CMSI 371-01
COMPUTER GRAPHICS
Spring 2016

Assignment 0308 Feedback

Outcomes that eventually cover both 2D and 3D continue to max out at | for now because this assignment remains in 2D.

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

- OK, filter page is running fine, though the intended effect of the filters are not clear.
- Plus, the neighborhood filters don't appear to use the neighborhood. We'll see what the code says.
- Meanwhile, your circle gradients look pretty good. Final judgment when we see the code…

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

1. *** As I suspected, the single-pixel filters look good, but the neighborhood filters do not use the neighborhood at all. Thus they miss the point of that part of the assignment. (*1a*, *2c*, *3c*, *4a*)
2. *** OK, so you did get a functional circle gradient in there, but you did it by fundamentally changing the interaction between the circle functions and the helper `plotCirclePoints` function. This is a known pitfall, so you will notice that the assignment *specifically instructed that the way to do this is to modify* `plotCirclePoints`, period. In particular, the approach you use builds an array of vertices before plotting them. In an environment of primitives, this type of memory use is avoided because of its overhead. Imagine what would happen if you tried to draw a super-detailed, super-high-resolution circle—even for an octant, that's a lot of vertices to remember before you even get to see the circle. No, it *is* possible to do this in a way that is completely transparent to the top-level circle functions, and this ain't it. (*2d*, *4b*)
3. As for the internal structure of `fillCircle` itself, I appreciate the strategy of largely adopting the structure of the rectangle gradient to the circle. The code is not as compact as it could be, but I can appreciate the symmetry. (+*2c*, *4b*)

1a — **+**

2c (max |) — **/** …Nay. Boar. Hood.

2d — **/** …Classic case of *what* you did was right, but *how* you did it does not fit the context.

3c — **/** …Ditto *2c*.

4a — **|** …We will accept the raw functionality of the circle here, dinging only for neighborhood filters.

4b — **|** …Ditto, this one is only for the misfit design for the circle gradient.

4c — **+** …Mostly looking good with the code, at least.

4d — **/** …A couple of instruction divergences here: neighborhood, `plotCirclePoints`.

4e — Hmmmmm…you're really not into the whole "commit in small work units," are you? **O_o** Tighten it up—one day you'll be glad you did. Descriptive messages are there at least. This comes down harsher because at this rate, you are tracking *16* commits for *all* of your graphics work so far—some students have that many for a single assignment! (**/**)

4f — Submitted on time except for a [massive] comment deletion run around 12 hours after the last on-time commit for *primitives-plus*…I think I will dock for this one because, really, the comment clean-up should have occurred to you sooner. (**|**)