CMSI 370
INTERACTION DESIGN
Fall 2006

Assignment 1212 (Juniors Only)

This is the only time that an assignment like this will be given — so consider yourselves special **>;-)** The seniors have been down this road before, so they'll get a "bye" on this one.

For Submission

Get your hands dirty with OpenGL — take the *spinningsquare.cpp* program and make the following changes to it:

1. Change the object being drawn. Go on, be creative, knock yourself out.
2. Change the way the object spins: speed, frame rate, direction. Get a good feel for how these changes affect the final result.
3. Change the title, initial size, and initial location of the window.

Commit your program under */homework/cmsi370/ spinningshape*, and tag it as *hw-1212*.

Extra Credit

A little advanced reading in OpenGL will allow you to make the following additional changes to the program. Do them all and get extra credit:

1. Change the axis of the object's rotation (the sample version rotates around the z axis).
2. Implement the following keyboard controls (and their corresponding functions):
    a. + and – increase and decrease the rate of rotation, respectively.
    b. [and] decrease and increase the frame rate of the animation.
    c. The *C* key changes the object's color (or color scheme, in case you figured out how to draw objects with multiple colors).
    d. The *S* key changes the object being drawn (i.e., rotate among 2 or more different objects as the user hits the *S* key).

Just include these features in */homework/cmsi370/ spinningshape* with the same tag; I'll look for them when I go through your code.