

Minh Nguyen

Question 1, Lab 3 write up

CS 162

### **Design Plan**

For this lab, I will create a class with 5 object variables in the class to be used, one for name, color, age, asking price, and price paid of an inventory list. These initialized variables will be added into a vector that I will create in the main function that uses the name of the class as the vector type.

The function will have an overall of 2 loops, one while loop and one for loop. The while loop is the outer loop that runs the entire program, and can be exited at the end of each item entered in. The for loop will be for inputting in variables and prompts users for conditional statements to add in color, price paid, or age if it is known. Since the instructions says that the Name and Asking price is already known, there is no conditional statement to enter those in, but rather only a prompt to do so.

After entering all of this, it will be added to a list via the vector of inventory items. This vector will have a pushback feature and allow for further additions of items if necessary.

### **Testing**

I tested this program by running it and attempted to put in every detail of each item, as well as skipping some data such as the color or age. What happens is that the list that prints it out will have a parenthesis and it will remain empty if there is no addition of the data type. I would have rather have it say N/A, but I could not figure out how to do so.

### **Reflection**

I could not understand how constructors were to be played into this program so I designed the program without constructors. I would really love for some tips as to how constructors are used alongside with vectors because the functionalities of it were very confusing and I could not find a good source anywhere for it. The program runs as intended, but not to the exact specification of the instructions.