

# CMSI 371-01

## COMPUTER GRAPHICS

Spring 2013

### Assignment 0212

This assignment gives you an opportunity to dig into our homebrew keyframe/tweening library, and to expose you to a little animation programming.

#### Outcomes

This assignment will affect your proficiency measures for outcomes *1a*, *2a*, *3a*, and *4a–4f*.

#### Not for Submission

##### By February 5

Read Robert Penner's book chapter on motion, tweening, and easing.

#### For Submission

Modify the *animation-sprite* sample so that it features a better animated scene than the one that is already there—better sprites, better animation sequences, etc. Ideally, your scene works as a very brief animated short, with a quick and engaging little story and characters.

As technical support for your new and improved animated scene, enhance the *keyframe-tweener.js* animation module in the following ways. Of course, you should demonstrate these enhancements by using them in your own animated short (a.k.a. “eating your own dog food”):

- Add a background setting to `KeyframeTweener`. `background` should be a function that accepts a rendering context which, during animation, is called in order to provide a custom background for the scene.
- Change the `draw` property of the sprite objects so that, instead of a single function, it is an *array* of functions. This allows sprites to have “internal” animation—that is, a different `draw` function is called depending on the current frame.
- Add to `KeyframeTweener`'s library of easing functions by implementing two new ones. You may adapt one from Robert Penner's library (<http://www.robertpenner.com/easing>) or make one up on your own.

Commit and push your work to your GitHub repository under *homework/animation-sprite-2.0*.