Assignment 0125

The goal of this assignment is to kickstart you into graphics programming — just get some code in there, build it, and run it. Don’t worry about understanding everything that the code is doing. Yet.

Not for Submission

1. Read Chapters 1 and 2 in Angel.
   a. Scan through the exercises at the end of Chapters 1 and 2; try to answer them in your head.
   b. Selected exercises are for submission; see below.
2. Get OpenGL and C++ running on whatever system you plan to use. Type in any or all of the sample code given out in class just to get the hang of entering code, building it, and running it.
3. Ditto for Java. Probably not as tough to setup, but type in the sample code and get it going.
4. Visit Nate Robins’s OpenGL tutorial site: http://www.xmission.com/~nate/tutors.html — download the tutorial source, build them, and run them. You’ll get practice with building OpenGL programs and get some good hands-on API training as well.

For Submission

Please submit all assignments on hardcopy; this is what I will count as proof-of-assignment. I know it seems anti-computer science to require this, but there are other forces at work here.

In addition, e-mail your code to #1 and #2 to me; this is so that we can put it up easily in class and show it off. Be prepared to talk through your work in class.

1. Take the spinningsquare.cpp sample program and modify it so it can be a “spinning anything” program: replace the square-drawing routine with a library of 5 different shapes, so that each new mouse click changes the shape that is drawn.
2. Reuse the Spark class from the Fireworks Java program so that it is used as a “cannonball” program instead.