INTERNSHIP REPORT ON
PYTHON COMPETATIVE CODING

A internship Report is submitted
In accordance with requirement of degree of

BACHELOR OF TECHNOLOGY

IN

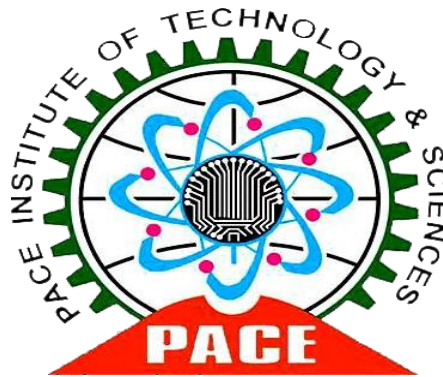### ELECTRICAL AND ELECTRONICS ENGINEERING

Submitted by

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

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(AffiliatedtoJawaharlalNehruTechnologicalUniversityKakinada,Kakinada&

Accredited by NAAC 'A' GRADE,An ISO 9001-2015 Certified Institution)

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(2024-2025)

HOTEL MASTER NEXUS

DATE: JUNE 11TH 2024

NAME: PATAN ASHISH KHAN

PROJECT DETAILS:

ABSTRACT: The objective of this project is to create a comprehensive hotel management system that can handle various aspects of hotel operations, including reservation management, guest check-in/check-out, room assignment, billing, and reporting.

DESCRIPITION: This project about effective allotment of hotel rooms to the customer by some factors like allotments, number of days, price based, requirement based, analysis. The aim to make fullfill the customer criteria and satisfaction giving Hotel free stay.

REQUIREMENTS :

1. How many rooms available.

2. How many rooms allotted .

3. Updating rooms are available every 2 hours .

4. How much cost for shift.

5. How many employees are working.

6. Daily how many rooms are report

7. Please salary credit is the employees account.

8.monthly income report.

APPROACH:

- **Home()–** Function to display the project's main screen i.e. the home page of the project or you can say the main menu for

selecting the desired operation to perform.
- **Booking()–** Function for booking room in hotel by entering user/customer details.
- **Room_Info()–** Function to provide users/customers with hotel rooms information(i.e. about room amenities).
- **Record()–** Function for keeping records of customers stayed in the hotel.

PROGRAM SOURCE CODE:


```
hotel 2.py - C:\Users\91701\OneDrive\Desktop\hotel 2.py (3.12.3)                                    –    □    X
File  Edit  Format  Run  Options  Window  Help
print('\t\t\tWELCOME TO THE HOTEL MASTER NEXUS')
import datetime

# Hotel data (name, available rooms, room price)
hotels = {
    "Hotel PK": {"rooms": 10, "price": 1000},
    "Hotel MSD": {"rooms": 20, "price": 1200},
    "Hotel NBK": {"rooms": 15, "price": 1500},
    "Hotel CBN": {"rooms": 12, "price": 2000},
    "Hotel JSP": {"rooms": 8, "price": 12500}
}

# Booking records
bookings = []

def display_hotels():
    print("Available Hotels:")
    for hotel, data in hotels.items():
        print(f"{hotel}: Rooms available: {data['rooms']}, Price per night: ${data['price']}")

def book_room(hotel_name):
    if hotel_name not in hotels:
        print("Invalid hotel name.")
        return

    if hotels[hotel_name]['rooms'] == 0:
        print("No rooms available in this hotel.")
        return

    name = input("Enter your name: ")
    check_in = input("Enter check-in date (YYYY-MM-DD): ")
    check_out = input("Enter check-out date (YYYY-MM-DD): ")
    try:
        check_in_date = datetime.datetime.strptime(check_in, "%Y-%m-%d")
        check_out_date = datetime.datetime.strptime(check_out, "%Y-%m-%d")
        if check_out_date <= check_in_date:
            print("Invalid dates. Check-out date should be after check-in date.")
            return
    except ValueError:
        print("Invalid date format.")
        return
                                                                            Ln: 1  Col: 0
```

File   Edit   Format   Run   Options   Window   Help

```python
    else:
        print("Booking Records:")
        for idx, booking in enumerate(bookings, start=1):
            print(f"Booking {idx}:")
            print(f"Hotel: {booking['hotel']}")
            print(f"Name: {booking['name']}")
            print(f"Check-in Date: {booking['check_in']}")
            print(f"Check-out Date: {booking['check_out']}")
            print(f"Total Price: ${booking['total_price']}")

def hotel_management():
    while True:
        print("\nHotel Management :")
        print("1. Display available hotels")
        print("2. Book a room")
        print("3. Display booking records")
        print("4. Exit")
        choice = input("Enter your choice: ")

        if choice == '1':
            display_hotels()
        elif choice == '2':
            hotel_name = input("Enter hotel name to book: ")
            book_room(hotel_name)
        elif choice == '3':
            display_bookings()
        elif choice == '4':
            print("Exiting program.")
            break
        else:
            print("Invalid choice.")
hotels={
    "Hotel PK": {"rooms": 10, "price": 100},
    "Hotel MSD": {"rooms": 20, "price": 120},
    "Hotel NBK": {"rooms": 15, "price": 150},
    "Hotel CBN": {"rooms": 12, "price": 200},
    "Hotel JSP": {"rooms": 8, "price": 250}
}
if __name__ == "__main__":
    hotel_management()
```

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OUTPUT:

File   Edit   Shell   Debug   Options   Window   Help

```
Python 3.12.3 (tags/v3.12.3:f6650f9, Apr  9 2024, 14:05:25) [MSC v.1938 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
    = RESTART: C:\Users\91701\OneDrive\Desktop\hotel 2.py
                    WELCOME TO THE HOTEL MASTER NEXUS

Hotel Management :
1. Display available hotels
2. Book a room
3. Display booking records
4. Exit
Enter your choice: 1
Available Hotels:
Hotel PK: Rooms available: 10, Price per night: $100
Hotel MSD: Rooms available: 20, Price per night: $120
Hotel NBK: Rooms available: 15, Price per night: $150
Hotel CBN: Rooms available: 12, Price per night: $200
Hotel JSP: Rooms available: 8, Price per night: $250

Hotel Management :
1. Display available hotels
2. Book a room
3. Display booking records
4. Exit
Enter your choice: 2
Enter hotel name to book: Hotel NBK
Enter your name: MANOHAR
Enter check-in date (YYYY-MM-DD): 2024-06-12
Enter check-out date (YYYY-MM-DD): 2024-06-14
Total price for 2 nights: $300
Confirm booking (yes/no): YES
Booking confirmed.

Hotel Management :
1. Display available hotels
2. Book a room
3. Display booking records
4. Exit
Enter your choice: 3
Booking Records:
Booking 1:
```

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```
Hotel ... Rooms available: 18, Price per night: $100
Hotel MSD: Rooms available: 20, Price per night: $120
Hotel NBK: Rooms available: 15, Price per night: $150
Hotel CBN: Rooms available: 12, Price per night: $200
Hotel JSP: Rooms available: 8, Price per night: $250

Hotel Management :
1. Display available hotels
2. Book a room
3. Display booking records
4. Exit
Enter your choice: 2
Enter hotel name to book: Hotel NBK
Enter your name: MANOHAR
Enter check-in date (YYYY-MM-DD): 2024-06-12
Enter check-out date (YYYY-MM-DD): 2024-06-14
Total price for 2 nights: $300
Confirm booking (yes/no): YES
Booking confirmed.

Hotel Management :
1. Display available hotels
2. Book a room
3. Display booking records
4. Exit
Enter your choice: 3
Booking Records:
Booking 1:
Hotel: Hotel NBK
Name: MANOHAR
Check-in Date: 2024-06-12
Check-out Date: 2024-06-14
Total Price: $300

Hotel Management :
1. Display available hotels
2. Book a room
3. Display booking records
4. Exit
Enter your choice: 4
Exiting program.
>>>
```

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EXPLANATION:

This Project on Hotel Management is a general software developed (using Python) to simplify hotel operations by automating them. In this project, "Hotel Master Nexus" is the project's hotel name. It covers major aspects of hotel management; it could perform the following operations- Hotel Booking, Provide you with Hotel ,Rooms Info and Record -Keeping.

1.Printing Welcome Message: This line simply prints a welcome message to the user when the program starts.

2.Hotel Data: Here, a dictionary named hotel is defined. Each key-value pair in the dictionary represents a hotel. The key is the hotel name, and the value is another dictionary containing the number of available rooms ("rooms") and the price per night ("price").

3. Booking Records: An empty list named bookings is initialized. This list will store the booking records.

CONCLUSION:

Your code structure is clear and easy to follow. It would be great to see further enhancements like error handling, validation checks, and maybe adding more functionalities such as canceling bookings or modifying existing bookings. Keep up the good work! Let me know if you need further assistance

THANK YOU