## CMSI 371-01

## COMPUTER GRAPHICS

Spring 2013

## **Assignment 0404 Feedback**

The "cuffs" are off outcomes 2a, 2b, and 3d with this assignment, so I have started giving +'s for those outcomes if the submitted work calls for it. 1c and 3a await full scene interaction before they can max out. 2c (not evaluated here) and 3e need proficiency in lighting and fragment shaders in order to go +.

## Chase Blokker

- 1c No instance transform code is seen here, but the addition of projection and the use of your own rotation matrix will count as a partial forward step in rendering a scene. (/)
- 2a No instance transform code is seen here as mentioned, but you got a projection matrix going. (/)
- 2b You have successfully added orthographic projection to your scene. To clarify (based on your commit message), orthographic projection does *not* add perspective. Its main function is to expand the viewing volume behind the 2×2×2 cube that we've been using so far. You thought you saw perspective because you were actually passing your projection matrix in *row-major* order, whereas WebGL wants it in *column-major* order. You were thus using a transposed orthographic projection matrix that put some apparent perspective in there. I fixed it for you (including your conversion function), so take a look and compare differences. (|)
- 3a You have not gone beyond the rotation already given by the sample code. You did replace that rotation with the one in your matrix library anyway, but you also need to delete the old one from the sample code. That's some nice cleanup when you get to it:) (|)
- 3d No instance transform-related changes seen, but you did swap out your rotation matrix and added projection, so that is a forward step in using your library if incomplete. (/)
- 3e No instance transform code is seen in your vertex shader, but you did add projection, so that avoids the  $\mathbf{O}$  (as it did in a bunch of other outcomes for this assignment) but still needs more work. (/)
- 4a Your projection code had the right idea with a few gotchas; see my inline comments for more. (1)
- 4b Your code is generally well-separated, short of needing deletion of old code in order to emphasize that you have indeed ported things to your library. (|)
- 4c Although not a lot of new code landed, what you did write is formatted well. (+)
- 4d Projection took a good step forward, but the lack of instance transforms drags you down here. (/)
- 4e Your single commit on April 3 is commensurate with the amount of work done, and your message was helpful in that it signaled to me that you might have a little misunderstanding there. I will max this out despite the missing work on the assumption that you will keep this up in future commits. (+)
- 4f—Projection was submitted on time, but the rest is still missing. (/)