

CSC 321: Project 2, Shapes grade sheet

Student name:

| Grade sheet Shapes | | | |
|---|---------|-------|----------|
| Criteria | Comment | Score | Possible |
| Functionality (52) | | | |
| <p>Proper tessellation: This means it looks like the shape it is supposed to look like, and the dimensions are correct. If they have extraneous triangles lying around, or not enough triangles, dock points. If you can see the wrong sides of the object, -2.</p> <p>Handles parameters: Changing parameters is possible, and works correctly. This section also includes degenerate cases. (i.e. $p1 \geq 3$ for a sphere) For example, if the number of triangles on the cap of the cyl is different from the number of strips along the side, dock points here. If $p1=5$, then there should be 5 squares on a side, not 4. And when you switch shapes, they should appear on the screen immediately, not after you rotate them.</p> <p>Smooth triangles (correct normals): The normals have to be completely correct. If the shape looks "inside out", that is a normals problem. Check their wireframe to make sure both caps of the cylinder are never showing at once. Turn up the tessellation, and rotate the cylinder about its long axis in solid mode- the shading should not change. This is an important test for the cone as well.</p> | | | |
| Cube tessellation: | | | 5 |
| Cube parameters: | | | 4 |
| Cube normals: | | | 4 |
| Cone tessellation: | | | 5 |
| Cone parameters: | | | 4 |
| Cone normals: | | | 4 |
| Sphere tessellation: Check their code and make sure they are not tesselating the entire sphere twice, which happens if you loop from 0 -> 2pi in both directions (-3) | | | 5 |
| Sphere parameters: | | | 4 |
| Sphere normals: | | | 4 |
| Cylinder tessellation: | | | 5 |
| Cylinder parameters: | | | 4 |
| Cylinder normals: | | | 4 |
| Stability (15) | | | |
| Doesn't crash | | | 5 |
| Memory leaks, statically allocating large chunk for data | | | 10 |
| Efficiency (21) | | | |
| Created class hierarchy for shapes | | | 10 |
| Maintains display list | | | 11 |
| Coding style (5) | | | |

| | | | |
|--|--|--|------|
| Uses integers for loop variables | | | 5 |
| Other | | | |
| Handin size was excessive (included .obj files, extra executables, etc.) | | | -5 |
| Needs non-trivial changes to compile on Law 113 machine (makefile doesn't work, entire source tree not handed in, etc) | | | -10 |
| Handin does not include up-to-date executable | | | -4 |
| Miscellaneous | | | |
| Readme (6) | | | |
| A description of any additional classes, methods, or files you have added. | | | 2 |
| Any known bugs. | | | 2 |
| A brief description of any extra credit. | | | 2 |
| Extra credit | | | |
| Special shape 1 | | | 5-10 |
| Special shape 2 | | | 5-10 |
| Better way of tessellating sphere | | | 5 |
| Triangle fans/strips | | | 5-10 |
| Total | | | 99 |