- **How did you prepare for the Project?**

To prepare for this project, I wrote down pseudo code on a piece of paper detailing what I wanted to accomplish in this game. I assumed that it would be pretty straight forward, however I was not able to check off everything from the list due to time constraints. I knew that I was going to be busy for fall break, but thought that 1 week would be plenty to finish the project. However, it seems that classes had a whole new set of errors that I have never seen, and it took quite some time to figure out some of these issues. I did not get to create more than 1 boss, I also did not get to create a random cost for every item in the shop, and I also did not have time to implement random biome events (such as a volcano exploding and hurting you and what not), as well as elemental resistances.

- **Did you write a Code Skeleton? Was it useful? How?**

I did write a code skeleton, however I realized afterwards that I did not scroll down another 2 inches and realise that we should have wrote pseudocode within the code skeleton. The code skeleton was definitely useful, but I ended up having to add a few different classes. If I were to have written more pseudocode, perhaps I would have been able to realise that some things would not work the way I expected them to. I did end up using most, if not all, of the code skeleton classes. The code skeleton gave me an outline and an idea of what kind of program I wanted, and it was very useful in regards of organization of the classes. There were some things that I could have put in the main, and some things that I could have put in classes.

- **Reflect on how you could have done better, or how you could have completed the project faster or more efficiently.**

One thing that I could have done to be more efficient was to ignore some of the errors I got and just made the outline before debugging. If I were to have ignored some of the errors and continue on with coding, perhaps I could have achieved the code that I wanted to do. I spent a

lot of time on the errors I got because I wanted to make sure I didn't write a bunch of code, just to have a key feature not work at all. I also should have coded during Fall break. I had a good idea of what to do, and had an outline of things to try and workarounds to certain things, but it all came down to time constraints. I definitely could have done some offline coding, but I did not think of it at the time. If I were to download visual studio or something on my laptop, I probably could have accomplished more.

- **Did you have any false starts, or begin down a path only to have to turn back when figuring out the strategy/algorithm for your Final Project program?**

I believe that I had very few false starts, but they were still very annoying to deal with. One issue was dealing with the gearing system in the game. I originally wanted to use a ton of bool's to determine whether something was equipped or not, but it slowly got to the point where I had way too many bool's and errors, which lead to me getting lost. Another issue was dealing with the store. I assumed that it would be simple, but I later realized, I wanted to have a string of the item name, as well as the item stats to work with. Originally I thought I could use a object arract (or even a 2D array) from my "Rng" class file to deal with getting random items and then filling them with stats. However, I kept on getting errors dealing with the shop function, so I ended up deleting all of that and creating a separate shop class to work with the shop. I also realized that using class functions to deal with certain conditions just led to a bunch of errors. For example, in my monster class, I wanted to add prefixes like "Big" or "Fast" to the monster name, but it just ended up giving me a bunch of errors and weird outputs. I thought it would be simple, but it seems that the best way to go about doing so is to set those class functions equal to a variable. Dealing with segmentation faults and file.io errors also made me redo a lot of the readfile stuff. For whatever reason, using while file.eof() would sometimes not work, so I would have to use a for loop to read a file.