**PRESIDENCY SCHOOL BANGALORE SOUTH**

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**HOTEL MANAGEMENT SYSTEM**

**SUBJECT: COMPUTER SCIENCE**

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**XII B**

**2021-22**

CERTIFICATE

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**Exam No: \_\_\_\_**

**This is certified to be the bonafide work of the student in the computer science laboratory during the academic year 2021-2022.**

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**TEACHER INCHARGE**

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**EXAMINER’S SIGNATURE PRINCIPAL**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Institution Rubber stamp**

**ACKNOWLEDGEMENT**

I wish to express my deep gratitude and sincere thanks to all my teachers for encouragement and the management for providing all facilities to successfully complete the project work.

I extend my sincere thanks to my principal, Ms. J Bhuvaneshwari and my Computer Science teacher, Ms. Tamil Selvi whose valuable guidance helped me, not only to successfully complete the project but also appreciate the beauty of computer science.

I extend my gratitude to my parents and classmates for their valuable support and time.

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**System Hardware and Software Specifications**

**SOFTWARE:**

The software used to run the program are :

**HARDWARE:**

The hardware used to run the project are :

**PROJECT SYNOPSIS**

**AIM:**

The main objective of the MYSQL based hotel management system is to ease administration and reduce paperwork.

The system facilitates online booking, payments and restaurant service. The project also has an admin end which manages customer details and facilitates deletion, addition and modification

**INTRODUCTION:**

As technology continues its rapid advance across all industries around the world, hospitality is really beginning to see the benefits. Hotel management software has come a long way in helping hoteliers improve the way their business operates, and there is little doubt as to its transformative impact.

A modern [management system](https://www.mews.com/en) helps you to streamline administrative systems and processes, as well as boost the company's overall operations. It's easy to see why the vast majority of hotel owners believe an excellent management system is essential for their business.

There are countless advantages to a reliable hotel management software system. Whether it’s time saving on manual tasks or increasing direct bookings, every element of a hospitality system should be working towards the end goals of improving efficiency and enhancing the guest experience.

**Advantages of hotel management system:**

* Save time on admin tasks
* Increase online visibility
* Implement effective revenue management system
* Increase bookings
* Accurate daily reports of the business
* Prevent manual errors and double bookings
* Analyse customer base
* Develop strong relationship with guests
* Increase online visibility and credibility

**ABOUT PROJECT**

Our application uses simple tools and techniques to manage records of all bookings. It also allows you to search and access specific records besides generating bills. The Hotel Management System is easy to understand and use.

The application uses MySQL as the database which is also protected by a password to ensure your data is safe.

Hotel management project can be broadly divided into 2 functionalities: -

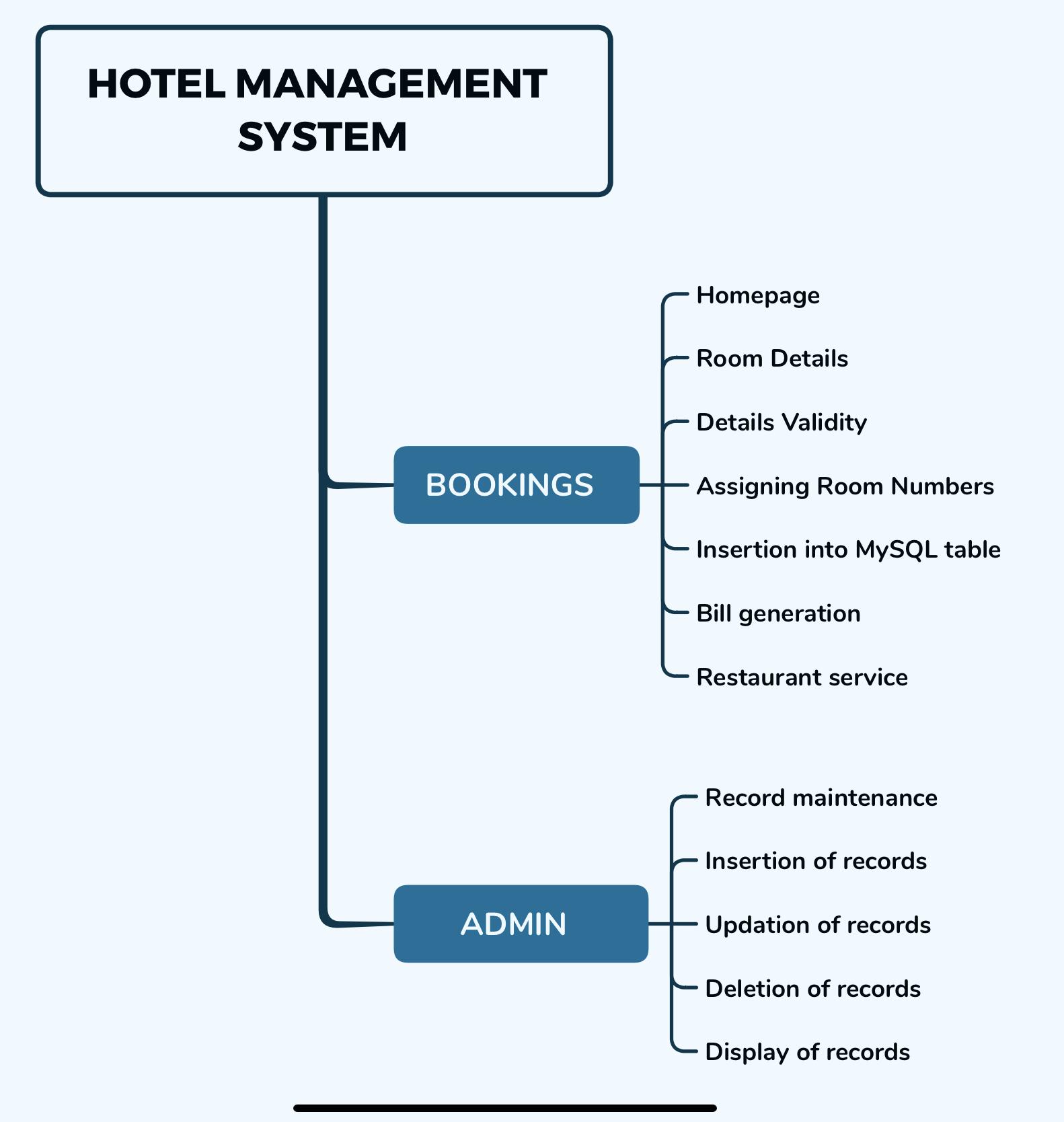
1. **Bookings:**

* Homepage: it displays a list of options to choose from. This includes room details, booking, restaurant service and payment.
* Room details: displays room types available such as Standard AC/NONAC and Deluxe AC/NONAC
* Checking for valid details: checks for booking details such as address, name and phone number. Ensures none of the fields are blank and proceeds to ask for check-in and check-out dates. It then ensures that the dates are valid for the year 2021-2022.Once booking is successful a bill is generated.
* Assigning room numbers: generates room numbers which are unoccupied
* Insertion into table: the guest details along with assigned room numbers are maintained by the hotel database on MYSQL
* Room service: guests can order food or beverage of their choice from the menu card. The guest is billed to their room numbers

1. **Admin:**

* Record maintenance
* Insertion of a new record
* Updation of records
* Deletion of records
* Display records

**DESIGN WORK**

****

**PROJECT SOURCE CODE:**

**import random**

**import datetime**

**# Global List Declaration**

**name = []**

**phno = []**

**add = []**

**checkin = []**

**checkout = []**

**room = []**

**price = []**

**rc = []**

**p = []**

**roomno = []**

**custid = []**

**day = []**

**# Global Variable Declaration**

**i = 0**

**#functions**

**#home**

**#roominfo**

**#date**

**# Home Function**

**def home():**

**print('----------------------------------HOTEL FIVE SEASONS----------------------------------')**

**print('\t\t\t\t1.ROOM INFO \n\t\t\t\t2.BOOKING \n\t\t\t\t3.RESTAURANT \n\t\t\t\t4.PAYMENT \n\t\t\t\t5.ADMIN \n\t\t\t\t0.EXIT \n')**

**ch=int(input('Enter choice : '))**

**if ch==1:**

**room\_info()**

**elif ch==2:**

**booking()**

**elif ch==3:**

**rest()**

**elif ch==4:**

**pay()**

**elif ch==5:**

**admin()**

**else:**

**exit()**

**#ROOM info**

**def room\_info():**

**import mysql.connector as ms**

**mc=ms.connect(host='localhost',user='root',passwd='forget834',database='mysql')**

**if mc.is\_connected()==False:**

**print('Error in connection')**

**c=mc.cursor()**

**c.execute('Create database if not exists hotel;')**

**mc.close()**

**mc=ms.connect(host='localhost',user='root',passwd='forget834',database='hotel')**

**if mc.is\_connected()==False:**

**print('Error in connection')**

**c=mc.cursor()**

**c.execute("CREATE table if not exists roominfo(roomtype varchar(10),price int, typee varchar(5))")**

**sql="insert into roominfo(roomtype,price,typee)values (%s,%s,%s)"**

**val=[("standard",9000,"AC"),("standard",7000,"NONAC"),("DELUXE",15000,"AC"),("DELUXE",11000,"NONAC")]**

**c.executemany(sql,val)**

**mc.commit()**

**c.execute("select\* from roominfo")**

**d=c.fetchall()**

**print("roomtype","price","typee")**

**j=1**

**for i in d:**

**print(j,i)**

**j+=1**

**#date function dd/mm/yyyy**

**y=1**

**def date(d):**

**global y**

**D={1:31,3:31,4:30,5:31,6:30,7:31,8:31,9:30,10:31,11:30,12:31}**

**if d[2]>=2021 and d[2]<=2021:**

**if d[1]==2:**

**if d[2]%100==0 and d[2]%4==0:**

**if d[0]<=29 and d[0]>=1:**

**pass**

**else:**

**y=0**

**else:**

**if d[0]<=28 and d[0]>=1:**

**pass**

**else:**

**y=0**

**elif d[1] in D.keys():**

**#if d[0]>=1 and d[0]<=D[d[1]]**

**if d[1] in [1,3,5,7,8,10,12]:**

**if d[0]>=1 and d[0]<=31:**

**pass**

**else:**

**y=0**

**elif d[1] in [4,6,9,11]:**

**if d[0]>=1 and d[0]<=30:**

**pass**

**else:**

**y=0**

**else:**

**y=0**

**else:**

**y=0**

**return y**

**'''**

**p=input('enter date in d/m/yyyy:')**

**q=p.split('/')**

**d=[int(q[0]),int(q[1]),int(q[2])]**

**print(date(d))'''**

**#Booking**

**n,pn,a,=0,0,0**

**def booking():**

**global n,pn,a**

**while True:**

**print('\t\t\t\tBOOKING')**

**n=input('Enter your name:')**

**pn=input('Enter phone no. :')**

**a=input('Enter address:')**

**#checks if any field is not empty**

**if n!='' and pn!='' and a!='':**

**print('The fields cant be empty')**

**else:**

**break**

**#checkin check out**

**while True:**

**cin=input('Enter check in date d/m/yyyy: ')**

**cout=input('Enter check out date d/m/yyyy: ')**

**q1=cin.split('/')**

**d1=[int(q1[0]),int(q1[1]),int(q1[2])]**

**q2=cout.split('/')**

**d2=[int(q2[0]),int(q2[1]),int(q2[2])]**

**o1=print(date(d1))**

**o2=print(date(d2))**

**if o1==True and o2==True:**

**#now check that checkin< checkout**

**if d1[2]<d2[2]:**

**break**

**elif d1[2]>d2[2]:**

**print('invalid')**

**continue**

**elif d1[2]==d2[2]:**

**if d1[1]<d2[1]:**

**break**

**elif d1[1]>d2[1]:**

**print('invalid')**

**continue**

**elif d1[1]==d2[1]:**

**if d1[0]<d2[0]:**

**break**

**elif d1[0]>d2[0]:**

**print('invalid')**

**continue**

**elif d1[0]==d2[0]:**

**print('invalid')**

**continue**

**#room no generation**

**roominfo()**

**while True:**

**ch=int(input("Enter your choice 1/2/3/4:"))**

**if ch==1:**

**print("Room Type: Standard AC")**

**print("Price: 9000")**

**break**

**elif ch==2:**

**print("Room Type: Standard Non-AC")**

**print("Price: 7000")**

**break**

**elif ch==3:**

**print("Room Type: Deluxe AC")**

**print("15000")**

**break**

**elif ch==4:**

**print("Room Type: Deluxe Non-AC")**

**print("11000")**

**break**

**while True:**

**rn= random.randrange(1,100)**

**if rn not in roomno:**

**roomno.append(rn)**

**break**

**print('Your room number is:',rn)**

**#admin**

**def admin():**

**import mysql.connector as ms**

**mc=ms.connect(host='localhost',user='root',passwd='forget834',database='mysql')**

**if mc.is\_connected()==False:**

**print('Error in connection')**

**c=mc.cursor()**

**c.execute('Create database if not exists hotel;')**

**mc.close()**

**mc=ms.connect(host='localhost',user='root',passwd='forget834',database='hotel')**

**if mc.is\_connected()==False:**

**print('Error in connection')**

**c=mc.cursor()**

**q="CREATE table if not exists admin(roomno int primary key,name varchar(50),phone char(10),checkin varchar(20),checkout varchar(20),roomtype varchar(15), bill int,address varchar(30))"**

**c.execute(q)**

**mc.commit()**

**#INSERT THE VALUES**

**def insertion():**

**global R**

**for j in range(R):**

**z="insert into admin (roomno,name,phone,checkin,checkout,roomtype,address)values(%s,%s,%s,%s,%s,%s,%s)"**

**data=[(R[j]),n,pn,(cin),(cout),(roomtype),a]**

**cursor.execute(z,data)**

**mycon.commit( )**

**n=int(input("0-BACK\n ->"))**

**if n==0:**

**Home()**

**else:**

**exit()**

**def restaurant():**

**while True:**

**w=int(input('Enter your room no:'))**

**if w in roomno:**

**print("HOTEL FIVE SEASONS")**

**print("-------------------------------------------------------------------------")**

**print(" Menu Card")**

**print("-------------------------------------------------------------------------")**

**print("BEVARAGES 26 Dal Fry................ 140.00")**

**print("---------------------------------- 27 Dal Makhani............ 150.00")**

**print(" 1 Regular Tea............. 20.00 28 Dal Tadka.............. 150.00")**

**print(" 2 Masala Tea.............. 25.00")**

**print(" 3 Coffee.................. 25.00 ROTI")**

**print(" 4 Cold Drink.............. 25.00 ----------------------------------")**

**print(" 5 Bread Butter............ 30.00 29 Plain Roti.............. 15.00")**

**print(" 6 Bread Jam............... 30.00 30 Butter Roti............. 15.00")**

**print(" 7 Veg. Sandwich........... 50.00 31 Tandoori Roti........... 20.00")**

**print(" 8 Veg. Toast Sandwich..... 50.00 32 Butter Naan............. 20.00")**

**print(" 9 Cheese Toast Sandwich... 70.00")**

**print(" 10 Grilled Sandwich........ 70.00 RICE")**

**print(" ----------------------------------")**

**print(" SOUPS 33 Plain Rice.............. 90.00")**

**print("---------------------------------- 34 Jeera Rice.............. 90.00")**

**print(" 11 Tomato Soup............ 110.00 35 Veg Pulao.............. 110.00")**

**print(" 12 Hot & Sour............. 110.00 36 Peas Pulao............. 110.00")**

**print(" 13 Veg. Noodle Soup....... 110.00")**

**print(" 14 Sweet Corn............. 110.00 SOUTH INDIAN")**

**print(" 15 Veg. Manchow........... 110.00 ----------------------------------")**

**print(" 37 Plain Dosa............. 100.00")**

**print(" MAIN COURSE 38 Onion Dosa............. 110.00")**

**print("---------------------------------- 39 Masala Dosa............ 130.00")**

**print(" 16 Shahi Paneer........... 110.00 40 Paneer Dosa............ 130.00")**

**print(" 17 Kadai Paneer........... 110.00 41 Rice Idli.............. 130.00")**

**print(" 18 Handi Paneer........... 120.00 42 Sambhar Vada........... 140.00")**

**print(" 19 Palak Paneer........... 120.00")**

**print(" 21 Matar Mushroom......... 140.00 ----------------------------------")**

**print(" 22 Mix Veg................ 140.00 43 Vanilla................. 60.00")**

**print(" 23 Jeera Aloo............. 140.00 44 Strawberry.............. 60.00")**

**print(" 24 Malai Kofta............ 140.00 45 Pineapple............... 60.00")**

**print(" 25 Aloo Matar............. 140.00 46 Butter Scotch........... 60.00")**

**ch=1**

**while ch!=0:**

**ch=int(input(" -> "))**

**# if-elif-conditions to assign item**

**# prices listed in menu card**

**if ch==1 or ch==31 or ch==32:**

**rs=20**

**r=r+rs**

**elif ch<=4 and ch>=2:**

**rs=25**

**r=r+rs**

**elif ch<=6 and ch>=5:**

**rs=30**

**r=r+rs**

**elif ch<=8 and ch>=7:**

**rs=50**

**r=r+rs**

**elif ch<=10 and ch>=9:**

**rs=70**

**r=r+rs**

**elif (ch<=17 and ch>=11) or ch==35 or ch==36 or ch==38:**

**rs=110**

**r=r+rs**

**elif ch<=19 and ch>=18:**

**rs=120**

**r=r+rs**

**elif (ch<=26 and ch>=20) or ch==42:**

**rs=140**

**r=r+rs**

**elif ch<=28 and ch>=27:**

**rs=150**

**r=r+rs**

**elif ch<=30 and ch>=29:**

**rs=15**

**r=r+rs**

**elif ch==33 or ch==34:**

**rs=90**

**r=r+rs**

**elif ch==37:**

**rs=100**

**r=r+rs**

**elif ch<=41 and ch>=39:**

**rs=130**

**r=r+rs**

**elif ch<=46 and ch>=43:**

**rs=60**

**r=r+rs**

**else:**

**print("Wrong Choice..!!")**

**print("Total Bill: ",r)**

**else:**

**print("1-try ordering again \n2.Homepage")**

**ch=int(input('Enter 1/2:'))**

**if ch==1:**

**pass**

**elif ch==2:**

**break**

**ch=1**

**rs=0**

**r=0**

**print("enter 0 to end your order")**

**while ch!=0:**

**ch=int(input(" -> "))**

**if ch==1 or ch==31 or ch==32:**

**rs=20**

**r=r+rs**

**elif ch<=4 and ch>=2:**

**rs=25**

**r=r+rs**

**elif ch<=6 and ch>=5:**

**rs=30**

**r=r+rs**

**elif ch<=8 and ch>=7:**

**rs=50**

**r=r+rs**

**elif ch<=10 and ch>=9:**

**rs=70**

**r=r+rs**

**elif (ch<=17 and ch>=11) or ch==35 or ch==36 or ch==38:**

**rs=110**

**r=r+rs**

**elif ch<=19 and ch>=18:**

**rs=120**

**r=r+rs**

**elif (ch<=26 and ch>=20) or ch==42:**

**rs=140**

**r=r+rs**

**elif ch<=28 and ch>=27:**

**rs=150**

**r=r+rs**

**elif ch<=30 and ch>=29:**

**rs=15**

**r=r+rs**

**elif ch==33 or ch==34:**

**rs=90**

**r=r+rs**

**elif ch==37:**

**rs=100**

**r=r+rs**

**elif ch<=41 and ch>=39:**

**rs=130**

**r=r+rs**

**elif ch<=46 and ch>=43:**

**rs=60**

**r=r+rs**

**elif ch==0:**

**print("Total Bill: ",r)**

**else:**

**print("invalid input")**

**1.** **Admin:**

**● Record maintenance: customer details maintained as a database in mysql**

**● Insertion of a new record: all details, room numbers etc. of each new customer is inserted**

**● Updating records: in case of any modification or cancellation in booking**

**● Deletion of records: customer records are popped out after checkout.**

**● Display records: to access any particular record from the database**