

CMSI 371-01

COMPUTER GRAPHICS

Spring 2016

Assignment 0428b 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.

Outcome 2d is based on your presence at the April 29 class section on clipping and hidden surface removal, as documented by the picture(s) taken on that day.

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*Notes while running (high-priority notes are marked with ***)*: Please refer to 0428a feedback for this; both lighting and interaction were examined during the same runtime session.

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

1. Occasional “lastDownTarget is not defined” error is seen in the beginning. That’s just good bookkeeping—make sure to find a way to avoid those.
2. Nope, nope, at this stage you totally *don’t* compare to true! (lines 418–437, *my-scene.js*) Major rookie habit there; the pros will eat you alive if they catch you doing this. <http://lmucs.github.io/backing-guidelines/all/#all-bool>
3. Line 464: Scope that index variable.
4. Overall interaction code structure can use refactoring to decrease switches and conditionals. Typically a data-driven approach, where key actions are expressed in a collection that is looked up, is the way to go and makes it easy to add/remove keyboard handlers.
5. Lost opportunity here with involving the mouse. The sample code already showed how to read it; it would have been a matter of computing a new Q vertex instead of the rotation matrices.

1c — +

2a — | ...Basic setup fulfills the baseline requirement of the assignment, but lots of untapped potential now that the foundation is there.

2d — +

3a — +

3b — | ...More “so much potential” feedback.

3d — + ...But fortunately, all on the JavaScript side. Shaders wouldn’t need to change for this unless you are adding something beyond matrices or objects.

4a — | ...Although the “lastDownTarget is not defined” looks pretty harmless, all the better to avoid it. Errors reduce a user’s or fellow developer’s faith in your code’s stability.

4b — / ...Will hit this one mainly for the boolean comparisons. But also there is the general structure and the need to eventually refactor for easy expansion.

4c — | ...Doubling up the importance of keeping your code from getting too cluttered with comments.

4d — +

4e — +

4f — +