

# UI Scroll View - Panning an Image

Tuesday, May 27, 2014 8:34 PM

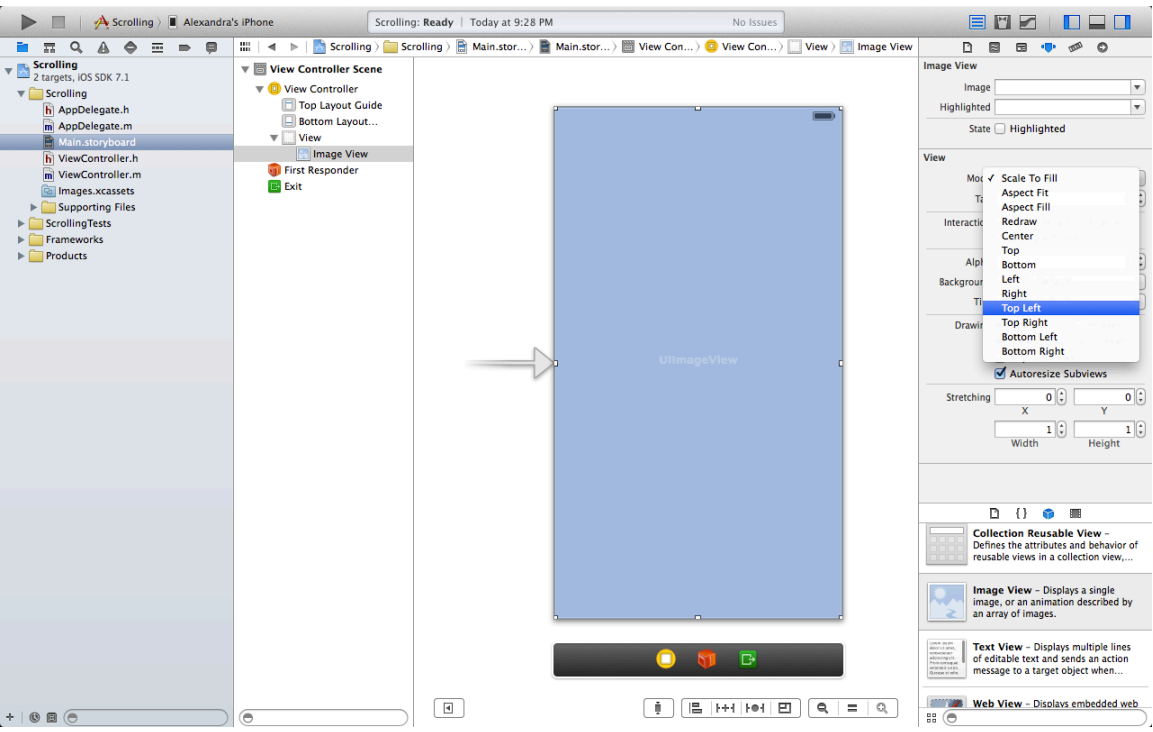
UIScrollView is mainly used to implement the scrolling and zooming functions in Objective C. It is a useful way to display objects that you want to show but are larger than the screen.

## Simple way to pan around a large image:

To start, save your image in Resources/Supporting Files folder of your Xcode Project

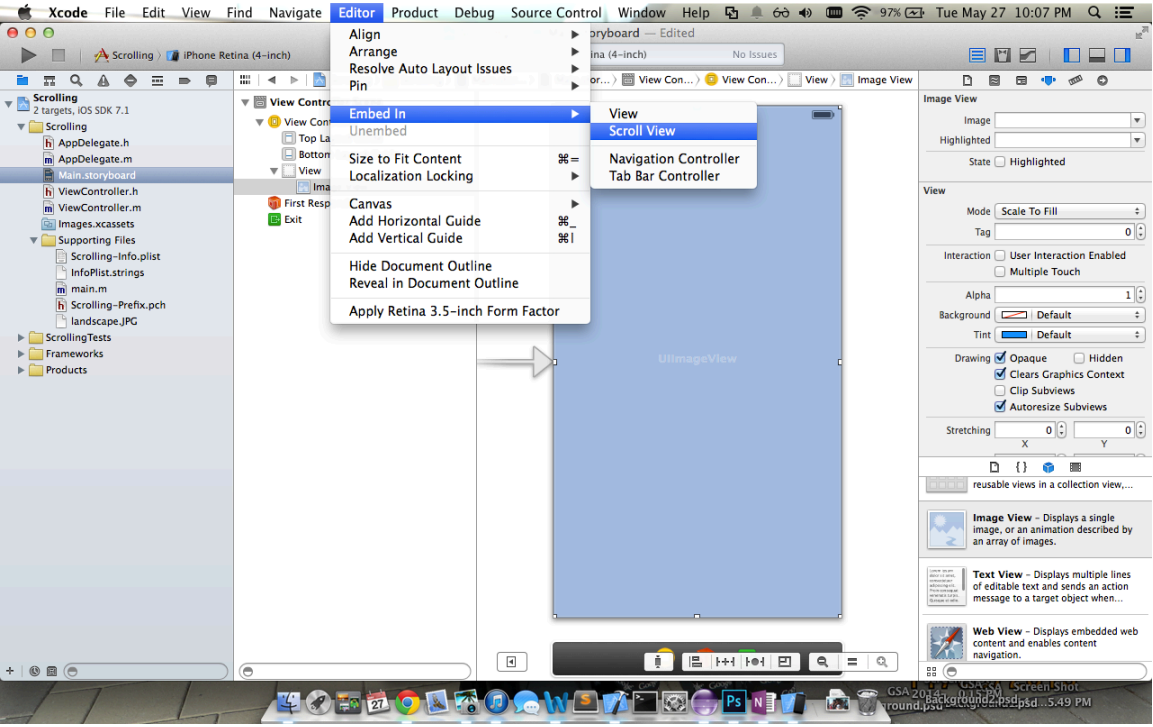
## Storyboarding

In the tool bar on the right scroll down the objects and you will see the UIImageView icon. Drag it onto the view controller. Also, set the view mode in the Image View to the Top Left.

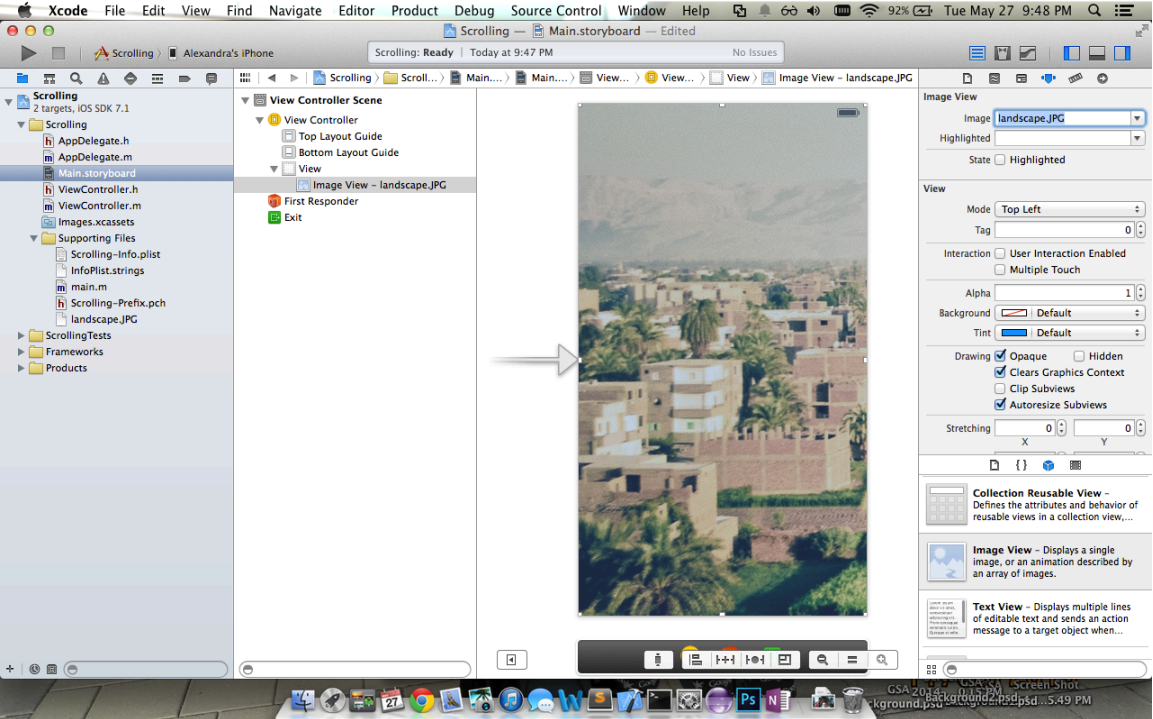


**Image View** – Displays a single image, or an animation described by an array of images.

After adding the UIImageView to your storyboard and embed the picture inside it by using Editor in the toolbar as seen in the screenshot.



Add the image in using the attributes inspector.



## Programming

Call `@property (nonatomic, strong) IBOutlet UIScrollView *scrollView;` in your `ViewController.h` file and `@property (nonatomic, strong) UIImageView *imageView;` in your `ViewController.m` file.

To add in the UIScrollView, you can create a frame using CGRect. You can frame it to be the size of an iPhone 4/4S (320 by 480) or iPhone 5 ( 320 by 568).

Declare the variables for the UIImage, UIImageView and the UIScrollView in the `-(void)viewDidLoad` method.

```
UIImage *bigImage = [UIImage imageNamed:@"landscape.jpg"];
UIImageView *imageView = [[UIImageView alloc] initWithImage:bigImage];
UIScrollView *scrollView = [[UIScrollView alloc] initWithFrame:scrollViewFrame];

//Implementing a single subview that scrolls/pans within the view
//choose the size of the subview with CGRect: 320 by 480 is the size of iPhone 4
CGRect scrollViewFrame = CGRectMake(0, 20, 320, 480);

//declaring the variables of the large image, the view to place it in and the scrollView (with respect to the set frame above)
UIImage *bigImage = [UIImage imageNamed:@"landscape.jpg"];
UIImageView *imageView = [[UIImageView alloc] initWithImage:bigImage];
UIScrollView *scrollView = [[UIScrollView alloc] initWithFrame:scrollViewFrame];

//adding a subview in order to pan around the image
[scrollView addSubview:imageView];
scrollView.contentSize = imageView.frame.size;
[self.view addSubview:scrollView];

//could set the background color to black if don't want the image behind the view
[scrollView setBackgroundColor:[UIColor blackColor]];
```

To zoom in and out, add this method:

```
-(UIView *)viewForZoomingInScrollView:(UIScrollView *)scrollView
{
    return self.imageView;
}
```