THE GEORGE WASHINGTON UNIVERSITY
Department of Computer Science
CS 6554 - Computer Graphics II - Spring 2023

Assignment 1 Due: 2/9
Perspective Vector Display System

Description: You are to implement a system to read in a geometric data of a polygonal object and to display the object using perspective transformation. You need not write the clipping routine (assume that the object will always be in the viewing volume) unless you have already done this lab before (in which case, you should extend it to include clipping).

Input: a) Geometric data for a polygonal object (Some example files are in https://icg.gwu.edu/models-and-related-stuff). A good example is the house. The file format you should use is the ".d" file format described below.
b) Viewing specification

Output: Perspective view of the object displayed on the viewport with back faces removed.

Source code: Source code. It is important that the grader understand your code. Put enough comments to make it clear what you are doing.

Put on the Blackboard Forum:

a) Some images generated with your code.
b) A short description of your system

Put on Blackboard

a) The source code

Data format:

a) the word "data" followed by the number of points and the number of polygons
b) points given by: the x, y, z coordinates
c) polygons given by: number of points in the polygon followed by vertex number in clockwise order (when looking from outside the object). Some object definitions have counter-clockwise order.