

## REPORT

### Reflection:

1. What was the easiest and hardest part of this assignment?

The easiest part of the assignment was doing the tests. There were some minor discrepancies that I needed to address in order for the tests to work, but otherwise, this was pretty straightforward and it was helpful that the code was provided to us.

The hardest part was understanding how objects and their respective methods and attributes work, and how they can be used together within a driver function. It took me a long time to plan how everything would come together, but it was helpful that the lab guided us on how to break down the problem into smaller steps.

2. What did you learn?

I learned how to create my own object and how to implement that into a program. This is a great way to simplify code in your driver function because you can do more programming in your object files via your methods. This lab was also a great example of breaking a very complex problem down into smaller ones. Initially, the lab felt overwhelming, but if you looked at each method and attribute as its own little problem it becomes more manageable.

3. What grade do you think you deserve and why?

I would give myself a 28 out of 30. I accomplished everything in the grading rubric, my code is organized, and I gave my program a few extra bells and whistles to make it more user-friendly.

### Extensions:

1. My first extension is the use of a try and except block. This was built to protect against scenarios where the user entered a value that was not an integer (which could not be used to iterate through the weapon or character list) or if the value was outside of the listed range. I put this in each selection function so users would not need to start over if they input an invalid value. I also added a raise block before the try and except block in case the value was out of the list's range, otherwise the function would still execute the value.
2. My second extension was to create an initiative variable. This would randomize the fight between the two characters (since I didn't think the characters I created would fight "fair" by taking turns).
3. My third extension was to print a statement for each time a character took damage. This helped keep track of what actually was happening in the fight, and made it a more realistic battle simulator.

4. My fourth extension created a random option for character and weapon selection. This would print at the end of the menu and was not affected by any characters or weapons removed from the list.
5. My final extension created a random event if any character used the "Toe Knife" weapon. This event had a 25% chance of occurring, would print a message, and would double the weapon damage.