Final Project Overview

The goal of the final project is to create a complex 3D scene that incorporates various techniques discussed in the class. The project should demonstrate your ability in developing geometry, transformations (model, view, and projection), materials, and lighting.

Key Components

A. Modeling
Create a rich scene that has multiple geometric objects.

B. Lighting and Shading
Features may include:

- Adding multiple light sources

- Applying multiple material types

- Implementing different shading or lighting models (e.g., a toon shader)
  Note: The normal matrix is the inverse transpose of the model–view matrix.

C. Animation and Interaction
Features may include:

- Animating the construction or assembly of the scene

- Moving light sources

- Allowing users to switch between different shader modes

- Implementing complex animations where objects move in different ways

*Do your best and submit any progress you make on your scene.

3. Submission Guidelines

- Proper code style and clear, appropriate commenting are required.
- Late assignments will not be accepted. Grades are due shortly after submission deadlines, so you **must** turn in your work on time.
- External sources or code used must be properly cited, both in the code and in the report.

Report

The report should be done in a word processor. Either a .doc, .docx, or .pdf file will be accepted.

1. Don't forget your name!

2. Provide an estimate of the total number of hours for the entire assignment

3. Write up your experience, including any problems you ran into.

4. Mention added features (lighting models, geometry, and transformations).

5. List any sources you used (cite code if needed).

6. Include clear directions for running and using your program, since I won't know which keys or controls you implemented for user interaction.

7. Provide snapshots. Name the images FirstLastFinalLabA.jpg, FirstLastFinalLabB.jpg, where First and Last are Your names. The snapshots should also be included in the report.

Submission All files (all source, your report, and your images) should be put into a single zip file and uploaded. I can handle, .zip, A zip file with your final source code, the report, and the images. The images need to be embedded in the report and as separate files in the zip file.