# Project Name : HOTEL MANAGEMENT PROJECT

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# Subject : COMPUTER SCIENCE

import mysql.connector

from datetime import date

# Global Variables

hotel\_name = ''

address = ''

phone = ''

email = ''

gst = 0

st = 0

result= ''

result1= ''

def settings():

global hotel\_name

global address

global phone

global email

global gst

global st

conn = mysql.connector.connect(host = 'localhost', database = 'hotel', user = 'root', password = '12345')

cursor = conn.cursor()

sql = "select \* from setting;"

cursor.execute(sql)

records = cursor.fetchall()

for record in records:

if record[1] == 'hotel\_name':

hotel\_name = record[2]

elif record[1] == 'address':

address = record[2]

elif record[1] == 'phone':

phone = record[2]

elif record[1] == 'email':

email = record[2]

elif record[1] == 'gst':

gst = record[2]

elif record[1] == 'st':

st = record[2]

else:

print("out of range")

def system\_settings():

print('Change System Settings')

print('\*'\* 120)

print('1. Hotel Name')

print('2. Hotel Address')

print('3. Phone Number(s)')

print('4. Email Id')

print('5. Current GST Rate')

print('6. Current Service Rate')

choice = int(input("Enter Your Choice:"))

field\_name = ''

if choice == 1:

field\_name = 'hotel\_name'

elif choice == 2:

field\_name = 'address'

elif choice == 3:

field\_name = 'phone'

elif choice == 4:

field\_name = 'email'

elif choice == 5:

field\_name = 'gst'

elif choice == 6:

field\_name = 'st'

else:

print("out of range")

value = input('Enter New value:')

sql = "update setting set value =%s where field\_name =%s ;"

cursor.execute(sql)

wait = input('\n\n\n Record updated ................ Press Any Key To Continue........')

def clear():

for \_ in range(65):

print()

def room\_exist(room\_no):

sql = "select \* from rooms where room\_no =%s ;"

cursor.execute(sql)

record = cursor.fetchone()

return record

def customer\_exist(cust\_no):

sql = "select \* from customer where id =%s ;"

cursor.execute(sql)

record = cursor.fetchone()

return record

def add\_room():

clear()

print('Add New Room - Screen')

print('-'\*120)

room\_no = input('\n Enter Room No : ')

room\_type = input('\n Enter Room Type (AC / DELUX / SUPER DELUX / QUEEN DELIGHT / KINGS SPECIAL / SUPER RICH SPECIAL) : ')

room\_rent = input('\n Enter Room Rent (INR) : ')

room\_bed = input('\n Enter Room Bed Type (SINGLE / DOUBLE / TRIPLE) : ')

sql = "insert into rooms (room\_no, room\_type, room\_rent, bed, status) values ( %s, %s, %s, %s", "free", ";"

result = room\_exist(room\_no)

if result is None:

cursor.execute(sql)

else:

print('\n\n\n Room No', room\_no, 'Already Exist In Database')

wait = input('\n\n\n Press Any Key To Continue..... ')

def modify\_room():

print('Change Room Information')

print('\*'\*120)

print('1. Room Type')

print('2. Room Rent')

print('3. Room Bed')

choice = int(input('Enter your choice : '))

field\_name = ''

if choice == 1:

field\_name = 'room\_type'

elif choice == 2:

field\_name = 'room\_rent'

elif choice == 3:

field\_name = 'room\_bed'

else:

print("out of range")

room\_no = input('Enter Room No : ')

value = input('Enter New Value : ')

sql = "update rooms set field\_name = %s where room\_no = %s ;"

cursor.execute(sql)

wait = input('\n\n\n Record Updated ................. Press Any Key To Continue......')

def add\_customer():

print('Add New Customer - Screen')

print('-'\*120)

name = input('\n Enter Customer Name : ')

address = input('\n Enter Customer Address : ')

phone = input('\n Enter Customer Phone No : ')

email = input('\n Enter Customer Email Id : ')

id\_proof = input('\n Enter Customer Id (Aadhar / Passport / DL / Voter Id) : ')

id\_proof\_no = input('\n Enter Customer Id Proof No : ')

males = input('\n Enter Total Males : ')

females = input('\n Enter Total Females : ')

children = input('\n Enter Total Children : ')

sql = "insert into customer(name, address, phone, email, id\_proof, id\_proof\_no, males, females, children) values (%s, %s, %s, %s, %s, %s, %s, %s, %s);"

cursor.execute(sql,(name,address,phone,email,id\_proof,id\_proof\_no,males,females,children))

conn.commit()

print('\n\n\n Customer Added Successfully .......... ')

wait = input('\n\n\n Press Any Key To Continue ....... ')

def modify\_customer():

print('Change Customer Information')

print('\*'\*120)

print('1. Name')

print('2. Address')

print('3. Phone No')

print('4. Email Id')

print('5. Id Proof')

print('6. Id Proof No')

print('7. Males')

print('8. Females')

print('9. Children')

choice = int(input('Enter Your Choice : '))

field\_name = ''

if choice == 1:

field\_name = 'name'

if choice == 2:

field\_name = 'address'

if choice == 3:

field\_name = 'phone'

if choice == 4:

field\_name = 'email'

if choice == 5:

field\_name = 'id\_proof'

if choice == 6:

field\_name == 'id\_proof\_no'

if choice == 7:

field\_name = 'males'

if choice == 8:

field\_name = 'females'

if choice == 9:

field\_name = 'children'

cust\_no = input('Enter Customer No : ')

value = input('Enter New Value : ')

sql = "update customer set field\_name = %s where id =%s ;"

cursor.execute(sql)

wait = input('\n\n\n Record Updated ........... Press Any Key To Continue........')

def room\_booking():

room\_id = int(input('Enter Room No To Book : '))

cust\_id = int(input('Enter Customer Id : '))

check\_in = input('Enter Check In Date (YYYY-MM-DD) : ')

advance = float(input('Enter Advance Amount : '))

sql1 = "update rooms set status = 'occupied' where id =%s ;"

sql2 = "insert into booking(room\_id, cust\_id, check\_in,advance) values (%s,%s,%s,%s);"

result = room\_exist(room\_id)

result1 = customer\_exist(cust\_id)

if result[5] == 'free' and result1 is not None :

cursor.execute(sql1)

cursor.execute(sql2,(room\_id,cust\_id,check\_in,advance))

print('\n\n\n Room No', room\_id, 'booked for', cust\_id)

if result[5] != 'free' :

print('\n Room Is Not Available For Booking. Right Now It Is : ', result[5])

if result1 is None :

print('Customer Does Not Exist ..... Please Add Customer First in Our Database')

conn.commit()

wait = input('\n\n\n Press Any Key To Continue.......')

def bill\_generation():

global gst

global st

room\_id = input('Enter Room No To Book : ')

cust\_id = input('Enter Customer Id : ')

sql = "select \* from booking where cust\_id =%s and room\_id =%s and check\_out is NULL;"

cursor.execute(sql)

record = cursor.fetchone()

clear()

print('Bill Generation')

print('-'\*100)

print('Rooms Occupied : ', room\_id)

check\_out = date.today()

book\_id = record[0]

check\_in = record[3]

advance = record[5]

total\_days = (check\_out - check\_in).days

result = room\_exist(room\_id)

rent = result[3]

amount = total\_days \* rent

gst\_amount = amount \* int(gst) /100

st\_amount = amount \* int(st) /100

payable\_amount = amount - advance + gst\_amount + st\_amount

print('Check In Date : ', check\_in, '\n Check Out Date : ', check\_out)

print('Total Payable Days :', total\_days)

print('Room Rent Per Day :', rent)

print('Total Amount : ', amount )

print('Advance : ', advance, '\n GST ({}) : {}' .format(gst, gst\_amount), '\n Service Tax ({}) : {}' .format(st, st\_amount))

print('Amount Payable : ', payable\_amount)

sql1 = "update rooms set status =free where room\_no =%s ;"

sql2 = "update booking set check\_out =%s where room\_id =%s and cust\_id =%s ;"

sql3 = "insert into bill (book\_id, amount, bill\_date, gst, st) values (%s, %s, %s, %s, %s);"

cursor.execute(sql1)

cursor.execute(sql2)

cursor.execute(sql3,(book\_id,amount,bill\_date,gst,st))

wait = input('\n\n\n Press Any Key To Continue..........')

def search\_rooms():

room\_no = input('Enter Room No : ')

sql = "select \* from rooms where room\_no =%s ;"

cursor.execute(sql)

record = cursor.fetchone()

clear()

print('Room Status')

print('\*'\*120)

print('Room No : ', record[1])

print('Room Rent : ', record[2])

print('Room Bed : ', record[3])

print('Room Status : ', record[4])

wait = input('\n\n\n Press Any Key To Continue ...........')

def search\_customer():

print('Search Customer Database')

print('\*'\*120)

print('1. Customer Name')

print('2. Customer Address')

print('3. Customer Phone')

print('4. Customer Email')

print('5. Id Proof')

print('6. Id Proof No')

choice = int(input('Enter Your Choice : '))

field\_name = ''

if choice == 1 :

field\_name = 'name'

if choice == 2 :

field\_name = 'address'

if choice == 3 :

field\_name = 'phone'

if choice == 4 :

field\_name = 'email'

if choice == 5 :

field\_name = 'id\_proof'

if choice == 6 :

field\_name = 'id\_proof\_no'

value = input('Enter Value That You want To Search : ')

if field\_name == 'id' :

sql = "select \* from customer where field\_name =%s ;"

else :

sql = "select \* from customer where field\_name like %s ;"

print(sql)

cursor.execute(sql)

records = cursor.fetchall()

clear()

print('Search Result For {} = {}'.format(field\_name, value))

print('\*'\*140)

print('{} {:20s} {:30s} {:15s} {:30s} {:20s} {:15s}'.format('Id', 'Name', 'Address', 'Phone', 'Email', 'Id Used', 'Id No'))

for record in records :

print('{} {:20s} {:30s} {:15s} {:30s} {:20s} {:15s}'.format(record[0], record[1], record[2], record[3], record[4], record[5], record[6]))

wait = input('\n\n\n Press Any Key To Continue..........')

def search\_booking():

cust\_no = input('Enter Customer No :')

sql = "select book\_id, r.room\_no, c.name, check\_in, advance from booking b, customer c, rooms r where b.room\_id = r.id AND b.cust\_id =%s ;"

cursor.execute(sql)

record = cursor.fetchall()

clear()

print('Booking Information For Customer Id : {}'.format(cust\_no))

print('{} {} {} {} {}'.format('Id', 'Room Id', 'Customer Name', 'Check In','Advance'))

print('\*'\*140)

for record in records:

print('{} {} {} {} {}'.format(record[0], record[1], record[2], record[3], record[4]))

wait = input('\n\n\n Press Any Key To Continue ............')

def search\_bills():

bill\_no = input('Enter Bill No : ')

sql = "select bill.bill\_id, bill.amount, bill.date, gst, st, b.book\_id, check\_in, check\_out, advance, name, address, phone, email, room\_no \

from bill, booking b, customer c, rooms r \

where bill.book\_id = b.book\_id \

and b.room\_id = r.id and b.cust\_id = c.id AND NOT check\_out is NULL AND \

bill\_id =%s ;"

cursor.execute(sql)

record = cursor.fetchone()

clear()

print('Bill Information For Bill No : {}'.format(bill\_no))

print('\*'\*140)

print('Bill No', record[0])

print('Amount', record[1])

print('Bill Date', record[2])

print('GST Charged', record[3])

print('Service Tax Charged', record[4])

print('Booking Id', record[5])

print('Room Id', record[13])

print('Check In Date', record[6])

print('Check Out Date', record[7])

print('Advance Paid', record[8])

print('Customer Name', record[9])

print('Customer Address', record[10])

print('Customer Phone', record[11])

print('Customer Email Id', record[12])

wait = input('\n\n\n Press Any Key To Continue.........')

def search\_menu():

while True:

clear()

print('Search Menu')

print('\*'\*120)

print("\n 1. Room Status")

print('\n 2. Booking Status')

print('\n 3. Customer Details')

print('\n 4. Bills')

print('\n 5. Back To Main Menu')

print('\n\n')

choice = int(input('Enter Your Choice : '))

if choice == 1 :

search\_rooms()

if choice == 2 :

search\_booking()

if choice == 3 :

search\_customer()

if choice == 4 :

search\_bills()

if choice == 5 :

break

def report\_room\_status():

sql = "select \* from rooms"

cursor.execute(sql)

records = cursor.fetchall()

clear()

print('Room Status - Report')

print('- '\*120)

print('{:10s} {:10s} {:20s} {:20s} {:>40s} {:>30s} '.format('Room Id', 'Room No', 'Room Type', 'Rent', 'Bedding', 'Status'))

for idr, no, rtype, rent, bed, status in records :

print('{:<10d} {:<10d} {:20s} {:<7.2f} {:>40s} {:30s}'.format(idr, no, rtype, rent, bed, status))

wait = input('\n\n\n Press Any Key To Continue .......')

def report\_booking\_status():

sql = "select b.book\_id, room\_no, check\_in, check\_out, advance, name, address, phone \

where b.room\_id = r.id and b.cust\_id and check\_out is NULL;"

cursor.execute(sql)

records = cursor.fetchall()

clear()

print('Booking Status - Report')

print('-'\*120)

print('{:10s} {:10s} {:20s} {:20s} {:>30s} {:20s} {:30s} {:15s}'.format('Booking Id', 'Room No', 'Check In', 'Check Out', 'Advance', 'Name', 'Address', 'Phone'))

for idr, no, check\_in, check\_out, advance, name, addr, phone in records:

print('{:10d} {:10d} {:20s} {:20s} {:10.2f} {:20s} {:30s} {:15s}'.format(idr, no, str(check\_in), str(check\_out), advance, name, addr, phone))

wait = input('\n\n\n Press Any Key To Continue ........')

def report\_menu():

while True :

clear()

print('Report Menu')

print('\n 1. Room Status')

print('\n 2. Booking Status')

print('\n 3. Today Collection')

print('\n 4. Monthly Collection')

print('\n 5. Back To Main Menu')

print('\n\n')

choice = int(input('Enter Your Choice : '))

if choice == 1 :

report\_room\_status()

if choice == 2 :

report\_booking\_status()

if choice == 3 :

report\_today\_collection()

if choice == 4 :

report\_monthly\_collection()

if choice == 5 :

break

def change\_room\_status():

room\_no = input('Enter Room No : ')

status = input('Enter current Status (Renovation / Modification) : ')

sql = "update rooms set status =%s where room\_no =%s ;"

cursor.execute(sql)

print('\n\n Room Status Updated')

wait = input('\n\n\n Press Any Key To Continue')

def main\_menu():

while True:

clear()

print('H O T E L M A N A G E M E N T S Y S T E M')

print('\*'\*120)

print('\n 1. Add New Room')

print('\n 2. Add Customer')

print('\n 3. Modify Room Information')

print('\n 4. Modify Customer Information')

print('\n 5. Room Booking')

print('\n 6. Bill Generation')

print('\n 7. Search Database')

print('\n 8. Report Menu')

print('\n 9. Settings')

print('\n10. Close Application')

print('\n\n')

choice = int(input('Enter Your Choice : '))

if choice == 1 :

add\_room()

if choice == 2 :

add\_customer()

if choice == 3 :

modify\_room()

if choice == 4 :

modify\_customer()

if choice == 5 :

room\_booking()

if choice == 6 :

bill\_generation()

if choice == 7 :

search\_menu()

if choice == 8 :

report\_menu()

if choice == 9 :

system\_settings()

if choice == 10 :

break

if \_\_name\_\_ == "\_\_main\_\_" :

settings()

main\_menu()

conn.close()