





symplexis





4 MIGRANT WOMEN RETURNERS



## Hotel and Restaurant Management Software

#### Activity scenario summary:

In this example coding for a project which replicates a Hotel Front Desk Management Software System used by staff working at the front desk and in customer service.

Once this project is completed, the user will have built a real working software system which can allow staff to:

- Check people in and out of rooms
- View vacant rooms
- View Occupied rooms
- Book a meal
- Create a room service order
- View which rooms need to be cleaned
- View customer bill



## Built into the template...

You should have access to a menu template that looks like this...

- Lines 1-27- There is premade lists for you containing room numbers and food items
- Lines 29-51- Subroutines which will be added to in the different difficulty levels of this project
- Lines 53-84- the main menu which will automatically appear when you run your code for the first time (all you have to do is program each menu option which may link to the subroutine or may not (choices 2 and 3)

```
1 food1=list()
 2 price1=list()
                                                         54
 4 #room details
 5 room avail=[100,103,201,204]
                                                         57
 6 room_occp=[101,104,202,203]
                                                         58
                                                         59
8 #food details
                                                         60
9 breakfast={"Sandwich-h":5,
                                                         61
              "Soup-p":3,
                                                         62
10
                                                         63
11
              "Juice-e":2,
12
              "Coffee-c":2,
                                                         64
                                                         65
13
              "Ham & Egg-g":5,
                                                         66
14
              "Pot of Tea-a":2}
                                                         67
15
                                                         68
16 lunch={"Rice & Peas-r":4,
                                                         69
17
          "Burger(chick.)-b":6,
                                                         70
18
          "Chicken Pizzola-c":5,
                                                         71
19
          "Mutton Curry-m":6,
                                                         72
20
          "Pot of tea-a":2}
                                                         73
21 dinner={"Salads-s":3,
                                                         74
22
           "Steamed Veg.-v":2,
                                                         75
23
           "Jerk Chicken-k":6,
                                                         76
24
           "Burger(bean)-b":4,
                                                         77
25
           "Coffee-c":2,
                                                         78
26
           "Juice-j":2}
                                                         79
27
                                                         80
28 #subroutines
                                                         81
29 def clear():
                                                         82
30
       print ("\n")
                                                         83
31
32 def bill():
       print("option not completed- advanced ")
34
35 def booking():
      print("option not completed- beginner")
36
37
38 def vacant():
39
       print("option not completed- beginner")
40
41 def or_break(ch):
       print("option not completed- intermediate")
42
43
44 def or_lunch(ch):
45
       print("option not completed- intermediate")
47 def or dinner(ch):
       print("option not completed- intermediate")
49
50 def food():
      print("option not completed- intermediate")
51
```

53 #main menu 55 chc=0 56 while chc !=7: clear() print("------Menu-----") print("1. Food") print("2. Room Available List") print("3. Room Occupied List") print("4. Book a Room") print("5. Bill") print("6. Vacant a room") print("7. Exit") chc=int(input("Enter your choice: ")) if chc==1: food() elif chc==2: print("option not completed- beginner") elif chc==3: print("option not completed- beginner") elif chc==4: booking() elif chc==5: bill() elif chc==6: vacant() elif chc==7: break else: print("----Wrong Input(1-7 only)-----")



# The code for the main menu (explained)

- Line 56- the user enters a while loop. This means that the main menu will continue to be shown until the user enters the option "7", which will then break the loop (on line 80)
- Lines 58-65- menu options are displayed
- Line 66- the user is asked to enter an potion
- Lines 67-78, depending on which option the user enters, determines which action will be performed by the code. In the intermediate and advanced sections we will learn the theory of subroutines, but for now all the code is written in the main menu itself
- Lines 81-82- if the user does not enter a value between 1 and 7, they are asked to enter a valid input and the code is repeated



## The Menu:

The menu will look like this.

For the beginner section of this code we will be programming the second two buttons as well as creating all the lists that the user will be interacting with later.





#### 2. Room available list

----Menu----1. Food
2. Room Available List
3. Room Occupied List
4. Book a Room
5. Bill
6. Vacant a room
7. Exit

This button will allow the user to view all of the room numbers that are available to be booked.

It will show the user a list in which all of the room numbers will be stored.



## What it will look like...

-Menu-1. Food 2. Room Available List 3. Room Occupied List 4. Book a Room 5. Bill 6. Vacant a room 7. Exit Enter your choice: 2 Available rooms---> [100, 103, 201, 204]

 When the user is prompted to enter a choice (represented by the number on the menu), and the option 2 is entered, the list of available rooms will be displayed



Step 1

#### The available room list

The available room and occupied room lists have already been created for you on lines 5 and 6 of the premade template. You will code how the program will interact with this list in the menu on line 70 of the template

The option for seeing the available rooms is number 2 on the menu, we will write the code in here 4 **#room details** 5 room\_avail=[100,103,201,204] 6 room\_occp=[101,104,202,203]



Step 2

#### Displaying the list

Firstly, a print statement will be used to inform the user that what they will be seeing is the list of available rooms in the hotel. We call what is being printed a "string" and we can tell this because there is green text and quotation marks around what is being outputted to the user

the next item that is printed is the list itself. This is done by referencing the name of the list in brackets after the print statement (without quotation marks surrounding it)



### 3. Room occupied list

-Menu 1. Food 2. Room Available List 3. Room Occupied List Book a Room 4. 5. Bill 6. Vacant a room 7. Exit

This button will allow the user to view all of the room numbers that are currently occupied and that cannot be checked into at present.

It will show the user a list in which all of the room numbers will be stored, much like the room available list in the way that is is programmed.



#### What it will look like...

-Menu-1. Food 2. Room Available List 3. Room Occupied List 4. Book a Room 5. Bill 6. Vacant a room 7. Exit Enter your choice: 3 Occupied rooms---> [101, 104, 202, 203]

 When the user is prompted to enter a choice and they enter the number 3, they will be shown the list of rooms that are occupied

> Before the solution is shown on the next slide, have a go at programming the option much like how we programmed the occupied room option in steps 1 and 2

Step 3

#### Displaying the list

Will work as the first option we programmed previously and will allow the user to see the list of occupied rooms. Differences to note:

- Is located in the "elif chc==3: " statement
- The OCCUPIED room list ("room\_occp") is being printed this time, NOT the available room list ("room\_avail")

Other than that, as you can see, the code for displaying a list is always the same



Congratulations you have finished the beginner section of this project

you are ready to move onto the intermediate section...