

# CMSI 371-01

## COMPUTER GRAPHICS

Spring 2015

### Assignment 0326a Feedback

Outcome 3a does not yet cover the entire graphics library for the course so it has a maximum proficiency of | for now. Similarly, because outcome 3d for this assignment only concerns the vertex shader, that outcome also has a maximum of | for this assignment.

Juan Carrillo

juansc / juanscarrillo23@gmail.com

So which is it, *pipeline* or *pipeline-again*? I guess I will have to look at both.

1. Some nice-looking shapes are there, but why scattered all over *homework*? These certainly make sense in a folder of their own. (4b)
2. Note that this function is also a good candidate for refactoring into your *Shape* object; maybe not exactly as-is, but still in a very similar form, and certainly providing the same functionality. (4b)
3. This approach is technically correct...for one level of children. That is an artificial and unnecessary limitation—you definitely want shape composition up to an arbitrary depth. (1c, 4a, 4c)
4. Now, *this* supports an arbitrary depth (nudge nudge hint hint). (4b)
5. You might want to work on coordinations here. The way children and transforms are handled, it appears that certain orderings of action might not yield correct/expected results. Specifically, if a transform is applied to a parent object *first* and *then* a child is added, that child will not have the right transform. You should either make this constraint abundantly clear...or think of an approach that relieves the user of your library from worrying about this. (4b)
6. This is overall correctly done, but the noise I see is that this function's result is not a *Shape*; it has to then be *passed* into a *Shape* constructor. My question is—why the extra step? Why not just make your shape library return *Shape* objects, so that the user can plug them into a scene directly? (4b)
7. Coverage is pretty decent here; good job! (4a, 4b)

1b — +

1c — | ...That depth restriction is the main ding here.

3a (max |) — |

3d (max |) — |

4a — +

4b — | ...This is a combined hit of the various small structural and organizational glitches noted above.

4c — +

4d — +

4e — +

4f — +

### Updated feedback based on commits up to 2015-04-23:

Notes 1, 2, 3, 5, 6 are addressed; regression seen in unit tests (i.e., the new file structure does not correspond to the expected locations of the files in the HTML test pages).

1c, 4b — +

4a — / ...The unit test dislocation is very much an oversight, but a costly one if it happens in production code, so we are coming down on it as a reminder for the future.