

CMSI 371-01

COMPUTER GRAPHICS

Spring 2012

Assignment 0209

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 *1c*, *2a*, and *4a–4f*.

Not for Submission

By February 2

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

For Submission

Enhance our *keyframe-tweener.js* animation module in the following ways:

- 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.

Demonstrate your enhancements by modifying the demonstration program (*keyframe-tweening-demo.js*) so that it illustrates the new features that you have added. You don't have to get visually fancy — just show that your enhancements work as advertised.

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