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 ***):*

- Oops, looks like your filter pages have some JavaScript loading errors…
- Meanwhile your circle gradient loads out of the box, but the gradient pattern does not look properly linear. We'll have to check the code for that. (mind you, it's still an interesting gradient—just not the one we were looking for)
- OK, you had those incorrect leading `/`'s in your `script` URLs. Remember *not* to use them when referring to files from a relative location.
- With the URLs fixed, everything was run successfully. Neat filters!

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

1. Filter code is good for all new filters. You could have used a conditional expression in randomColorSwapper to better capture the intent of that last line, but otherwise no issues. (*+2c*, *+3c*)
2. The `tweenColor` logic has a number of issues, and put together this is what causes the non-linear gradient. First, note that the color deltas should be based on the *diameter*, not the radius—the colors change from top to bottom, left to right, and so the distance traveled there is the diameter and not the radius. Second, the way those deltas are then used needs adjustment. The basic idea looks right, which is that the target color is the delta "distance" from the original color to the color on the other side. But the final expressions don't pan out…I don't have the time to read through all of the possibilities, but one thing that strikes me is that the delta should be based on the *distance* between the colors, and in the code, the delta is only multiplied to the originating color. There is that, plus there might be other issues as well. I'd need to trace out the calculations more closely to suss everything out. (*2c*, *2d*)

1a — **+**

2c (max |) — **|**

2d — **|** …Glitches in converting a circle coordinate to the correct gradient color.

3c — **+**

4a — **|** …Circle gradient is considered to be mismatched functionality.

4b — **+**

4c — **+**

4d — **+**

4e — Sufficient frequency, with decent descriptiveness. (**+**)

4f — Submitted on time. (**+**)