

tile.c was a much larger struggle for me than the previous assignments. I put quite a bit of work into a form of the program that was unnecessary. I originally believed the assignment was this. Find the best composite image of tiles and rotated tiles, call the dispatcher from the tile program to create rotated tiles, and use the results to create the composite image. I was speaking to a classmate about how much difficulty I've been having when he let me know my mistake, unfortunately for me that was at 8pm on the due date of this assignment. I spent most of my time trying to solve coding hurdles I didn't need to solve. I'll explain.

Let's assume we have to consider rotate tiles, thus we have to call the dispatcher. That means we have to keep track of which images are and aren't rotated. Then we have to create a string to concatenate the args to. That means we have to count the length of every command we are going to make before we actually assemble the commands. When we do concatenate an arg, we have to track to make sure we don't erase the null pointer at the end of the string. In addition, we need to save the address to our actual char** arg list.

Many of these simple sentences represent hours of trying to solve errors. The math of the rotated images left me scratching my head for days. I even wrote the dispatcher thinking we only needed it to run the rotate program because that's all the tile program needed. Needless to say, once I realized my error I had to go back and make some very quick edits. The silly thing is, I'm pretty sure I had it mostly working, it just wasn't the assignment.

As it stands, my big error is that my assignment statement doesn't work. I can't actually copy any of the images into my composite image. I have this exact same problem on every assignment, and the solution always seems to be something different. I've commented out the assignment line for now to show that the rest runs and to let the bash script run. I don't have the time to place proper commenting, let alone the Doxygen commenting, into the code. I apologize!

dispatcher.c wasn't so bad, the entire program was just one loop and a fork statement. The real problem was having to change the structure last minute because I didn't realize that I hadn't written it according to the instructions. Originally, I just thought the argument was going to be rotate commands, so I made a simple while loop to copy the string references to a new array. The new version tests a value against a set of possible commands and follows the same pattern according to however many arguments that program should have. For instance, crop has 7, so the index is incremented by 7.

tiler.sh was the easiest of the three, it's just the first half of my modder.sh from prog 03.