**Thanh Phan u3175008** **Software Engineering Main Assignment**

**Test Plan:** This test Plan will be test on limitation, under and over limit (for table, servings). It will show the error if it goes over limit, invalid input. It can also test the result of the program in some special case (Ex: for some special people like Rubens May….). Specially, making sure that the calculation is correct with the expected results. This is a mandatory test with some more random test to make sure the whole program work perfectly and does the main job for its purpose. At the end of this test there are 2 results and they are, first everything will work as it is expected to do or it will find out the error and display the problem.

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| **Test**  **Description** | **Inputs** | **Meaning** | **Expected output** | **Result** | **Notes** |
| Name | Sally Ride |  | --------------------------  Name: Sally Ride  Job Section: Astronaut  Meal: Date Cake  Servings: 1  Table Number: 31  Product Cost: $1.00  Gross Cost: $1.00  Discount: $0.00  Tax Cost: $0.00  Nett Cost: $ 1.00  --------------------------  Sally Ride Enjoy the good tucker |  | Succeed |
| Job Section | A | astronaut |
| Product | D | Date Cake |
| Number of Servings | 1 |  |
| Table at | 31 |  |
| Price lookup |  | 1$ |
| **Calculation** | | |
| Gross | Price times servings  1\*1= 1$ | |
| Discount (3 or more) 5% | N/A | |
| Tax | Astronaut don’t need to pay tax | |
| Nett Cost | 1$ | |
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| **Test**  **Description** | **Inputs** | **Meaning** | **Expected output** | **Result** | **Notes** |
| Name | Yuri Gagarin |  | -------------------------  Name: Yuri Gagarin  Job Section: Astronaut  Meal: Beef Sandwich  Servings: 4  Table Number: 31  Product Cost: $0.00  Gross Cost: $0.00  Discount: $0.00  Tax Cost: $0.00  Nett Cost: $ 0.00  ------------------------------  Yuri Gagarin Enjoy the good tucker |  | Succeed |
| Job Section | A | astronaut |
| Product | B | Beef Sandwich |
| Number of Servings | 4 |  |
| Table at | 31 |  |
| Price lookup |  | 0$ |
| **Calculation** | | |
| Gross | Price times servings  0\*4= 0$ | |
| Discount (3 or more) 5% | 0-(0\*0.05) = 0$ | |
| Tax | Astronaut don’t need to pay tax | |
| Nett Cost | 0$ because price for beef sandwich is 0 for astronaut | |
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| **Test**  **Description** | **Inputs** | **Meaning** | **Expected output** | **Result** | **Notes** |
| Name | Jane Tully |  | Error Jane thats not in your diet |  | Succeed |
| Job Section | A | astronaut |
| Product | S | Strawberry Desert |
| Number of Servings | 3 |  |
| Table at | 24 |  |
| Price lookup |  | 1$ |
| **Calculation** | | |
| Gross | Price times servings  1\*3= 3$ | |
| Discount (3 or more) 5% | 3\*0.05 = 0.15$ | |
| Tax | Astronaut don’t need to pay tax | |
| Nett cost | Will be on if the input is correct | |
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| **Test**  **Description** | **Inputs** | **Meaning** | **Expected output** | **Result** | **Notes** |
| Name | Jane Tully |  | -------------------------  Name: Jane Tully  Job Section: Astronaut  Meal: Date cake  Servings: 2  Table Number: 24  Product Cost: $1.00  Gross Cost: $2.00  Discount: $0.00  Tax Cost: $0.00  Nett Cost: $2.00  ------------------------------  Jane Tully Enjoy the good tucker |  | Succeed |
| Job Section | A | astronaut |
| Product | D | Date Cake |
| Number of Servings | 2 |  |
| Table at | 24 |  |
| Price lookup |  | 1$ |
| **Calculation** | | |
| Gross | Price times servings  1\*2=2$ | |
| Discount (3 or more) 5% | N/A | |
| Tax | Astronaut don’t need to pay tax | |
| Nett Cost | 2$ | |
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| **Test**  **Description** | **Inputs** | **Meaning** | **Expected output** | **Result** | **Notes** |
| Name | Rubens May |  | -------------------------  Name: Rubens May  Job Section: Science  Meal: Date cake  Servings: 12  Table Number: 1  Product Cost: $5.00  Gross Cost: $60.00  Discount: $0.00  Tax Cost: $0.00  Nett Cost: $ 0.00  ------------------------------ |  | Succeed |
| Job Section | S | Science |
| Product | D | Date Cake |
| Number of Servings | 12 |  |
| Table at | 1 |  |
| Price lookup |  | 5$ |
| **Calculation** | | |
| Gross | 5\*12=60$  But Free coz in special case and won’t apply on total cost | |
| Discount (3 or more) 5% | 0 \* 0.05 = 0$ | |
| Tax | Science does not pay tax | |
| Nett cost | 0$ because Rubens May is special | |
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| **Test**  **Description** | **Inputs** | **Meaning** | **Expected output** | **Result** | **Notes** |
| Name | Rob Cox |  | -------------------------  Name: Rob Cox  Job Section: Science  Meal: Cheese Sandwich  Servings: 3  Table Number: 2  Product Cost: $4.90  Gross Cost: $14.70  Discount: $0.74  Tax Cost: $0.00  Nett Cost: $ 13.97  ------------------------------ |  | Succeed |
| Job Section | S | Science |
| Product | C | Cheese Sandwich |
| Number of Servings | 3 |  |
| Table at | 2 |  |
| Price lookup |  | 4.90$ |
| **Calculation** | | |
| Gross | Price times servings  4.90\*3=14.7$ | |
| Discount (3 or more) 5% | 14.7 \* 0.05= 0.74$ | |
| Tax | Science does not pay tax | |
| Nett Cost | 14.7-0.74= 13.97$ | |
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| **Test**  **Description** | **Inputs** | **Meaning** | **Expected output** | **Result** | **Notes** |
| Name | Bob Chen |  | -------------------------  Name: Bob Chen  Job Section: Public Relations  Meal: Cheese Sandwich  Servings: 4  Table Number: 6  Product Cost: $7.00  Gross Cost: $28.00  Discount: $1.40  Tax Cost: $2.13  Nett Cost: $ 28.73  ------------------------------ |  | Succeed |
| Job Section | P | Public relations |
| Product | C | Cheese Sandwich |
| Number of Servings | 4 |  |
| Table at | 6 |  |
| Price lookup |  | 7$ |
| **Calculation** | | |
| Gross | Price times servings  7\*4=28$ | |
| Discount (3 or more) 5% | 28\*0.05= 1.4$ | |
| Tax | Tax at 8%  (28-1.4)\*0.08=2.13$ | |
| Nett Cost | 28-1.40+2.13=28.73$ | |
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| **Test**  **Description** | **Inputs** | **Meaning** | **Expected output** | **Result** | **Notes** |
| Name | Bob Chen |  | -------------------------  Name: Bob Chen  Job Section: Public Relations  Meal: Strawberry Desert  Servings: 2  Table Number: 6  Product Cost: $7.50  Gross Cost: $15.00  Discount: $0.00  Tax Cost: $1.20  Nett Cost: $ 16.20  ------------------------------ |  | Succeed |
| Job Section | P | Public relations |
| Product | S | Strawberry Desert |
| Number of Servings | 2 |  |
| Table at | 6 |  |
| Price lookup |  | 7.50$ |
| **Calculation** | | |
| Gross | Price times servings  7.50\*2= 15$ | |
| Discount (3 or more) 5% | N/A | |
| Tax | Tax at 8%  15\*0.08= 1.2$ | |
| Nett Cost | 15+1.2=16.2$ | |
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| **Test**  **Description** | **Inputs** | **Meaning** | **Expected output** | **Result** | **Notes** |
| Name | Jonathan Coulton |  | Invalid number! Enter again! |  | Succeed |
| Job Section | P | Public relations |
| Product | B | Beef Sandwich |
| Number of Servings | 13 |  |
| Table at | 2 |  |
| Price lookup |  | 6.50$ |
| **Calculation** | | |
| Gross | Price times servings  6.50\*13= 84.5$  But error no order over 12 | |
| Discount (3 or more) 5% | Error just apply up to 12 serves no over | |
| Tax | Will display when order from 1 -12 | |
| Nett Cost | Will be display when the serving is input valid | |
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| **Test**  **Description** | **Inputs** | **Meaning** | **Expected output** | **Result** | **Notes** |
| Name | Jonathan Coulton |  | Invalid number! Enter again! |  | Succeed |
| Job Section | P | Public relations |
| Product | D | Date Cake |
| Number of Servings | 1 |  |
| Table at | 35 |  |
| Price lookup |  | 6$ |
| **Calculation** | | |
| Gross | Price times servings  6\*1= 6$ | |
| Discount (3 or more) 5% | N/A | |
| Tax | Tax at 8%  6\*0.08= 0.48$ | |
| Nett Cost | Will display when the input is valid | |
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| **Test**  **Description** | **Inputs** | **Meaning** | **Expected output** | **Result** | **Notes** |
| Name | Thanh Phan |  | Error – must be one of E.D.S.B.C  Exit | Exit | Succeed |
| Job Section | P | Public relations |
| Product | Q, E | Nothing then exit |
| Number of Servings |  |  |
| Table at |  |  |
| Price lookup |  |  |
| **Calculation** | | |
| Gross |  | |
| Discount (3 or more) 5% |  | |
| Tax |  | |
| Nett Cost |  | |
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| **Test**  **Description** | **Inputs** | **Meaning** | **Expected output** | **Result** | **Notes** |
| Name | Portal song, then type in Thanh Phan |  | Portal song Lyrics.  After continuing to input up to 0 the program will exit | Exit | Succeed |
| Job Section | A | astronaut |
| Product | S | Strawberry Desert |
| Number of Servings | 0 | Zero |
| Table at |  |  |
| Price lookup |  |  |
| **Calculation** | | |
| Gross |  | |
| Discount (3 or more) 5% |  | |
| Tax |  | |
| Nett Cost |  | |
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| **Test**  **Description** | **Inputs** | **Meaning** | **Expected output** | **Result** | **Notes** |
| Name | Thanh Phan |  | Error – must be one of E,A,S,P.  Exit | Exit | Succeed |
| Job Section | Q then E | Nothing, then Exit |
| Product |  |  |
| Number of Servings |  |  |
| Table at |  |  |
| Price lookup |  |  |
| **Calculation** | | |
| Gross |  | |
| Discount (3 or more) 5% |  | |
| Tax |  | |
| Nett Cost |  | |
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| **Test**  **Description** | **Inputs** | **Meaning** | **Expected output** | **Result** | **Notes** |
| Name | Portal song, then type in Thanh Phan |  | Portal song Lyrics.  After continuing to input up to 0 the program will exit | Exit | Succeed |
| Job Section | A | astronaut |
| Product | S | Strawberry Desert |
| Number of Servings | 1 |  |
| Table at | 0 | Zero |
| Price lookup |  |  |
| **Calculation** | | |
| Gross |  | |
| Discount (3 or more) 5% |  | |
| Tax |  | |
| Nett Cost |  | |
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