GreenSock Cheat Sheet

GreenSock
Engaging the Internet

TweenLite - TweenMax - TimelineLite - TimelineMax

TweenLite

```
// Create a variable
var $box = $('#box');
```

```
// Create a tween
var tween = TweenLite.to($box, 2, {
    x: 100,
    ease: Power1.easeInOut,
    delay: 2,
    onComplete: myFunction,
    onCompleteParams: [element, 'param2']
});
```

```
// Default easing functions
ease: Power0.easeNone //no easing = Linear
ease: Power1, Power2, Power3, Power4, Back
      Bounce, Circ, Elastic, Expo, Sine
    .easeIn .easeOut .easeInOut
ease: RoughEase, SlowMo, SteppedEase
    .ease.config()
// http://greensock.com/ease-visualizer
```

```
paused: true/false, // Pause Tween
delay: 2, // Amount of delay in seconds
immediateRender: true/false, // Prevent
    immediate rendering when using set()
    or from()-based methods (eg. fromTo)
```

```
// Callback functions
onComplete: // When tween has completed
onStart: // When tween begins
onUpdate: // On every frame of the tween
```

```
// From Tween          // FromTo Tween
TweenLite.from(        TweenLite.fromTo(
    element,               element,
    duration,              duration,
    {fromVars}             {fromVars},
);                         {toVars}
                       );
```

TimelineLite

```
// Create a timeline
var tl = new TimelineLite();
```

```
// Sequence multiple tweens
tl.to($box, 1, {x:50,y:0})
  .to($box, 1, {x:50,y:50})
  .to($box, 1, {x:-50,y:50})
  .to($box, 1, {x:-50,y:0});
```

```
// Add tween 0.7 seconds into the timeline
tl.to($box, 1, {scale: 0.5}, 0.7);
```

```
// Overlap tween with previous by 0.7 sec
tl.to($box, 1, {scale: 0.5}, '-=0.7');
```

```
// Offset/delay tween by 0.7 seconds
tl.to($box, 1, {scale: 0.5}, '+=0.7');
// Set tween without animating
tl.set($box, {scale: 0.5});
```

```
// Add Label 1 second into the timeline
tl.add('scaleBox', 1);
// Add tween to label position
tl.to($box, 1, {scale: 0.5}, 'scaleBox');
```

```
// Control timeline playback
tl.play(1.5); // Play from 1.5s
tl.play(-1); // Play 1s from end
tl.pause(); // Pause timeline
tl.resume(); // Continue playback
tl.seek(1.5); // Go to 1.5s or 'label'
tl.reverse(); // Reverse playback anytime
tl.timeScale(2); // Speed up timeline
tl.progress(0.5); // Skip to halfway
```

```
// staggerFrom, staggerTo, staggerFromTo
tl.staggerFrom($dots, 1, {
    autoAlpha: 0
}, 0.1); // Stagger tween start by 0.1
```

TimelineMax

```
// Create a timeline
var tl = new TimelineMax({options});
```

```
// TimelineMax Options
delay: 2, // Number of seconds before animation start
paused: true/false, // Default value is false
repeat: 2, // Number of repeats or -1 for infinite loop
repeatDelay: 1, // Number of seconds between repeats
yoyo: true/false, // If true > A-B-B-A, if false > A-B-A-B
smoothChildTiming: true/false, // Controls child tweens and timelines
useFrames: true/false, // Set timing based on frames (default seconds)
```

```
// Callback function
var tl = new TimelineMax({
    onStart: myFunc, // Run myFunc() when timeline starts
    onStartScope: Object, // What 'this' refers to inside of myFunc
    onStartParams: ['{self}', 'param2'] // {self} is timeline itself
});
```

```
// Available Callback functions
onStart, onStartScope, onStartParams, onComplete, onCompleteScope,
onCompleteParams, onUpdate, onUpdateScope, onUpdateParams,
onRepeat, onRepeatScope, onRepeatParams, onReverseComplete,
onReverseCompleteScope
```

TweenMax

```
// Inc. CSSPlugin, RoundPropsPlugin, BezierPlugin, AttrPlugin, EasePack,
    DirectionalRotationPlugin, TweenLite, TimelineLite, and TimelineMax
```

```
var tween = TweenMax.to($box, 1, {
    x: '-=50', // Tween to the current x value minus 50
    y: '+=50', // Tween to the current y value plus 50
    onComplete: myFunction,
    ease:Back.easeOut
});
tl.add(tween, 2); // Add tween 2 seconds into the timeline
```

```
Getting Started Guide: http://greensock.com/get-started-js
```