



CPT111

School of Computer Sciences
Semester 1: Session 2020/2021

Assignment 2

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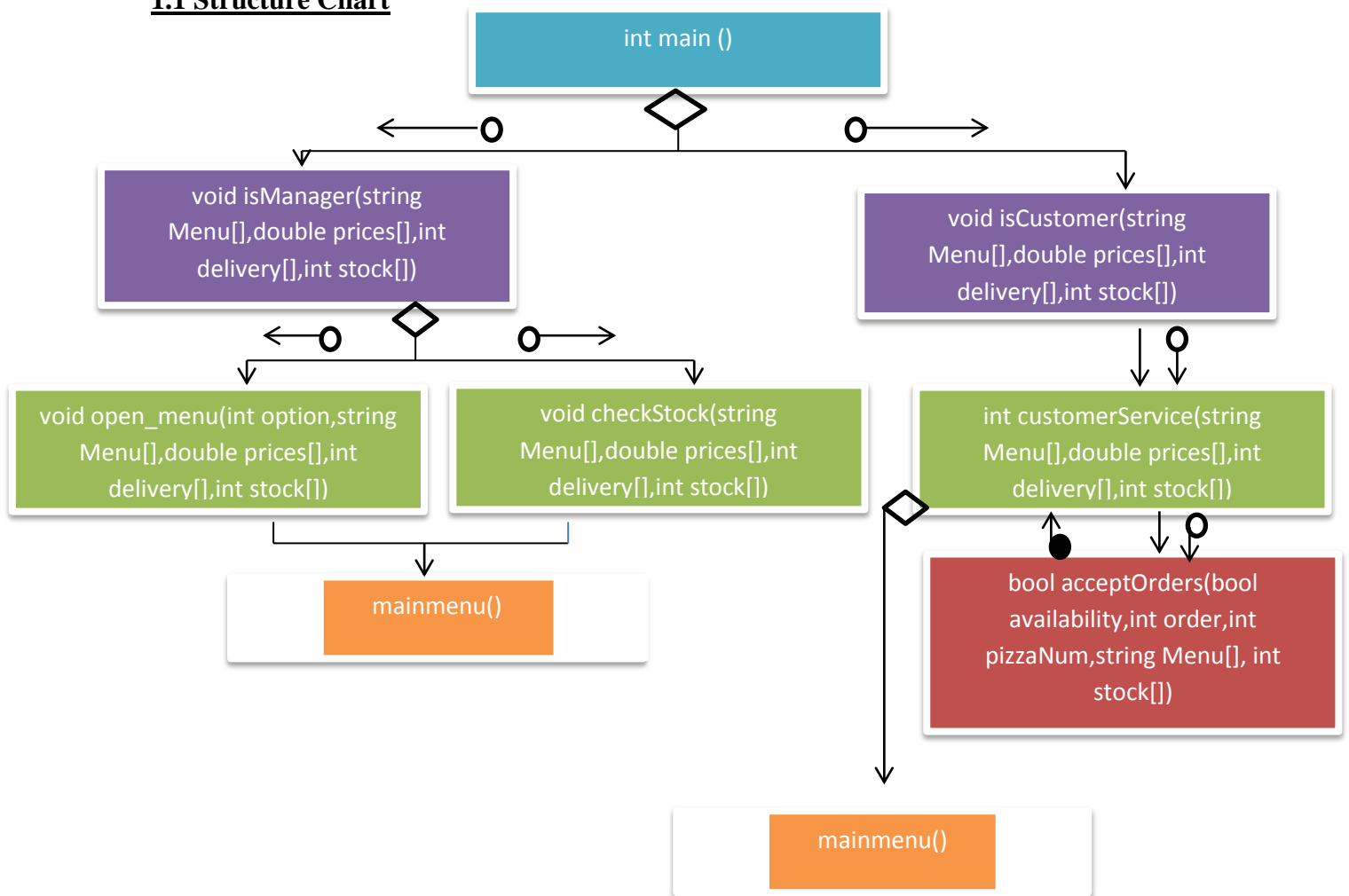
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Group : C

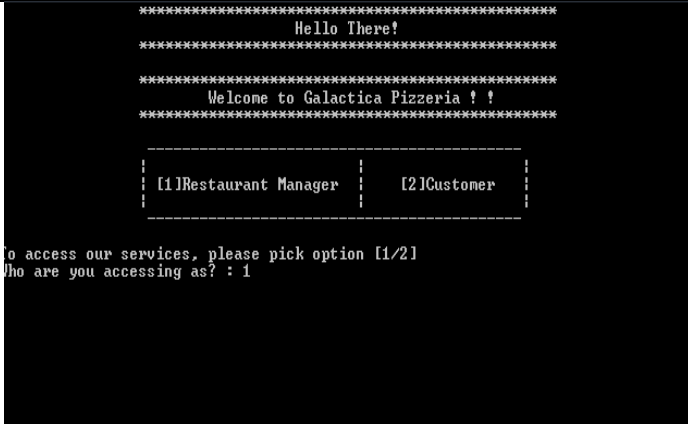
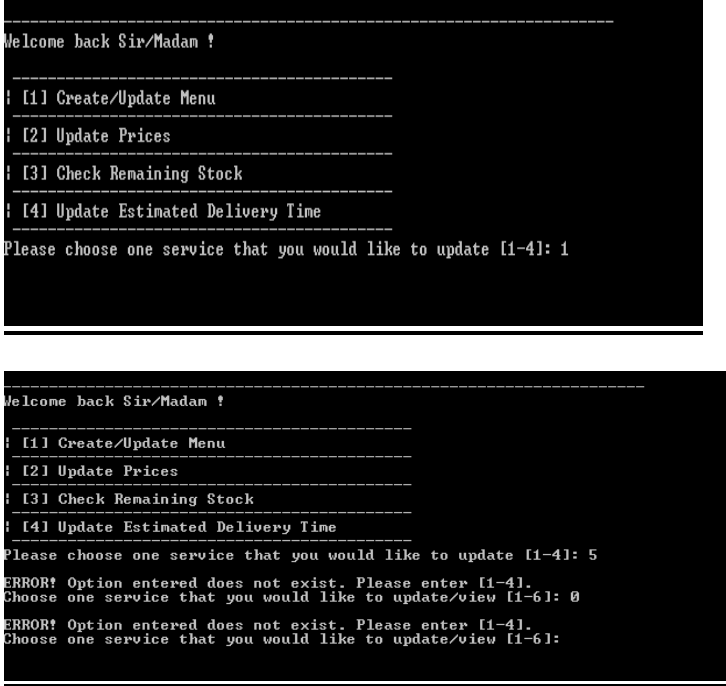
Table of Contents

1.1 Structure Chart.....	1
1.2 Input/Output.....	2
1.3 Flowchart.....	[Another document]

1.1 Structure Chart



1.2 Input/Output

No	Screenshot	Explanation
1.	 <pre> ***** Hello There! ***** ***** Welcome to Galactica Pizzeria ! ! ***** ***** [1]Restaurant Manager [2]Customer ***** To access our services, please pick option [1/2] Who are you accessing as? : 1 </pre>	User enters 1 to pick option "Restaurant Manager"
2.	 <pre> ***** Welcome back Sir/Madam ! ***** [1] Create/Update Menu [2] Update Prices [3] Check Remaining Stock [4] Update Estimated Delivery Time ***** Please choose one service that you would like to update [1-4]: 1 ***** Welcome back Sir/Madam ! ***** [1] Create/Update Menu [2] Update Prices [3] Check Remaining Stock [4] Update Estimated Delivery Time ***** Please choose one service that you would like to update [1-4]: 5 ERROR! Option entered does not exist. Please enter [1-4]. Choose one service that you would like to update/view [1-6]: 0 ERROR! Option entered does not exist. Please enter [1-4]. Choose one service that you would like to update/view [1-6]: </pre>	The following explanation applies to all options 1 to 4. Here, user enters 1 to pick option Create/Update menu and will be directed to an output screen where the menu, prices, and delivery times are listed. If user inputs number less than 1 or more than 5, an error message will appear. The error message will appear until user enters a correct input.

```

This is our current menu:
=====
Menu Names      Price (RM)      Delivery Time(mins)
=====
(1)  Mars Margarita      15.00      15
(2)  Pepperoni Pluto      16.00      15
(3)  Supernova Cheese      16.00      15
(4)  Galactic Pizza Fusion      18.00      15
(5)  Saturn's Onion Rings      7.00      6
(6)  Crater's Mushroom Soup      7.00      7
(7)  Moondust Lychee Juice      10.00      10
(8)  Space-Ready Orange Soda      10.00      5
(9)  E-T Guava Juice      7.00      5
(10) Supernova Sprite Fizz      5.00      5
(11) Venus's Lava Cake      8.50      10
(12) Moon's Vanilla Macaron      4.00      10
=====

```

Do you want to update menu? [YES/NO]: yes

```

This is our current menu:
=====
Menu Names      Price (RM)      Delivery Time(mins)
=====
(1)  Mars Margarita      15.00      15
(2)  Pepperoni Pluto      16.00      15
(3)  Nebula Cheese      15.00      15
(4)  Galactic Pizza Fusion      17.00      15
(5)  Saturn's Onion Rings      7.00      6
(6)  Crater's Mushroom Soup      7.00      7
(7)  Moondust Lychee Juice      10.00      5
(8)  Space-Ready Orange Soda      10.00      5
(9)  E-T Guava Juice      7.00      5
(10) Supernova Sprite Fizz      5.00      5
(11) Venus's Lava Cake      8.50      10
(12) Moon's Vanilla Macaron      4.00      10
=====

```

Do you want to update menu? [YES/NO]: lol

ERROR! We didn't quite catch that T.T'. Please enter [YES/NO].
Do you want to update menu? [YES/NO]:

```

This is our current menu:
=====
Menu Names      Price (RM)      Delivery Time(mins)
=====
(1)  Mars Margarita      15.00      15
(2)  Pepperoni Pluto      16.00      15
(3)  Supernova Cheese      16.00      15
(4)  Galactic Pizza Fusion      18.00      15
(5)  Saturn's Onion Rings      7.00      6
(6)  Crater's Mushroom Soup      7.00      7
(7)  Moondust Lychee Juice      10.00      10
(8)  Space-Ready Orange Soda      10.00      5
(9)  E-T Guava Juice      7.00      5
(10) Supernova Sprite Fizz      5.00      5
(11) Venus's Lava Cake      8.50      10
(12) Moon's Vanilla Macaron      4.00      10
=====

```

Do you want to update menu? [YES/NO]: yes

Enter number of dish/drink that you would like to update [1-12]: 3

Enter new menu: Nebula Cheese

If user enters “Yes” to agree to update menu, user must input number 1 to 12 to update the respective menu names. However, if user enters input other than “Yes”/”YES”/”yes” or “No”/”NO”/”no”, an error message will appear. The error message will appear until user enters a correct input.

Here, user chooses to update menu no. 3, so user inputs . Thus, the program will ask user to enter the name of the new menu.

```

This is our current menu:
=====
Menu Names          Price (RM)          Delivery Time(mins)
=====
[1] Mars Margarita    15.00              15
[2] Pepperoni Pluto   16.00              15
[3] Cheesy Pluto       15.00              15
[4] Galactic Pizza Fusion  17.00              15
[5] Saturn's Onion Rings  7.00               6
[6] Crater's Mushroom Soup  7.00               7
[7] Moondust Lychee Juice  10.00              5
[8] Space-Ready Orange Soda  10.00              5
[9] E-T Guava Juice      7.00               5
[10] Supernova Sprite Fizz  5.00               5
[11] Venus's Lava Cake    8.50              10
[12] Moon's Vanilla Macaron  4.00              10
=====

Do you want to update menu? [YES/NO]: yes
Enter number of dish/drink that you would like to update [1-12]: 13
ERROR! Input Invalid. Please enter number between 1 to 12 ONLY.
Enter number of dish/drink that you would like to update [1-12]: 0
ERROR! Input Invalid. Please enter number between 1 to 12 ONLY.
Enter number of dish/drink that you would like to update [1-12]:

```

```

This is our current menu:
=====
Menu Names          Price (RM)          Delivery Time(mins)
=====
[1] Mars Margarita    15.00              15
[2] Pepperoni Pluto   16.00              15
[3] Cosmic Cheese      15.00              15
[4] Galactic Pizza Fusion  17.00              15
[5] Saturn's Onion Rings  7.00               6
[6] Crater's Mushroom Soup  7.00               7
[7] Moondust Lychee Juice  10.00              5
[8] Space-Ready Orange Soda  10.00              5
[9] E-T Guava Juice      7.00               5
[10] Supernova Sprite Fizz  5.00               5
[11] Venus's Lava Cake    8.50              10
[12] Moon's Vanilla Macaron  4.00              10
=====

Do you want to update menu? [YES/NO]: yes
Enter number of dish/drink that you would like to update [1-12]: 3
Enter new menu: Supernova Cheese
Do you want to update more menu? [YES/NO]: no

```

Original contents of "Menu.txt":

```

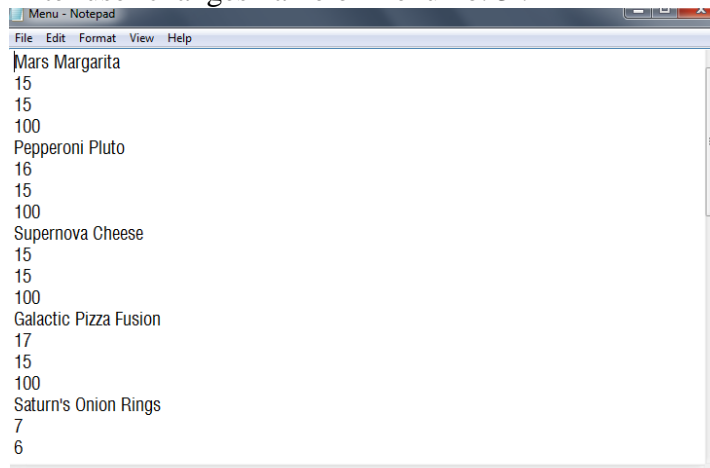
Menu - Notepad
File Edit Format View Help
Mars Margarita
15
15
100
Pepperoni Pluto
16
15
100
Cosmic Cheese
15
15
100
Galactic Pizza Fusion
17
15
100
Saturn's Onion Rings
7
6

```

However, if user enters input other less than 1 or more than 12, an error message will appear. The error message will appear until user enters a correct input.

If all user inputs are correct, after user enters the name of the menu, the content of file of that menu will change, here's an example. User enters number 3 as the menu that they want to update, user wants to change the menu "Cosmic Cheese" to "Supernova Cheese".

After user changes name of menu no. 3 :



```

This is our current menu:
=====
Menu Names          Price <RM>      Delivery Time<mins>
=====
11 Mars Margarita    15.00          15
12 Pepperoni Pluto   16.00          15
13 Cheesy Pluto      15.00          15
14 Galactic Pizza Fusion 17.00          15
15 Saturn's Onion Rings 7.00           6
16 Crater's Mushroom Soup 7.00           7
17 Moondust Lychee Juice 10.00           5
18 Space-Ready Orange Soda 10.00           5
19 E-T Guava Juice    7.00           5
110 Supernova Sprite Pizz 5.00           5
111 Venus's Lava Cake  8.50           10
112 Moon's Vanilla Macaron 4.00           10
=====

Do you want to update menu? [YES/NO]: yes
Enter number of dish/drink that you would like to update [1-12]: 3
Enter new menu: Cheesy Pluto
Do you want to update more menu? [YES/NO]: lol
ERROR! We didn't quite catch that I.T'. Please enter [YES/NO].
Do you want to update more menu? [YES/NO]:
  
```

Contents of file will change accordingly.

After that, the program will ask whether user wants to update more or not. if user enters input other than "Yes"/"YES"/"yes" or "No"/"NO"/"no", an error message will appear. The error message will appear until user enters a correct input.

If user enters yes,

```

This is our current menu:
=====
Menu Names      Price <RM>      Delivery Time<mins>
=====
[1]  Mars Margarita      15.00      15
[2]  Pepperoni Pluto     16.00      15
[3]  Cheesy Pluto        15.00      15
[4]  Galactic Pizza Fusion 17.00      15
[5]  Saturn's Onion Rings  7.00       6
[6]  Crater's Mushroom Soup 7.00       7
[7]  Moondust Lychee Juice 10.00       5
[8]  Space-Ready Orange Soda 10.00       5
[9]  E-T Guava Juice      7.00       5
[10] Supernova Sprite Fizz  5.00       5
[11] Venus's Lava Cake    8.50      10
[12] Moon's Vanilla Macaron 4.00      10
=====

Do you want to update menu? [YES/NO]: yes
Enter number of dish/drink that you would like to update [1-12]: 3
Enter new menu: Cheesy Pluto
Do you want to update more menu? [YES/NO]: lol
ERROR! We didn't quite catch that I_T'. Please enter [YES/NO].
Do you want to update more menu? [YES/NO]: no
Press Y to go back to main menu or press X to exit. [Y/X]: z
ERROR! We didn't quite catch that I_T'. Please enter [Y/X].
Press Y to go back to main menu or press X to exit. [Y/X]:

```

If user enter 'Y' or 'y':

```

Do you want to update menu? [YES/NO]: no
Press Y to go back to main menu or press X to exit. [Y/X]: x

Process exited after 13.39 seconds with return value 1
Press any key to continue . . .

```

If user enters 'X' or 'x':

```

#####
# GET EAT #
#####
We deliver 5-star meals right at your front door!
Press any key to continue . . .

```

the program will ask user to enter the no. of the menu they wish to update, if not, the program will display two choices, Y to go back to main menu or X to exit. If user enters input other than Y or X, an error message will appear and user will be asked to enter again until user enters the correct input

3.

```

Welcome back Sir/Madam !

: [1] Create/Update Menu
: [2] Update Prices
: [3] Check Remaining Stock
: [4] Update Estimated Delivery Time
Please choose one service that you would like to update [1-4]: 2

```

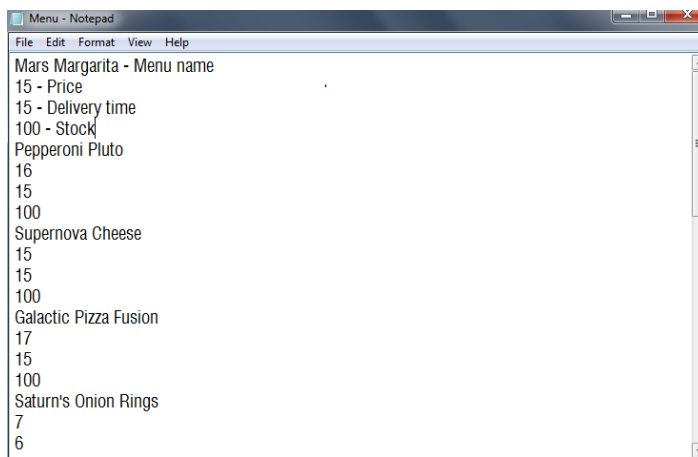
```

This is our current menu:
=====
Menu Names          Price (RM)    Delivery Time<mins>
=====
[1] Mars Margarita    15.00        15
[2] Pepperoni Pluto    16.00        15
[3] Supernova Cheese    15.00        15
[4] Galactic Pizza Fusion 17.00        15
[5] Saturn's Onion Rings 7.00         6
[6] Crater's Mushroom Soup 7.00         7
[7] Moondust Lychee Juice 10.00        5
[8] Space-Ready Orange Soda 10.00        5
[9] E-T Guava Juice    7.00         5
[10] Supernova Sprite Fizz 5.00         5
[11] Venus's Lava Cake 8.50         10
[12] Moon's Vanilla Macaron 4.00         10
=====

Do you want to update price? [YES/NO]: yes
Enter number of dish/drink that you would like to update its price [1-12]: 1
Enter new price: RM13
Do you want to update more prices? [YES/NO]: no
Press Y to go back to main menu or press X to exit. [Y/X]: x

```

Original contents of "Menu.txt":

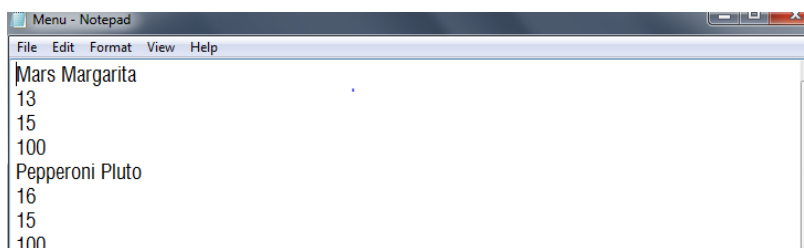


```

Menu - Notepad
File Edit Format View Help
Mars Margarita - Menu name
15 - Price
15 - Delivery time
100 - Stock
Pepperoni Pluto
16
15
100
Supernova Cheese
15
15
100
Galactic Pizza Fusion
17
15
100
Saturn's Onion Rings
7
6

```

After user changes price of menu no. 1 :



```

Menu - Notepad
File Edit Format View Help
Mars Margarita
13
15
100
Pepperoni Pluto
16
15
100

```

Here, user enters 2 to pick option Update Prices and will be directed to an output screen where the menu, prices, and delivery times are listed, the same as before.

Here, user chooses to update price of menu no. 1, so user inputs . Thus, the program will ask user to enter the new price. User want to change price of Mars Margarita from RM15 to RM13.

Contents of file will change accordingly.

4.

```

Welcome back Sir/Madam !

-----
: [1] Create/Update Menu
: [2] Update Prices
: [3] Check Remaining Stock
: [4] Update Estimated Delivery Time
-----
Please choose one service that you would like to update [1-4]: 3

```

```

#####
SYSTEM STOCK CHECK
#####
Menu Names                               Stock
-----
[1] Mars Margarita                      100
[2] Pepperoni Pluto                      100
[3] Supernova Cheese                     100
[4] Galactic Pizza Fusion                100
[5] Saturn's Onion Rings                 100
[6] Crater's Mushroom Soup              100
[7] Moondust Lychee Juice                100
[8] Space-Ready Orange Soda               99
[9] E-T Guava Juice                      100
[10] Supernova Sprite Fizz                100
[11] Venus's Lava Cake                   100
[12] Moon's Vanilla Macaron              100
-----

Do you want to add stock? [YES/NO]: yes
Enter number of dish/drink that you would like to add its stock [1-12]: 8
Enter amount of stock: 1
Do you want to add more stocks? [YES/NO]: no
Press Y to go back to main menu or press X to exit. [Y/X]: x

-----
Process exited after 33.1 seconds with return value 1
Press any key to continue . . .

```

Original contents of Menu no. 8 in "Menu.txt":

```

Space-Ready Orange Soda
10
5
99

```

After user add stock of menu no. 8 :

```

Space-Ready Orange Soda
10
5
100

```

Here, user enters 3 to pick option "Check Remaining Stock" and will be directed to an output screen where the menu, and stocks are listed.

Here, user chooses to add stock of menu no. 8, so user inputs 8. Thus, the program will ask user to enter the amount of stock they want to add. User want to add stock of "Space-Ready Orange Soda" by 1.

Contents of file will change accordingly.

5.

```

Welcome back Sir/Madam !

: [1] Create/Update Menu
: [2] Update Prices
: [3] Check Remaining Stock
: [4] Update Estimated Delivery Time
Please choose one service that you would like to update [1-4]: 4

```

```

This is our current menu:
=====
Menu Names                Price (RM)    Delivery Time(mins)
=====
[1]  Mars Margarita        13.00        15
[2]  Pepperoni Pluto       16.00        15
[3]  Supernova Cheese      15.00        15
[4]  Galactic Pizza Fusion  17.00        15
[5]  Saturn's Onion Rings   7.00         6
[6]  Crater's Mushroom Soup 7.00         7
[7]  Moondust Lychee Juice  10.00        5
[8]  Space-Ready Orange Soda 10.00        5
[9]  E-T Guava Juice        7.00         5
[10] Supernova Sprite Fizz   5.00         5
[11] Venus's Lava Cake      8.50        10
[12] Moon's Vanilla Macaron 4.00        10
=====

Do you want to update delivery time? [YES/NO]: yes
Enter number of dish/drink that you would like
to update its delivery time [1-12]: 12
Enter new delivery time: 6
Do you want to update more delivery times? [YES/NO]: no
Press Y to go back to main menu or press X to exit. [Y/X]: x

Process exited after 30.39 seconds with return value 1
Press any key to continue . . .

```

Original contents of Menu no. 12 in "Menu.txt":

```

Moon's Vanilla Macaron
4
10
100

```

After user change delivery time of menu no. 12 :

```



Moon's Vanilla Macaron
4
6
100

```

Here, user enters 4 to pick option "Update Estimated Delivery Time" and will be directed to an output screen where the menu, prices, and delivery times are listed, the same as before. Delivery time is basically how long it takes for the restaurant to make the food or drink.

Here, user chooses to change delivery time of menu no. 12, so user inputs 12. Thus, the program will ask user to enter the new delivery time. User wants to change delivery time of "Moon's Vanilla Macaron" from 10 minutes to 6 minutes.

Contents of file will change accordingly.

6.	 <pre> ***** Hello There! ***** ***** Welcome to Galactica Pizzeria ! ! ***** ***** [1]Restaurant Manager [2]Customer ***** To access our services, please pick option [1/2] Who are you accessing as? : 2 </pre>	User enters 2 to pick option "Customer"
7.	 <pre> ***** * 0 / * * / 0 * * 0 / * * / 0 * * 0 / * * / 0 * ***** Welcome to Galactica Pizzeria where we serve out-of-the-world pizzas!! Would you like to look at our menu? <YES/NO> : yes ***** * 0 / * * / 0 * * 0 / * * / 0 * * 0 / * * / 0 * ***** Welcome to Galactica Pizzeria where we serve out-of-the-world pizzas!! Would you like to look at our menu? <YES/NO> : no Too bad :(You're missing out! Thank you for visiting our website. Process exited after 4.293 seconds with return value 0 Press any key to continue . . . ***** * 0 / * * / 0 * * 0 / * * / 0 * * 0 / * * / 0 * ***** Welcome to Galactica Pizzeria where we serve out-of-the-world pizzas!! Would you like to look at our menu? <YES/NO> : beep ERROR! We didn't quite catch that I_I'. Please enter [YES/NO]. Would you like to look at out menu? [YES/NO]: </pre>	User must enter "Yes"/"YES"/"yes" or "No"/"NO"/"no". If user enters input other than "Yes"/"YES"/"yes" or "No"/"NO"/"no", an error message will appear. The error message will appear until user enters a correct input.

8.

```

=====MENU=====
Menu Names      Price (RM)
-----
11 Mars Margarita      15.00
12 Pepperoni Pluto     16.00
13 Nebula Cheese       15.00
14 Galactic Pizza Fusion 17.00
15 Saturn's Onion Rings 7.00
16 Crater's Mushroom Soup 7.00
17 Moondust Lychee Juice 10.00
18 Space-Ready Orange Soda 10.00
19 E-T Guava Juice      7.00
110 Supernova Sprite Fizz 5.00
111 Venus's Lava Cake    8.50
112 Moon's Vanilla Macaron 4.00
=====

```

```

Enter your order [1-12]: 11
Enter amount of desserts you desire : 1
*Order Available!*
You ordered Venus's Lava Cake : RM8.50
Amount of dessert : 1

YOU ORDERED Venus's Lava Cake
ORDER SUCCESSFULLY SAVED
Would you like to add another order? [YES/NO]:

```

```

Enter your order [1-12]: 13
ERROR! Input Invalid. Please enter number between 1 to 12 ONLY.
Enter your order [1-12]:

```

```

Enter your order [1-12]: 11
Enter amount of desserts you desire : 1
*Order Available!*
You ordered Venus's Lava Cake : RM8.50
Amount of dessert : 1

YOU ORDERED Venus's Lava Cake
ORDER SUCCESSFULLY SAVED
Would you like to add another order? [YES/NO]: yes
Enter your order [1-12]: 1
Enter amount of pizza you desire : 200
*We're really sorry :< Mars Margarita is OUT OF STOCK*
Would you like to add another order? [YES/NO]:

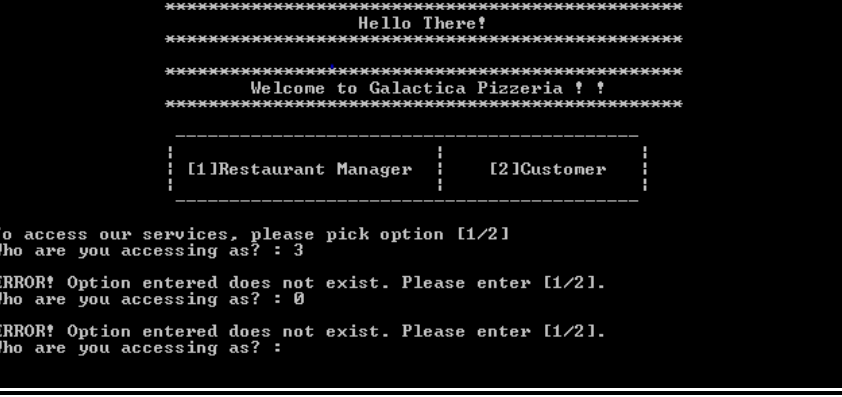
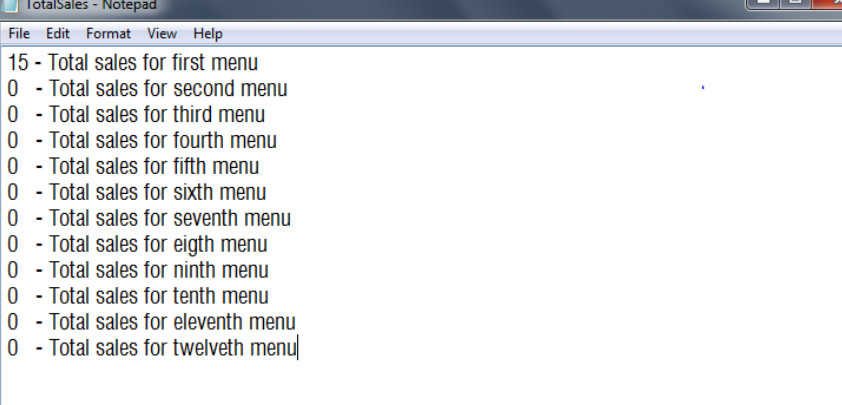
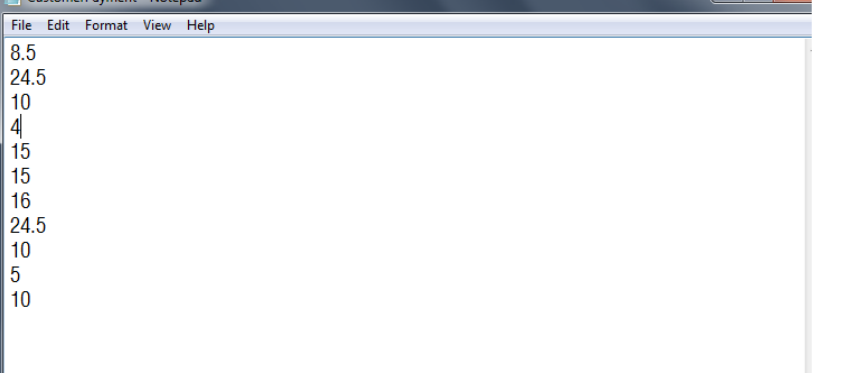
```

If user enters "YES"/"Yes"/"yes", user will be directed to an output screen that shows menu names and prices, user must enter order number and amount of them.

If user enters input other or less than 1 or less than 12, an error message will appear. The error message will appear until user enters a correct input.

Then, user must enter amount of their order, if its in stock, the order is available, if it's not, the order is not available. After that, user will be asked whether they want to add another order.

	<pre> Enter your order [1-12]: 13 ERROR! Input Invalid. Please enter number between 1 to 12 ONLY. Enter your order [1-12]: 1 Enter amount of pizza you desire : 1 *Order Available!* You ordered Mars Margarita : RM15.00 Amount of pizza : 1 YOU ORDERED Mars Margarita YOUR ORDER IS SUCCESSFULLY SAVED Would you like to add another order? [YES/NO]: meep ERROR! We didn't quite catch that T_T'. Please enter [YES/NO]. Would you like to add another order? [YES/NO]: </pre>	<p>User must enter "Yes"/"YES"/"yes" or "No"/"NO"/"no". If user enters input other than "Yes"/"YES"/"yes" or "No"/"NO"/"no", an error message will appear. The error message will appear until user enters a correct input.</p>
9.	<pre> ###Galactica Pizzeria's Customer Info### Number of customers: 1 Press 1 to order again, otherwise press 2 Press Y to go back to main menu or press X to exit. [Y/X]: </pre> <pre> ###Galactica Pizzeria's Customer Info### Number of customers: 1 Press 1 to order again, otherwise press anything else.. Press Y to go back to main menu or press X to exit. [Y/X]: k ERROR! We didn't quite catch that T_T'. Please enter [Y/X]. Press Y to go back to main menu or press X to exit. [Y/X]: _ </pre>	<p>At the end of the program, after the bill is displayed and the total sales, highest, lowest selling menu and number of customers are displayed, user is asked to press 1 to order again otherwise press any key. If user press 1, user will be directed to the ordering screen, otherwise, user is asked to press Y to back to main menu or X to exit. User must enter 'Y'/'y' or 'X'/'x' or an error message will appear. The error message will appear until user enters a correct input.</p>

10.	 <pre> ***** Hello There! ***** ***** Welcome to Galactica Pizzeria !! ***** [1]Restaurant Manager [2]Customer To access our services, please pick option [1/2] Who are you accessing as? : 3 ERROR! Option entered does not exist. Please enter [1/2]. Who are you accessing as? : 0 ERROR! Option entered does not exist. Please enter [1/2]. Who are you accessing as? : </pre>	<p>User must enter 1 or 2. If user enters input less than 1 or more than 2, an error message will appear. The error message will appear until user enters a correct input.</p>
11.	 <pre> TotalSales - Notepad File Edit Format View Help 15 - Total sales for first menu 0 - Total sales for second menu 0 - Total sales for third menu 0 - Total sales for fourth menu 0 - Total sales for fifth menu 0 - Total sales for sixth menu 0 - Total sales for seventh menu 0 - Total sales for eighth menu 0 - Total sales for ninth menu 0 - Total sales for tenth menu 0 - Total sales for eleventh menu 0 - Total sales for twelfth menu </pre>	<p>Lastly, everytime a customer makes order, the program will keep track of sales of each menu and store it in a file "TotalSales". For example, a few customers ordered the first menu so in the file, the first menu has 15 sales.</p>
12.	 <pre> CustomerPayment - Notepad File Edit Format View Help 8.5 24.5 10 4 15 15 16 24.5 10 5 10 </pre>	<p>Also, everytime a customer makes payment, the program will store data of the amount of payment each customer makes into a file "CustomerPayment".</p>