<<Hotel Management system>>

21CSS101J – PROGRAMMING FOR PROBLEM-SOLVING

Mini Project Report

Submitted by

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November 2023

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BONAFIDE CERTIFICATE

Certified that Mini project report titled_____is the bonafide work of Reg.No_____Name_____who carried out the minor project under my supervision. Certified further, that to the best of my knowledge, the work reported herein does not form any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

SIGNATURE

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TABLE OF CONTENTS

1.Problem Statement

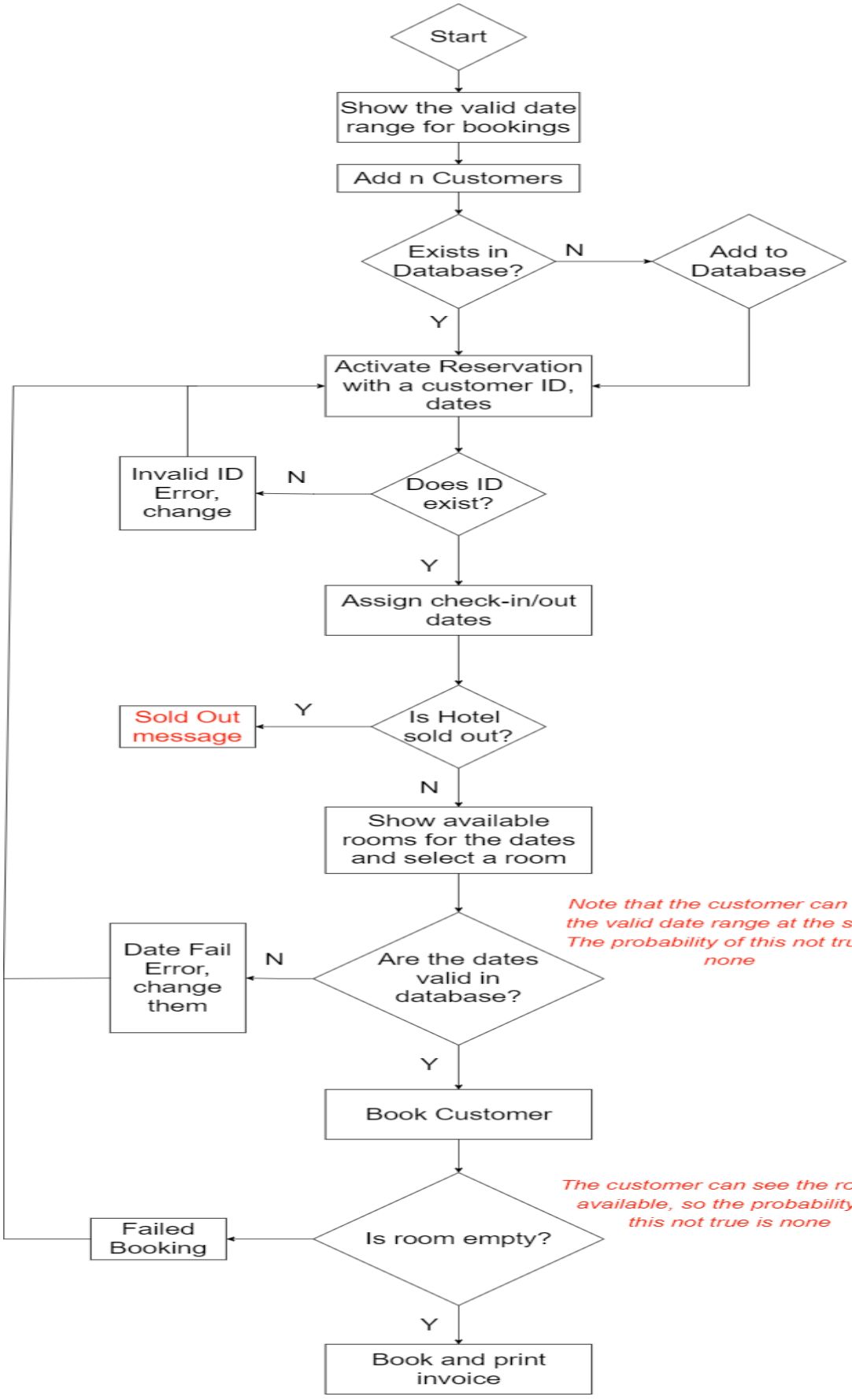
The title of my mini project is hotel management system . The source code is written in python programming language. The idea behind this is to manage a hotel . My project uses many modules, function and interesting shades of python language and mysql.

2.Methodology / Procedure/ Algorithm

1. **User Authentication:**
   Users are prompted to log in by providing a valid username and password.
   The system validates the login credentials against pre-defined user accounts.
   If the login is successful, users gain access to the main menu; otherwise, an error message is displayed.
2. **Booking a room:**
   Users select the "Book a room" option.
   They enter the room number and personal details.
   The system verifies room availability and reserves a room for the guest.
   A confirmation message is displayed upon successful booking.
3. **Canceling a room:**
   Users select the "Cancel a room" option.
   They provide the guest name to identify the reservation.
   The system cancels the reservation, increasing available room for the corresponding hotel.
   A confirmation message is displayed upon successful cancellation.
4. **Checking room Status:**
   Users choose the "Check room Status" option.
   They enter the room number to retrieve information such as guest name, phone number, accommodation type.
   The system displays the room status.

3. Flow chart

Make Reservation



4. Coding (Python)

```
#Project For Hotel Management System Using Python,File Handling and SQL Database

#Importing Required Modules
import csv
import random
import os
import mysql.connector as c
con=c.connect(host='localhost',user='root',passwd='mysql',database='hotel')     #To connect to
   MySQL via Python
cursor=con.cursor()
cursor.execute("use hotel")     #Selecting Database where table is created.

#Defining Global Variables
hotel_database="hotel.csv"
name=phno=add=checkin=checkout=room=price=rc=p=roomno=customer_Id=day=[]
hotel=[]
services=[]
fields=['Name','Phone No','Email','Check-In','Check-Out','Room Type','Price','Room
   Number',"Customer Id","Days"]
i=0
days=0
room_type=""

#Home Function
def Home():
   print("-------------------------------------------------")
   print("GREETINGS!\n")
   print("WELCOME TO HOTEL PARADISE")
   print("-------------------------------------------------")
   print("\t\t\t 1 Booking A Room\n")
   print("\t\t\t 2 Rooms Info\n")
   print("\t\t\t 3 Room service(Food Menu)\n")
   print("\t\t\t 4 Pay Bill\n")
   print("\t\t\t 5 Search A Record\n")
   print("\t\t\t 6 Delete Record\n")
```

```
    print("\t\t\t 7 Contact Us\n")
    print("\t\t\t 0 Exit\n")
    print("-------------------------------------------------")
    choice=int(input("What Would You Like To Do? Enter Your Choice :"))
    if choice == 1:
        print(" ")
        booking()
    elif choice == 2:
        print(" ")
        info_rooms()
    elif choice == 3:
        print(" ")
        restaurant()
    elif choice == 4:
        print(" ")
        payment()
    elif choice == 5:
        print(" ")
        search_record()
    elif choice == 6:
        print(" ")
        delete_record()
    elif choice==7:
        print(" ")
        contact()
    elif choice==0:
        print(" ")
        exit()
    else:
        print("Invalid Option")

#Defining Different Functions For The Program

#BOOKING FUNCTION

def booking():
        days=0
        openfile=open(hotel_database,'a')
        fw=open('services.csv','a')
        global i
        global hotel
```

```
print("----------------------")
print("BOOKING ROOMS")
print("----------------------")
print(" ")
global fields
Booking_data=[]
csvfile=csv.writer(openfile)
csvfile1=csv.writer(fw)
while True:
    n=input("Name :")
    while n=="":
        print("Name can't be empty")
        n=input("Name :")
    p1=input("Phone :")
    while len(p1)!=10:
        print("Invalid Phone Number")
        p1=input("Phone :")
    a=input("email :")
    while "@" not in a:
        print("Invalid Email")
        a=input("email :")
    if n!="" and p1!="" and a!="":
        name.append(n)
        phno.append(p1)
        add.append(a)
        break
checkindate=input("Check-In Date(YYYY-MM-DD) :")
#copy of data for file management
indate=checkindate
checkin.append(checkindate)
checkindate=checkindate.split('-')
ci=checkindate
ci[0]=int(ci[0])
ci[1]=int(ci[1])
ci[2]=int(ci[2])
checkoutdate=input("Check-Out Date(YYYY-MM-DD) :")

#copy of date for file management

outdate=checkoutdate
checkout.append(checkoutdate)
```

```
checkoutdate=checkoutdate.split('-')
co=checkoutdate
co[0]=int(co[0])
co[1]=int(co[1])
co[2]=int(co[2])
if co[1]<ci[1] and co[2]<ci[2]:
        print("\n\tErr..!!\n\tCheck-Out date must fall after Check-In\n")
        name.pop(i)
        add.pop(i)
        checkin.pop(i)
        checkout.pop(i)
        booking()
elif co[1]==ci[1] and co[0]>=ci[0] and co[2]<=ci[2]:
        print("\n\tErr..!!\n\tCheck-Out date must fall after Check-In\n")
        name.pop(i)
        add.pop(i)
        checkin.pop(i)
        checkout.pop(i)
        booking()
else:
        month = {
                1:31,
                2:28,
                3:31,
                4:30,
                5:31,
                6:30,
                7:31,
                8:31,
                9:30,
                10:31,
                11:30,
                12:31
                }
        d=0

        #Checking Right Credentials

        if (0<ci[1]<13 and 0<co[1]<13 and ci[2]<=month[ci[1]] and co[2]<=month[co[1]]):
           #if month are same
           if(ci[1]==co[1]):
```

```
            days=co[2]-ci[2]
        else:
            for i in range(ci[1],co[1]):
                #print(month[i])
                days+=(month[ci[1]]-ci[2])+co[2]
        print('Booking for ',days+1,'days')
    else:
        print('Wrong Value')
print("----SELECT ROOM TYPE----")
print(" 1. Standard")
print(" 2. Standard Plus")
print(" 3. Suites")
print(" 4. Cottages")
print(("\t\tPress 0 for Room Prices"))
choice=int(input("->"))

# if-conditions to display alloted room type and it's price
if choice==0:
   print(" 1. Standard- Rs. 4000")
   print(" 2. Standard Plus - Rs. 4500")
   print(" 3. Suites - Rs. 5000")
   print(" 4. Cottages- Rs. 5500")
   choice=int(input("->"))
elif choice==1:
   room.append('Standard')
   print("Room Type- Standard")
   room_type="Standard"
   price.append(4000)
   p=4000
   print("Price- 4000")
   bill=(days+1)*p
elif choice==2:
   room.append('Standard Plus')
   print("Room Type-Standard Plus ")
   price.append(4500)
   print("Price- 4500")
   room_type="Standard Plus"
   p=4500
   bill=(days+1)*p
elif choice==3:
   room.append('Suites')
```

```
        print("Room Type- Suites")
        price.append(5000)
        print("Price- 5000")
        room_type='Suites'
        p=5000
        bill=(days+1)*p
    elif choice==4:
        room.append('Cottages')
        print("Room Type- Cottages")
        price.append(5500)
        print("Price- 5500")
        room_type="Cottages"
        p=5500
        bill=(days+1)*p
    else:
        print(" Wrong choice..!!")
    # randomly generating room no. and customer id for customer

    room_no = random.randrange(40)+300
    customer_id = random.randrange(60)+10
    print("")
    roomno.append(room_no)
    customer_Id.append(customer_id)
    i=i+1
    hotel.extend([n,p1,a,indate,outdate,room_type,p,room_no,customer_id,days+1])
    csvfile.writerow(hotel)
    print("\t\t\t---ROOM BOOKED SUCCESSFULLY---\n")
    print("Room No. - ",room_no)
    print("Customer Id - ",customer_id)
    print("Successfully Saved into Our Database")
    data=str(hotel)
    sql="insert into
booking(Name,Phone_Number,Email,Check_In,Check_Out,Room_Type,Price,Room_Number,Cus
tomer_id,Days)values('{}',{},'{}','{}','{}','{}',{},{},{},{})".format(n,str(p1),a,str(indate),str(outdate),r
oom_type,p,room_no,customer_id,days+1)
    cursor.execute(sql)
    service_charge=0
    services.extend([n,customer_id,service_charge,bill])
    csvfile1.writerow(services)

    sql1="insert into
```

```
    service(Name,Customer_id,Room_Bill)values('{}',{},{})".format(n,customer_id,bill)
        cursor.execute(sql1)
        con.commit()
        hotel=[]
        openfile.close()
        n=int(input("0-BACK\n -->"))
        if n==0:
            Home()
        else:
            exit()

#ROOM INFO FUNCTION

def standard():
        print("\t\t\tSTANDARD")
        print("----------------------------------------------------------------")
        print("Find sanctuary in our serene Standard room. A cosy double bedroom complete with an ensuite with rainfall shower and private balcony.\n")
        print("This cosy room has everything you need for R&R, including crisp 300 thread count cotton sheets, a hypoallergenic mattress, ensuite bathroom, a private balcony and, of course, superfast WiFi connection. Decorated with classic interior that complements the Algarve's natural beauty, this room has everything you need for a relaxing stay.")
        print("\nThis room includes\n")
        print("1.Air Conditioning")
        print("2.High Speed WiFi")
        print("3.Multi-Line Telephone")
        print("4.Flat Screen TV with International Channels")
        print("5.Daily Maid Service")
        print("")

def standard_plus():
    print("\t\t\tSTANDARD PLUS")
    print("----------------------------------------------------------------")
    print("Enjoy all the comfort and style of the Standard but in our larger room. With a size of 26m², the Standard Plus is ideal for longer stays.")
    print("\nWith a private entrance and ground floor access, our Standard Plus rooms have all the comfort and style of the Standard but with added space. With a size of 26m², and a private balcony perfect for sipping a cocktail at sunset, the Standard Plus is ideal for longer stays at The Paradise Hotel. Complete with a divinely comfortable twin or double bed, crisp 300 thread count cotton sheets and modern en suite bathroom fitted with all amenities, oversized 600 tog bath towels, hairdryer, vanity sink and magnifying make-up mirror.")
    print("\nThis room includes\n")
    print("1.Air Conditioning")
```

```
    print("2.High Speed WiFi")
    print("3.Multi-Line Telephone")
    print("4.Flat Screen TV with International Channels")
    print("5.Daily Maid Service")
    print("")

def suites():
        print("\t\t\tSUITES")
        print("----------------------------------------------------------------")
        print("Our stylish suites are complete with a double bedroom, living space with cosy couches, ensuite and private balcony. Dreamy.")
        print("\nBright and airy, our stylish suites feature separate living areas with cosy couches to lounge on, as well as a divine double bedroom for the ultimate R&R. In the bathroom, a glorious shower awaits, with a vanity sink and mirror equipped with hairdryer, magnifying make-up mirror, and signature Paradise slides.")
        print("\nThis room includes\n")
        print("1.Air Conditioning")
        print("2.High Speed WiFi")
        print("3.Multi-Line Telephone")
        print("4.Flat Screen TV with International Channels")
        print("5.Daily Maid Service")
        print("")

def cottages():
        print("\t\t\tCOTTAGES")
        print("----------------------------------------------------------------")
        print("Our charming two-bedroom cottages each have their own living room, kitchenette, bathroom and patio. Great for couples and families looking for a blissful getaway.")
        print("\nThe perfect retreat. Situated among the pine trees, our two-bedroom cottages each have their own living room, kitchenette, bathroom and patio. Great for couples and families, with modern and luxurious style and all The Paradise Hotel action on the doorstep, it’s ideal for a dreamy getaway.")
        print("\nThis room includes\n")
        print("1.Air Conditioning")
        print("2.High Speed WiFi")
        print("3.Multi-Line Telephone")
        print("4.Flat Screen TV with International Channels")
        print("5.Daily Maid Service")
        print("")

def info_rooms():
        print()
```

```
    print("            ------ HOTEL ROOMS INFO ------")
    print("")
    standard()
    standard_plus()
    suites()
    cottages()
    n=int(input("0-BACK\n ->"))
    if n==0:
     Home()
    else:
     exit()

# RESTAURANT FUNCTION

def restaurant():
   id=int(input("Customer Id: "))
   k=0
   counter=0
   fw=open('services.csv','a')
   csvfile=csv.writer(fw)
   global i
   with open('hotel.csv','r') as csvfiler:
      csvr=csv.reader(csvfiler)
      for row in csvr:
            #print(len(row))
            for i in range(0,len(row)):
               #print(i)
               if row[8]==str(id):
                  k=k+1
                  x=row[8]
                  name=row[0]
                  customerid=row[8]
                  print(' ')
                  print('Welcome',row[0],".What would you like to have today?")
                  print("-----------------------------------------------------------")
                  print("-----------------------------------------------------------")
                  print("\t\tHotel Paradise Menu Card")
                  print("-----------------------------------------------------------")
                  print("-----------------------------------------------------------")
                  print("\n BREADS                                    THALI MEAL DEALS")
                  print("--------------------------------- ----------------------------------")
```

```
print(" 1 Toast X2..... 25.00 36.Chana and Puri.....50.00 ")
print(" 2 French Toasts..... 30.00       37.Halwa and Puri.....40.00")
print("-------------------------          38.Chana Halwa Puri.....65.00")
print(" ROTIS AND PARATHAS                                  ----------")
print(" ------------------------           CHINESE")
print(" 3.Plain Roti X1..... 10.00         ----------")
print(" 4.Butter Roti X1..... 20.00        39.Veg Chowmein.....80.00")
print(" 5.Butter Nan..... 25.00            40.Butter Chowmein.....100.00")
print(" 6.Aaloo Paratha X1.....25.00       41.Noodles.....40.00")
print(" 7.Aaloo and Onion Paratha X1...30.00   42.Ramen.....60.00")
print(" 8.Paneer Paratha X1.....45.00      43.Veg Spring Rolls.....100.00")
print(" ----------------------------       44.Mixed Spring Rolls.....150.00")
print(" SABJI                                       ----------")
print(" ----------------------------       DALS")
print(" 9.Aaloo Gobi.....90.00             ----------")
print(" 10.Bhindi Fry..... 90.00           45.Dal Tadka.....80.00")
print(" 11.Mix Veg.....90.00               46.Dal Fry.....80.00")
print(" 12.Mushroom Masala.....120.00      47.Dal Makhni.....100.00")
print(" 13.Aaloo Matar.....100.00          48.Rajma.....100.00")
print(" 14.Matar Paneer.....120.00         49.Chhole.....100.00")
print(" 15.Kadai Paneer.....120.00         ----------")
print(" 16.Shahi Paneer.....120.00         RICE")
print(" ----------------------------       ----------")
print(" SOUPS                         50.Plain Rice.....90.00")
print("----------------------------       51.Jeera Rice.....90.00")
print(" 17.Tomato Soup.....50.00           52.Fried Rice.....120.00")
print(" 18.Manchow Soup.....55.00          53.Paneer Fried Rice.....165.00")
print(" 19.Hot Sour Soup.....55.00         54.Veg Pulao.....130.00")
print(" 20.Palak Soup.....55.00            55.Matar Pulao.....140.00")
print("----------------------------       ----------")
print(" SOUTH INDIAN DISHES                SANDWICHES")
print("----------------------------       ----------")
print(" 21.Plain Dosa.....70.00            56.Veg Sandwich.....45.00")
print(" 22.Masala Dosa.....80.00           57.Cheese Sandwich.....65.00")
print(" 23.Paneer Masala Dosa.....100.00   58.Grilled Sandwich.....120.00")
print(" 24.Dahi Vada.....55.00             59.Club Sandwich.....120.00")
print(" 25.Idli Sambhar.....30.00          60.Veg Cheese Grilled Sandwich..140.00")
print(" 26.Idli Fried.....40.00            61.Veg Toasted Sandwich.....70.00")
print("----------------------------       ----------")
print(" PIZZA                                 ICE CREAMS")
print("----------------------------       ----------")
```

```
print(" 27.Cheese Pizza.............140.00     62.Vanilla Ice cream.............60.00")
print(" 28.Mushroom Pizza............160.00          63.Strawberry Ice cream.........60.00")
print(" 29.Margherita.................130.00     64.Chocolate Ice cream...........60.00")
print(" 30.Paneer Pizza..............160.00     65.Pineapple Ice cream...........60.00")
print(" 31.Tomato Pasta Pizza........150.00          66.Butterscotch Ice cream........60.00")
print("-----------------------------------          ----------------------------------")
print(" BEVERAGES                                        DESSERTS")
print("-----------------------------------          ----------------------------------")
print(" 32.Pepsi(500 ml).............60.00     67.Choco Lava Cake.............100.00")
print(" 33.Slice(350 ml).............50.00     68.Butterscotch Mousse Cake.....100.00")
print(" 34.7Up(500 ml).................60.00     69.Red Velvet Lava Cake.........130.00")
print(" 35.Mirinda(500 ml).............60.00   70.Blueberry Cheese Lava Cake...130.00")
print("-----------------------------------          ----------------------------------")
print("Press 0 -to end ")
choice=1

while(choice!=0):
    choice=int(input(" -> "))

    # if-elif-conditions to assign item
    # prices listed in menu card

    if choice==1 or choice==5 or choice==6:
        cost=25
        counter=counter+cost
    elif choice==2 or choice==7 or choice==25:
        cost=30
        counter=counter+cost
    elif choice==3:
        cost=10
        counter=counter+cost
    elif choice==4:
        cost=20
        counter=counter+cost
    elif choice==8 or choice==56:
        cost=45
        counter=counter+cost
    elif (choice<=11 and choice>=9) or choice==50 or choice==51:
        cost=90
        counter=counter+cost
    elif (choice<=16 and choice>=14) or choice==12 or choice==52 or choice==58 or
```

```
choice==59:
                cost=120
                counter=counter+cost
            elif (choice<=20 and choice>=18) or choice==24:
                cost=55
                counter=counter+cost
            elif choice==21 or choice==61:
                cost=70
                counter=counter+cost
            elif choice==17 or choice==33 or choice==36:
                cost=50
                counter=counter+cost
            elif choice==22 or choice==39 or choice==45 or choice==46:
                cost=80
                counter=counter+cost
            elif choice==26 or choice==37 or choice==41:
                cost=40
                counter=counter+cost
            elif choice==27 or choice==55 or choice==60:
                cost=140
                counter=counter+cost
            elif choice==28 or choice==30:
                cost=160
                counter=counter+cost
            elif choice==31 or choice==44:
                cost=150
                counter=counter+cost
            elif choice==32 or choice==34 or choice==35 or choice==42 or(choice>=62 and
choice<=66):
                cost=60
                counter=counter+cost
            elif choice==38 or choice==57:
                cost=65
                counter=counter+cost
            elif choice==53:
                cost=165
                counter=counter+cost
            elif choice==13 or choice==23 or choice==40 or choice==43 or (choice>=47 and
choice<=49) or choice==68 or choice==67:
                cost=100
                counter=counter+cost
```

```
                elif choice==29 or choice==54 or choice==70 or choice==69:
                    cost=130
                    counter=counter+cost
                elif choice==0:
                    pass
                else:
                    print("Wrong Choice..!!")

            if counter!=0:
                    print("Total Bill: ",counter)
                    service=[]
                    bill=str(counter)
                    service.extend([name,customerid,bill])
                    csvfile.writerow(service)
                    service=[]
                    print('Order Placed.Coming Right Up')
                    sql="update service set Service_Charge ={} where
Customer_id={};".format(counter,x)
                    cursor.execute(sql)
                    con.commit()
                    z='NO'
                    sql1="update booking set Payment='{}' where Customer_id={}".format(z,x)
                    cursor.execute(sql1)
                    con.commit()
                    break

            else:
                    print("Order Not Placed")
                    break
        else:
            pass
    if k==0:
        print("User with the given Customer id is not registered.")

    n=int(input("0-BACK\n ->"))
    if n==0:
        Home()
    else:
        exit()

#PAYMENT FUNCTION
```

```
def payment():
    id=int(input('Enter customer id-->'))
    k=0
    with open('hotel.csv','r') as csvfiler:
        csvr=csv.reader(csvfiler)
        for row in csvr:
            for i in range(0,len(row)):
                if row[8]==str(id):
                    k=k+1
                    print("Yo")
                    print("Welcome",row[0],". Here is your bill:")
                    sql='select * from service where Customer_id={}'.format(id)
                    cursor.execute(sql)
                    rows=cursor.fetchall()
                    for x in rows:
                        hotel_service=x[2]
                        room_chrg=x[3]
                        print('Hotel Service',hotel_service)
                        print('Room Charge',room_chrg)
                    sql1='select Payment from booking where Customer_id={}'.format(id)
                    cursor.execute(sql1)
                    row1=cursor.fetchall()
                    print("Your Total bill is:",hotel_service+room_chrg)
                    if row1==[('NO',)]:
                        choice=input("Do you wish to make your payment now? y-yes,or any other character
to exit-->")
                        if choice=='y' or choice=='Y':
                            print("Enter mode of payment")
                            print(" 1- Credit/Debit Card")
                            print(" 2- Paytm/PhonePe")
                            print(" 3- Using UPI")
                            print(" 4- Cash")
                            x=int(input("-> "))
                            if 1<=x<=4:
                                print("\n\n -------------------------------")
                                print("                    Hotel Paradise")
                                print(" -------------------------------")
                                print("                              Bill")
                                print(" -------------------------------")
                                print(" Name: ",row[0],"\t\n")
```

```
                print("\n\t\n Room Charges:",room_chrg)
                print(" Restaurant Charges: \t",hotel_service)
                print(" --------------------------------")
                print("\n Total Amount: ",(hotel_service+room_chrg))
                print(" --------------------------------")
                print("                  Thank You")
                print("                  Visit Again :)")
                print(" --------------------------------\n")
                z="YES"
                sql2="update booking set payment='{}' where Customer_id={};".format(z,id)
                cursor.execute(sql2)
                con.commit()
            else:
                print("Wrong Choice,please retry")
        else:
            print("\n\nYour Payment is already done")
        n = int(input("0-BACK\n ->"))
        if n==0:
            Home()
            break
        else:
            exit()


# RECORD FUNCTION

def search_record():
    id=int(input('Enter customer id-->'))
    k=0
    with open('hotel.csv','r') as csvfiler:
        csvr=csv.reader(csvfiler)
        for row in csvr:
            for i in range(0,len(row)):
                if row[8]==str(id):
                    k=k+1
                    print("--------------------------------------------------------------------------------------------------
  ---------------")
                    print('Name:',row[0])
                    print('\nPhone Number:',row[1])
                    print("\nEmail:",row[2])
                    print("\nCheck-In Date:",row[3])
```

```
                print("\nCheck-Out Date",row[4])
                print("\nRoom Type:",row[5])
                print("\nPrice:",row[6])
                print("\nRoom Number:",row[7])
                print('\nCustomer Id:',row[8])
                print('\nBooked for:',row[9],'days')
                print("-------------------------------------------------------------------------------------------------------
---------------")
                break
            else:
                pass
        if k==0:
            print("Record with the given customer id is not registered.Please retry!!")
        csvfiler.close()
        n = int(input("0-BACK\n ->"))
        if n == 0:
            Home()
        else:
            exit()

#DELETE RECORD FUNCTION

def delete_record():
    csvfilew1=open("new.csv","w")
    csvw=csv.writer(csvfilew1)
    cid=int(input("Enter Your Customer Id :"))
    k=0
    l=[]
    with open(hotel_database,'r')as csvfiler:
        csvr=csv.reader(csvfiler)
        #print(csvr)
        for row in csvr:
            for i in range(0,len(row)):
                if str(cid)==row[8]:
                    k=k+1
                    print("Record Found,Deleting It.....")
                    print(".....")
                    print(".....")
                    print(".....")
                    print("Record Deleted!!")
                    break
```

```
            elif str(cid)!=row[8]:
                csvw.writerow(row)
                break
        if k==0:
            print("Record with the given customer id is not registered.Please retry!!")


    csvfilew1.close()
    csvfiler.close()
    os.remove("hotel.csv")
    os.rename("new.csv","hotel.csv")
    st="delete from booking where Customer_id={}".format(cid)
    cursor.execute(st)
    con.commit()
    n = int(input("0-BACK\n ->"))
    if n == 0:
        Home()
    else:
        exit()


#CONTACT FUNCTION

def contact():
    print("-----------------------------------------")
    print("\t\tHotel Paradise")
    print("-----------------------------------------")
    print("\nHere's how you can contact us")
    print("\nTELEPHONE:")
    print("\n\t+91 612 2203040")
    print("\nFAX:")
    print("\n\t+91 612 2203060")
    print("\nADDRESS:")
    print("\n\tHotel Paradise, South Gandhi Maidan, Mumbai , Maharashtra - 400029, India")
    print('\nGENERAL ENQUIRIES:')
    print('\n\t+91 612 2203040')
    print('\n\takm@paradise.com')
    n = int(input("0-BACK\n ->"))
    if n == 0:
    Home()
    else:
```

```
    exit()

def exit():
    print("\nThank You for using our services")

Home()
    con.close()
```

5. Modules of the proposed work

Structures:

- *Three structures are defined:* struct Bus to store bus information, struct Passenger to store passenger information, and struct User to store user login information. These structures help organize and manage data related to buses, passengers, and users.

2. ***Display Functions:***

- *DisplayMainMenu:* Displays the main menu options for the user, including options to log in or exit the program.
- *displayUserMenu:* Displays the user menu options for a logged-in user, including booking a hotel, canceling a hotel, checking hotel status, and logging out.

3. ***User Login Function:***

- *loginUser:* Takes an array of users, the number of users, and user-provided credentials (username and password). It checks if the provided credentials match any user in the array and returns the index of the logged-in user. If no match is found, it returns -1.

4. ***Booking a Hotel Room:***

- *book Hotel:* the number of rooms, an array of guests and the index of the logged-in user. It allows the user to book a hotel room by providing hotel number, guest name, and age. It checks if the hotel room exists, has available rooms, and then assigns a room to the guest.

5. ***Canceling a Hotel Room:***

- *cancel Hotel:* the number of rooms, an array of guests and the index of the logged-in user. It allows the user to cancel a hotel room by providing the guest's name. It checks if the guest is on the same room and then frees up the room.

6. ***Checking hotel room Status:***

- *checkRoomStatus:* the number of rooms, and the index of the logged-in user. It displays information about a specific bus, including room number.

7. ***Booking Services:***

- *checkBooing:* the Menu, and the index of the logged-in user. It displays information about a specific food items, including room number.

6. Results/Screenshots

```
mysql> desc booking;
+--------------+-------------+------+-----+---------+-------+
| Field        | Type        | Null | Key | Default | Extra |
+--------------+-------------+------+-----+---------+-------+
| Name         | varchar(20) | YES  |     | NULL    |       |
| Phone_Number | varchar(10) | YES  |     | NULL    |       |
| Email        | varchar(30) | NO   |     | NULL    |       |
| Check_In     | date        | YES  |     | NULL    |       |
| Check_Out    | date        | YES  |     | NULL    |       |
| Room_Type    | varchar(25) | YES  |     | NULL    |       |
| Price        | int         | YES  |     | NULL    |       |
| Room_Number  | int         | YES  |     | NULL    |       |
| Customer_id  | int         | YES  |     | NULL    |       |
| Payment      | varchar(5)  | YES  |     | NO      |       |
| Days         | int         | YES  |     | NULL    |       |
+--------------+-------------+------+-----+---------+-------+
```

```
mysql> desc service;
+----------------+-------------+------+-----+---------+-------+
| Field          | Type        | Null | Key | Default | Extra |
+----------------+-------------+------+-----+---------+-------+
| Name           | varchar(20) | YES  |     | NULL    |       |
| Customer_id    | int         | YES  |     | NULL    |       |
| Service_Charge | int         | YES  |     | 0       |       |
| Room_Bill      | int         | YES  |     | NULL    |       |
+----------------+-------------+------+-----+---------+-------+
```

```
------------------------------------------------------
GREETINGS!

WELCOME TO HOTEL PARADISE
------------------------------------------------------
                          1 Booking A Room

                          2 Rooms Info

                          3 Room service(Food Menu)

                          4 Pay Bill

                          5 Search A Record

                          6 Delete Record

                          7 Contact Us

                          0 Exit

------------------------------------------------------
What Would You Like To Do? Enter Your Choice :7

-----------------------------------------
                Hotel Paradise
-----------------------------------------

Here's how you can contact us
```

```
Here's how you can contact us

TELEPHONE:

        +91 612 2203040

FAX:

        +91 612 2203060

ADDRESS:

        Hotel Paradise, South Gandhi Maidan, pune , Maharashtra – 500029, India

GENERAL ENQUIRIES:

        +91 612 22010203

        pmy@paradise.com
0-BACK
 ->0
-----------------------------------------------
GREETINGS!

WELCOME TO HOTEL PARADISE
-----------------------------------------------
```

```
WELCOME TO HOTEL PARADISE
--------------------------------------------------
                          1 Booking A Room

                          2 Rooms Info

                          3 Room service(Food Menu)

                          4 Pay Bill

                          5 Search A Record

                          6 Delete Record

                          7 Contact Us

                          0 Exit

--------------------------------------------------
What Would You Like To Do? Enter Your Choice :3

Customer Id: 1
User with the given Customer id is not registered.
0-BACK
 ->0
--------------------------------------------------
```

```
 --------------------------------------------------
 GREETINGS!

 WELCOME TO HOTEL PARADISE
 --------------------------------------------------
                           1 Booking A Room

                           2 Rooms Info

                           3 Room service(Food Menu)

                           4 Pay Bill

                           5 Search A Record

                           6 Delete Record

                           7 Contact Us

                           0 Exit

 --------------------------------------------------
 What Would You Like To Do? Enter Your Choice :1

 ------------------------
 BOOKING ROOMS
 ------------------------
```

```
----------------------
BOOKING ROOMS
----------------------

Name :Rohit
Phone :6202003348
email :rk@gmail.com
Check-In Date(YYYY-MM-DD) :2023-11-15
Check-Out Date(YYYY-MM-DD) :2023-11-16
Booking for  2 days
----SELECT ROOM TYPE----
 1. Standard
 2. Standard Plus
 3. Suites
 4. Cottages
                Press 0 for Room Prices
->0
 1. Standard- Rs. 4000
 2. Standard Plus - Rs. 4500
 3. Suites - Rs. 5000
 4. Cottages- Rs. 5500
->1
```

7.Conclusion

The hotel Reservation System provides an efficient and user-friendly solution for managing hotel bookings. It streamlines the reservation process, allows cancellations, and provides real-time information about rooms status. The modular design ensures scalability and ease of maintenance.

8. References

1. Python Programming Language Documentation - [https://www.w3schools.com/python/python_reference.asp]
2. Mysql[https://www.geeksforgeeks.org/mysql-common-mysql-queries/]