HOTEL MANAGEMENT SYSTEM

BY AVANTIKA CHAUHAN
OF XII-A

2020-21

COMPUTER SCIENCE (083)

CERTIFICATE



This is to certify that "Avantika Chauhan", a student of class XII-A of D.A.V. Public School, Jasola Vihar has successfully performed the project in session '2020-21' on the topic "Hotel Management System" in computer science under my Supervision.

Signature (External Examiner)

Signature (Subject Teacher)

ACKNOWLEDGEMENTS

I wish to express my deep gratitude and sincere thanks to Principal, Mr. V.K. Barthwal, DAV Public School, Jasola Vihar, for his encouragement and for all the facilities that he provided for this project work. This project would not have been feasible without the proper rigorous guidance of computer science teacher Ms. Anjali Arora who guided me throughout this project in every possible way. I take this opportunity to express my deep sense of gratitude for her invaluable guidance, constant encouragement, constructive comments, sympathetic attitude and immense motivation, which has sustained my efforts at all stages of this project work. Thereby, I would like to thank her for guiding me on a systematic basis. I can't forget to offer my sincere thanks to my classmates and parents who helped me to carry out this project work successfully & for their valuable advice & support, which I received from them time to time.

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- 1. Introduction of the Project.
- 2. System Requirements of the Project.
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INTRODUCTION

The project starts with -

Enter 1 - CUSTOMER DETAILS

Enter 2 - BOOKING RECORD

Enter 3 - ROOM RENT

Enter 4 - RESTAURENT BILL

Enter 5 - DISPLAY CUSTOMER DETAILS

Enter 6 - TOTAL BILL

Enter 7 - OLD BILL

Enter 8- EXIT

PROCESS

FIRSTLY, I had done the planning in a paper work regarding what have to do on the assigned project **HOTEL MANAGEMENT SYSTEM**.

SECONDLY, I discussed my planning with our subject teacher and then she provided us the right path to perform the work.

NEXT, I started my project on foot paths of my subject teacher.

THEN, I started my coding, coding took around 1 months for completion.

NEXT, I analysed the mistakes done and then I corrected them.

THEN, I prepared the project format as shown above.

SYSTEM REQUIREMENTS OF THE PROJECT

Recommended System Requirements

Processors: Intel[®] Core[™] i3 processor 4300M at 2.60 GHz.

Disk space: 2 to 4 GB.

Operating systems: Windows® 10, MACOS, and UBUNTU.

Python Versions: 3.X.X or Higher.

Minimum System Requirements

Processors: Intel Atom® processor or Intel® Core™ i3 processor.

Disk space: 1 GB.

Operating systems: Windows 7 or later, MACOS, and UBUNTU.

Python Versions: 2.7.X, 3.6.X.

Prerequisites before installing MySQL Connector Python

You need root or administrator privileges to perform the installation process.

Python must be installed on your machine.

Note: - MySQL Connector Python requires python to be in the system's PATH. Installation fails if it doesn't find Python.

On Windows, If Python doesn't exist in the system's PATH, please manually add the directory containing python.exe yourself.

PYTHON CODING

```
# ----- HOTEL MANAGEMENT SYSTEM ---------
# ----- AVANTI HOTELS ------
'''Designed and Maintained By :
"Avantika Chauhan - CLASS XII A - ROLL NO - 9 [ 2020-2021 ]" '''
import mysql.connector
#Declaration of global variables
myConnnection =""
cursor=""
username=""
password =""
roomrent = 0
restaurantbill = 0
grandTotal= 0
cid = ""
# MODULE TO CHECK MYSQL CONNECTIVITY
def MYSQLconnectionCheck():
   qlobal myConnection
   global username
   qlobal password
   username = input("\nENTER MYSQL SERVER'S USERNAME: ")
   password = input("\nENTER MYSQL SERVER'S PASSWORD : ")
   myConnection = mysql.connector.connect(host="localhost", user=username,
passwd=password, auth_plugin='mysql_native_password')
   if myConnection:
       print("\nCONGRATULATIONS ! YOUR MYSQL CONNECTION HAS BEEN
ESTABLISHED !")
       cursor = myConnection.cursor()
       cursor.execute("Create database if not exists avanti_hotels;")
       cursor.execute("Commit")
       cursor.close()
       return myConnection
       print("\nERROR ESTABLISHING MYSQL CONNECTION CHECK USERNAME AND
PASSWORD !")
#MODULE TO ESTABLISH MYSQL CONNECTION
def MYSQLconnection ():
   qlobal username
   global password
   global myConnection
   qlobal cid
   myConnection=mysql.connector.connect(host="localhost", user=username,
```

```
passwd=password, database="avanti_hotels",
auth_plugin='mysql_native_password' )
    if myConnection:
        return myConnection
    else:
        print("\nERROR ESTABLISHING MYSQL CONNECTION !")
    myConnection.close()
def userEntry():
    qlobal cid
    if myConnection:
        cursor=myConnection.cursor()
        createTable="CREATE TABLE IF NOT EXISTS C_DETAILS(CID
VARCHAR(20), C_NAME VARCHAR(30), C_ADDRESS VARCHAR(30), C_AGE VARCHAR(30),
C_COUNTRY VARCHAR(30) ,P_NO VARCHAR(30),C_EMAIL VARCHAR(30))"
        cursor.execute(createTable)
        cid = input("Enter Customer Identification Number : ")
        name = input("Enter Customer Name : ")
        address = input("Enter Customer Address : ")
        age= input("Enter Customer Age : ")
        nationality = input("Enter Customer Country : ")
        phoneno= input("Enter Customer Contact Number : ")
        email = input("Enter Customer Email : ")
        sql = "INSERT INTO C_Details VALUES(%s,%s,%s,%s,%s,%s,%s,%s)"
        values= (cid, name, address, age, nationality, phoneno, email)
        cursor.execute(sql,values)
        cursor.execute("COMMIT")
        print("\nNew Customer Entered In The System Successfully !")
        cursor.close()
    else:
        print("\nERROR ESTABLISHING MYSQL CONNECTION !")
def bookingRecord():
    qlobal cid
    customer=searchCustomer()
    if customer:
     if myConnection:
        cursor=myConnection.cursor()
        createTable ="CREATE TABLE IF NOT EXISTS BOOKING_RECORD(CID
VARCHAR(20), CHECK_IN DATE , CHECK_OUT DATE);"
        cursor.execute(createTable)
        checkin=input("\nEnter Customer CheckIN Date [ YYYY-MM-DD ] :
        checkout=input("\nEnter Customer CheckOUT Date [ YYYY-MM-DD ] :
")
        sql= "INSERT INTO BOOKING_RECORD VALUES(%s,%s,%s);"
        values= (cid, checkin, checkout)
        cursor.execute(sql,values)
        cursor.execute("COMMIT")
        print("\nCHECK-IN AND CHECK-OUT ENTRY MADED SUCCESSFULLY !")
        cursor.close()
```

```
else:
      print("\nERROR ESTABLISHING MYSQL CONNECTION !")
def roomRent():
    qlobal cid
    customer=searchCustomer()
    if customer:
        qlobal roomrent
        if myConnection:
            cursor=myConnection.cursor()
            createTable ="CREATE TABLE IF NOT EXISTS ROOM_RENT(CID
VARCHAR(20), ROOM_CHOICE INT, NO_OF_DAYS INT, ROOMNO INT , ROOMRENT INT)"
            cursor.execute(createTable)
            print ("\n ##### We have The Following Rooms For You #####")
            print (" 1. Ultra Royal ----> 10000 Rs.")
            print (" 2. Royal ----> 5000 Rs. ")
            print (" 3. Elite ----> 3500 Rs. ")
            print (" 4. Budget ----> 2500 Rs. ")
            roomchoice =int(input("Enter Your Option : "))
            roomno=int(input("Enter Customer Room No : "))
            noofdays=int(input("Enter No. Of Days : "))
            if roomchoice=1:
                roomrent = noofdays * 10000
                print("\nUltra Royal Room Rent : ",roomrent)
            elif roomchoice=2:
                roomrent = noofdays * 5000
                print("\nRoyal Room Rent : ",roomrent)
            elif roomchoice=3:
                roomrent =noofdays * 3500
                print("\nElite Royal Room Rent : ",roomrent)
            elif roomchoice=4:
                roomrent = noofdays * 2500
                print("\nBudget Room Rent : ",roomrent)
            else:
                print("Sorry, Invalid input, Please Try Again ! ")
            sql="INSERT INTO ROOM_RENT VALUES(%s, %s, %s, %s, %s)"
            values= (cid,roomchoice,noofdays,roomno,roomrent,)
            cursor.execute(sql, values)
            cursor.execute("COMMIT")
            print("Thank You , Your Room Has Been Booked For : ",noofdays ,
"Days" )
            print("Your Total Room Rent is : Rs. ",roomrent)
            cursor.close()
        else:
            print("\nERROR ESTABLISHING MYSQL CONNECTION !")
def Restaurant():
     global cid
     customer=searchCustomer()
     if customer:
```

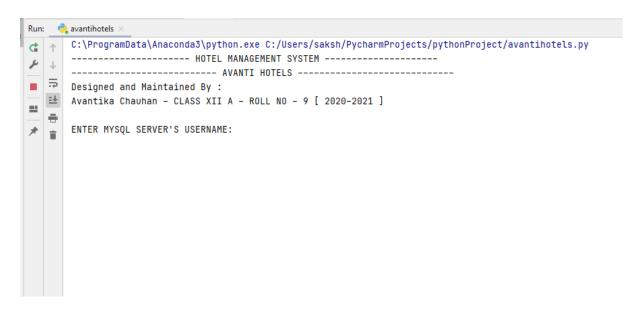
```
global restaurantbill
         if myConnection:
             cursor=myConnection.cursor()
             createTable="""CREATE TABLE IF NOT EXISTS RESTAURANT(CID
VARCHAR(20), CUISINE VARCHAR(30), QUANTITY VARCHAR(30), BILL VARCHAR(30))"""
             cursor.execute(createTable)
             print("1. North Indian Thali ----> 300 Rs.")
             print("2. South Indian Thali ----> 500 Rs.")
             print("3. Chinese Combo ----> 550 Rs.")
             print("4. Italian Combo ----> 600 Rs.")
             print("5. Vegetarian & Non-Vegetarian Combo ----> 750 Rs.")
             choice_dish= int(input("Enter Your Cuisine : "))
             quantity = int(input("Enter Quantity : "))
             if choice_dish = 1:
                 print("\nSO YOU HAVE ORDER: North Indian Thali ")
                 restaurantbill = quantity * 300
             elif choice dish = 2:
                 print("\nSO YOU HAVE ORDER: South Indian Thali ")
                 restaurantbill = quantity * 500
             elif choice_dish = 3:
                 print("\nSO YOU HAVE ORDER: Chinese Combo ")
                 restaurantbill = quantity * 550
             elif choice_dish = 4:
                 print("\nSO YOU HAVE ORDER: Italian Combo ")
                 restaurantbill = quantity * 600
             elif choice_dish = 5:
                 print("\nSO YOU HAVE ORDER: Vegetarian & Non-Vegetarian
Combo ")
                 restaurantbill = quantity * 750
             else:
                 print("Sorry, Invalid input, Please Try Again ! ")
                 return
             sql = "INSERT INTO restaurant VALUES(%s,%s,%s,%s,%s)"
             values = (cid, choice_dish, quantity, restaurantbill)
             cursor.execute(sql, values)
             cursor.execute("COMMIT")
             print("Your Total Bill Amount Is : Rs. ", restaurantbill)
             print("\n\n**** WE HOPE YOU WILL ENJOY YOUR MEAL ***\n\n")
             cursor.close()
     else:
         print("\nERROR ESTABLISHING MYSQL CONNECTION !")
def totalAmount():
    qlobal cid
    customer=searchCustomer()
    if customer:
        qlobal grandTotal
        global roomrent
        global restaurantbill
        if myConnection:
            cursor=myConnection.cursor()
```

```
createTable ="CREATE TABLE IF NOT EXISTS TOTAL(CID
VARCHAR(20), C_NAME VARCHAR(30), ROOMRENT INT , RESTAURANTBILL INT
TOTALAMOUNT INT)"
           cursor.execute(createTable)
           sql="INSERT INTO TOTAL VALUES(%s, %s, %s, %s, %s)"
           name = input("Enter Customer Name : ")
           grandTotal=roomrent+restaurantbill
           values=(cid,name,roomrent,restaurantbill,grandTotal)
           cursor.execute(sql, values)
           cursor.execute("COMMIT")
           cursor.close()
           print("\n **** AVANTI HOTELS **** CUSTOMER BILLING ****")
           print("\n CUSTOMER NAME : ",name)
           print("\nROOM RENT : Rs. ",roomrent)
           print("\nRESTAURANT BILL : Rs. ",restaurantbill)
           print("_____")
           print("\nTOTAL AMOUNT : Rs. ",grandTotal)
           cursor.close()
       else:
           print("\nERROR ESTABLISHING MYSQL CONNECTION !")
def OldBill():
   qlobal cid
   customer=searchCustomer()
   if customer:
        if myConnection:
           cursor=myConnection.cursor()
           sql="SELECT * FROM TOTAL WHERE CID= %s"
           cursor.execute(sql,(cid,))
           data=cursor.fetchall()
           if data:
               print(data)
           else:
               print("Record Not Found Try Again !")
               cursor.close()
   else:
       print("\nsomething Went Wrong ,Please Try Again !")
def searchCustomer():
   qlobal cid
    if myConnection:
       cursor=myConnection.cursor()
       cid=input("ENTER CUSTOMER ID : ")
       sql="SELECT * FROM C_DETAILS WHERE CID= %s"
       cursor.execute(sql,(cid,))
       data=cursor.fetchall()
       if data:
           print(data)
           return True
       else:
           print("Record Not Found Try Again !")
           return False
```

```
cursor.close()
   else:
       print("\nsomething Went Wrong ,Please Try Again !")
print("""----- HOTEL MANAGEMENT SYSTEM
----- AVANTI HOTELS -----
Designed and Maintained By :
Avantika Chauhan - CLASS XII A - ROLL NO - 9 [ 2020-2021 ]""")
myConnection = MYSQLconnectionCheck()
if myConnection:
   MYSQLconnection()
   while True:
       print("""
       1--->Enter Customer Details
       2--->Booking Record
       3--->Calculate Room Rent
       4--->Calculate Restaurant Bill
       5--->Display Customer Details
       6--->GENERATE TOTAL BILL AMOUNT
       7--->GENERATE OLD BILL
       8--->EXIT """)
       choice = int(input("Enter Your Choice"))
       if choice = 1:
           userEntry()
       elif choice = 2:
           bookingRecord()
       elif choice = 3:
           roomRent()
       elif choice = 4:
           Restaurant()
       elif choice = 5:
           searchCustomer()
       elif choice = 6:
           totalAmount()
       elif choice = 7:
           OldBill()
       elif choice = 8:
           break
       else:
           print("Sorry, Invalid input, Please Try Again ! ")
else:
   print("\nERROR ESTABLISHING MYSQL CONNECTION !")
```

OUTPUT OF THE PROJECT

MAIN SCREEN



USER AUTHENTICATION

```
Run: 🚉 avantihotels >
      C:\ProgramData\Anaconda3\python.exe C:/Users/saksh/PycharmProjects/pythonProject/avantihotels.py
      ----- HOTEL MANAGEMENT SYSTEM -----
      ----- AVANTI HOTELS -----
   Designed and Maintained By :
      Avantika Chauhan - CLASS XII A - ROLL NO - 9 [ 2020-2021 ]
      ENTER MYSQL SERVER'S USERNAME: root
   ÷.
      ENTER MYSQL SERVER'S PASSWORD : 12345678
       CONGRATULATIONS ! YOUR MYSQL CONNECTION HAS BEEN ESTABLISHED !
             1--->Enter Customer Details
             2--->Booking Record
             3--->Calculate Room Rent
             4--->Calculate Restaurant Bill
             5--->Display Customer Details
             6--->GENERATE TOTAL BILL AMOUNT
             7--->GENERATE OLD BILL
              8--->EXIT
      Enter Your Choice
```

COSTUMER DETAILS

```
Run: 🚉 avantihotels ×
( ↑
       ENTER MYSQL SERVER'S USERNAME: root
              ENTER MYSQL SERVER'S PASSWORD : 12345678
1--->Enter Customer Details
                            1--->enter Customer Details
2--->Booking Record
3--->Calculate Room Rent
4--->Calculate Restaurant Bill
5--->Display Customer Details
6--->GENERATE TOTAL BILL AMOUNT
7--->GENERATE OLD BILL
                            8--->EXIT
            8---EXIT
Enter Your Choice!
Enter Customer Identification Number : C101
Enter Customer Mame : Aisna
Enter Customer Mame : A-11, Sarita Vihar, New Delhi
Enter Customer Address : A-11, Sarita Vihar, New Delhi
Enter Customer Address : India
Enter Customer Country : India
Enter Customer Contact Number : 8090900000
Enter Customer Email : aisha22@gmail.com
              New Customer Entered In The System Successfully !
                            2--->Booking Record
3--->Calculate Room Rent
                             4--->Calculate Restaurant Bill
                            5--->Display Customer Details
6--->GENERATE TOTAL BILL AMOUNT
              6--->GENERATE TOTAL BIT
7--->GENERATE OLD BILL
8--->EXIT
Enter Your Choice
☐ Event Log

10:1 CRLF UTF-8 4 spaces Python 3.8 (base) 🚡 🍪
```

CUSTOMER BOOKING RECORDS

ROOM RENT

RESTAURENT BILL

DETAILS OF THE CUSTOMER

```
The complete is a state of the complete is a sta
```

TOTAL BILL

OLD BILL

EXIT

```
| Park | Process | Park | Park
```

MYSQL DATABASE AND TABLES USED IN THIS PROJECT

Database

Table Structure 1 & 2

Field	Туре	Null Key	Default Extra
CHECK_IN	varchar(20) date date	YES	NULL NULL NULL
orows in se	t (0.01 sec)	+	+
nysql> descr	ibe c_details;		4
Field	Туре	Null Key	Default Extra
C_NAME C_ADDRESS	varchar(20) varchar(30) varchar(30) varchar(30) varchar(30) varchar(30)	YES YES YES	NULL

Table Structure 3 & 4

+	ribe restauran Type	+	-+ Ke	+ y De	efault	+ Extra	.
+	varchar(20) varchar(30) varchar(30) varchar(30)	YES YES YES		NU	JLL JLL JLL JLL	 	
++ 4 rows in set (0.00 sec) mysql> describe room_rent; +							
Field + CID ROOM_CHOIC NO_OF_DAYS ROOMNO ROOMRENT	varchar(2 E int	9) Y	+	rey	HOTAU HOULL NULL NULL NULL NULL	lt Extr	'd +
5 rows in se	et (0.00 sec)	+	+		+		+

Table Structure 5

BACKEND DATA GENERATED THROUGH SOFTWARE

```
| CID | CHECK_IN | CHECK_OUT | | | |
| CID | CHECK_IN | CHECK_OUT |
| C101 | 2021-02-01 | 2021-02-05 |
| C102 | 2021-01-01 | 2021-01-03 |
| C103 | 2021-01-15 | 2021-01-25 |
| C104 | 2020-12-15 | 2021-01-25 |
| C105 | 2020-12-01 | 2020-12-05 |
| C106 | 2020-12-01 | 2020-12-05 |
| C107 | C108 | C108 | C108 |
| C109 | C109 | C109 | C109 |
| C109 | C109 | C109 | C109 |
| C109 | C109 | C109 | C109 |
| C109 | C109 | C109 | C109 |
| C109 | C109 | C109 | C109 |
| C109 | C109 | C109 | C109 |
| C109 | C109 | C109 | C109 |
| C109 | C109 | C109 | C109 |
| C109 | C109 | C109 | C109 | C109 |
| C109 | C109 | C109 | C109 | C109 |
| C109 | C109 | C109 | C109 | C109 |
| C109 | C109 | C109 | C109 | C109 | C109 |
| C109 | C109 | C109 | C109 | C109 | C109 |
| C109 |
| C109 |
```

MySQL 8.0 Command Line Client mysql> select * from restaurant order by cid; +----+ | CID | CUISINE | QUANTITY | BILL | +----+ +----+ 5 rows in set (0.00 sec) mysql> select * from room_rent order by cid; +----+----+----+ | CID | ROOM_CHOICE | NO_OF_DAYS | ROOMNO | ROOMRENT | +----+ | C101 | 1 | 5 | 101 | 50000 | | C102 | 3 | 3 | 106 | 10500 | | C103 | 4 | 10 | 109 | 25000 | | C104 | 2 | 9 | 111 | 45000 | | | C105 | 1 | 5 | 119 | 50000 | +----+ 5 rows in set (0.00 sec) mysql>

MySQL 8.0 Command Line Client

mysql> select * from total order by cid;

CID C_NAME ROOMRENT RESTAURANTBILL TOTALAMOUN	_
	9 9 9 9

5 rows in set (0.00 sec)

mysql>

References

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