CIS 425/625 Final Project Fall 2014 Baruch

Each of you will do an individual final project of your choice. They will involve some reading and research on your part, and a project in OpenGL. You may already have an idea of something you would like to do, or you may look through our textbook, other books, or on the web to get <u>ideas</u>.

Projects will be due Dec. 2, before the last class. I would like to use the last class (Wednesday, Dec. 3) and our scheduled final exam time (Friday, Dec. 12 12:45-2:45) for people to demonstrate their projects to the class.

In order to insure that project plans are appropriate, you will need to submit a one page proposal. This should not describe the coding, but rather, what your project will look like or accomplish. It should be well written in proper English. Feel free to have others proofread it to make sure it is clear. I will look at it, and together we will modify it if necessary.

Some ideas:

- A skater, a soccer player, a gymnast,... with moving parts. Perhaps "prerecorded" movement, or programmable movement. Other items around, supporting the scene.
- A scientific visualization package. It could be used to display data on 2-d or 3-d graphs, in a variety of formats. There should be a convenient interface for the user. One version of this might be able to display world data on a globe.
- A CAD package for a particular setting, such as architecture, robotics, or circuit design.
- An energy "SimCity" type of simulation. Windmills, solar, smoky power plants...
- A Mars rover, traveling rugged terrain. Or a terrain builder. Or a rover builder.
- A video game. Challenge yourself can you imagine no weapons, not blowing things to bits? Go beyond the video games you play they already exist!

By no means are you limited to these. If you want to discuss your ideas with each other and with me that is fine. I do not want an "exact" copy of something that is out there already - I want **you** to come up with the design as well as the code.

Don't aim for a marketable product (yet). Time is limited. (You will be showing your project to the class and discussing how you did what you did, so your secrecy will not be protected.) In addition to the overall project, your project will be graded in part on the variety of OpenGL ideas you incorporate. This includes topics we have covered, topics we will cover, and topics you learn on your own. Your project should be in 3D. For the proposal you should not discuss what OpenGL you will use, but it is something you will want to consider as you work on your project.

Please submit your proposals by uploading them via the link on the assignments page by Saturday, November 8. Call the file *yournetid*.proposal. They can be .doc's, .rtf's, .pdf's, or .ppt's. Then get going on the project!