Title	Assignment 0.1
Duration	1 week
Instructor	Sakthivel Subbaian

Instructions

This assignment calls for you to setup soft-wares for OpenGL programming along with the following objectives. This should make you more familiar with the basic functionality of OpenGL and concepts in computer graphics.

Objectives

- To get familiar with the following concepts in OpenGL.
  - Initialization of a glut window
  - Using primitives
  - Use of colors
- Introduction to orthographic projections.
- Interaction with a GUI (GLUT).
- Transformations.
- Camera setup

Requirements

The user should be able to do the following.

- Draw 3D models in different display modes (points, wire-frame, shaded) on the drawing area or change the display mode using keyboard input.
- Display model in both views, perspective and orthographic views, or Change between them using keyboard inputs.
- Perform transformations, translation, scaling and rotation, or perform them one at a time by keyboard input.
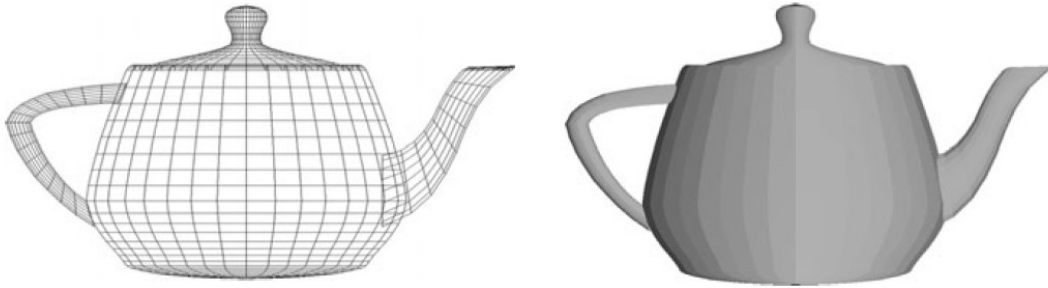- Move camera using keyboard input.

Any extension or alternation of the functionality is encouraged as long as it does not limit the usability or intention of the assignment.
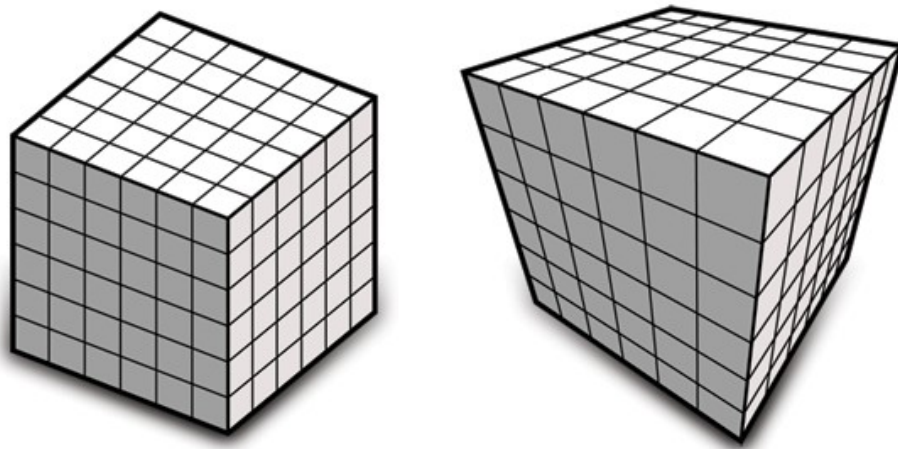
Resources

Use the following page for setting up the GLUT libraries.
ftp://www.cs.uregina.ca/pub/class/315/WWW/Lab1/GLUT/windows.html

Examples

Display mode examples;

Orthographic and Perspective projection of a cube looks like this, respectively.

Camera move; for example rotation.