



Acknowledgement

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Introduction

The Hotel Management system is to generalize and simplify the monthly or day today activities of Hotel like Room activities , Check –in of New Customer , Checkout of customer , assigning a room according to customer requirement and finally compute the bill etc. which has to be performed repeatedly on a regular basis.

To provide an efficient , fast, reliable and user-friendly system is the basic agenda behind this project and show the Hotel room facilities, Book room etc. The main aim of the entire activity is to automate the process of day-to-day activities of hotels like Room activities, registering a New Customer, Assigning a room according to customer's demand, etc.

Need of Computerization

Computers are used extensively by lodging managers and their assistants to keep track of guests' bills, reservations, room assignments, meetings, and special events. In addition, computers are used to order food, beverages, and supplies, as well as to prepare reports for hotel owners and top-level managers. Many hotels also provide extensive information technology services for their guests. Managers work with computer specialists and other information technology specialists to ensure that the hotel's computer systems, Internet, and communications networks function properly.

There are many different uses for computers in hotels. The first would be at the front desk. These computers have an intricate software called the Property Management System (PMS) to do all the check-ins, guest accounting, and etc. The most famous being Opera or Sabre. Second in the restaurant, lounge, or bar is a new computer entirely called a Point-of-Sale System (POS). This will collaborate with a PMS to bill guests for a meal and etc. but can also be used as a cash register. Third is the computer in the sales office

System Requirements

Hardware:

1. Operating System: Supports all known operating systems such as Windows, Linux etc.
2. Computer Configuration: 512 MB+ RAM, Monitor with minimum resolution of 1024 X 768, Keyboard and Mouse or Touchpad
3. Hard Drive: Should be formatted with minimum 10 GB free space for the system.

Software:

1. Python 3.x installation
2. IDE such as IDLE or Spyder or PyCharm
3. MySQL for storing information

Technical Stack:

- **Front End**

Python

- **Back End**

MySQL as database

Project Modules

- ***Admin Panel:*** The admin will have control over the whole application. Admin will be able to Add a Customer, Calculate Room Bill, View Room types Available, View Special Services available and Update the Special Services.
- ***Customer Panel :*** The Customers can view room types available, order food and beverages, ask for laundry services and view special services

Advantages

- 1.Sometimes it happens that the rooms get booked soon when one visits the place therefore users can make advance booking using this system.
2. It saves the user time in searching a room.
- 3.The system is useful as it calculates an exact cost of rooms for requested number of days.
- 4.It saves organization resources and expenses.
- 5.This system is effective and saves time and cost of users.

Disadvantages

1. The booking process usually requires a customer identity, which the system cannot detect.
2. It requires a reliable internet connection.
3. The system lacks Graphical User Interface

SQL Tables

MySQL 8.0 Command Line Client

```
mysql> use hotel;
Database changed
mysql> select*from custdata;
```

CustID	CustName	Address	Room_Type	indate	outdate
101	Tom	3536 Spring Haven Trail	Duluxe	2022-07-03	2022-07-10
102	Robert	86 Near Avenue Road	Penthouse	2022-07-04	2022-07-08
103	James	659 Davis Street	Family Suite	2022-07-06	2022-07-14
104	Francisco	629 Saint Claire Street	Classic	2022-07-15	2022-07-18
105	Andrew	1406 Pine Street	Classic	2022-07-18	2022-07-22
106	Louis	48 Avenue Road	Family Suite	2022-07-20	2022-07-29
107	Emily	37 Park Street	Duluxe	2022-08-01	2022-08-03
108	Rose	338 Green Avenue	Penthouse	2022-08-15	2022-08-22

```
8 rows in set (0.00 sec)

mysql> describe custdata;
```

Field	Type	Null	Key	Default	Extra
CustID	int	NO	PRI	NULL	
CustName	varchar(20)	YES		NULL	
Address	varchar(80)	YES		NULL	
Room_Type	varchar(20)	YES		NULL	
indate	date	YES		NULL	
outdate	date	YES		NULL	

```
6 rows in set (0.00 sec)

mysql>
```

```
mysql> select*from roomtype;
```

Rid	Room_Type	Per_Night_Charges	Rooms_Available
1	Classic	6500	10
2	Duluxe	8000	9
3	Family Suite	14000	6
4	Penthouse	18000	8

```
4 rows in set (0.02 sec)

mysql> describe roomtype;
```

Field	Type	Null	Key	Default	Extra
Rid	int	NO	PRI	NULL	
Room_Type	varchar(20)	YES		NULL	
Per_Night_Charges	int	YES		NULL	
Rooms_Available	int	YES		NULL	

```
4 rows in set (0.00 sec)
```

Hotel Management System

```
mysql> select*from restaurant;
```

itemno	itemname	price
1	Tea	60
2	Coffee	120
3	Cold Drink	70
4	Samosa	95
5	Sandwich	120
6	Dhokla	115
7	Kachori	125
8	Hot Chocolate	170
9	Noodles	200
10	Pasta	250

```
10 rows in set (0.02 sec)
```

```
mysql> describe restaurant;
```

Field	Type	Null	Key	Default	Extra
itemno	int	NO	PRI	NULL	
itemname	varchar(15)	YES		NULL	
price	int	YES		NULL	

```
3 rows in set (0.00 sec)
```

```
mysql> select*from splservice;
```

SNo	Name	Price
1	Swimming	615
2	Spa/Massage	1200
3	Rent a Car	400
4	Parking	100

```
4 rows in set (0.00 sec)
```

```
mysql> describe splservice;
```

Field	Type	Null	Key	Default	Extra
SNo	int	NO	PRI	NULL	
Name	varchar(20)	YES		NULL	
Price	varchar(10)	YES		NULL	

```
3 rows in set (0.00 sec)
```

```
mysql> select*from laundry;
```

clothid	cloth_of	price
1	Men	12
2	Women	10
3	Children	7

3 rows in set (0.07 sec)

```
mysql> describe laundry;
```


Field	Type	Null	Key	Default	Extra
clothid	int	NO	PRI	NULL	
cloth_of	varchar(15)	YES		NULL	
price	int	YES		NULL	

3 rows in set (0.00 sec)

Python Snippets

```
1  import mysql.connector
2  import getpass
3
4  mydb = mysql.connector.connect(host='localhost',user='root', password='Lak@2408',database='hotel')
5  mycursor=mydb.cursor()
6
7  #Welcome Screen
8  def Menuset():
9      print("-"*156)
10     print(" Welcome to Deluna Oriental".center(156,'='))
11     print("-"*156)
12     print("")
13     print('Enter 1: For Admin')
14     print('Enter 2: For Customer')
15     print('Enter 3: To Exit')
16     au=int(input('Enter you choice: '))
17     if au==1:
18         AdminSet()
19     elif au==2:
20         CustSet()
21     elif au==3:
22         print('Thanks for using our services')
23     else:
24         print('Kindly choose from above options')
25
```

```
1  #For Admin
2  def AdminSet():
3      print('='*156)
4      print(" Welcome Admin ".center(156,'='))
5      print("="*156)
6      print("")
7      ps=getpass.getpass("Enter your password: ")
8      if ps=="Hotel_24":
9          print("Enter 1: To View Customer Data")
10         print("Enter 2: To Register Customer")
11         print("Enter 3: To Calculate Room Bill")
12         print("Enter 4: To View Room Types Available")
13         print("Enter 5: To View Special Services")
14         print("Enter 6: To Update Special Services")
15         print("Enter 7: To Add Special Service")
16         print("Enter 8: To Exit")
17         ca=int(input('Enter your choice: '))
18         if ca==1:
19             viewcust()
20         elif ca==2:
21             registercust()
22         elif ca==3:
23             roomrent()
24         elif ca==4:
25             roomtypeview()
26         elif ca==5:
27             splservice()
28         elif ca==6:
29             upsplservices()
30         elif ca==7:
31             addservice()
32         elif ca==8:
33             print('Thanks for using our services')
34         else:
35             print("Kindly choose from above options")
36     else:
37         print('Inavlid Password')
```



```
1  #For Customers
2  def CustSet():
3      print('='*156)
4      print(" Welcome to Deluna Oriental ".center(156,'='))
5      print(" Hope you like our services ".center(156,'='))
6      print('='*156)
7      print("")
8      print('Enter 1: To View Room Types Available')
9      print('Enter 2: To Order Food And Beverages')
10     print('Enter 3: For Laundry Services')
11     print('Enter 4: To View Special Servies')
12     print('Enter 5: To Exit')
13     uc=int(input('Enter your choice: '))
14     if uc==1:
15         roomtypeview()
16     elif uc==2:
17         orderitem()
18     elif uc==3:
19         laundry()
20     elif uc==4:
21         splservice()
22     elif uc==5:
23         print('Thanks for using our services')
24     else:
25         print('Kindly choose from above options')
```

Hotel Management System

```
1  #To Run Again
2  def runagain():
3      runagn=input("Do you want to run again y/n:")
4      if runagn=='y':
5          Menuset()
6      else:
7          print('Thanks for using our services')
8
9  #To View Customer Data
10 def viewcust():
11     print(' CUSTOMER DATA '.center(156,'^'))
12     mycursor.execute('select * from custdata')
13     for rec in mycursor:
14         print('Customer ID:',rec[0],'Customer Name:',rec[1],'Address:',rec[2],'Room Type:',rec[3])
15
```

```
1  #To Register a Customer
2  def registercust():
3      print(' REGISTRATION OF A CUSTOMER '.center(156,'^'))
4      cid=int(input('Enter the Customer ID: '))
5      name=input('Enter Customer Name: ')
6      addr=input('Enter Customer's Address: ')
7      roomtype=input('Enter Room Type Taken: ')
8      indate=input('Enter Check In Date in YYYY/MM/DD :')
9      outdate=input('Enter Check Out Date in YYYY/MM/DD :')
10     sql="insert into custdata(CustID,CustName,Address,Room_Type,indate,outdate)values({}, '{}', '{}', '{}', '{}', '{}')".format(cid,name,addr,roomtype,indate,outdate)
11     mycursor.execute(sql)
12     print('The Customer is successfully registered!')
13     mydb.commit()
14
15 #To Preview the room types with details available
16 def roomtypeview():
17     print(' ROOM TYPES AVAILABLE '.center(156,'^'))
18     mycursor.execute('select * from roomtype')
19     for rec in mycursor:
20         print('Room ID:',rec[0],'Room Type:',rec[1],'Per Night Charges:',rec[2],'Rooms Available:',rec[3])
```

```
1  #To rent a room to the customer
2  def roomrent():
3      print(' ROOM RENT '.center(156,'^'))
4      mycursor.execute('select * from roomtype')
5      for rec in mycursor:
6          print('Room ID:',rec[0],'Room Type:',rec[1],'Per Night Charges:',rec[2])
7      x=int(input("Enter the Room Id of the Room Customer Stayed in: "))
8      n=int(input("For How Many Nights Did Customer Stay: "))
9      if(x==1):
10         q=1200*n
11         print('Your Room Rent is: ',q)
12     elif (x==2):
13         q=2500*n
14         print('Your Room Rent is: ',q)
15     elif (x==3):
16         q=4000*n
17         print('Your Room Rent is: ',q)
18     elif (x==4):
19         q=6000*n
20         print('Your Room Rent is: ',q)
21     else:
22         print('Kindly choose from the above options')
```



```
1 #To Order from Restaurant
2 def orderitem():
3     global s
4     print(' FOOD AND BEVERAGES '.center(156,'^'))
5     sql="select * from restaurant"
6     mycursor.execute(sql)
7     rows=mycursor.fetchall()
8     for x in rows:
9         print('Item Number:',x[0],'Item Name:',x[1],'Price:',x[2])
10    no=int(input('Enter the Number of items to be ordered: '))
11    s=0 #Amount to be paid for the items ordered
12    for i in range(no):
13        d=int(input("Enter your choice: "))
14        if(d==1):
15            a=int(input("Enter quantity: "))
16            print("You have ordered",a,'Tea')
17            s+=10*a
18        elif (d==2):
19            a=int(input("Enter quantity: "))
20            print("You have ordered",a,"Coffee")
21            s+=15*a
22        elif(d==3):
23            a=int(input("Enter quantity: "))
24            print("You have ordered",a,"Cold drink")
25            s+=25*a
26        elif(d==4):
27            a=int(input("Enter quantity: "))
28            print("You have ordered",a,"Samosa")
29            s+=15*a
30        elif(d==5):
31            a=int(input("Enter quantity: "))
32            print("You have ordered",a,"Sandwich")
33            s+=50*a
34        elif(d==6):
35            a=int(input("Enter quantity: "))
36            print("You have ordered",a,"Dhokla")
37            s+=30*a
38        elif(d==7):
39            a=int(input("Enter quantity: "))
40            print("You have ordered",a,"Kachori")
41            s+=12*a
42        elif(d==8):
43            a=int(input("Enter quantity: "))
44            print("You have ordered",a,"Milk Bottle")
45            s+=20*a
46        elif(d==9):
47            a=int(input("Enter quantity: "))
48            print("You have ordered",a,"plate Noodles")
49            s+=60*a
50        elif(d==10):
51            a=int(input("Enter quantity: "))
52            print("You have ordered",a,"platePasta")
53            s+=70*a
54        else:
55            print("Please enter your choice from the menu")
56    print('Total Amount = ',s)
57
```

```
1  #For laundry
2  def laundry():
3      print(' LAUNDARY '.center(156, '^'))
4      global z
5      z=0
6      sql='select* from laundry'
7      mycursor.execute(sql)
8      for w in mycursor:
9          print('S No.:',w[0], 'Cloth of:',w[1], 'Price Per Cloth:',w[2])
10     ym=int(input('Cloths of Men: '))
11     yw=int(input('Cloths of Women: '))
12     yc=int(input('Cloths of Children: '))
13     if ym!=0:
14         z+=12*ym
15     if yw!=0:
16         z+=10*yw
17     if yc!=0:
18         z+=7*yc
19
20     print("Your laundry bill is:",z)
```

```
1  #For Special Services
2  def splservice():
3      print(' SPECIAL SERVICES AVAILABLE '.center(156,'^'))
4      mycursor.execute('select * from splservices')
5      for rec in mycursor:
6          print('Service Name:',rec[1],'Price:',rec[2])
7      print('To enjoy these services contact the reception')
8
9  #Updating Special Services
10 def upsplservices():
11     print(' TO UPDATE SPECIAL SERVICES '.center(156,'^'))
12     mycursor.execute('select * from splservices')
13     for rec in mycursor:
14         print('SNo.:',rec[0],'Service Name:',rec[1],'Price:',rec[2])
15         uc=int(input('Enter the SNo of the Special Service to be updated: '))
16         uf=input('Enter the coloumn name to be updated: ')
17         uv=input('Enter the new value: ')
18         sql1="UPDATE splservice SET {}={} WHERE sno={}".format(uf,uv,uc)
19         mycursor.execute(sql1)
20         mydb.commit()
21         print('Data Updated in the Server')
22
23 #Adding a Special Service
24 def addservice():
25     print(' TO ADD A SPECIAL SERVICES '.center(156,'^'))
26     mycursor.execute('select * from splservices')
27     for rec in mycursor:
28         print('SNo.:',rec[0],'Service Name:',rec[1],'Price:',rec[2])
29     sno=int(input('Enter SNo of Service: '))
30     ns=input("Enter Service Name: ")
31     prs=input("Enter Service Price: ")
32     sqls="insert into splservices(SNo,Name,Price)values({},'{}','{}')".format(sno,ns,prs)
33     mycursor.execute(sqls)
34     print('The Service is successfully registered!')
35     mydb.commit()
```

Admin

```
Enter your password:
Enter 1: To View Customer Data
Enter 2: To Register Customer
Enter 3: To Calculate Room Bill
Enter 4: To View Room Types Available
Enter 5: To View Special Services
Enter 6: To Update Special Services
Enter 7: To Add Special Service
Enter 8: To Exit
Enter your choice: 2
***** REGISTRATION OF A CUSTOMER *****
Enter the Customer ID: 109
Enter Customer Name: Rose
Enter Customer's Address: 156 Park Street
Enter Room Type Taken: Duluxe
Enter Check In Date in YYYY/MM/DD :2024/04/04
Enter Check Out Date in YYYY/MM/DD :2025/04/08
The Customer is successfully registered!
```

```
Enter 1: For Admin
Enter 2: For Customer
Enter 3: To Exit
Enter you choice: 1
***** Welcome Admin *****

Enter your password:
Enter 1: To View Customer Data
Enter 2: To Register Customer
Enter 3: To Calculate Room Bill
Enter 4: To View Room Types Available
Enter 5: To View Special Services
Enter 6: To Update Special Services
Enter 7: To Add Special Service
Enter 8: To Exit
Enter your choice: 4
***** ROOM TYPES AVAILABLE *****
Room ID: 1 Room Type: Classic Per Night Charges: 6500 Rooms Available: 10
Room ID: 2 Room Type: Duluxe Per Night Charges: 8000 Rooms Available: 9
Room ID: 3 Room Type: Family Suite Per Night Charges: 14000 Rooms Available: 6
Room ID: 4 Room Type: Penthouse Per Night Charges: 18000 Rooms Available: 8
Do you want to run again y/n:
```

```
***** Welcome to Deluna Oriental*****

Enter 1: For Admin
Enter 2: For Customer
Enter 3: To Exit
Enter you choice: 1
***** Welcome Admin *****

Enter your password:
Enter 1: To View Customer Data
Enter 2: To Register Customer
Enter 3: To Calculate Room Bill
Enter 4: To View Room Types Available
Enter 5: To View Special Services
Enter 6: To Update Special Services
Enter 7: To Add Special Service
Enter 8: To Exit
Enter your choice: 1
***** CUSTOMER DATA *****
Customer ID: 101 Customer Name: Tom Address: 3536 Spring Haven Trail Room Type: Duluxe
Customer ID: 102 Customer Name: Robert Address: 86 Near Avenue Road Room Type: Penthouse
Customer ID: 103 Customer Name: James Address: 659 Davis Street Room Type: Family Suite
```

Customer

```
Enter 1: For Admin
Enter 2: For Customer
Enter 3: To Exit
Enter your choice: 2
=====
===== Welcome to Deluna Oriental =====
===== Hope you like our services =====
=====

Enter 1: To View Room Types Available
Enter 2: To Order Food And Beverages
Enter 3: For Laundry Services
Enter 4: To View Special Servies
Enter 5: To Exit
Enter your choice: 2
===== FOOD AND BEVERAGES =====
Item Number: 1 Item Name: Tea Price: 60
Item Number: 2 Item Name: Coffee Price: 120
Item Number: 3 Item Name: Cold Drink Price: 70
Item Number: 4 Item Name: Samosa Price: 95
Item Number: 5 Item Name: Sandwich Price: 120
Item Number: 6 Item Name: Dhokla Price: 115
Item Number: 7 Item Name: Kachori Price: 125
Item Number: 8 Item Name: Hot Chocolate Price: 170
Item Number: 9 Item Name: Noodles Price: 200
Item Number: 10 Item Name: Pasta Price: 250
Enter the Number of items to be ordered: █
```

```
Enter 1: To View Room Types Available
Enter 2: To Order Food And Beverages
Enter 3: For Laundry Services
Enter 4: To View Special Servies
Enter 5: To Exit
Enter your choice: 2
===== FOOD AND BEVERAGES =====
Item Number: 1 Item Name: Tea Price: 60
Item Number: 2 Item Name: Coffee Price: 120
Item Number: 3 Item Name: Cold Drink Price: 70
Item Number: 4 Item Name: Samosa Price: 95
Item Number: 5 Item Name: Sandwich Price: 120
Item Number: 6 Item Name: Dhokla Price: 115
Item Number: 7 Item Name: Kachori Price: 125
Item Number: 8 Item Name: Hot Chocolate Price: 170
Item Number: 9 Item Name: Noodles Price: 200
Item Number: 10 Item Name: Pasta Price: 250
Enter the Number of items to be ordered: 2
Enter your choice: 1
Enter quantity: 1
You have ordered 1 Tea
Enter your choice: 4
Enter quantity: 1
You have ordered 1 Samosa
Total Amount = 25
```

```
=====
===== Welcome to Deluna Oriental =====
===== Hope you like our services =====
=====

Enter 1: To View Room Types Available
Enter 2: To Order Food And Beverages
Enter 3: For Laundry Services
Enter 4: To View Special Servies
Enter 5: To Exit
Enter your choice: 4
===== SPECIAL SERVICES AVAILABLE =====
Service Name: Swimming Price: 600
Service Name: Spa/Massage Price: 1200
Service Name: Rent a Car Price: 400
Service Name: Parking Price: 100
To enjoy these services contact the reception
Do you want to run again y/n: █
```

Bibliography

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