# CST8130 – Data Structures

# Assignment <1> – Test Plan

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## <Add Item>

| Description of Test | Input Values | Expected Output | Actual Output / Result | Pass/Fail |
| --- | --- | --- | --- | --- |
| |  | | --- | | a. Add a valid fruit item |  |  | | --- | |  | | 1  f  101  Apple  10  1.50  0.80  Orchard A | Item added successfully, item appears in inventory | Please select one of the following:  1: Add Item to Inventory  2: Display Current Invetory  3: Buy Item(s)  4: Sell Item(s)  5: To Exit  1  Do you wish to add a fruit(f), vegetable(v) or a preserve(p)? <user enters f,v, or p>  f  Enter the code for the item: <must be an int>: 101  Enter the name for the item: Apple  Enter the quantity for the item: 10  Enter the cost of the item: 1.50  Enter the sales price of the item: 0.80  Enter the name of the orchard supplier: Orchard A  Please select one of the following:  1: Add Item to Inventory  2: Display Current Invetory  3: Buy Item(s)  4: Sell Item(s)  5: To Exit | Pass |
| |  | | --- | | b. Add a valid vegetable item |  |  | | --- | |  | | 1  v  102  Vegg  10  1.50  0.80  Vegg A | Item added successfully, item appears in inventory | Please select one of the following:  1: Add Item to Inventory  2: Display Current Invetory  3: Buy Item(s)  4: Sell Item(s)  5: To Exit  1  Do you wish to add a fruit(f), vegetable(v) or a preserve(p)? <user enters f,v, or p>  f  Enter the code for the item: <must be an int>: 101  Enter the name for the item: Vegg  Enter the quantity for the item: 10  Enter the cost of the item: 1.50  Enter the sales price of the item: 0.80  Enter the name of the farm supplier: Vegg A  Please select one of the following:  1: Add Item to Inventory  2: Display Current Invetory  3: Buy Item(s)  4: Sell Item(s)  5: To Exit | Pass |
| |  | | --- | | c. Add a valid preserve item |  |  | | --- | |  | | 1  p  103  Brandy  10  1.50  0.80  50 | Item added successfully, item appears in inventory | Please select one of the following:  1: Add Item to Inventory  2: Display Current Invetory  3: Buy Item(s)  4: Sell Item(s)  5: To Exit  1  Do you wish to add a fruit(f), vegetable(v) or a preserve(p)? <user enters f,v, or p>  p  Enter the code for the item: <must be an int>: 103  Enter the name for the item: Brandy  Enter the quantity for the item: 10  Enter the cost of the item: 1.50  Enter the sales price of the item: 0.80  Enter the size of the jar in milliliters: 50  Please select one of the following:  1: Add Item to Inventory  2: Display Current Invetory  3: Buy Item(s)  4: Sell Item(s)  5: To Exit | Pass |
| d. Add an item with an existing itemCode | 1  v  101  Orange  15  20  10  Orange F | Error: Item with this code already exists. | Please select one of the following:  1: Add Item to Inventory  2: Display Current Invetory  3: Buy Item(s)  4: Sell Item(s)  5: To Exit  1  Do you wish to add a fruit(f), vegetable(v) or a preserve(p)? <user enters f,v, or p>  v  Enter the code for the item: <must be an int>: 101  Enter the name for the item: Orange  Enter the quantity for the item: 15  Enter the cost of the item: 20  Enter the sales price of the item: 10  Enter the name of the farm supplier: Orange F  Error: Item with this code already exists. | Pass |
| e. Add an item with an invalid type entry | x | Invalid entry | Please select one of the following:  1: Add Item to Inventory  2: Display Current Invetory  3: Buy Item(s)  4: Sell Item(s)  5: To Exit  1  Do you wish to add a fruit(f), vegetable(v) or a preserve(p)? <user enters f,v, or p>  x  Invalid entry | Pass |
| f. Add an item with invalid input for details | 1  f  1f6% | Invalid entry | Please select one of the following:  1: Add Item to Inventory  2: Display Current Invetory  3: Buy Item(s)  4: Sell Item(s)  5: To Exit  1  Do you wish to add a fruit(f), vegetable(v) or a preserve(p)? <user enters f,v, or p>  f  Enter the code for the item: <must be an int>: 1f6%  Invalid entry  Enter the code for the item: <must be an int>: | Pass |
| g. Add an item with negative numbers | 1  f  123  Mango  -20  10  -23  13  -19  40  Mango A | Invalid entry for each negative number | Please select one of the following:  1: Add Item to Inventory  2: Display Current Inventory  3: Buy Item(s)  4: Sell Item(s)  5: To Exit  1  Do you wish to add a fruit(f), vegetable(v) or a preserve(p)? <user enters f,v, or p>  f  Enter the code for the item: <must be an int>: 123  Enter the name for the item: Mango  Enter the quantity for the item: -20  Invalid entry  Enter the quantity for the item: 10  Enter the cost of the item: -23  Invalid entry  Enter the cost of the item: 13  Enter the sales price of the item: -19  Invalid entry  Enter the sales price of the item: 40  Enter the name of the orchard supplier: Mango A |  |

## <Buy items>

| Description of Test | Input Values | Expected Output | Actual Output / Result | Pass/Fail |
| --- | --- | --- | --- | --- |
| 1. Buy a valid quantity of an item | 2 Display inventory first  3 buy items  Buy 10 | Item bough succesfully | Please select one of the following:  1: Add Item to Inventory  2: Display Current Invetory  3: Buy Item(s)  4: Sell Item(s)  5: To Exit  2  Inventory:  Item: 101 Apple 10 price: $0.80 cost: $1.50 orchard supplier: Orchard A  Item: 102 Vegg 10 price: $0.80 cost: $1.50 farm supplier: Vegg A  Item: 103 Brandy 10 price: $0.80 cost: $1.50 size: 50mL  Item: 1 dl 23 price: $2.00 cost: $1.00 orchard supplier: 3  Please select one of the following:  1: Add Item to Inventory  2: Display Current Invetory  3: Buy Item(s)  4: Sell Item(s)  5: To Exit  3  Enter the code for the item: <must be an int>  101  Enter valid quantity to buy:  10  Item bought successfully  Please select one of the following:  1: Add Item to Inventory  2: Display Current Invetory  3: Buy Item(s)  4: Sell Item(s)  5: To Exit  2  Inventory:  Item: 101 Apple 20 price: $0.80 cost: $1.50 orchard supplier: Orchard A  Item: 102 Vegg 10 price: $0.80 cost: $1.50 farm supplier: Vegg A  Item: 103 Brandy 10 price: $0.80 cost: $1.50 size: 50mL  Item: 1 dl 23 price: $2.00 cost: $1.00 orchard supplier: 3 | Pass |
| 1. Buy an invalid itemCode | 3  Input 3 | Item not found in inventory | Please select one of the following:  1: Add Item to Inventory  2: Display Current Invetory  3: Buy Item(s)  4: Sell Item(s)  5: To Exit  3  Enter the code for the item: <must be an int>  3  Item not found in inventory | Pass |
| 1. Buy a quantity exceeding stock | 3  Input 30 | Error: Cannot buy. Not enough items in stock | Please select one of the following:  1: Add Item to Inventory  2: Display Current Invetory  3: Buy Item(s)  4: Sell Item(s)  5: To Exit  3  Enter the code for the item: <must be an int>  101  Enter valid quantity to buy:  30  Error: Cannot buy. Not enough items in stock. | Pass |
| 1. Buy a zero quantity | 3  3  101  Input 0 | Error | Please select one of the following:  1: Add Item to Inventory  2: Display Current Invetory  3: Buy Item(s)  4: Sell Item(s)  5: To Exit  3  Enter the code for the item: <must be an int>  101  Enter valid quantity to buy:  0  Item bought successfully | Fail |
| 1. Buy from an empty inventory | 2 check empty inventory  3 try to buy | Error.. could not buy/sell item. Inventory is empty. | Please select one of the following:  1: Add Item to Inventory  2: Display Current Invetory  3: Buy Item(s)  4: Sell Item(s)  5: To Exit  2  Inventory:  Please select one of the following:  1: Add Item to Inventory  2: Display Current Invetory  3: Buy Item(s)  4: Sell Item(s)  5: To Exit  3  Error.. could not buy/sell item. Inventory is empty | Pass |

## <Name of Feature 3>

| Description of Test | Input Values | Expected Output | Actual Output / Result | Pass/Fail |
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## <Name of Feature 4>

| Description of Test | Input Values | Expected Output | Actual Output / Result | Pass/Fail |
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## <Name of Feature 5>

| Description of Test | Input Values | Expected Output | Actual Output / Result | Pass/Fail |
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Its expected that you:

<add more tables if you have more features to test>