Alex Childers PA #1 - Inventory Management Reflection Essay 09/07/2018

If I were to rate my work on this assignment on a scale of 1 to 10, with 1 being "didn't even start the assignment" and 10 being "spent a few days working on the assignment, and now the code does what is needed and is totally robust, efficient, and easy to understand," I'd give myself a 6.5. While I did finish the assignment and, as far as I know, it works like it's supposed to, there's a few things that I would have liked to improve on if I had more time.

The assignment was easy to understand. It was clear what was expected of me, and I knew that I had all the tools I needed to complete the task. It only took me about six and a half hours total over two days to get it done. That may seem like a long time, but given that it takes me a long time to complete homework anyway, and that I was tired while writing the first half of the code, I think I'm okay with it. A large amount of this time includes debugging, especially as the code grew longer. I also spent time spent researching solutions to errors I encountered and brainstorming on a piece of scratch paper to break down what I needed to accomplish into smaller, more manageable coding tasks.

A challenge that I couldn't overcome was maintaining abstraction while writing functions. As I wrote helper functions to add, update, and remove rows of the inventory in one vector holding the inventory, I tried to consider, "What if there's more than three columns in inventory.csv, which would mean the number of items I add to the vector is variable? What if this vector could hold items that might not be strings?" However, as the code grew longer, it became increasingly difficult to maintain that level of abstraction. I didn't know if it was worth the trouble to maintain that abstraction, so I decided to write my functions with the assumption that there are always three columns and that it is always formatted in the same way inventory.csv is.

If I had more time, I would have incorporated more abstraction into my code, as described above. I would have made my code more robust -- currently, when prompted to give a menu selection, entering any non-numeric value causes the program to loop infinitely. (Maybe exception handling would be applicable here?) I also would have gone to office hours to get help with refactoring my code. I'm concerned that my code is longer and more complex than necessary, and it would be helpful for me to get another person's perspective. I would have started the homework sooner as well. I don't regret prioritizing my other homework assignments with sooner due dates, but I will make an effort this week to do more homework during the day before going home.