## **Test Document for Project #1**

## Names: Anthony Triolo, Biyun Wu

| Test<br>Case # | Purpose of the test case  | Input Data   | Expected Output  |
|----------------|---|--|--|
| 1              | Test the constructor for instantiating an instance of ShoppingBag class. There are no params for this constructor, but the instance should have an initial capacity of 5 and should have 0 items in it. This is tested by printing the length of the bag and the "size" property of the instance. | No data input since no<br>constructor params   | 5,0  |
| 2              | Test the add() method, which puts a new item in the shopping bag. If the item is added, when we use the print() method to print the contents of the bag, it should be in there  | "milk", 2.90, false  | milk: \$2.90 : tax free  |
| 3              | Test the remove() method, which removes a specific item from a bag as long as the name, price, and taxable values specified match that of something in the bag.  • Case 1: item in bag, the method returns true  • Case 2: item is not in bag, the method returns false                           | • Case 1: "milk", 2.90, false<br>• Case 2: "juice", 2.90, false                                | <ul><li>Case 1 returns true</li><li>Case 2 returns false</li></ul> |
| 4              | Test the grow() method, which increases the capacity of the bag by 5. If we print the capacity of the bag before the grow() method is called and then after, the latter should be 5 bigger than the initial   | No data input other than<br>method call  | Initial capacity: 5<br>New capacity: 10                            |
| 5              | Test the salesTax() method, which returns the total amount of tax on all taxable items in the bag at a rate of 6.625%.  • Case 1: No taxable items in bag, the method returns 0.0  • Case 2: There are taxable items in the bag, the method returns the proper amount of tax                      | Case 1: ("milk", 2.90, false)<br>added to bag<br>Case 2: ("apple", 3.90, true)<br>added to bag | • Case 1: 0.0<br>• Case 2: 0.258375                                |