CMSI 371-01

COMPUTER GRAPHICS

Spring 2013

Assignment 0226 Feedback

Because 2ϵ involves color and light computations, and this assignment pertains only to color, 2ϵ tops out at | with future assignments allowing expansion of this to +.

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- 1a Your ability to handle digital visual information in terms of pixels and geometric primitives is fairly well-demonstrated here, but you missed the gradient circle portion, thus dragging you down. (1)
- 2c Your color computations are decent, but narrow: they only cover the single-pixel variety. You never did a genuine neighborhood-based calculation, and the gradient circle was not done. (/)
- 3b Your primitives implementation is only half-complete. You did do the dash implementation fairly correctly (with a caveat for a portion of its logic—see 4a), but the gradient circle was not done. (/)
- 3c Bit-level color manipulation is well-demonstrated for the single-pixel type of filter, but nothing is seen that is truly neighborhood based. Otherwise, this can be justifiably higher. (|)
- 4a Your code is generally correct and functional, with one major gaffe that, although technically correct, actually drags down your logic skills quite a bit—in your primitives code, you have "dash > 0 && dash > 1." Wow, really? I hope that does not need further explanation—plus, that hiccup alone is a huge knock on your programming proficiency. There are additional style and elegance issues also—see the inline comments. The lack of a genuine neighborhood filter does not detract from this particular outcome, but the missing gradient circle code does. (/)
- 4b Your code separates concerns quite well. (+)
- 4c Your code is mostly readable, but inconsistently spaced, particularly with regard to blank lines, nested parenthetical expressions, and spacing around curly braces—this can be quite distracting, actually. Pick a good set of rules (just look at the sample code—there's lots of it!) and stick to it. (/)
- 4d The lack of a genuine neighborhood filter and the missing primitive implementation (the gradient circle) speak to inadequate resource and documentation discovery or use. (/)
- 4e Your commit pacing and messages are excellent. (+)
- 4f—Partially submitted on time; only the gradient circle is missing. (1)

Re-evaluation covering commits made since March 7:

- 1a You have completed a gradient circle implementation. The algorithm you implemented is not completely linear, but it still does implement a decent-looking gradient. (+)
- 2ϵ You have sufficiently demonstrated color computation proficiency with your neighborhood color filters. This proficiency will then "max out" when you do 3D lighting. (|)
- 3b Your primitives implementation is functionally completed by your gradient circle. But as you noted, the circle implementation does not handle colors correctly. This detracts from this outcome. (1)
- 3c Bit-level color manipulation is now fully demonstrated with your genuine neighborhood filters. (+)
- 4a Your major dashed-line logic issue has been fixed, and you have a form of gradient circle implementation, even if colors aren't totally well-handled yet. (+)
- 4ε No significant improvement is seen in your spacing consistency. (/)
- 4d Filling in the neighborhood filter and circle gradient functionalities in your assignment (despite the incomplete handling of colors for the circle gradient) are enough to increase this proficiency. (+)