Assignment 1028

OK, time to roll up our sleeves on those projects. This assignment hopes to bring you to some relatively satisfying milestone in your project’s development.

Not for Submission

1. Read Chapter 4 in Angel, and if you need more background, consult Appendices B and C.

2. These readings will depend on specific needs that you might encounter while working on your project. Read as needed (or desired):
   a. For textbook examples on object modeling: Chapter 9 in Angel.
   b. For modeling using curves and surfaces: Chapter 10 in Angel.
   c. For deeper OpenGL drawing details: Chapters 2-3 in the red book.
   d. To improve performance with display lists: Chapter 7 in the red book.

3. To learn about the more modeling-oriented aspects of C++ (classes, standard C++-specific libraries), try the following:
   a. Dr. Toal’s Introduction to C++:
   b. You can also go straight to the horse’s mouth, Bjarne Stroustrup:
   c. For step-by-step resources, pick a Google result from searching “object-oriented c++ tutorial.”

For Submission

Continue committing your work via CVS. When I will look at your code I will look at what is committed as of October 28. Only (1) is truly required; go to > (2) only if you have completed (1) or you’ve hit a point where you need to iterate across MVC in order to make progress. Note that even if you do work on the view and controller, I will still focus on how you have designed your model.

1. Build the core data model component of your project.
   a. Define and implement any model classes or algorithms required by your project. If you separate things right, you will not need any OpenGL headers in any of this code.
   b. Highly recommended: a non-graphics test suite that makes sure that your model works properly. Unfortunately it’s hard to be more specific without talking going into detail with your respective projects, so if you’re wondering about how to do these unit tests just talk to me individually.

2. After the core model is done, work on the 3D object model, using an appropriate combination of the techniques discussed in class as well as your own.

3. If all this is done in good time before the 28th, start on the view and controller. Create initial versions of your display function and implement an initial set of rudimentary controls.

4. But, first and foremost, get the model part (1) done first.