

CMSI 371

COMPUTER GRAPHICS

Spring 2009

Assignment 0217

As pre-announced, this assignment starts the process of figuring out your graphics project, and includes a brief side trip to Java for some rudimentary image processing. Also included is reading to fill in details from what has been covered in class is also included.

Not for Submission

By February 10

1. Get the “Three Ideas and a README” part done, so that you can focus on “Poor Person’s Image Processing” after that.

By February 12

2. Get *some* coding done on “Poor Person’s Image Processing,” so that you can bring questions up during the February 12 class.

By February 17

3. Read Chapters 4, 8, and 9 in the red book — Chapter 4 talks about color representation in OpenGL, while Chapters 8 and 9, while not directly addressed in class, carry on the theme of “things you can do now that you understand how graphics relates to memory.”
4. In a similar vein, Section 2.5 in the Angel book talks about color representation, while Section 3.13 and Chapter 8 tackle topics for which low-level graphics representation is a prerequisite.
5. If you’re interested in additional GLSL reading, you’ll find it in Chapter 9 of the Angel book.

For Submission

As it turns out, this is a two-parter; note the recommended schedule to the left so that you don’t find yourself cramming close to the deadline.

Three Ideas and a README

Describe three ideas for your graphics project: what your “object” is, what users can do with it, and how you’d like to render it. Commit these ideas as a *README* file in your designated subdirectory within the shared *gallery* repository.

When your final project choice gets finalized, this file will evolve into a specific *README* for that project choice.

Poor Person’s Image Processing

Extend the *nanoshop* sample program that has been committed to your respective *homework/cmsi371* directories by implementing two (2) new color changers for it. Ideas include, but are not restricted to: brightness changer, contrast changer, inverter (i.e., creating a photo negative), and a tinter/blender. Commit your new color changers.