Jaryd Meek
CSCI 1300
Recitation: 102 – Matthew Luebbers
Project 3 Reflection

I prepared for the project by going through the PDF outlining the project and taking notes on how I would approach each part, including any skills or information I would need to use that I haven't before. This included generating random numbers, seeding the random number generator, how to output to files, and how to tabulate outputs in C++. Then, I planned what the four classes I would create would be, to allow me to begin to plan functions when I began my code skeleton. I then went through each part of the project and planned what functions I would need and what those functions would do, including what I would pass to each function and what each function would return. Doing this allowed me to also plan what variables, arrays and vectors I would need in each class. Overall, the planning of this project before even starting the code was a major contributing factor in making this project manageable.

I then used the information gained from my notes in order to create my code skeleton. I looked through my notes and made a note of any functions that I needed and would quickly write the function and what the function would accomplish. I, then, would decide which class that function would best belong to, or if that function would be best in my main() function. Having these notes allowed me to be able to quickly create my code skeleton and algorithm comments as it was mainly just translating my handwritten notes into the IDE. I also was able to translate my notes about what variables, arrays, and vectors I would need as data members in my classes. Writing my code skeleton was not too large a task thanks to my notes, it did make completing the functions easier later, as I could just reference my algorithm comments in order to be able to write the functions.

There isn't much I believe I could have done better in order to work more efficiently. When it comes to coding, I find that I personally do significantly better when coding sessions are longer, as then I do not have to remember where I was, or what I was doing. The break for Thanksgiving gave me a few days where I could do this, which allowed me to get a large majority of the game done. After that I worked on minor things and bug fixes during the week before the project was due. This worked very well for me in terms of the project. I worked quickly, but this project still took me an excessively long time for a project for any class. I spent over 64 hours working on just writing the actual code for this project (according to Screen Time in macOS). I have been coding for many years and believe myself to be able to work faster than most. This was a ridiculous time sink that was very frustrating to have to deal with along with work for all my other classes. That was my only major issue with the project.

I had a few false starts, but they were generally very short thanks to all the planning I did ahead of time. The project was a matter of converting what I have written in my notes into code and fix a minor bug here or there. There was never a moment where I had to rewrite a major function or portion of my code. Creating a test file to go along with my main game function also made testing each function one part at a time significantly easier, allowing me to not have to go

back and fix issues with functions later. This allowed me to avoid making any major backtracks, and made any backtracks I had to preform small and easy to fix. Planning out the code for a project this large had a major impact on my ability to work quickly, and to be as efficient as I was with writing code.