

dungeon_dudes writeup

WO1 Clayton E. Williams

October 2023

0.1 Project Summary

`dungeon_dudes` is a text-based RPG that users interact with at the command line. A majority of the game has already been written. The goal of this project is to use the provided guide for how different characters and monsters interact, and develop a module to implement a character or monster for game play.

0.2 Challenges

The main challenge of this project was falling in on the provided code base and understanding how all the modules interacted with each other. I tried to spend some time over the weekend going over the progression of the game, and I had a decent understanding of how the menus and options/selections worked, as well as character interactions, but never made it to monsters, which is what I ended up with having to develop. I felt comfortable with OOP in the context of what we had seen so far in this course, but classes that are abstracted 4 levels away from the base class made it very difficult to see where dependencies were coming from, or how interactions were happening.

0.3 Successes

Once I had a solid grasp on how monsters interacted with the encounters and how to use `CombatActions` for each turn, I think I did a great job of implementing those features. On the first monster class I worked on, I felt like I copied most of it from the provided code, and by the time I got to the last one, I was able to write it just by understanding what needed to be accomplished. I was even able to go back and re-write the first monster class I wrote, fixing issues from implementing code that I did not fully understand.

0.4 Lessons Learned

The C and DSA modules reinforced the need for spending at least a few hours designing before beginning to write any code, and I have done my projects according to that idea. These designs are typically data-flow diagrams and highlight what happens at each point in the execution of the program, and functions needed for a TDD approach. This project required less of that, because the manual spelled out the functionality of each character and monster. I didn't do it until halfway through the second day, but creating a UML to be able to quickly visualize how modules interact and base to subclass relationships exist at the beginning of the project would have helped

substantially. Just like my comments on the previous project, of understanding not just the project, but the language it is written in, understanding what type of design is necessary at the onset is crucial to a large project such as this.