

CMSI 371

COMPUTER GRAPHICS

Spring 2008

Assignment 0313

Spring Break is the perfect time for hunkering down and working through an additional level of detail and planning for your graphics project; this assignment hopes to give it a little structure.

Not for Submission

Read Chapters 10 and 11 in Angel for additional information, details, and alternatives for 3D object/scene modeling.

For Submission

Flesh out your graphics project a little bit more by creating (and submitting) the following documents:

- A use case diagram for your project
- A structural diagram for the data needed by your project (i.e., its model), including the approach that you plan to use for the 3D or geometric information that will be displayed onscreen
- A “user control” diagram that specifies how each of your project’s use cases will be triggered (e.g., keypresses, mouse activities, etc.)

Note how these documents essentially define the *model* and *controller* of your graphics project; most of the remaining work focuses on the *view*, which makes sense since this is, after all, a computer graphics course.

You may use any tool that you find effective, including hand-drawn sketches — just make sure that your diagrams are clear and readable. Thus, submission for this assignment is on hardcopy.

If you do produce these diagrams electronically, by all means commit them to CVS, under `/projects/cmsi371/doc`.

For Submission (Extra Credit)

You will receive extra credit if you supplement your design documents with enough initial code to constitute a substantial beginning toward the implementation your model and controller.

Your code must show a clear correspondence to the plans laid out by your documents — this is no longer a throwaway prototype, but the foundation for your actual project. Focus on definitions and implementations of the data structures and event handlers specified by your use case, structural, and user control diagrams. View-related code (i.e., the `display()` function and all other directly-supporting code) may wait.

I reserve the right to determine, based on the functionality and degree of difficulty of the committed code, whether your submission constitutes a “substantial beginning” (and thus whether you do get the extra credit).

How to Turn it In

Commit your work to `/projects/cmsi371`, using whatever directory structure you feel is needed to expedite development.