CMSI 371-01
COMPUTER GRAPHICS
Spring 2016

Assignment 0428a Feedback

Due to time constraints, this feedback is being kept brief. If you would like a longer discussion of your 3D scene, please contact me and we can find some time for a review.

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*Notes while running (high-priority notes are marked with ***):*

- Although not technically a "scene," the "lighting laboratory" that we've thrown together definitely hits all of the technical beats, except maybe the grouping function (present in the code but not used here).
- Some immediate visual notes: I'm not sure that the vertex normals toggle genuinely switches to face normals when it's off. It looks different, but not what I would expect with flat-face normals.
- The beveled cube appears to have some clockwise-listed triangles, most apparent when vertex normals is turned on. (which again leads me to believe that there is something amiss with the non-vertex normals)

Code review (refer to http://lmucs.github.io/hacking-guidelines/ for code-review abbreviations):

1. Not enough time to dig in, but I did enough to see that inverting the order of the vertices on some shapes *does not have an effect on the shading*. So there is definitely something up, because there *should* be an effect. Will have to look further when the pressure's off.
2. Ideally we should have the perspective matrix for projection; particularly helpful in understanding depth for shapes like the cube and beveled cube.
3. The child code remains in *shapes-old.js* so it is present but as we discussed is not used in this particular page due to design issues. Again when there is more time (and if you are interested) we can look at that more closely to see what kind of refactoring can get that code to a better place.

1b — **|** …Obligatory dock because the full-blown `Shape` class is dormant for now. Plus the possibility that the lighting issues are vertex- or normal-related.

1c — **|** …Ditto with grouping/children.

2a — **|** …Also not so much on the transforms…

2b — **|** …And the ortho projection is so sample code **:)**

2c — **|** …But at least lighting is not a zero, just needing a look at those dark triangles on some of the meshes (under certain conditions).

3a — **|** …Same with the dormant `Shape` but decent mesh-only collection and lighting issues.

3d — **+** …Good job on that second light source.

4a — **+** …Other outcomes notwithstanding, functionality is great here.

4b — **+**

4c — **+**

4d — **+**

4e — **+**

4f — **+**