**Oscar So**

**CS 2024 – C++ Programming**

**Assignment #3: Menu**

In this assignment, I initially found it rather difficult to understand given the parameters expected from the assignment handout. However, I am really thankful that lecture finally clearly taught me what an enum was and how its features were unique in terms of similarities in classification. This also helped given that we talked about enums the same day as CS3110 did as well and it definitely helped me code this project well.

To begin, I just copied and pasted the expected class file into the header file. Inside C++, I have learnt that the class actually is consisted of two files. One where functions and variables are declared, menuH.h, and another, menu.cpp, where they are defined. I also learnt that importing header files in C++ is different than #import<iostream>, because it uses quotation marks instead of the brackets. This is also different from C when we used #import<stdio.h>.

When it came to menu.cpp, it took me a while to understand how the enum worked along with the functions, especially the return values. When I realized that we could use Menu::\_\_\_() to create a function that was linked to the enum, everything became clear as I saw the direct relation from “pointers”. Lastly, given my background in programming, I figured out a simple method to just check the enum and return whichever one the input was correlated to.

Lastly, as for menu.cpp, there were three parts to code. First part of repeating my name 3 times was pretty simple just by using a for loop that looped three times while printing out my name, “Oscar”. For the second part, I took in user input with cin and put it into a variable. Then I multiplied the variable by itself to produce the square of the user input, which I then returned with a print statement. Lastly, for the 3rd part, whenever option 3 is chosen, we just need to add an extra statement saying “Quitting!”

Overall, despite the rough start given the major confusions inside the attachment, I thoroughly enjoyed this project and learned more about how enumerators worked in the OOP world. Hopefully, this will give me an edge on my other classes in terms of understanding as well.