

KENDRIYA VIDYALAYA NO-2 DELHI CANTT  
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**Project Synopsis**  
**Hotel Managements Systems**



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## CERTIFICATE

This is to certify that **Sayantana Mandal** Of Class **XII A** has prepared the report on the Project entitled “Employee Management System”. The report is the result of his efforts & endeavors. The report is found worthy of acceptance as final project report for the subject Computer Science of Class XII. He has prepared the report under my guidance.

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**CERTIFICATE**

**The project report entitled “Hotel Management  
System”.Submitted by Sayantana Mandal of  
Class XII A for the CBSE  
Senior Secondary Examination class XII of  
Computer**

**Science at Kendriya Vidyalaya No. 2, Delhi Cantt  
has been examined**

***SIGNATURE OF EXAMINER***

# DECLARATION

I hereby declare that the project work entitled.  
**“Hotel Management System”**, submitted to  
Department of Computer Science, Kendriya Vidyalaya  
No. 2, Delhi Cantt, New Delhi is  
prepared by me. All the coding are result of my personal  
efforts.

Sayantana Mandal  
Class XII A

# ACKNOWLEDGEMENT

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Last but not the least, I would like to thank  
all those who had helped directly or indirectly towards the completion of this project

Sayantana Mandal  
Class XII A

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# **INTRODUCTION OF PROJECT**

The Hotel Management System is basically a database-based project done with help of **python language** and **MySQL**. **Hotel Management Systems (HMS)** is a computer system that helps manage the information related to the customers staying in the hotel effectively. It manages the data related to customer and their details.

**HMS** provides the ability to manage all the room booking in oneplace, reducing the work of staff in arranging and analyzing the credential on normal pen paper work.

## **OBJECTIVES OF THE PROJECT**

The objectives of the systems are-

- Maintain the records of the Customers.
- Maintain the number of rooms.
- Reduces the work of staff and makes it easy to work.
- Reduced operational time.
- Increased accuracy and reliability.
- Increased operational efficiency.
- Data security.
- Cost-effective and easily manageable.

## MODULES

- Room Enquiry
- Bills and Payment Module
- Customer Enquiry
- Room Booking
- Room Types

## HARDWARE AND SOFTWARE USED

### HARDWARES USED:

- Desktop
- Keyboard
- Mouse
- Computer
- Hard Drive(1 TB)
- RAM (8.00 GB)

### SOFTWARE USED:

- **Operating System Used:** Windows 10
- Python 3.10.2
- MySQL



# ADVANTAGE OF HOTEL MANAGEMENT SYSTEMS

- No Need to do Paper Work.
- To save the environment by using paper-free work.
- To increase the accuracy and efficiency of the procedure.
- High reliability and Security

## WORKING DESCRIPTION

### Room Booking

- Customers can book Rooms
- Strayed or Forgot customer can take information out thru customer ID.

### Bill

- To display the details of Bills.
- Customer-wise payment description.

# PROJECT CODE

```
1                                     #Section-1
2                                     #Importing Necessary Modules
3
4 import mysql.connector as con
5 from time import sleep
6 import random
7
8                                     #Section-2
9                                     #Establishing Connection
10 print()
11 password=input("Please Enter Your MySQL Password - ")
12 mycon=con.connect ( host = "localhost", user = "root", passwd=password, database="Hotel")
13 mycur= mycon.cursor()
14
15
16                                     #Section-3
17                                     #Defining Functions
18 def user_id():
19     st1="AS7"
20     st2=Name[0:2]
21     st3=str(random.randrange(100,999))
22     C_ID= st1 + st2 + st3
23     return C_ID
24
25
```

## #Section-4

### #Main Code

```

26                                     #Section-4
27                                     #Main Code
28
29
30 print()
31 print()
32 print()
33 print()
34 print("<><><><><><><><><><><><><>WELCOME TO HOTEL MANAGEMENT SYSTEM<><><><><><><><><><><><><><>")
35 print()
36 print()
37 sleep(1)
38 print("                                MANAGEMENT DEVELOPERS:")
39 sleep(0.4)
40 print()
41 print("                                >> AGAM DAYAL ")
42 sleep(0.3)
43 print()
44 print("                                >> SAYANTANA MANDAL ")
45 sleep(1)
46 print()
47 print("-----LET'S HAVE A QUICK REVEIW OF OUR FEATURES-----")
48 print()
49 sleep(1)
50 print("# Our system is based on Hotel Managment Administration ## Our system is really easy and convinient")
51 print("    which gathers the data on table."      "to use.")
52 print()
53 sleep(1)
54 print("# This system provides all the important and necessary details ## All the details of the people staying in the ")
55 print("    of the people staying in the hotel."     "hotel are unshakeable. ")
56 print()
57 sleep(0.5)
58 print("-----")
59 sleep(1)
60 print()

```

```

61 print()
62 print()
63
64 a = input("Press the ENTER KEY to continue")
65 print()
66 a='y'
67 while (a=='y' or a=='Y'):
68     print("Main Menu ")
69     print("Enter 1: For New Entry")
70     print("Enter 2: For Room Details")
71     print("Enter 3: For Bill")
72     print("Enter 4: For Customer Wise Details")
73     print("Enter 5: To Exit The Program")
74     print()
75     choice = int(input("Enter your choice:"))
76     print()
77     print()
78     if choice == 1:
79         print("ROOM BOOKING :-")
80         print()
81         Name= input("Enter Name of Person :")
82         print()
83         C_ID=user_id()
84         print("Your Customer Id is ", C_ID, ",Do remember this !!")
85         print()
86         P_no=int(input("Enter Phone Number : "))
87         Email=input("Enter your Email :")
88         Aadhar_no=int(input("Enter Aadhar card no. :"))
89         Room_no=int(input("Enter Room No. :"))
90         Room_type=input("Enter Room type[SuperDelux/Delux/Premium/Normal] : ")
91         Cost=int(input("Enter The Total Cost[10000/7500/4000/2000]: "))
92         Adv_payment=input("Enter Advance Payment : ")
93         Status= input("Enter the Current payment status[Paid/Pending]: ")
94         Staying=input("Enter 'YES' if the customer is staying or 'NO' if not : ")
95         print()
96         data=(C_ID,Name, P_no, Email, Aadhar_no,Room_no,Room_type,Cost,Adv_payment,Status,Staying)

```



```

97 A="""insert into details (C_ID,Name, P_no, Email, Aadhar_no,Room_no,Room_type,Cost,Adv_payment,Status,Staying)
98 Values(%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s)"""
99 mycur.execute(A,data)
100 mycon.commit()
101 print("The above details are successfully registered. ")
102 print()
103 print()
104 print()
105 print()
106 print()
107
108
109
110 if choice== 2:
111     print("FOR ROOM DETAILS :-")
112     print()
113     print("Enter 1: For Room Overview")
114     print("Enter 2: For Room Wise Details")
115     print()
116     choice1=int(input("Enter Your Choice:"))
117     print()
118
119     if (choice1==1):
120         mycur.execute("select room_no,room_type,cost from details")
121         record = mycur.fetchall()
122         print("The Detials of The Rooms are :- ")
123         print()
124         for i in record:
125             print(i)
126
127     if (choice1==2):
128         r_no=int(input("Enter The Room No Whose Details You Want To View :"))
129         mycur.execute("select* from details where Room_no=" + str(r_no))
130         record = mycur.fetchall()
131         for i in record:
132             print(i)

```

```

133         print()
134
135     print()
136     print()
137     print()
138     print()
139     print()
140
141
142
143     if (choice==3):
144         print("BILL :-")
145         print()
146         print("Enter 1: To Get Bill Through Customer ID")
147         print("Enter 2: To Get Bill Of Everyone")
148         print()
149         choice2 = int(input("Enter your choice :"))
150         print()
151
152         if (choice2 == 1):
153             U_ID=input("Enter C_ID :")
154             mycur.execute ("select Cost, Adv_payment, Status from details where C_ID='" +U_ID + "'")
155             record = mycur.fetchall()
156             print("The Bill is :-")
157             print()
158             for i in record:
159                 print(i)
160
161         if (choice2== 2):
162             mycur.execute("select (C_ID, Cost, Adv_payment,Status) from details ")
163             record = mycur.fetchall()
164             print("The Bill Details Of All The Customers Are :-")
165             print()
166             for i in record:
167                 print (i)

```

168  
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```
print()
print()
print()
print()
print()
```

```
if (choice == 4):
```

```
    print ("CUSTOMER WISE DETAILS :-")
    print()
    print("Enter 1 : To Get Specific Details Of Customer By C_ID" )
    print("Enter 2 : To Get Detail Of All Customer")
    print()
    choice3 = int(input("Enter your choice :"))
    print()
```

```
    if (choice3==1):
```

```
        U_ID = input("Enter the C_ID for which you want to view details :")
        mycur.execute("select * from details where C_ID =" + U_ID+"")
        record = mycur.fetchall()
        print("")
        print()
        for i in record:
            print(i)
```

```
    if (choice3==2):
```

```
        mycur.execute("select * from details")
        record = mycur.fetchall()
        print("The Details Of All The Customers Are:-")
        print()
        for i in record:
            print(i)
```

```
202
203     print()
204     print()
205     print()
206     print()
207     print()
208
209
210 if (choice == 5):
211     print("THANK YOU FOR USING THE PROGRAM OF HOTEL MANAGEMENT SYSTEMS !!")
212     print()
213     a='s'
214
215
216
217 mycon.close ()
```



## OUTPUT SCREEN

Please Enter Your MySQL Password - rabbit

WELCOME TO HOTEL MANAGEMENT SYSTEM

**MANAGEMENT DEVELOPERS:**

>> AGAM DAYAL

>> SAYANTANA MANDAL

**-LET'S HAVE A QUICK REVEIW OF OUR FEATURES-**

**## Our system is based on Hotel Managment Administration which gathers the data on table.**

**## Our system is really easy and convinient to use.**

**## This system provides all the important and necessary details of the people staying in the hotel.**

**## All the details of the people staying in the hotel are unshakeable.**

Press the ENTER KEY to continue

**Main Menu**

Enter 1: For New Entry

**Enter 2: For Room Details**

**Enter 3: For Bill**

**Enter 4: For Customer Wise Details**

**Enter 5: To Exit The Program**

Enter your choice:

Enter your choice:1

ROOM BOOKING :-

Enter Name of Person :Sayantana

Your Customer Id is AS7Sa456 ,Do remember this !!

Enter Phone Number : 97645464

Enter your Email :saya2005@gmail.com

Enter Aadhar card no. :5697

Enter Room No. :702

Enter Room type[SuperDelux/Delux/Premium/Normal] : SuperDelux

Enter The Total Cost[10000/7500/4000/2000]: 10000

Enter Advance Payment : 7000

Enter the Current payment status[Paid/Pending]: Pending

Enter 'YES' if the customer is staying or 'NO' if not : Yes

The above details are successfully registered.

Enter your choice:2

FOR ROOM DETAILS :-

Enter 1: For Room Overview

Enter 2: For Room Wise Details

Enter Your Choice:1

The Detials of The Rooms are :-

(101, 'Premium', 4000)

(801, 'Premium', 4000)

(701, 'SuperDelux', 10000)

(403, 'Premium', 4000)

(501, 'SuperDelux', 10000)

(702, 'SuperDelux', 10000)

(102, 'Delux', 7500)

Enter your choice:2

FOR ROOM DETAILS :-

Enter 1: For Room Overview

Enter 2: For Room Wise Details

Enter Your Choice:2

Enter The Room No Whose Details You Want To View :101

('AS7Ag323', 'Agam', 14256776, 'agamdayal@gmail.com', 5632, 101, 'Premium', 4000, 3000, 'Pending', 'Yes')

Enter your choice:3

BILL :-

Enter 1: To Get Bill Through Customer ID

Enter 2: To Get Bill Of Everyone

Enter your choice :1

Enter C\_ID :AS7Sa687

The Bill is :-

(7500, 7500, 'Paid')



Enter your choice:3

BILL :-

Enter 1: To Get Bill Through Customer ID

Enter 2: To Get Bill Of Everyone

Enter your choice :2

The Bill Details Of All The Customers Are :-

('AS7Ag323', 4000, 3000, 'Pending')  
('AS7Al962', 4000, 4000, 'Paid')  
('AS7As286', 10000, 10000, 'Paid')  
('AS7De768', 4000, 2000, 'Pending')  
('AS7Py558', 10000, 8000, 'Pending')  
('AS7Sa456', 10000, 7000, 'Pending')  
('AS7Sa687', 7500, 7500, 'Paid')

Enter your choice:3

BILL :-

Enter 1: To Get Bill Through Customer ID

Enter 2: To Get Bill Of Everyone

Enter your choice :1

Enter C\_ID :AS7Sa687

The Bill is :-

(7500, 7500, 'Paid')

Enter your choice:3

BILL :-

Enter 1: To Get Bill Through Customer ID

Enter 2: To Get Bill Of Everyone

Enter your choice :2

The Bill Details Of All The Customers Are :-

('AS7Ag323', 4000, 3000, 'Pending')

('AS7Al962', 4000, 4000, 'Paid')

('AS7As286', 10000, 10000, 'Paid')

('AS7De768', 4000, 2000, 'Pending')

('AS7Py558', 10000, 8000, 'Pending')

('AS7Sa456', 10000, 7000, 'Pending')

('AS7Sa687', 7500, 7500, 'Paid')



Enter your choice:4

CUSTOMER WISE DETAILS :-

Enter 1 : To Get Specific Details Of Customer By C\_ID

Enter 2 : To Get Detail Of All Customer

Enter your choice :1

Enter the C\_ID for which you want to view details :AS7As286

('AS7As286', 'Ashish', 86023698, 'ash77@gmail.com', 7695, 701, 'SuperDelux', 10000, 10000, 'Paid', 'Yes')

Enter your choice:4

CUSTOMER WISE DETAILS :-

Enter 1 : To Get Specific Details Of Customer By C\_ID

Enter 2 : To Get Detail Of All Customer

Enter your choice :2

The Details Of All The Customers Are:-

('AS7Ag323', 'Agam', 14256776, 'agamdayal@gmail.com', 5632, 101, 'Premium', 4000, 3000, 'Pending', 'Yes')  
('AS7Al962', 'Alisha', 23456789, 'aloo@gmail.com', 5523, 801, 'Premium', 4000, 4000, 'Paid', 'Yes')  
('AS7As286', 'Ashish', 86023698, 'ash77@gmail.com', 7695, 701, 'SuperDelux', 10000, 10000, 'Paid', 'Yes')  
('AS7De768', 'Deepanshu', 76548291, 'gamer@gmail.com', 1234, 403, 'Premium', 4000, 2000, 'Pending', 'Yes')  
('AS7Py558', 'Pyush', 65473824, 'nandan@gmail.com', 9012, 501, 'SuperDelux', 10000, 8000, 'Pending', 'No')  
('AS7Sa456', 'Sayantana', 97645464, 'saya2005@gmail.com', 5697, 702, 'SuperDelux', 10000, 7000, 'Pending', 'Yes')  
('AS7Sa687', 'Samya', 56742345, 'sumo@gmail.com', 8645, 102, 'Delux', 7500, 7500, 'Paid', 'Yes')

**Main Menu**

**Enter 1: For New Entry**

**Enter 2: For Room Details**

**Enter 3: For Bill**

**Enter 4: For Customer Wise Details**

**Enter 5: To Exit The Program**

**Enter your choice:5**

**THANK YOU FOR USING THE PROGRAM OF HOTEL MANAGEMENT SYSTEMS !!**

# DATABASE AND TABLES

- Database: HOTEL

- STRUCTURES:-

```
mysql> desc details;
```

Field	Type	Null	Key	Default	Extra
C_id	varchar(10)	NO	PRI	NULL	
Name	varchar(50)	NO		NULL	
P_no	int	NO		NULL	
Email	varchar(60)	YES		NULL	
Aadhar_no	int	NO	UNI	NULL	
Room_no	int	NO		NULL	
Room_type	varchar(10)	NO		NULL	
Cost	int	NO		NULL	
Adv_payment	int	NO		NULL	
Status	varchar(20)	YES		NULL	
Staying	varchar(20)	NO		yes	

```
11 rows in set (0.10 sec)
```



- **TABLE LIST**

```
mysql> use hotel;
Database changed
mysql> show tables;
+-----+
| Tables_in_hotel |
+-----+
| details          |
+-----+
1 row in set (0.46 sec)
```

- **ENTRIES**

```
mysql> select* from details;
```

C_id	Name	P_no	Email	Aadhar_no	Room_no	Room_type	Cost	Adv_payment	Status	Staying
AS7Ag323	Agam	14256776	agamdayal@gmail.com	5632	101	Premium	4000	3000	Pending	Yes
AS7Al962	Alisha	23456789	aloo@gmail.com	5523	801	Premium	4000	4000	Paid	Yes
AS7As286	Ashish	86023698	ash77@gmail.com	7695	701	SuperDelux	10000	10000	Paid	Yes
AS7De768	Deepanshu	76548291	gamer@gmail.com	1234	403	Premium	4000	2000	Pending	Yes
AS7Py558	Pyush	65473824	nandan@gmail.com	9012	501	SuperDelux	10000	8000	Pending	No
AS7Sa456	Sayantana	97645464	saya2005@gmail.com	5697	702	SuperDelux	10000	7000	Pending	Yes
AS7Sa687	Samya	56742345	sumo@gmail.com	8645	102	Delux	7500	7500	Paid	Yes

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

# **CONCLUSION**

- The use of software in computers in Hotelmanagement systems has made things easy.
- Hotel management systems reduce a lot of paperwork as well as manpower.
- The software is user-friendly and easy to handle

# **BIBLIOGRAPHY**

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