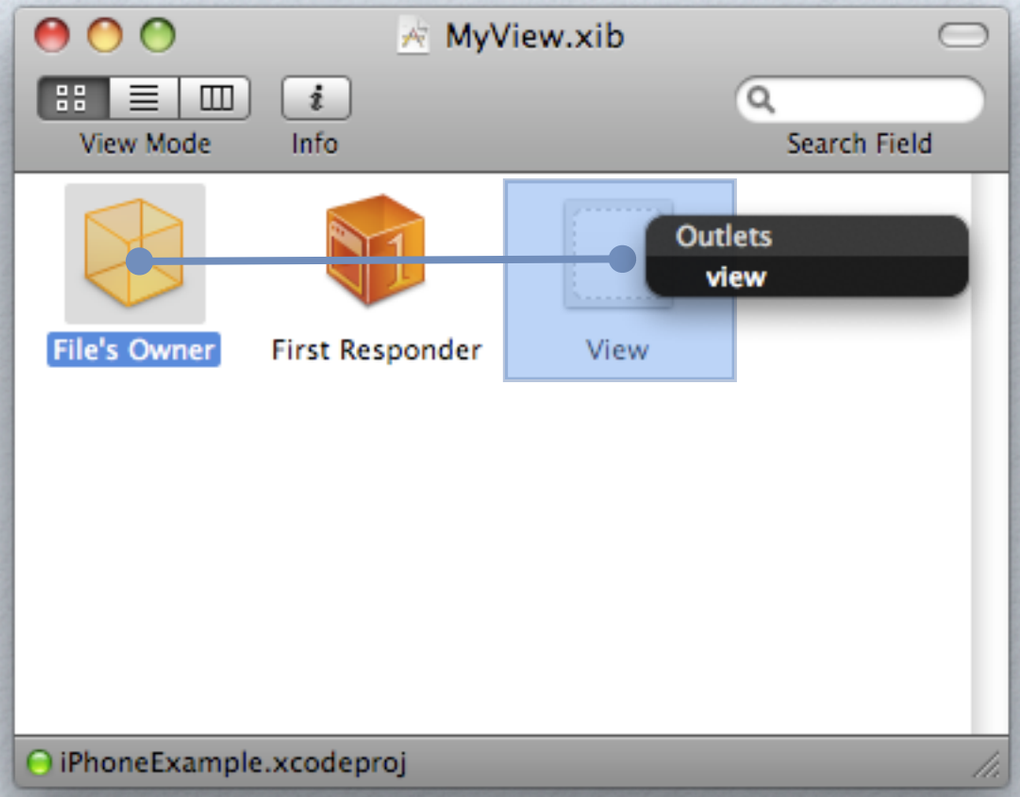
Subclassing UIViewController

Create an *init* method, because it'll make life easier.

```
-(id)init {
    return [self initWithNibName:@“MyView” bundle:nil];
}
```

But still use the *initWithNibName:bundle:* method in your subclass rather than calling super!

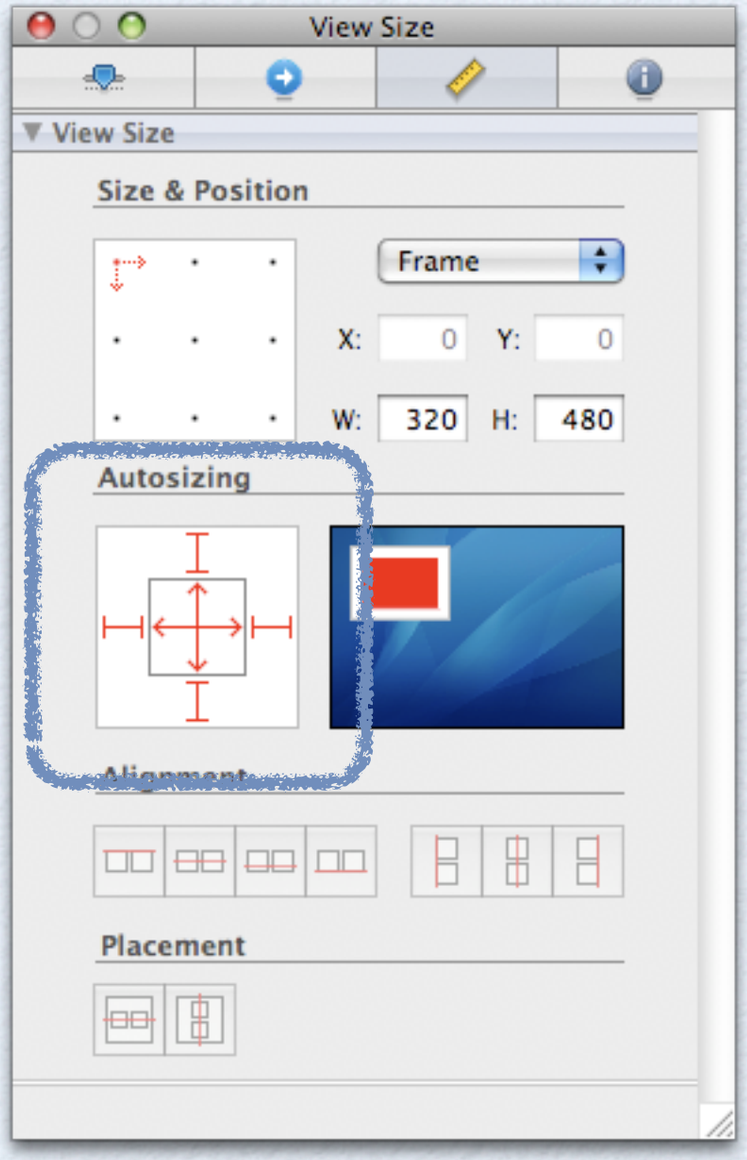
A View XIB for view controllers



Connecting the view controller's view property to the UIView in Interface Builder.

A View XIB for view controllers

Setting the view's autosizing property to flexible width and height will allow use inside any view controller structure.



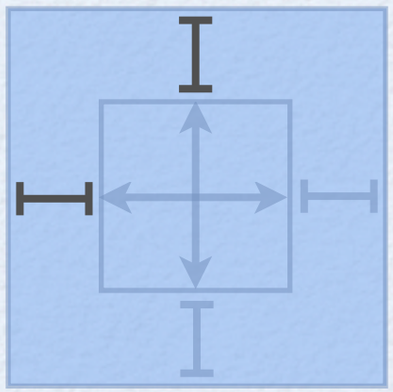
Autorotation

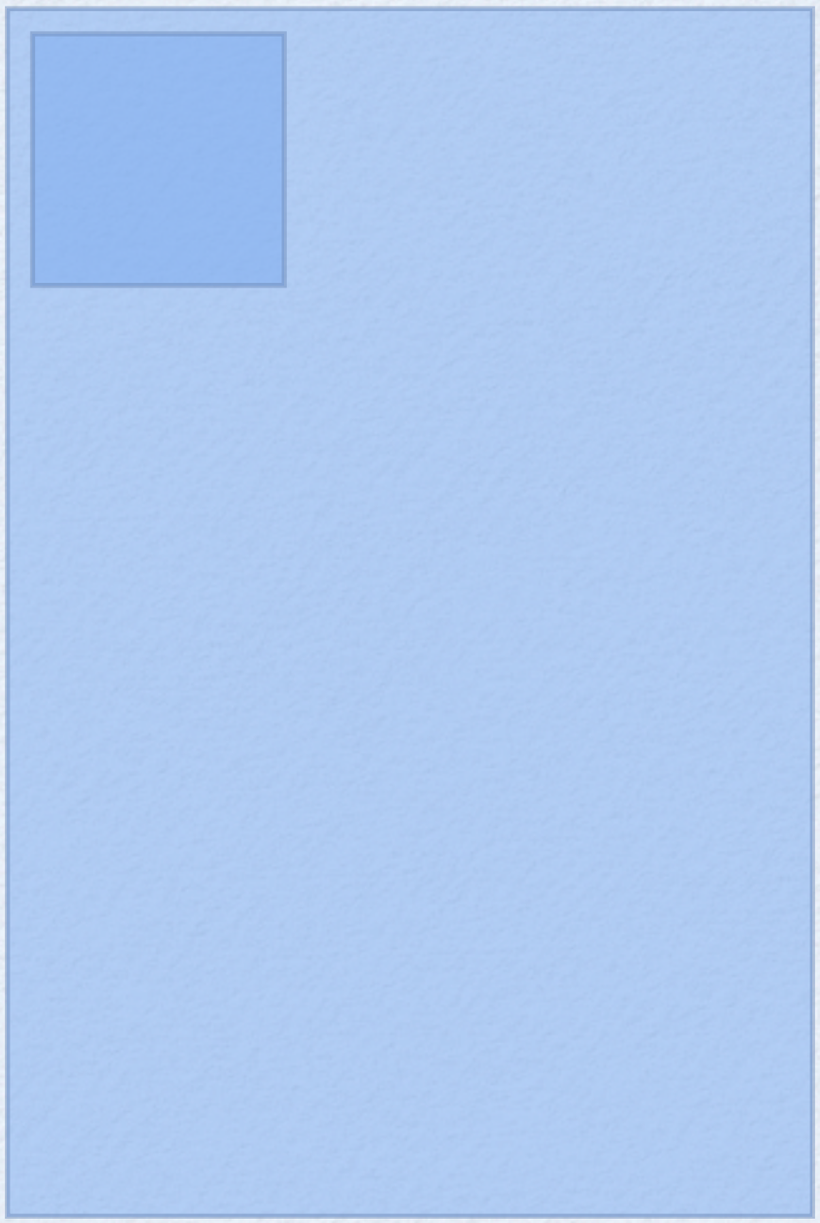
If you have set the view to flexible width and height, it will resize to the new dimensions.

```
- (BOOL)shouldAutorotateToInterfaceOrientation:
(UIInterfaceOrientation)interfaceOrientation {
    return YES;
}
```

Giving subviews correct autoresizingMask properties will allow you to go landscape automatically.

Autorotation





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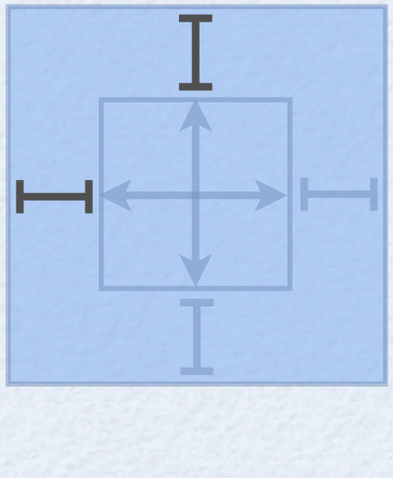

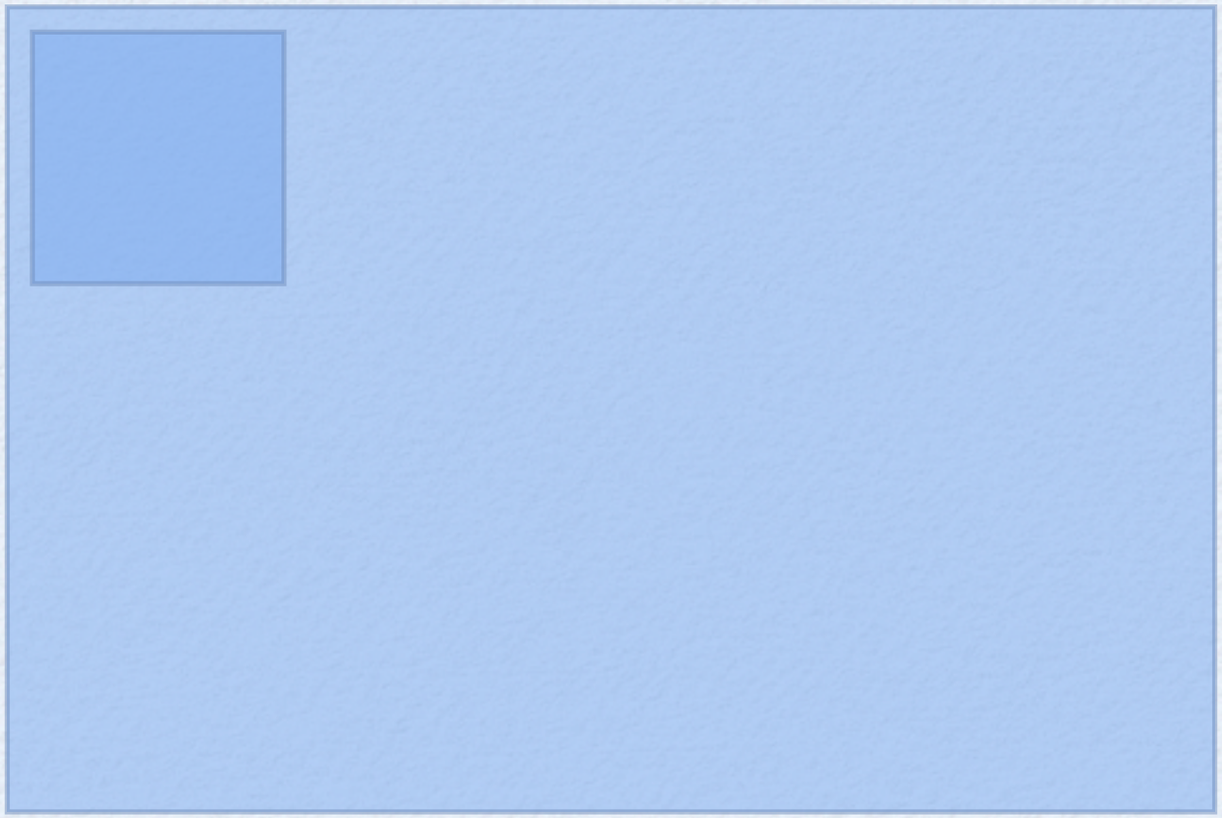

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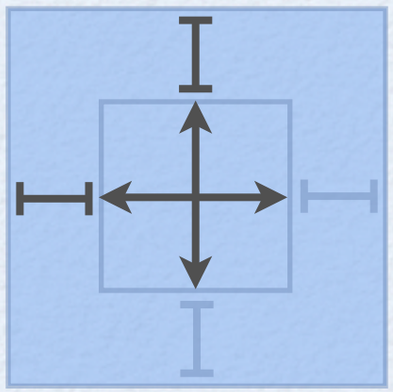

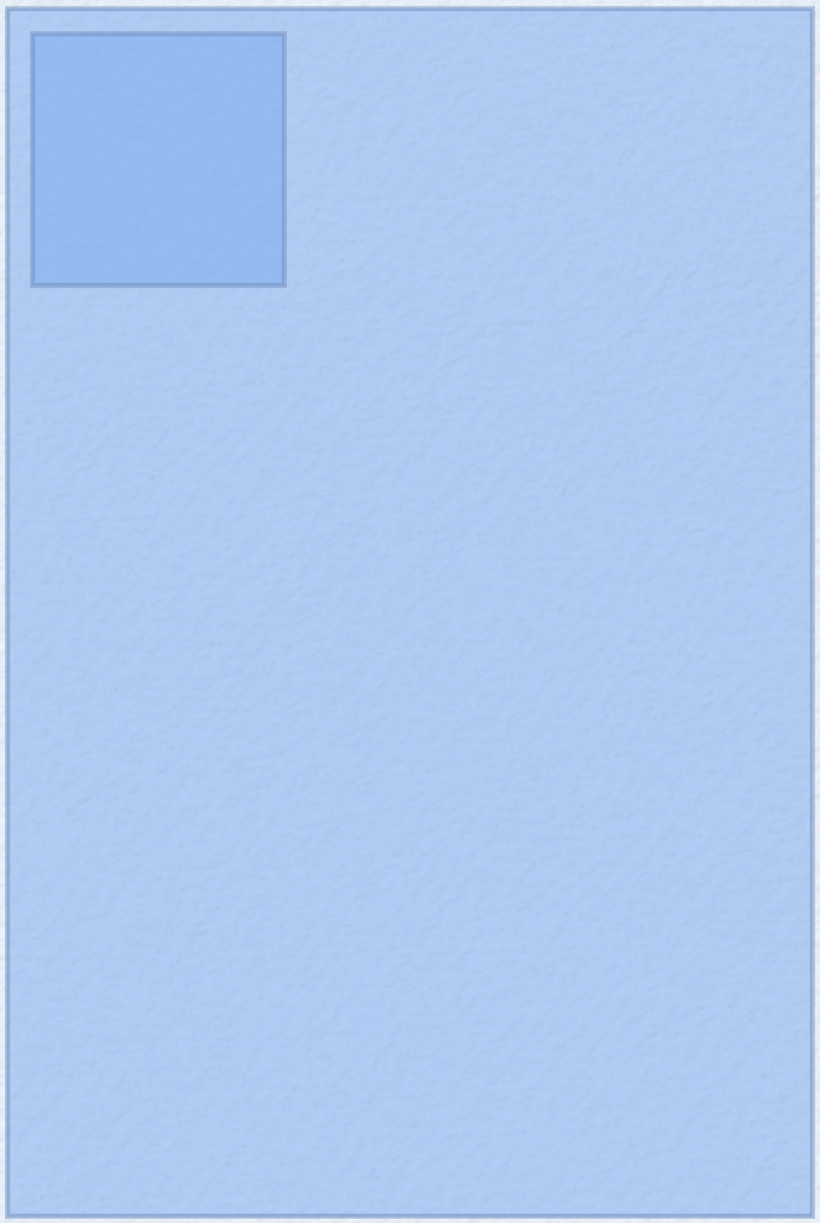

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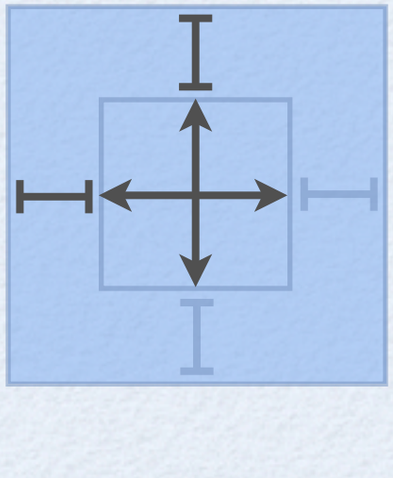

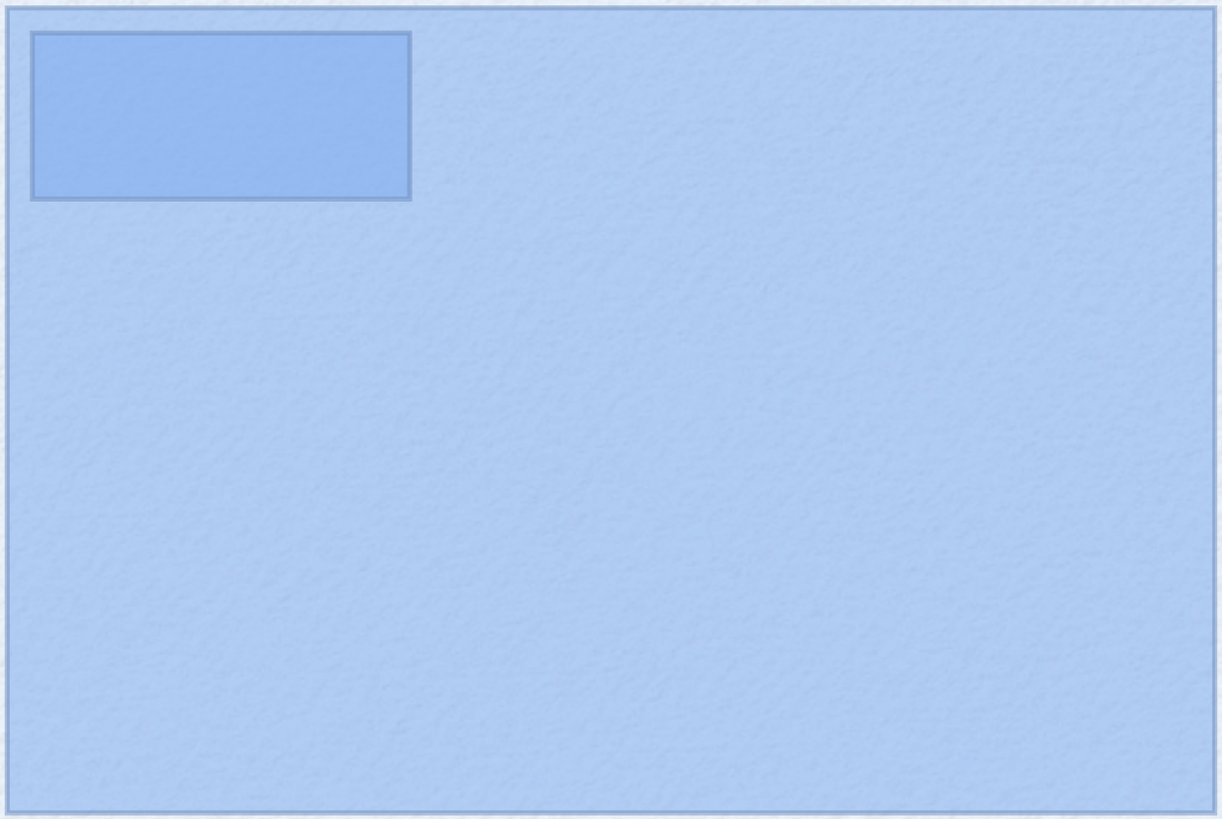

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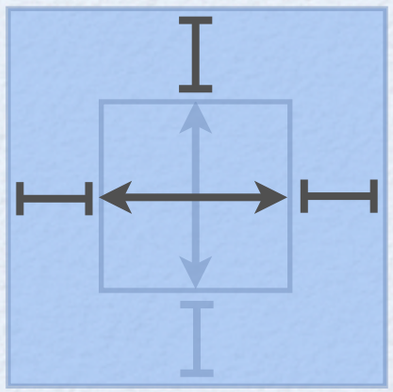

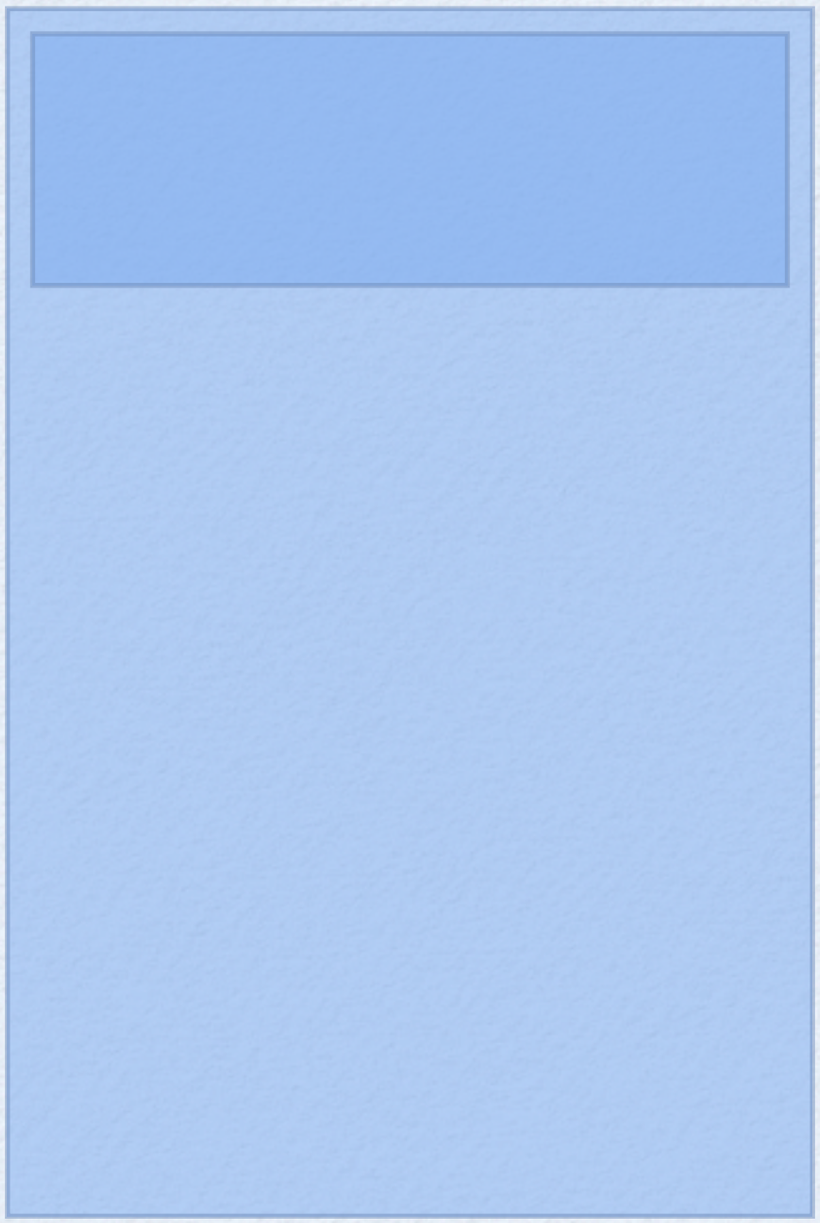

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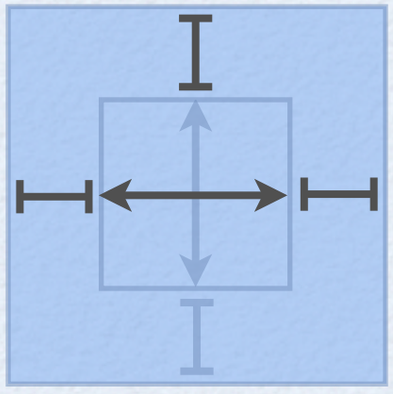

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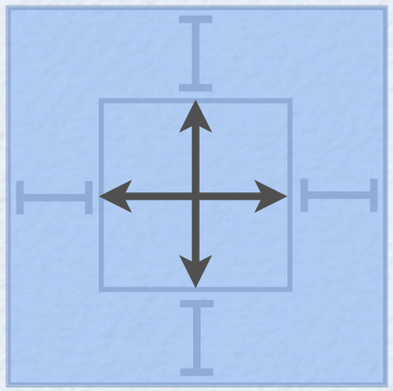

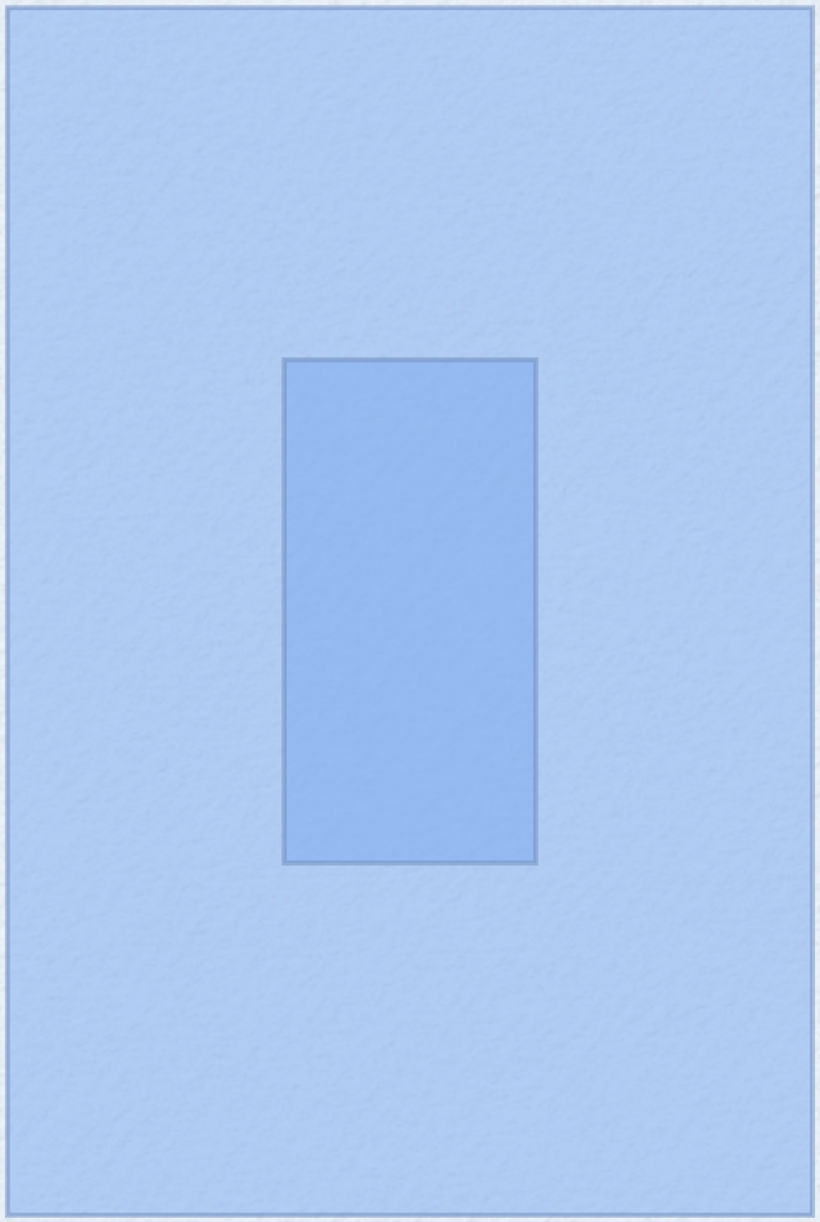

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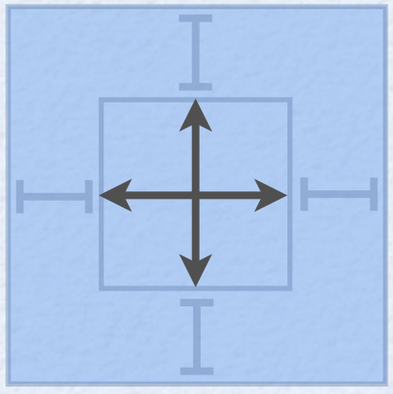
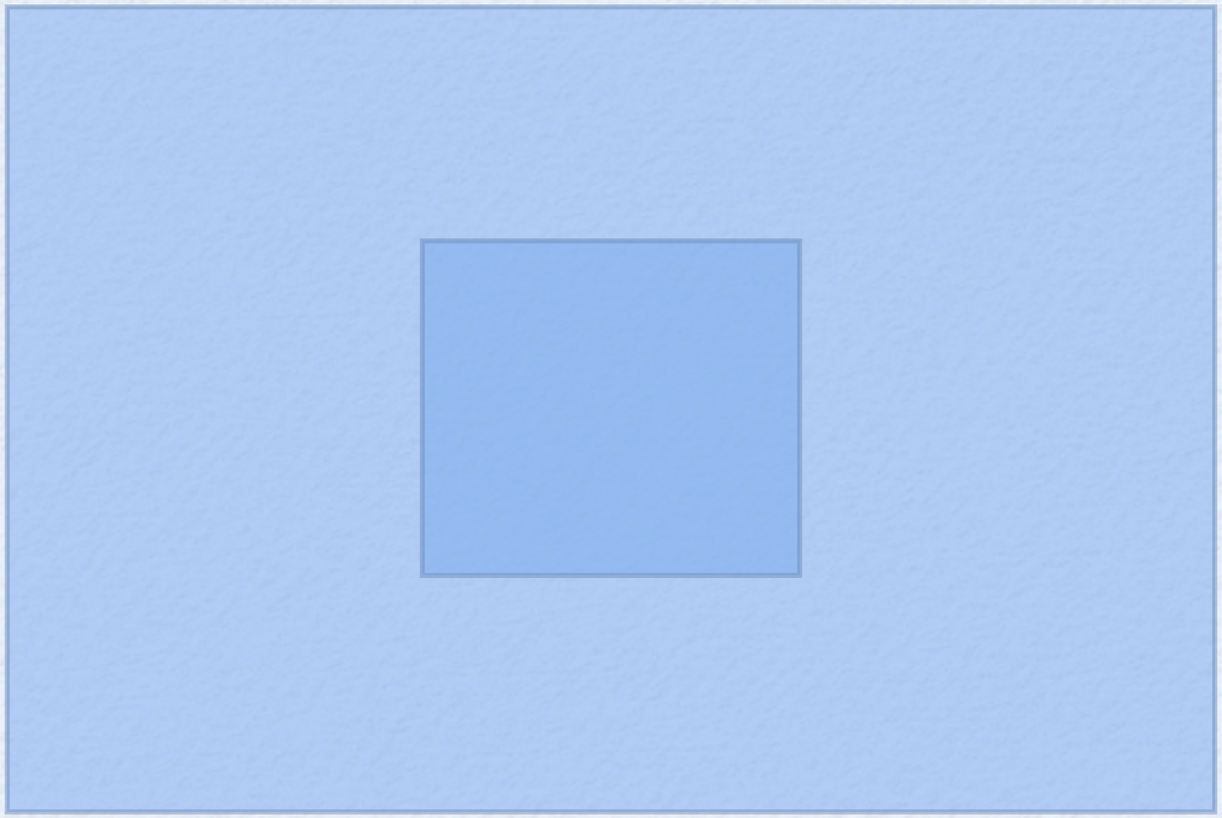


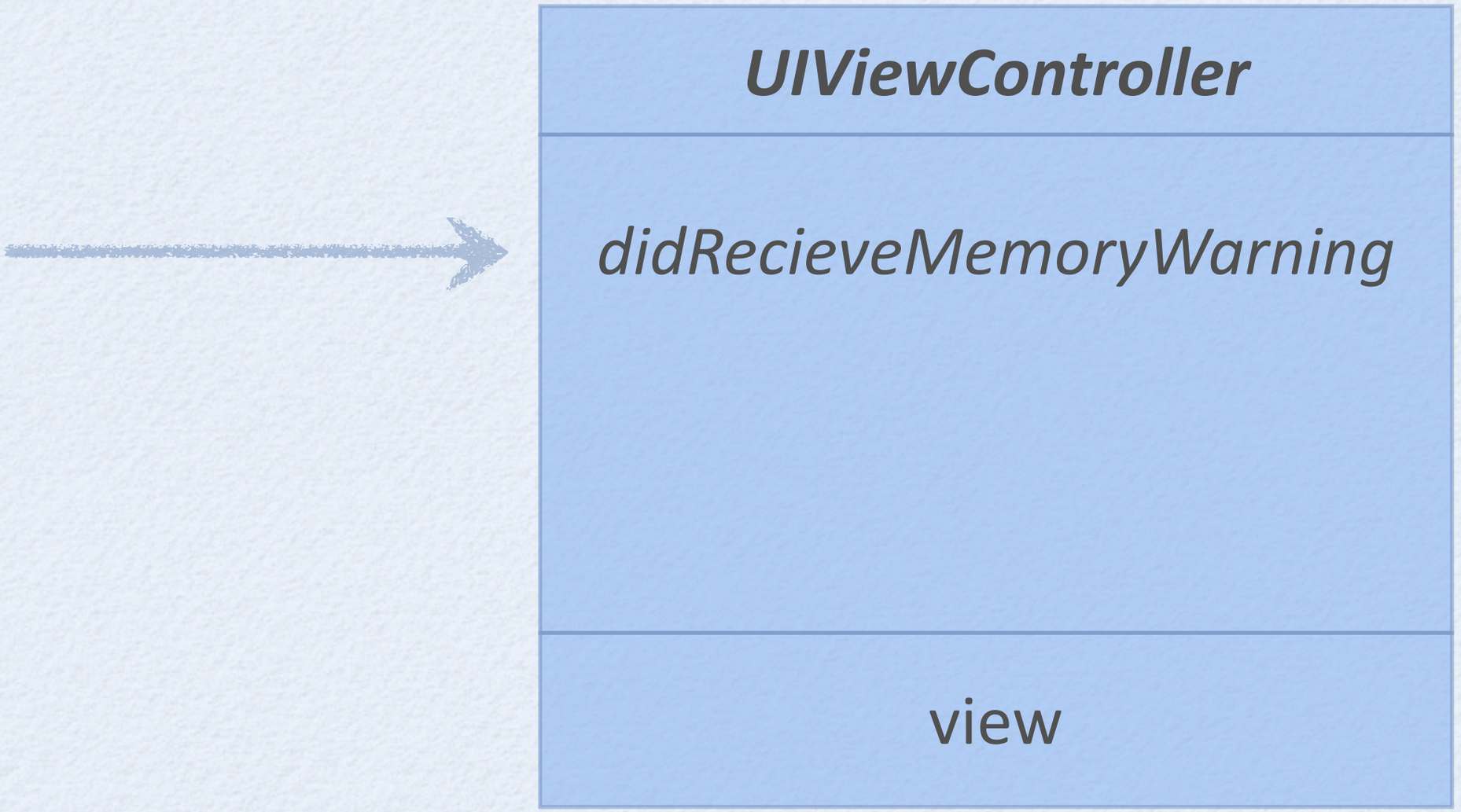


Creating IBOutlets

The nib loading mechanism uses accessors, so you should declare outlets in property delcarations:

```
@interface MyViewController : UIViewController {

    UIView *subView;

}

@property (nonatomic, retain) IBOutlet UIView *aSubview;

@end
```

Handling Memory Warnings



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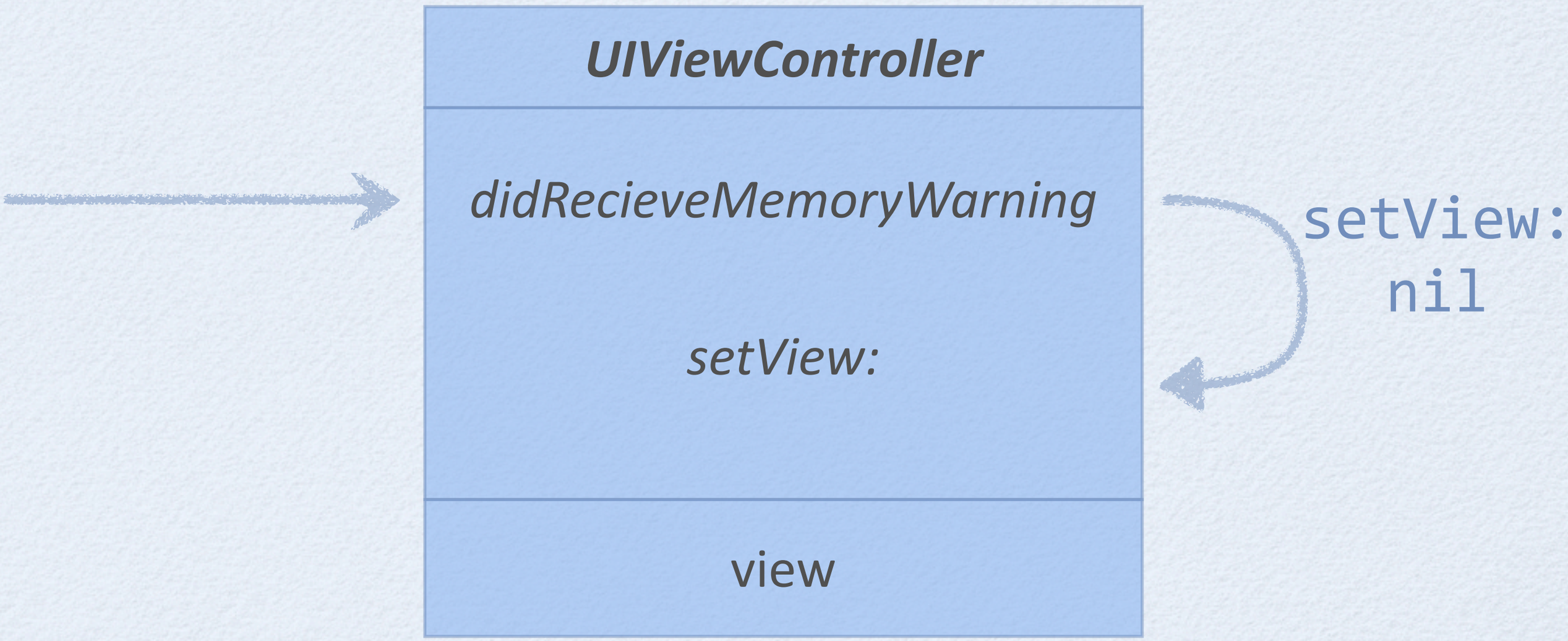

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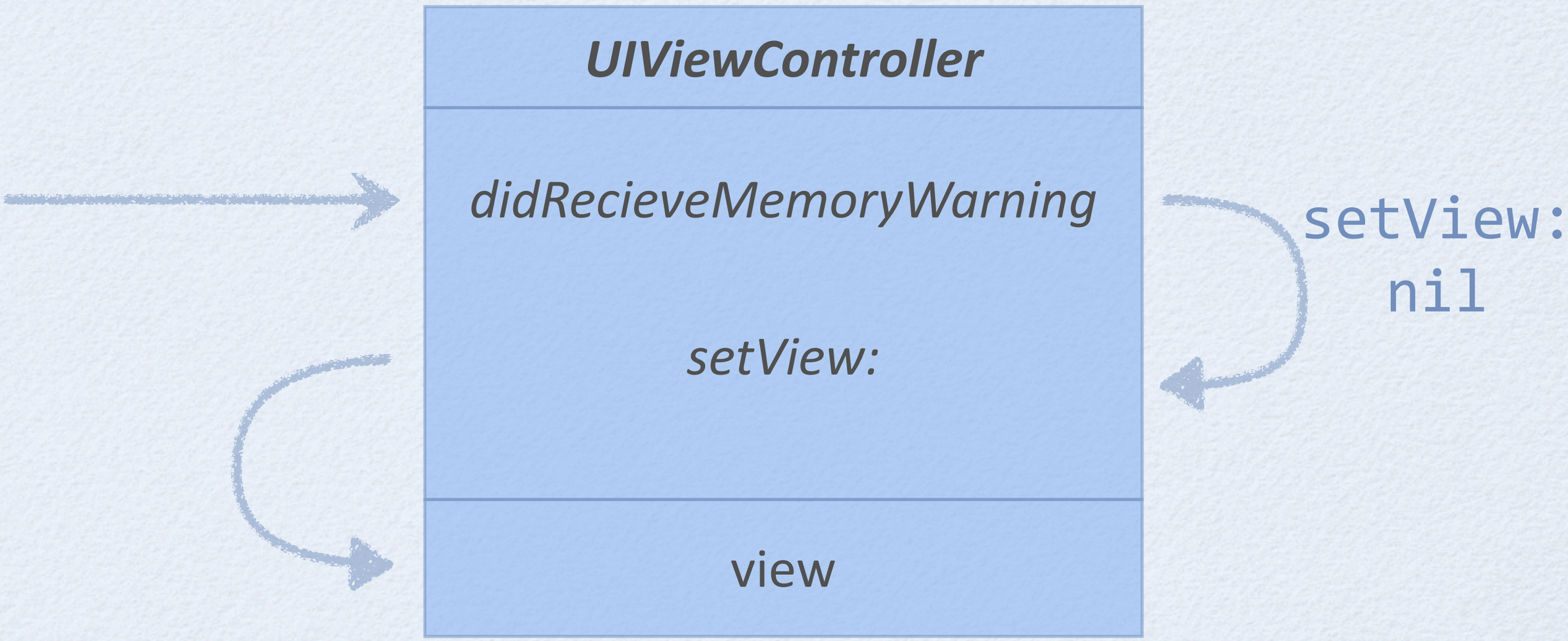

Handling Memory Warnings

MyViewController

view
UIView *aSubview;

UIImage *image1; UIButton *button1; UILabel *label1; UIView *subview;
UIImage *image2; UIButton *button2; UILabel *label2; DTGridView *grid;
UIImage *image3; UIImage *button3; UILabel *label3; UITableView *table;
UISlider *slider; UIWebView *webView; UISegmentedControl *segControl;

Handling Memory Warnings

MyViewController

didRecieveMemoryWarning

view
UIView *aSubview;

UIImage *image1; UIButton *button1; UILabel *label1; UIView *subview;
UIImage *image2; UIButton *button2; UILabel *label2; DTGridView *grid;
UIImage *image3; UIImage *button3; UILabel *label3; UITableView *table;
UISlider *slider; UIWebView *webView; UISegmentedControl *segControl;

Handling Memory Warnings

Handling Memory Warnings

Handling Memory Warnings

```
- (void)setView:(UIView *)aView {
    if (!aView)
        self.someSubview = nil;
    [super setView:aView];
}

- (void)dealloc {
    [someSubview release];
    someSubview = nil;
}
```

Thank You

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