

Animations

Two Systems

- Core Animation
- UIView Animations

In some UIViewController...

```
// viewDidLoad
```

```
self.logoImageView.alpha = 0.0
```

```
// viewWillAppear:
```

```
UIView.animateWithDuration(2.0, animations: {  
    self.logoImageView.alpha = 1.0  
})
```

Things to animate

- alpha
- constraint constants
- transforms (scale, 3D)
- background colors

Controlling an Animation

```
class func animateWithDuration(_ duration: NSTimeInterval,  
                             delay delay: NSTimeInterval,  
                             options options: UIViewAnimationOptions,  
                             animations animations: () -> Void,  
                             completion completion: ((Bool) -> Void)?)
```

UIViewAnimationOptions

```
enum {  
    . . .  
    UIViewAnimationOptionCurveEaseInOut,  
    UIViewAnimationOptionCurveEaseIn,  
    UIViewAnimationOptionCurveEaseOut,  
    UIViewAnimationOptionCurveLinear,  
    . . .  
};  
typedef NSUInteger UIViewAnimationOptions;
```

With "Spring"

```
class func animateWithDuration(_ duration: NSTimeInterval,  
                             delay delay: NSTimeInterval,  
                             usingSpringWithDamping dampingRatio: CGFloat,  
                             initialSpringVelocity velocity: CGFloat,  
                             options options: UIViewAnimationOptions,  
                             animations animations: () -> Void,  
                             completion completion: ((Bool) -> Void)?)
```

Demos