Project Report 7

The goal of this assignment is to use many of the skills learned from last semester like switch statements, file i/o, classes, etc. The program’s inputs are the numbers 1 through 4 and some string, integer, and float values. The outputs to the console are machines categorized by name, year produced, manufacturer, average fun rating, theme. Additionally, there is an ASCII file output. There was error handling to make sure any value not between 1 through 4 would not execute anything on the program.

I made several design decisions not dissimilar to ones I made in the previous homework assignments. Previously, I have made a function for my main menu and switch function. Moreover, the design decisions pertaining to writing and implementing classes can be initially seen in past projects. Data structures used includes classes and switch statements. The class categorizes various pinball machines. The switch statement is used for the main menu. I used algorithms like loops and if-else statements. The cons of not making all parts of the switch statement functions adds a layer of inorganization where some functions are at the top of the file while others are housed under their respective cases. In the future I will perhaps chose to make all cases code into functions to make the code easier to comprehend.

In contrast to previous homework assignments, the details of the prompt were relatively easier to implement into a project with multiple types of files. There was no sample code given for the assignment, just a text file that needed to be read and added to. I used the menu function from and structure of the header and .cpp files from previous projects. My development timeline was one week. I paced out the work progress evenly for this assignment.

For each input data type I entered data types that matched the variables I declared them as. For each category of the machines, I entered data types different than that of their intended type. For example, when the program asks, “What is the average fun rating of your machine?” then entering a nonfloat value outputs an error condition. Most everything worked as expected, however compiling the program in Linux resulted in an error unseen in Onlinegdb. The sample input and output can be seen on the typescript attached to the submission file.

The final result of the homework assignment created a main menu that could modify a database of pinball machines. The project was a success, very few things are amiss. Next time I would structure my code in a more organized manner and continue the working pace I used for this assignment. The project took a week to complete.