

This project beat Langton's Ant as my favorite project of this class. At first I was sort of "put off" but the lack of a prompt or description of the program, but the few requirements of the assignment ended up making for a very interesting challenge!

Looking back, I wish I would have gotten started sooner, because the project was a lot of fun and I had a cool idea for what would happen when you beat the game, but I did not have time to implement it. My biggest struggle was creating the 2D grid of Space pointers. At first, I was trying to create the grid using nested for loops and if statements by linking the Space pointers much like the labs where we worked with the Stack and Queue, but I ended up ditching that method and used a method that was cleaner and more akin to the Langton's Ant assignment.

I went for an Ancient Greece theme because beginning my studies in January this year reignited my love for mathematics, and specifically, I have grown very interested in the history of mathematics, and just "great thinkers" of ancient times in general. I thought whoever would be grading the assignment may be a nerd like me and get a kick out of it, too, but a happy accident was that the three "great thinkers" in my game's initials spell SEO, for Search Engine Optimization.

I almost had a heart attack a minute ago because I had spent basically 12 hours straight on this assignment and I was starting to just see double when I looked at the screen, and alas, my code did not compile on the school's Flip server! Luckily for me, the error messages clearly pointed to the issue being related to the abstract class type Space being instantiated when I meant for a derived class to be so. It was an easy fix, but I thought it was strange that my compiler had no issue with Xcode on my Mac, but just assume that my computer was able to determine which child class I meant for Space to represent in that context. Little things like that really make me appreciate the amazing minds that came before us, and not just in Ancient Greece and fairytales like the Odyssey, but in the profession of Computer Science; I am so thankful that I have so many robust tools such as Xcode, Visual Studio, FileZilla, Stack Overflow, GitHub, and more. On the note of using other people's tools and code, I was very excited to begin learning about the STL; it is my hope that in the next classes we will quit "reinventing the wheel", despite how helpful it's been in facilitating a deeper understanding and learning, and begin using the STLs available to build more sophisticated programs.

I probably could have gotten a better grade if I JUST followed the rules as much as possible to meet the requirements, but I had a lot of fun the way I made my game, although, sometimes the game will crash, and I honestly can't figure out why! I know that if you restart the game over and over that the crashing becomes more frequent, and so that leads me to believe it is an issue with my destructors (or lack thereof), but for the sake of spending time with my wife and baby tonight, I called it a rest!

I just want to sincerely thank everyone who has been a part of my learning so far during this course. This course has changed my life and I am so excited to further my studies. I am so excited because my next two classes, Web Development and Data Structures, are both buzz words and/or job descriptions I see on postings all the time. To me, the internet is the most fascinating aspect of computer technology, and so I am ecstatic to learn about HTML and all sorts of stuff I am not even smart enough to describe yet!