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 ***):*

- Image files are causing trouble here but understandably so—we'll ignore those.
- The single-pixel filters work, but they're kind of the same calculation, just using different parameters. Some variety would have been nice.
- The neighborhood filters are a *little* bit better solely because the visual effect is a little more distinctive.
- The gradient circles look good, but the gradient itself (nice-looking as it is) isn't quite the four-color linear gradient that we were looking for. We will see what the code reveals…

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

1. Code review of the filters confirms that there isn't a lot of variety there. With just two required filters of each kind, I think it's fair to expect less of a cookie-cutter approach. (*+2c, +3c*, *4a*, *4d*)
2. Longer story with the circle gradient…so, the divergent gradient track is because the horizontal delta is being calculated using the *radius* of the circle, and not its diameter. Switching to the diameter cleans it up a bit. But wait, there's more—in a switch-up, the scanning for pixels goes across twice the *diameter* when it should actually go across twice the *radius*. Those changes get you to where we want, leaving one last thing…that `dict` array. Not sure why it's needed; given an octant you can infer the pixels you need to scan across, so the need for those cases isn't clear. (*2d*, *4b*)
3. One last bit: 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 **|**) — **|**

2d — **/** …Some errors in extrapolating the octant to the gradient fill.

3c — **+**

4a — **|** …Greater filter variety desired.

4b — **|** …Gradient implementation can be more streamlined.

4c — **+**

4d — **|**

4e — Decent commit frequency though commit messages can be a *little* bit better. Borderline though, so we will leave them be but they definitely could have been better (e.g., "added a filter" = which filter?, etc.). (**+**)

4f — Submitted on time. (**+**)