CMSI 371-01
COMPUTER GRAPHICS
Spring 2013

Assignment 0502

This assignment seeks to have you round out your initial graphics pipeline implementation. There's way more that you can do, of course, but this is what our allotted time allows.

Outcomes

This assignment will affect your proficiency measures for outcomes *2c*, *2d*, *3e*, and *4a–4f*.

Not for Submission

The lighting model that we have seen, plus a few more details, can be seen in greater detail in Angel Chapter 5 and the orange book Chapter 9.

For Submission

For the following tasks, keep building on *homework/ pipeline* on your `git` repository. If you haven't done so already, rename your files to better reflect what you have going now.

The New Normal

Add normal vectors to all of your shapes, particularly your sphere implementation. You may use any technique for generating them, including (correctly) using the functions given to you, writing code of your own, and manually specifying them (ouch, but if you insist on doing all that typing, then knock yourself out). You want to do this because you will then…

…Light It Up

Implement a lighting model for your scene. At a minimum, you should use the model shown in class and detailed in the reading. You can go beyond that if you wish (e.g., the UberLight model described in Chapter 12 of the orange book).

Commit and push your work to your `git` repository under *homework/pipeline*.

Show Up

The remaining material for the course can be found in Angel Chapter 6 Sections 6.3–6.7 (clipping) and Section 6.11 (hidden surface removal). To satisfy the outcome pertaining to these topics (*2d*), please attend class on Tuesday, April 30 and Thursday, May 2.