Hotel Alakazaar Code:

CODE:

```
import datetime
import random
# Global List Declaration
name = []
phno = []
add = []
checkin = []
checkout = []
room = []
price = []
rc = []
p = []
roomno = []
custid = []
day = []
# Global Variable Declaration
i = 0
```

```
# Home Function
def Home():
   print("\t\t\t\t\t WELCOME TO HOTEL ALKAZAAR\n")
   print("\t\t\t
                        1. Booking\n")
   print("\t\t\t
                         2. Rooms Info\n")
   print("\t\t\t
                         3. Payment\n")

 Record\n")

   print("\t\t\t
                       0. Exit\n")
   print("\t\t\t
   ch=int(input("->"))
   if ch == 1:
       print(" ")
       Booking()
   elif ch == 2:
       print(" ")
       Rooms_Info()
  elif ch == 3:
```

```
print(" ")
    Payment()

elif ch == 4:
    print(" ")
    Record()

else:
    exit()
```

```
# Function used in booking
def date(c):
    if c[2] >= 2022 and c[2] <= 2024:
        if c[1] != 0 and c[1] <= 12:
            if c[1] == 2 and c[0] != 0 and c[0] <= 31:
                 if c[2]\%4 == 0 and c[0] <= 29:
                     pass
                 elif c[0]<29:
                     pass
                 else:
                     print("Invalid date\n")
                     name.pop(i)
                     phno.pop(i)
                     add.pop(i)
                     checkin.pop(i)
                     checkout.pop(i)
                     Booking()
            # if month is odd & less than equal
            # to 7th month
            elif c[1] <= 7 and c[1]\%2 != 0 and c[0] <= 31:
                 pass
            # if month is even & less than equal to 7th
            # month and not 2nd month
            elif c[1] \leftarrow 7 and c[1]\%2 == 0 and c[0] \leftarrow 30 and c[1] != 2:
                 pass
```

```
# if month is even & greater than equal
        # to 8th month
        elif c[1] >= 8 and c[1]\%2 == 0 and c[0] <= 31:
        # if month is odd & greater than equal
        # to 8th month
        elif c[1] >= 8 and c[1] \% 2! = 0 and c[0] <= 30:
            pass
        else:
            print("Invalid date\n")
            name.pop(i)
            phno.pop(i)
            add.pop(i)
            checkin.pop(i)
            checkout.pop(i)
            Booking()
    else:
        print("Invalid date\n")
        name.pop(i)
        phno.pop(i)
        add.pop(i)
        checkin.pop(i)
        checkout.pop(i)
        Booking()
else:
    print("Invalid date\n")
    name.pop(i)
    phno.pop(i)
    add.pop(i)
    checkin.pop(i)
    checkout.pop(i)
    Booking()
```

```
# Booking function
def Booking():

    # used global keyword to
    # use global variable 'i'
    global i
    print(" BOOKING ROOMS")
    print(" ")
```

```
n = str(input("Name: "))
    p1 = str(input("Phone No.: "))
    a = str(input("Address: "))
    # checks if any field is not empty
    if n!="" and p1!="" and a!="":
        name.append(n)
        add.append(a)
        break
    else:
        print("\tName, Phone no. & Address cannot be empty..!!")
cii=str(input("Check-In{DD/MM/YYYY}: "))
checkin.append(cii)
cii=cii.split('/')
ci=cii
ci[0]=int(ci[0])
ci[1]=int(ci[1])
ci[2]=int(ci[2])
date(ci)
coo=str(input("Check-Out{DD/MM/YYYY}: "))
checkout.append(coo)
coo=coo.split('/')
co=coo
co[0]=int(co[0])
co[1]=int(co[1])
co[2]=int(co[2])
# checks if check-out date falls after
# check-in date
if co[1]<ci[1] and co[2]<ci[2]:</pre>
    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[2]>=ci[2] and co[0]<=ci[0]:
    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:
    pass
date(co)
d1 = datetime.datetime(ci[2],ci[1],ci[0])
d2 = datetime.datetime(co[2],co[1],co[0])
d = (d2-d1).days
day.append(d)
print("----SELECT ROOM TYPE----")
print(" 1. Standard Non-AC")
print(" 2. Standard AC")
print(" 3. 3-Bed Non-AC")
print(" 4. 3-Bed AC")
print(("\t\tPress 0 for Room Prices"))
ch=int(input("->"))
# if-conditions to display alloted room
# type and it's price
if ch==0:
    print(" 1. Standard Non-AC - Rs. 3500")
    print(" 2. Standard AC - Rs. 4000")
    print(" 4. 3-Bed AC
                          - Rs. 5000")
   ch=int(input("->"))
if ch==1:
   room.append('Standard Non-AC')
    print("Room Type- Standard Non-AC")
    price.append(3500)
    print("Price- 3500")
elif ch==2:
   room.append('Standard AC')
    print("Room Type- Standard AC")
    price.append(4000)
   print("Price- 4000")
elif ch==3:
    room.append('3-Bed Non-AC')
    print("Room Type- 3-Bed Non-AC")
    price.append(4500)
   print("Price- 4500")
elif ch==4:
    room.append('3-Bed AC')
    print("Room Type- 3-Bed AC")
    price.append(5000)
   print("Price- 5000")
else:
   print(" Wrong choice..!!")
```

```
# randomly generating room no. and customer
        # id for customer
        rn = random.randrange(40)+300
        cid = random.randrange(40)+10
        # checks if alloted room no. & customer
        # id already not alloted
        while rn in roomno or cid in custid:
            rn = random.randrange(60)+300
            cid = random.randrange(60)+10
        rc.append(∅)
        p.append(∅)
        if p1 not in phno:
            phno.append(p1)
        elif p1 in phno:
            for n in range(0,i):
                if p1== phno[n]:
                    if p[n]==1:
                        phno.append(p1)
        elif p1 in phno:
            for n in range(0,i):
                if p1== phno[n]:
                    if p[n] == 0:
                        print("\tPhone no. already exists and payment yet not
done..!!")
                        name.pop(i)
                        add.pop(i)
                        checkin.pop(i)
                        checkout.pop(i)
                        Booking()
        print("")
        print("\t\t***ROOM BOOKED SUCCESSFULLY***\n")
        print("Room No. - ",rn)
        print("Customer Id - ",cid)
        roomno.append(rn)
        custid.append(cid)
        i=i+1
        n=int(input("0-BACK\n ->"))
        if n==0:
            Home()
        else:
            exit()
```

```
# ROOMS INFO
def Rooms Info():
   print(" ----- HOTEL ROOMS INFO -----")
   print("")
   print("> STANDARD NON-AC")
   print("------
   print("Room amenities include: 1 Double Bed, Television, Telephone,")
   print("Double-Door Cupboard, 1 Coffee table with 2 sofa, Balcony and")
   print("an attached washroom with hot/cold water.\n")
   print("> STANDARD NON-AC")
   print("-----")
   print("Room amenities include: 1 Double Bed, Television, Telephone,")
   print("Double-Door Cupboard, 1 Coffee table with 2 sofa, Balcony and")
   print("an attached washroom with hot/cold water + Window/Split AC.\n")
   print("> 3-Bed NON-AC")
   print("-----")
   print("Room amenities include: 1 Double Bed + 1 Single Bed, Television,")
   print("Telephone, a Triple-Door Cupboard, 1 Coffee table with 2 sofa, 1")
   print("Side table, Balcony with an Accent table with 2 Chair and an")
   print("attached washroom with hot/cold water.\n")
   print("> 3-Bed AC")
   print("-----")
   print("Room amenities include: 1 Double Bed + 1 Single Bed, Television,")
   print("Telephone, a Triple-Door Cupboard, 1 Coffee table with 2 sofa, ")
   print("1 Side table, Balcony with an Accent table with 2 Chair and an")
   print("attached washroom with hot/cold water + Window/Split AC.\n\n")
   print()
   n=int(input("0-BACK\n ->"))
   if n==0:
      Home()
   else:
      exit()
```

```
print(" ------
             print(" MODE OF PAYMENT")
             print(" 1- Credit/Debit Card")
             print(" 2- Paytm/PhonePe/G-Pay")
             print(" 3- Using UPI")
             print(" 4- Cash")
             x=int(input("-> "))
             print("\n Amount: ",(price[n]*day[n])+rc[n])
             print("\n Pay For HOTEL ALKAZAAR")
             print(" (y/n)")
             ch=str(input("->"))
             if ch=='y' or ch=='Y':
                print("\n\n -----")
                print(" Hotel ALKAZAAR")
                print(" -----")
                print(" Bill")
                print(" -----")
                print(" Name: ",name[n],"\t\n Phone No.: ",phno[n],"\t\n
Address: ",add[n],"\t")
                print("\n Check-In: ",checkin[n],"\t\n Check-Out:
",checkout[n],"\t")
                print("\n Room Type: ",room[n],"\t\n Room Charges:
",price[n]*day[n],"\t")
                print(" -----")
                print("\n Total Amount: ",(price[n]*day[n])+rc[n],"\t")
                print(" -----")
                print(" Thank You")
                print(" Visit Again :) ")
                print(" -----\n")
                p.pop(n)
                p.insert(n,1)
                # pops room no. and customer id from list and
                # later assigns zero at same position
                roomno.pop(n)
                custid.pop(n)
                roomno.insert(n,0)
                custid.insert(n,0)
          else:
             for j in range(n+1,i):
                if ph==phno[j] :
                    if p[j]==0:
                       pass
```

```
# RECORD FUNCTION
def Record():
   # checks if any record exists or not
   if phno!=[]:
      print(" *** HOTEL RECORD ***\n")
      Room Type | Price |")
     print("-----
      for n in range(0,i):
         print("|",name[n],"\t |",phno[n],"\t
|",add[n],"\t|",checkin[n],"\t|",checkout[n],"\t|",room[n],"\t|",price[n])
      print("------
   else:
     print("No Records Found")
   n = int(input("0-BACK\n ->"))
   if n == 0:
     Home()
   else:
   exit()
```

```
Home()
```

Introduction

Title of the project is "Hotel Management"
.It is a project for keeping customer's record and also calculate customer's bill which is provided when he checks out.
In this project, "ALKAZAAR" is the project's hotel name. It covers major aspects of hotel management; it can perform the following operations- Hotel Booking, Provide you with Hotel Rooms Info, Room Service, Billing and Record-Keeping.

MOTIVATION

Many times, we might have experienced that hotels don't have any systematic and a well established system for record keeping. By using, excel sheets, notebooks, registers, record handling becomes difficult. This also increases the chances of errors while calculating the final bill while payments and check out times. To avoid errors and making this work hassle free, we created such a system in order to do the same.

JUSTIFICATION FOR PROJECT

 Easier and less time consuming interface for booking, payments, billing records.

PROBLEM STATEMENT

- Creating a function for a dashboard which stores records including name, check in date, check out date, address, mobile number.
- Creating a function which provides a unique room no. according to check in and check dates stored in the system.
- Creating a function for generating a unique bill for the customer in which he also the gets to choose payment option.

OBJECTIVE

The main objective of this project is to reduce the extensive paper work in the present system. It will make the system more versatile and user friendly. It also calculates the proper billing slip of customers. This will ensure reliable and efficient communication within hotel and avoid common input errors done by hotel staff. It aims a fast and easy retrieval of hotel guest records for faster activities.

METHODOLOGY

- The admin enters the details about customer in the system. This includes his name, address, phone number, check in date and check out.
- The choices and details are given to the customer by the admin about the room which he wants to opt for.
 According to whatever type of room he chooses, prices are shown by the admin to the customer. Also like this, the room is booked for the customer by the admin.
- Room no. of the available type of the room is shown to him. A unique customer ID is generated for the customer using random function.
- The financial manager enters the phone number of the customer. This

- identifies the customer who has to make the payment. Total amount to be paid is shown to the customer.
- When payment is initiated, the whole bill is shown. This bill can be printed and given to the customer and even he can choose the mode of payment as well.
- The database manager manages the records of the hotel. Many customers come and book rooms. He's able to see the record of the customers who have booked the rooms previously. This includes the information of the customer like his name, phone no., check in date, check out date, room type and room price accordingly.

Expected Outcomes

WELCOME TO HOTEL ALKAZAAR

2	1. Booking			
:	2. Rooms Info			
3	3. Payment			
4	4. Record			
Ţ	0. Exit			
->1				
BOOKING ROOMS				
Name: Jinny Kapur				
Phone No.: 8146303631				
Address: Chandigarh				
Check-In{DD/MM/YYYY}: 02/12/202	2			
Check-Out{DD/MM/YYYY}: 03/12/20	022			
SELECT ROOM TYPE				
1. Standard Non-AC				
2. Standard AC				
3. 3-Bed Non-AC				
4. 3-Bed AC				
Press 0 for Room	Prices			
->2				
Room Type- Standard AC				
Price- 4000				

ROOM BOOKED SUCCESSFULLY

WELCOME TO HOTEL ALKAZAAR
one,
ny and
,
one,
ny and
lit AC.

Room amenities include: 1 Double Bed + 1 Single Bed, Television,

Room No. - 324

Telephone, a Triple-Door Cupboard, 1 Coffee table with 2 sofa, 1 Side table, Balcony with an Accent table with 2 Chair and an attached washroom with hot/cold water.

➤ 3-Bed AC		

Room amenities include: 1 Double Bed + 1 Single Bed, Television,
Telephone, a Triple-Door Cupboard, 1 Coffee table with 2 sofa,
1 Side table, Balcony with an Accent table with 2 Chair and an
attached washroom with hot/cold water + Window/Split AC.

0-BACK

->0

WELCOME TO HOTEL ALKAZAAR

- 1. Booking
- 2. Rooms Info
- 3. Payment
- 4. Record
- 0. Exit

->3

Phone Number: 8146303631

Payment

MODE OF PAYMENT

- 1- Credit/Debit Card
- 2- Paytm/PhonePe/G-Pay

3- Using UPI	
4- Cash	
> 2	
Amount: 4000	
Pay	For HOTEL ALKAZAAR
(y/n)	
>y	
	-
	el ALKAZAAR
	- Bill
Name: Jinny Kapur	
, . Phone No.: 814630363	1
Address: Chandigarh	
Check-In: 02/12/2022	
Check-Out: 03/12/2022	2
Room Type: Standard A	AC .
Room Charges: 4000	
	-
Total Amount: 4000	
	nk You
	t Again :)
	-

0-BACK

->0

WELCOME TO HOTEL ALKAZAAR

	1. Booking				
	2. Rooms Info				
	3. Payment				
	4. Record				
	0. Exit				
->4					
*** HOTEL RECORD ***					
Name Phone No. Address					
Jinny Kapur 8146303631 4000				Standard AC	I
0-BACK					
->0		WELCOME TO H	OTEL ALKAZAAR		
	1. Booking				
	2. Rooms Info				
	3. Payment				
	4. Record				
	0. Exit				

BOOKING ROOMS

Name: Kamaljeet Kaur				
Phone No.: 1234567890				

Address: Sangrur

Check-In{DD/MM/YYYY}: 05/12/2022

Check-Out{DD/MM/YYYY}: 10/12/2022

- ----SELECT ROOM TYPE----
- 1. Standard Non-AC
- 2. Standard AC
- 3. 3-Bed Non-AC
- 4. 3-Bed AC

Press 0 for Room Prices

->4

Room Type- 3-Bed AC

Price- 5000

ROOM BOOKED SUCCESSFULLY

Room No. - 325

Customer Id - 12

0-BACK

->0

WELCOME TO HOTEL ALKAZAAR

- 1. Booking
- 2. Rooms Info
- 3. Payment
- 4. Record

Phone Number: 1234567890
Payment
MODE OF PAYMENT
1- Credit/Debit Card
2- Paytm/PhonePe/G-Pay
3- Using UPI
4- Cash
>3
Amount: 25000
Pay For HOTEL ALKAZAAR
(y/n)
>y
Hotel ALKAZAAR
Bill
Name: Kamaljeet Kaur
Phone No.: 1234567890
Address: Sangrur
Check-In: 05/12/2022
Check-Out: 10/12/2022

Room Type: 3-Bed AC
Room Charges: 25000

Total Amount: 2						
	Thank You Visit Again :)					
0-BACK						
->0			WELCOME TO H	OTEL ALKAZAAR		
		1. Booking				
		2. Rooms Info				
		3. Payment				
		4. Record				
		0. Exit				
->4						
*** HO	TEL RECORD ***					
		Check-In Check-O				
		Chandigarh			Standard AC	
Kamaljeet Kaur 5000	1234567890	Sangrur	05/12/2022	10/12/2022	3-Bed AC	
 Ω-ΒΔCK						

->0