

Project #1 (5-sided Tent Project) grading sheet. Spring 2022 (Revision 1).

Student name:

Grade date:

Student PID:

Grader:

1. Student should be logged in, with Visual Studio running, and ready to demo the program, including being able to recompile. Ask: Did they upload to gradescope? On time? Late?
2. Does the program show two 5-sided tents in the correct positions and orientations? (Exact positions and shapes may vary, but both should be visible at once. Do the rotation and wireframe commands still work (r, arrows, w)? [3 pt]
3. Are the shaded and flat surfaces rendered correctly? Are the colors similar to what was required? There should be no extra discontinuities in colors beyond those in the demo, but it is OK if the tent's side colors match the top colors. (Possibly discuss this.) [5 pt]
4. In wireframe mode: can the back faces be toggled with the "c" command? Are all faces correctly facing outward? (Use wireframe mode, and rotation, to view this. It can also often be seen in non-wireframe mode. Be sure to view from all sides. Discuss any problems found. [5 pt]
5. Examine the code: Does it use a single triangle strip for the sides? A triangle fan for the roof? Triangles for the base? Does it use the correct number of vertices for each `glDrawArrays` command? [5 pts] (*A few students may use only one or two arrays/VAOs/VBOs and use `glDrawElements(-,N,-)` with N not zero. Most students will use three arrays and three VAO/VBO pairs. Either is OK.*) Does it use `glVertexAttrib3f` to set the color for the base? [0pt, but if so +2 which can make up for other lost points if any.]
6. Explore whether there is any visible aliasing (surely) or z-fighting (perhaps). Discuss with the student. [0 points, but +2 pt for saving an image of it can make up for other lost points, if any.]
7. Ask the student to put a breakpoint to capture either "w" or "c" keystrokes. Ask them how to see variables' values (type the variable name in the Watch window). Let them single step and watch values change. Have them change the variable's value in the Watch window. [2 pt]
8. If any points are lost above, can the student immediately fix it in the code, or explain why it does not work and how to fix it? [up to +2 per item if appropriate]
9. Ask student: were there any particular difficulties or do they have questions? Discuss. Any other unusual features of the code? Ask: was the gradescope handed in on time? [0 pt]
10. Grade (Maximum is 20):

(Grader keeps this sheet for grade recording. Student may photograph if wants a copy. Grades subject to change after review by the Professor and TAs.)