

Catering Services Application

By Yoshihiro Nakagawasai
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Introduction

“Catering Services for your party” This is an application that is a food catering planning guide for users.

The final quote changes depending on the user’s selection, and the user can confirm their selection on the final screen.

It is a requirement to accept user input and produce printed output and interact with file system.

Features

- Display menu and price list
- Menu Selection
- Exit or Retry
- Main Function

This application consists of four main functions. First, I will explain the features one by one along with the terminal screen.

Feature 1: Display menu and price list

The title will be displayed as soon as the application starts. A price list of the plan will be displayed along with a menu explanation of the catering service.

```
> + src git:(main) x python3 main.py

Catering services
For your party

Please check our catering menus and price list
After selecting menus, you can check the total price

Our Chinese Food menu includes spring rolls, Gyozas, Dim-Sum and Pudding
Our Mexican Food menu includes TACOS, Burritos, Pozole and Corn Cake
Our Thai Food menu includes Pad Thai, Som Tum, Tom Yum Goong and Roti

Press: 1
Chinese Food
$100
_____
Press: 2
Mexican Food
$150
_____
Press: 3
Thai Food
$200
_____

Please press the number: 1
Please choose one of the main dish from here.

Press: 1
Crispy Fried Chicken
$0
_____
Press: 2
Roasted Pork Belly
$20
_____
Press: 3
Angus Beef Steak
$40
_____

Please press the number: █
```

This is the first feature I will introduce. Menu plans and price lists are displayed along with service descriptions of this application. This coding is managed with dictionary, and if the menu will be changed, the menu name and price can be easily changed, and it is also designed, and it is also designed to be linked to other functions.

Feature 2: Menu Selection

Here the user selects the desired menu plan by pressing the number. After that, the user keep selecting a main dish and drinks, and the price is calculated according to the user chosen menu.

If the user makes a wrong selection, the system is designed to display "Something wrong. Please try again" and then retry.

```
Our Chinese Food menu includes spring rolls, Gyozas, Dim-Sum and Pudding
Our Mexican Food menu includes TACOS, Burritos, Pozole and Corn Cake
Our Thai Food menu includes Pad Thai, Som Tum, Tom Yum Goong and Roti

Press: 1
Chinese Food
$100
-----
Press: 2
Mexican Food
$150
-----
Press: 3
Thai Food
$200
-----
Please press the number: 1
Please choose one of the main dish from here.

Press: 1
Crispy Fried Chicken
$0
-----
Press: 2
Roasted Pork Belly
$20
-----
Press: 3
Angus Beef Steak
$40
-----
Please press the number: 4
Something went wrong. Please try again
Please press the number: 3
Would you like to add alcoholic?

Press: 1
Nothing
$0
-----
Press: 2
Beer
$20
-----
Press: 3
Beer Wine Sake
$40
-----
Please press the number: █
```

Here, users select their preferred plan, main dish, and drink. If you make a mistake in your input, a warning will be displayed in red and users can retry.

Feature 3: Exit or Retry

The final screen of the application will display a final selection. The user can retry from the beginning by selecting "y". Conversely, exit the application by selecting "n".

```
Please press the number: 3
Please fill out your food allergies if you have:
Fish

Please confirm your plan

*** Thai Food ***
Main Dish : Angus Beef Steak
Alcoholic : Beer Wine Sake
Food allergy: Fish
Your total price : $280

Would you like to try again?
Please press y/n: y

Catering services
for your party

Please check our catering menus and price list
After selecting menus, you can check the total price

Our Chinese Food menu includes spring rolls, Gyozas, Dim-Sum and Pudding
Our Mexican Food menu includes TACOS, Burritos, Pozole and Corn Cake
Our Thai Food menu includes Pad Thai, Som Tum, Tom Yum Goong and Roti
```

This is the last allergy input that the user enters. The plan selected, the total price and user's allergy will be displayed on the final confirmation screen. After that, the user can retry by pressing 'y' if Yes, or 'n' to finish the application.

Feature 4: Main Function

This feature is the core of this application.

Most functions are called from this Main Function, and the output and input screens are displayed alternately, the use view the menus and select menus comfortably.

A walk-through of my application code from here.

```
src > main.py > main
1
2 import sys
3 import colorama
4 from colorama import Fore
5 from functions import (price, welcome, show_plan, show_dish,
6                        show_drink, select_plan, select_dish, select_drink)
7 import time
8 colorama.init(autoreset=True)
9
10
11 # Main
12
13 def main():
14     welcome()
15     show_plan()
16
17     # Choose a plan
18
19     user_menu = select_plan()
20     print("Please choose one of the main dish from here.\n")
21
22     show_dish()
23
24     # Choose a main dish
25
26     user_dish = select_dish()
27
28
29     print("Would you like to add alcoholic?\n")
30     show_drink()
31
32     # Choose a drink
33
34     user_drink = select_drink()
35
```

Most functions are invoked from this main function. Originally, there was a lot of writing in this main function, which made the code difficult to read, so this problem was solved by managing other functions separately in a new file called functions.py.

A walk-through of application code

The code is designed with emphasis on readability and understandability. Finally, this main function displays the menu the user has selected and at the same time displays the total price.

```
37     print("\nPlease confirm your plan\n")
38     time.sleep(1)
39     print(f"*** {user_menu} ***")
40     print(f"Main Dish : {user_dish}")
41     print(f"Alcoholic : {user_drink}")
42     print(f"Food allergy: {allergy}")
43     print(f"Your total price : ${sum(price)}\n")
44     time.sleep(1)
45     print("Would you like to try again?\n")
46
47
48     end()
49
50 # users select to try again or exit
51 # feature 4
52
53 def end():
54     while True:
55         user_exit = input("Please press y/n: ")
56         if user_exit.lower() == 'y':
57             price.clear()
58             main()
59         elif user_exit.lower() == 'n':
60             print("Thank you for choosing us.")
61             sys.exit(0)
62         else:
63             print(Fore.RED + "Something went wrong. Please try again")
64
65 if __name__ == "__main__":
66     main()
67
```

When writing code, the code is designed with emphasis on readability and understandability. Finally, this main function displays the menu the user has selected and at the same time displays the total price.

A walk-through of functions code

The menu and price list are designed using a dictionary, and the functions below are arranged to make it easy to understand what is displayed and how.

An empty list of price is defined.

```
functions.py > ...
functions.py > ...
1 # import main
2 import pyfiglet
3 import time
4 from colorama import Fore
5
6 # Calculate total price
7
8 price = []
9
10 # Plans
11 # There are 3 types of menu which include id, menu and price
12 # It is easy to see, add and remove items
13 # These prices and name of menus are linked other functions
14 # So just changing here will be reflected in other functions
15 # And also there are main dish menu and drink menu as well
16
17 plan1 = {"id": 1, "menu": "Chinese Food", "price": 100}
18 plan2 = {"id": 2, "menu": "Mexican Food", "price": 150}
19 plan3 = {"id": 3, "menu": "Thai Food", "price": 200}
20
21
22 def plan(id, menu, price):
23     print(f"Press: {id}")
24     print(menu)
25     print(f"${price}")
26     print("-----")
27
28 # Main dishes
29
30 dish1 = {"id": 1, "menu": "Crispy Fried Chicken", "price": 0}
31 dish2 = {"id": 2, "menu": "Roasted Pork Belly", "price": 20}
32 dish3 = {"id": 3, "menu": "Angus Beef Steak", "price": 40}
33
34
35 def dish(id, menu, price):
36     print(f"Press: {id}")
37     print(menu)
38     print(f"${price}")
39     print("-----")
40
41
```

Here, price is defined as an empty list and plan is defined using a dictionary. The menu and prices are designed to be easy to understand.

A walk-through of functions code

- import pyfiglet
- import colorma
- import time

```
functions.py x
functions.py > ...
44 drink1 = {"id": 1, "menu": "Nothing", "price": 0}
45 drink2 = {"id": 2, "menu": "Beer", "price": 20}
46 drink3 = {"id": 3, "menu": "Beer Wine Sake", "price": 40}
47
48
49 def drink(id, menu, price):
50     print(f"Press: {id}")
51     print(menu)
52     print(f"${price}")
53     print("-----")
54
55
56 # This function expresses the title of this application
57 # And also it shows the 3 types of details of the menus
58 # feature 1
59
60 def welcome():
61     print(pyfiglet.figlet_format("Catering services for your party"))
62     print(Fore.LIGHTGREEN_EX + "Please check our catering menus and price list\n")
63     "After selecting menus, you can check the total price\n")
64     print(f"Our {plan1['menu']} menu includes spring rolls, Gyozas, Dim-Sum and Pudding\n")
65     print(f"Our {plan2['menu']} menu includes TACOS, Burritos, Pozole and Corn Cake\n")
66     print(f"Our {plan3['menu']} menu includes Pad Thai, Som Tum, Tom Yum Goong and Roti\n")
67
68 # feature 1
69
70 def show_plan():
71     time.sleep(.5)
72     plan(**plan1)
73     plan(**plan2)
74     plan(**plan3)
75
76 def show_dish():
77     time.sleep(.5)
78     dish(**dish1)
79     dish(**dish2)
80     dish(**dish3)
81
82 def show_drink():
83     time.sleep(.5)
84     drink(**drink1)
```

This welcome function uses the imported pyfiglet, and the title is displayed as soon as the application starts. Furthermore, the description is displayed using the imported colorma, and the menu plan displayed. The select_plan function uses the imported time to display selection menu for users.

A walk-through of functions code

Loops also have a simple design and easy-to-understand structure, allowing users to retry after a red message warns them of any input errors.

```
functions.py ×
functions.py > ...
86     drink(++drink3)
87
88     # Plans
89     # Users select one of the menu by pressing the number [1 or 2 or 3]
90     # feature 2
91
92     def select_plan():
93
94         while True:
95             user_num = input("Please press the number: ")
96             if user_num == "1":
97                 price.append(plan1["price"])
98                 return plan1["menu"]
99             elif user_num == "2":
100                 price.append(plan2["price"])
101                 return plan2["menu"]
102             elif user_num == "3":
103                 price.append(plan3["price"])
104                 return plan3["menu"]
105             else:
106                 print(Fore.RED + "Something went wrong. Please try again")
107
108     # Main dish
109     # Users select one of the main dish by pressing the number [1 or 2 or 3]
110
111     def select_dish():
112
113         while True:
114             user_num = input("Please press the number: ")
115             if user_num == "1":
116                 price.append(dish1["price"])
117                 return dish1["menu"]
118             elif user_num == "2":
119                 price.append(dish2["price"])
120                 return dish2["menu"]
121             elif user_num == "3":
122                 price.append(dish3["price"])
123                 return dish3["menu"]
124             else:
125                 print(Fore.RED + "Something went wrong. Please try again")
126
```

This function has a simple if statement and a while statement. If the user's selection is incorrect, a retry will occur and loop processing will be performed.

A walk-through of functions code

It receives the user's allergy input and finally displays it along with the user's selections.

```
main.py > ...
30     show_drink()
31
32     # Choose a drink
33
34     user_drink = select_drink()
35
36     allergy = input("Please fill out your food allergies if you have:\n")
37
38     print("\nPlease confirm your plan\n")
39     time.sleep(1)
40     print(f"*** {user_menu} ***")
41     print(f"Main Dish : {user_dish}")
42     print(f"Alcoholic : {user_drink}")
43     print(f"Food allergy: {allergy}")
44     print(f"Your total price : ${sum(price)}\n")
45     time.sleep(1)
46     print("Would you like to try again?\n")
47
48     end()
49
50 # users select to try again or exit
51 # feature 4
52
53 def end():
54     while True:
55         user_exit = input("Please press y/n: ")
56         if user_exit.lower() == 'y':
57             price.clear()
58             main()
59         elif user_exit.lower() == 'n':
60             print("Thank you for choosing us.")
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62         else:
63             print(Fore.RED + "Something went wrong. Please try again")
64
65 if __name__ == "__main__":
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67
```

The content input by the user is assigned to the allergy variable. Display the selections receives from the user, the total cost of the plan and the user's allergies on a confirmation screen. Finally, in the end function the user can choose to retry or exit the application, and if retry, the entered content will be reset.

A review of my development

A particularly challenging part of building the application was testing. Initially, I wrote the main function and other functions in the same file, but I faced many errors during testing. Based on that experience, I recoded the main function and other functions separately to deal with any errors. This experience will help you focus on the importance of thinking about functions separately the next time you start coding, and write code that is easy to read and understand.

A particularly challenging part of building the application was testing. Initially, I wrote the main function and other functions in the same file, but I faced many errors during testing. Based on that experience, I recoded the main function and other functions separately to deal with any errors. This experience will help you focus on the importance of thinking about functions separately the next time you start coding, and write code that is easy to read and understand. Thank you very much.