



Daffodil
International
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PROJECT REPORT

Course Title: OS Lab

Course Code: CSE324

Project Title: Fast Food Restaurant Management System in
Shell Script

SUBMITTED TO

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Abstract

It's a small restaurant. Practically, customers have to make their order by choosing food from our given food menu list. This is a simple shell script based project. After taking orders we provide the bill to the customers and customers has to pay the bill and wait for collecting the food. After taking the order customers receives a greeting message. Conclude that insist of the program cause more efficiency to the restaurant.

Table of Content

Chapter-1

- + Introduction.

Chapter-2

- + Project Demonstration and Explanation
 - Demonstration Examples
 - Code Discussion

Chapter-3

- + Usages in Real Life
- + Advantages
- + Disadvantages
- + Limitations

Chapter-4

- + Future Possibilities & Improvement.

Chapter-5

- + Conclusion

Chapter-1

Project Title

Fast Food Restaurant Management in Shell Script. In a restaurant, the food order contains food name, size, and quantity.

Introduction

The project requires to make a program which will help to automate the process of food order and delivery system in a restaurant. The program will ask customer to enter the food he/she want to take from a given list. Then will ask to enter the desired quantity of that item. After getting the order customers get a greeting message and get an inform message for paying the bill and wait for collecting the food.

Difficulty

Medium

Input

The program will take input for choosing option from menu. Then will engage according to the selection.

Order: Choosing order will show the list of food items and ask to input number of items to order. After selecting this it will ask for chosen items then for every item it will ask for the size of the item (if available). After entering of size of the item it will ask for the quantity of the item. After the requested

input, the order will complete showing a message containing customer's bill for paying and also a greeting message.

Output

Output will show the total bill amount which a customer ordered and which will need to pay.

Language(s) used

The complete program is written in Shell Script. Which is called Bash Programming.

IDE used

Linux OS Terminal.

Testing and Validation

The program was tested using many of different inputs needed accordingly to see the outputs. And the program successfully delivered the desired output at any time of command.

Program was run several times with different inputs by coder.

Chapter-2

Project Demonstration and Explanation

Demonstration Screenshots:

Example 1:

```
foysal@ABYSS: ~/Desktop/PROJECT
foysal@ABYSS:~/Desktop/PROJECT$ bash PROJECT_RMS.sh
=====WELCOME TO OXYGEN FAST FOOD RESTAURANT=====
=====MENU=====
|||....FOOD NAME.....Size.....Price....|||
1....Burger.....200/300g.....130tk/180tk
2....Chicken Pizza....8/10inch.....120tk/150tk
3....French Fry.....300g.....70tk
4....Coke.....300/400/1000mg.....30/40/50tk
5....Coffee.....250mg.....65tk
What do you want to order?
1
Which size of burger you want?\n
1. 200g 2. 300g
2
How many Burger do you want?
2
Do you want to order 1 more item?
1. Yes 2. No
1
What do you want to order as a second item?
4
Which size Coke you want?
1. 300ml 2. 400ml 3. 1litre
3
```

```
foysal@ABYSS: ~/Desktop/PROJECT
3....French Fry.....300g.....70tk
4....Coke.....300/400/1000mg.....30/40/50tk
5....Coffee.....250mg.....65tk
What do you want to order?
1
Which size of burger you want?\n
1. 200g 2. 300g
2
How many Burger do you want?
2
Do you want to order 1 more item?
1. Yes 2. No
1
What do you want to order as a second item?
4
Which size Coke you want?
1. 300ml 2. 400ml 3. 1litre
3
How many Coke do you want?
1
Your Total Bill is:410
Please pay the bill and wait for collecting the food!
Thankyou for purchasing food from our restaurant! :)
foysal@ABYSS:~/Desktop/PROJECT$
```

```
foysal@ABYSS: ~/Desktop/PROJECT
Thankyou for purchasing food from our restaurant! :)
foysal@ABYSS:~/Desktop/PROJECT$ bash PROJECT_RMS.sh
=====WELCOME TO OXYGEN FAST FOOD RESTAURANT=====
=====MENU=====
|||...FOOD NAME.....Size.....Price...|||
1....Burger.....200/300g.....130tk/180tk
2....Chicken Pizza....8/10inch.....120tk/150tk
3....French Fry.....300g.....70tk
4....Coke.....300/400/1000mg.....30/40/50tk
5....Coffee.....250mg.....65tk
What do you want to order?
2
Which size pizza you want?
1. 8inch 2. 10inch
1
How many Pizza do you want?
5
Do you want to order 1 more item?
1. Yes 2. No
2
Your Total Bill is:600
Please pay the bill and wait for collecting the food!
Thankyou for purchasing food from our restaurant! :)
foysal@ABYSS:~/Desktop/PROJECT$
```

Working Procedure:

Example 1:

At first run of the program it will show the welcome message with the name of restaurant and a food menu list which will have order by a customer. The food menu is consist of food name, size and prize.

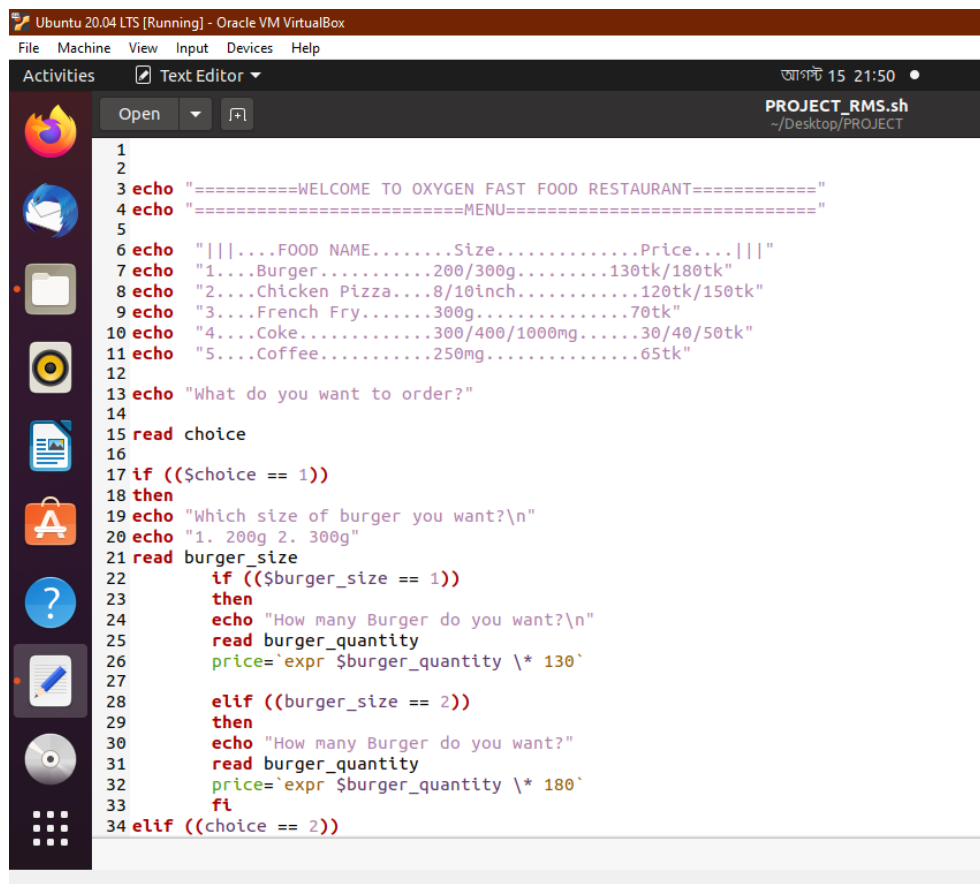
Then it will ask for an order. Here 5 item of food is available so he/she has to select 1-5 any food for ordering. In example 1, we selected 1 or Burger and then it will ask for the size of the burger with the message 1. 200g 2. 300g. Then it will ask for the quantity of the burger for order. We selected 300g size burger and quantity of 2. Then the program will ask for another order. Here we select yes and it will ask for the item name of second order. We select coke which is no 4 food. Then it will ask for the size of the coke bottle with the different size of the bottle. Then we select 1 litre coke.

After completing the order it will show the total bill amount. And the inform message for paying the bill and wait for collecting the food. After it will also show a greetings message.

Example 2:

The process of order is same as example 1 but here the difference is when we complete our first order then it will ask for the second order. Then we select for No. Then directly show the total bill of first order with inform message and the greeting message.

Project Explanation Screenshots:



```
1
2
3 echo "=====WELCOME TO OXYGEN FAST FOOD RESTAURANT======"
4 echo "=====MENU=====
5
6 echo "|||...FOOD NAME.....Size.....Price....|||"
7 echo "1...Burger.....200/300g.....130tk/180tk"
8 echo "2...Chicken Pizza...8/10inch.....120tk/150tk"
9 echo "3...French Fry.....300g.....70tk"
10 echo "4...Coke.....300/400/1000mg.....30/40/50tk"
11 echo "5...Coffee.....250mg.....65tk"
12
13 echo "What do you want to order?"
14
15 read choice
16
17 if (($choice == 1))
18 then
19 echo "Which size of burger you want?\n"
20 echo "1. 200g 2. 300g"
21 read burger_size
22     if (($burger_size == 1))
23     then
24         echo "How many Burger do you want?\n"
25         read burger_quantity
26         price=`expr $burger_quantity \* 130`
27     elif ((burger_size == 2))
28     then
29         echo "How many Burger do you want?"
30         read burger_quantity
31         price=`expr $burger_quantity \* 180`
32     fi
33 elif ((choice == 2))
```


Ubuntu 20.04 LTS [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

Activities Text Editor

Open

PROJECT_RMS.sh
~/Desktop/PROJECT

```
33 fi
34 elif ((choice == 2))
35 then
36 echo "Which size pizza you want?"
37 echo "1. 8inch 2. 10inch"
38 read pizza_size
39     if (($pizza_size == 1))
40     then
41         echo "How many Pizza do you want?"
42         read pizza_q
43         price=`expr $pizza_q \* 120`
44
45     elif (($pizza_size == 2))
46     then
47         echo "How many Pizza do you want?"
48         read pizza_q
49         price=`expr $pizza_size \* 150`
50     fi
51
52 elif ((choice == 3))
53 then
54 echo "How many plate of French Fries do you want?"
55 read ff_q
56 price=`expr ff_q \* 70`
57
58
59 elif ((choice == 4))
60 then
61 echo "Which size Coke you want?"
62 echo "1. 300ml 2. 400ml 3. 1litre"
63 read coke_size
64     if (($coke_size == 1))
65     then
66         echo "How many Coke do you want?"
```

Ubuntu 20.04 LTS [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

Activities Text Editor

Open

PROJECT_RMS.sh
~/Desktop/PROJECT

```
57
58
59 elif ((choice == 4))
60 then
61 echo "Which size Coke you want?"
62 echo "1. 300ml 2. 400ml 3. 1litre"
63 read coke_size
64     if (($coke_size == 1))
65     then
66         echo "How many Coke do you want?"
67         read coke_q
68         price=`expr $coke_q \* 30`
69
70     elif (($coke_size == 2))
71     then
72         echo "How many Coke do you want?"
73         read coke_q
74         price=`expr $coke_q \* 40`
75
76     elif (($coke_size == 3))
77     then
78         echo "How many Coke do you want?"
79         read coke_q
80         price=`expr $coke_q \* 50`
81     fi
82
83 elif ((choice == 5))
84 then
85 echo "How many Cup of Coffee do you want?"
86 read coffee_q
87 price=`expr $coffee_q \* 65`
88 fi
89
90
```

Ubuntu 20.04 LTS [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

Activities Text Editor

আগস্ট 15 21:52

PROJECT_RMS.sh
~/Desktop/PROJECT

```
89
90
91
92 echo "Do you want to order 1 more item?"
93 echo "1. Yes 2. No"
94 read order_choice2
95
96
97
98 if ((order_choice2 == 1))
99 then
100 echo "What do you want to order as a second item?"
101
102 read choice
103
104     if (($choice == 1))
105     then
106         echo "Which size of burger you want?\n"
107         echo "1. 200gm 2. 300gm"
108         read burger_size
109         if (($burger_size == 1))
110         then
111             echo "How many Burger do you want?\n"
112             read burger_quantity
113             price2=`expr $burger_quantity \* 130`
114
115         elif ((burger_size == 2))
116         then
117             echo "How many Burger do you want?"
118             read burger_quantity
119             price2=`expr $burger_quantity \* 180`
120         fi
121     elif ((choice == 2))
122     then
123         echo "Which size pizza you want?"
```

Ubuntu 20.04 LTS [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

Activities Text Editor

আগস্ট 15 21:52

PROJECT_RMS.sh
~/Desktop/PROJECT

```
117
118         read burger_quantity
119         price2=`expr $burger_quantity \* 180`
120         fi
121     elif ((choice == 2))
122     then
123         echo "Which size pizza you want?"
124         echo "1. 8inch 2. 10inch"
125         read pizza_size
126         if (($pizza_size == 1))
127         then
128             echo "How many Pizza do you want?"
129             read pizza_q
130             price2=`expr $pizza_q \* 120`
131
132         elif (($pizza_size == 2))
133         then
134             echo "How many Pizza do you want?"
135             read pizza_q
136             price2=`expr $pizza_size \* 150`
137         fi
138
139     elif ((choice == 3))
140     then
141         echo "How many plate of French Fries do you want?"
142         read ff_q
143         price2=`expr ff_q \* 70`
144
145     elif ((choice == 4))
146     then
147         echo "Which size Coke you want?"
148         echo "1. 300ml 2. 400ml 3. 1litre"
149         read coke_size
150         if (($coke_size == 1))
```

```
Ubuntu 20.04 LTS [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Text Editor
PROJECT_RMS.sh
~/Desktop/PROJECT

141 read ff_q
142 price2=`expr ff_q \* 70`
143
144
145 elif ((choice == 4))
146 then
147 echo "Which size Coke you want?"
148 echo "1. 300ml 2. 400ml 3. 1litre"
149 read coke_size
150 if (($coke_size == 1))
151 then
152 echo "How many Coke do you want?"
153 read coke_q
154 price2=`expr $coke_q \* 30`
155
156 elif (($coke_size == 2))
157 then
158 echo "How many Coke do you want?"
159 read coke_q
160 price2=`expr $coke_q \* 40`
161
162 elif (($coke_size == 3))
163 then
164 echo "How many Coke do you want?"
165 read coke_q
166 price2=`expr $coke_q \* 50`
167 fi
168
169 elif ((choice == 5))
170 then
171 echo "How many Cup of Coffee do you want?"
172 read coffee_q
173 price2=`expr $coffee_q \* 65`
174
```

```
Ubuntu 20.04 LTS [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Text Editor
PROJECT_RMS.sh
~/Desktop/PROJECT

154 price2=`expr $coke_q \* 30`
155
156 elif (($coke_size == 2))
157 then
158 echo "How many Coke do you want?"
159 read coke_q
160 price2=`expr $coke_q \* 40`
161
162 elif (($coke_size == 3))
163 then
164 echo "How many Coke do you want?"
165 read coke_q
166 price2=`expr $coke_q \* 50`
167 fi
168
169 elif ((choice == 5))
170 then
171 echo "How many Cup of Coffee do you want?"
172 read coffee_q
173 price2=`expr $coffee_q \* 65`
174
175 fi
176 echo "Your Total Bill is:${(price+price2)}"
177 echo "Please pay the bill and wait for collecting the food!"
178 echo "Thankyou for purchasing food from our restaurant! :)"
179
180 elif ((order_choice2 == 2))
181 then
182 echo "Your Total Bill is:$price
183 echo "Please pay the bill and wait for collecting the food!"
184 echo "Thankyou for purchasing food from our restaurant! :)"
185 fi
186
187
```

Working Procedure:

In the first of the programme we have displayed the restaurant name, menu details and menu list by using the echo. After using this display we used read function for taking order choice input from the customer. Here we have 5 available food in the list. So a customer have to select between 1 and 5 for order the food. After getting of choice input value then if function will work here. In the first condition where burger or 1 choice value, here it will print a message for getting the size of the burger. And also here can be the different input value as menu. So here we have used a nested if function. After getting the size of the burger it will ask for the quantity of the burger. Here we have used if and elif. After getting the size and the quantity we have calculated the price in a variable with the expression multiplication function.

By using of elif we have work all the statement same before.

In the second order system we have just used a nested if function for getting the second order. We have asked the customer for the second order. If he input yes then the previous whole if elif function will run again. In the end of the second order function run it will calculate the total bill in a new variable with summation of the previous bill amount and second bill amount. And also it will show the message of information for paying the bill and wait for the food. Also it will show a greeting message to the customer.

If the customer input no for the second order. It will only calculate the first order bill and the other messages.

Chapter-3

Usage in Real Life

This program can be used in Food courts or restaurants to maintain the food orders and keep everything under surveillance. Although this program contains a few items in list the list can be bigger and with more options as necessary.

Advantages

This program will help restaurants to manage food orders more easily. Busy shops have calculating exact bill problems sometimes. This program will help to maintain the accurate bill for customer within fastest time.

Disadvantages and Limitations

This program is a console program which is not user friendly. The interface is quite difficult to input data normally. This program has a small size of food menu which will not enough for good business. So we need to develop this program with more food items.

Chapter-4

Future Possibilities and Improvements

Upgrading this program, we can create more suitable food management system. Which can even be capable of keeping records of previous records. Adding a user-friendly GUI can make this program usable by everyone. It can more item list than it has in it. With a few adjustments, we can even make a way to change any order that has already been placed. It will bring a little complexity to source code but will surely be helpful. This can be used in AI for automated home delivery system.

Chapter-5

Conclusion

This program is full of potential to help people managing orders and saving times. It can be helpful for both customers and restaurant owner or manager.

References

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