CMSI 371
COMPUTER GRAPHICS
Spring 2007

Assignment 0208

Now that you have gotten a decent amount of OpenGL programming practice, it's time to flesh out your graphics research project for the semester.

Not for Submission

1. The concepts of 3D viewing, viewing volumes, "camera" positioning, and transformations can be found in greater detail in Angel Chapters 4 (Sections 4.7 and 4.1) and 5 (Sections 5.1–5.3, then 5.5). The presentation of the material is slightly different in the text, taking a bottom-up rather than top-down approach. We'll get to the lower-level fundamentals (i.e., the remainders of those chapters) eventually.

2. The red book covers these same topics from an API perspective in Chapter 3, while texture mapping is covered in detail in Chapter 9.

For Submission

Write your graphics project proposal as a plain text file and commit it to CVS under */projects/cmsi371* as a file named *readme.txt*. You guessed it — your graphics project proposal will eventually morph into a README file that potential users of the project will find useful when downloading, installing, or running your project for the first time. Include any details, features, or requirements that you have at this point in time; this will help in refining and finalizing your project. Tag this initial version as *hw-0208*.

Over the next two weeks, we'll work toward a final version of your project proposal, editing your *readme.txt* file as we go.

Extra Credit

This is a bit of a side trip, but if you're interested, you'll learn a little bit about JOGL and 3D programming in Java.

A few years ago, an individual studies student of mine implemented some advanced 3D graphics demos in JOGL. Information about these demos is available at this URL:

http://dguzzocomputergraphics.blogspot.com

However, since that time, the JOGL API has changed to the point that the original source code will no longer compile under the latest version of JOGL. You will get an extra assignment credit if you download this code, edit it for compatibility with the latest version of JOGL, and commit a patch to this code to CVS using *unified diff* format.

Commit the patch file under */homework/cmsi371/jogl-demos-patch* and tag it as *hw-0206*.