

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.

Misa Pham

misaqpham / misaqpham

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

- Filters look good.
- The circle seems to have encountered some issues. Plus from the look of it the gradient is not exactly the same as the approach given in class. We'll see what the code reveals.

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

1. The silhouette filter doesn't really do what you might think—`Math.random()` generates a value from 0 to 1, and so that filter merely sets the pixel to a really really dark color. (2c)
2. All other filters are fine and show some nice variety. (+2c, 3c, 4a)
3. For the primitives, 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)
4. Although the structure is OK, there is a divergence in the insertion of a dict variable and argument to `plotCirclePoints`. I'm not sure what purpose this serves, but I do know that it should not have been necessary to modify the entry-point circle functions (`circleTrig`, `circleDDA`, etc.). (4a, 4b)
5. As for the odd central circle behavior, I can say that the issue here is `circleDDA`. There is something about the way it computes its octant that is not compatible with the way `plotCirclePoints` is trying to fill the circle. Again, the fact that this is a one-off problem hints at further issues with the implementation. If the circle-filling routine is correct, then the circle octant algorithm shouldn't make a difference. (4a)

1a — +

2c (max |) — |

2d — | ...Due to the flaws in the circle-filling routine.

3c — +

4a — |

4b — | ...Yes, 4a and 4b are both due to the circle-filling issues.

4c — +

4d — +

4e — Decent commit frequency and message descriptiveness. (+)

4f — Submitted on time. (+)