## Sean Reilly

Reflection – Assignment 2 – Design, implement and test a grocery list program

## **Design Description**

I decided to make 2 classes with 2 headers as I figured the program would be large enough to warrant such a decision. It's broken down into the list and the items and then the main houses it all. Within the main it is presented as a menu using a while loop which asks the user if they would like to add an item, remove an item, print the list of items, or exit the program. If you do not select one of these options, it would ask you to enter a correct choice. My default constructor initialized the name to nothing, the price to 0, the quantity to 0 and the total to 0. I also initialized the price to include 2 decimals using the set precision function found within the iomanip class.

## Test Plan

My plan was just to test in groups as I went along. So anytime I added new code I would comment out non relevant code and test that individually and then with everything else to make for sure that it talked to each other the way it needed to and then also worked on its own. This is what I typically do and seems to work very well as I can isolate problems easier.

## **Test Results**

My biggest problem initially was the program would go into a never ending loop if the char response part of the program was answered with anything other than a character. So I added the (y/n) part so the user would know to only put one letter in as an answer otherwise the program will just be on a loop continuously. Did not see an easier fix than this.

I ran into a problem with words with spaces in them so went back and added a getline where appropriate.

The program was good to reinforce how objects work and how to encapsulate data properly.