# CST8130 – Data Structures

# Assignment <2> – Test Plan

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## < Display of Main Menu>

| Description of Test | Input Values | Output / Result | Pass/Fail |
| --- | --- | --- | --- |
| * 1. Valid input | 1,2,3,4,5,6,7,8 | Resulting in the following tables |  |
| * 1. Invalid inputs - digit | 0,-1,100 | An error message is displayed | Result |
| * 1. Invalid inputs – Alpha character | A,a | An error message is displayed | Result |
| * 1. Invalid input - Symbol | @, ! | An error message is displayed | Result |
| * 1. Invalid input - whitespace | Space, tab | An error message is displayed | Result |

## <Tests on empty data>

| Description of Test | Input Values | Output / Result | Pass/Fail |
| --- | --- | --- | --- |
| 1. Display values in the array | 2 | The heading “Inventory:” s displayed with nothing listed. The main menu is displayed again. | Result |
| 1. Buy item | 3 | Enter code but no code error will appear. | Result |
| 1. Sell | 4 | Enter code but no code error will appear. | Result |
| 1. Search for Item | 5 | Enter code but no code error will appear |  |
| 1. Exit the application | 8 | The message “Exiting...” is displayed and the program is terminated. | Result |

## <Adding values to the Array>

| Description of Test | Input Values | Output / Result | Pass/Fail |
| --- | --- | --- | --- |
| 1. Adding item to inventory | 1 then f | The menu asking for fruit, vegetable or preserve appears. Choosing f. Enter code, name, quantity, cost, sales price, and orchard supplier. |  |
| 1. Adding item to inventory | 1 then v | The menu asking for fruit, vegetable or preserve appears. Choosing v. Enter code, name, quantity, cost, sales price, and farm supplier. |  |
| 1. Adding item to inventory | 1 then p | The menu asking for fruit, vegetable or preserve appears. Choosing p. Enter code, name, quantity, cost, sales price, and size of the jar in milliliters. |  |
| 1. Adding item to inventory | 7 | Enter file name and the system will read the code to check if it is duplicate or not. |  |
| 1. Add an invalid alpha character | A,a | An error message is displayed. The menu is displayed again. |  |
| 1. Add an invalid symbol character | !,@ | An error message is displayed. The menu is displayed again. |  |
| 1. Display values | Select 5 from menu | All values successfully added in this test are displayed. The menu is displayed again. |  |

## <Buy and Sell Item>

| Description of Test | Input Values | Output / Result | Pass/Fail |
| --- | --- | --- | --- |
| 1. Buy Item | 3 | Enter code, if code existed, prompt to enter value. If not error and menu display. If quantity is not valid, print “Invalid quantity...”. Re-enter. |  |
| 1. Sell Item | 4 | Enter code, if code existed, prompt to enter value. If not error and menu display. If quantity is not valid, print “Invalid quantity...”. Re-enter. If inventory is out of product, print “Sold out”. |  |

## <Buy and Sell Item>

| Description of Test | Input Values | Output / Result | Pass/Fail |
| --- | --- | --- | --- |
| 1. Save inventory | 6 | Enter file name that you want to save as, then inventory will be saved to with the formatted way. |  |