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COSC 4370

HW 1 Report

In order to rasterize a circle, it is best to start with a 45o segment. The method provided in the reading is called eight-way symmetry which is a method of drawing a circle based on the distance from the center. It plots points on (x,y) and 7 more symmetrical points in order to complete the circle. This leads to the midpoint circle algorithm. This algorithm uses a certain formula to place the most optimal set of pixels that evaluates two pixels near the circle and chooses the next pixel between previously mentioned two points. The reading resource provides us with two pieces of code for both method and algorithm provided above. In order to adjust for the homework requirements, I used the formula [here](https://www.programmersought.com/article/44255590419/) instead of the one in the algorithm to account for the center not being origin. Afterwards, I have left some code in there that hard codes the radius of 150 and 100. This code overrides the usage of arguments and it is unclear which one is required for the assignment. I will add comments in the code for the TA’s to remove said code in order to change the size of the radius