

Get Moving With Core Animation

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Demos

- ✦ Implicit Animations
- ✦ UIKit Animations
- ✦ CABasicAnimation
- ✦ CAKeyframeAnimation
- ✦ 3D Perspective and transforms.
- ✦ CAAnimationGroup
- ✦ CATransitions
- ✦ Video in a CALayer
- ✦ User Interface using CALayers

Animation is **Pervasive**

- ✦ Animation comes “for free”.
- ✦ UITableViewController (11 methods):
 - ✦ `scrollToRowAtIndexPath:atScrollPosition:animated:`
 - ✦ `insertSections:withRowAnimation:`
 - ✦ ...
- ✦ UINavigationController (10 methods)
- ✦ On and on forever.

Implicit Animation

- ✦ Every view has a **CALayer**. `self.layer`
- ✦ Layers have animatable properties like:
 - ✦ position, color, bounds, opacity, corners, borders, etc.
- ✦ Property changes animate by **default**. They are grouped inside an implicit **CATransaction**
- ✦ Developer expresses **intent**, no run loops, timers, interpolation, buffering, etc.

UIKit Animation

- ✦ UIKit can also do animations.
- ✦ Great for cool UI layouts with very minimal code.

CABasicAnimation

- ✦ Slightly more advanced than implicit or UIKit animations
- ✦ Can have repeat count and duration.
- ✦ Animate based on a key path, like
@”transform.rotation.x”

CAKeyframeAnimation

- ✦ Specify a series of values or a path.
- ✦ any property.

3D Transforms and Perspective

- ✦ Core animation is a 2.5D system. Layers are flat, but can be rotated in 3D space.
- ✦ Perspective transforms give a real 3D look.

UIAnimationGroup

- ✦ Animations can be combined and applied together

CATransition

- ✦ Very easy to make cool transitions between layers.
- ✦ Simply add a transition and then set layer contents.

AVPlayer and AVPlayerLayer

- ✦ Movies can be presented in layers that can be animated.

Building UI using Layers.

- ✦ Finally, great UI can be built with Core Animation layers
- ✦ Build your custom controls out of CALayers!
- ✦ Demos
 - ✦ Magnifier: nested CALayers
 - ✦ Google Books

Get My Code

- ✦ Code is up on GitHub: <https://github.com/PaulMaxime/CADemo>