

INTERNSHIP REPORT

ON

PYTHON COMPETITIVE CODING

A internship Report is submitted

In accordance with requirement of degree of

BACHELOR OF TECHNOLOGY

IN

ELECTRICAL AND ELECTRONICS ENGINEERING

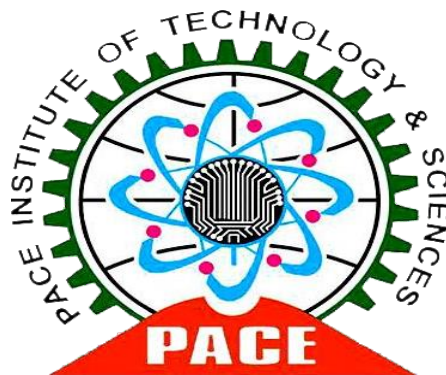
Submitted by

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DEPARTMENT OF ELECTRICAL AND EL ECTRONICS ENGINEERING

PACE INSTITUTE OF TECHNOLOGY AND SCIENCES (AUTONOMOUS)

(Affiliated to Jawaharlal Nehru Technological University Kakinada, Kakinada &

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

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(2024-2025)

PROJECT TITLE

HOTEL MASTER NEXUS

DATE: JUNE 11TH 2024

NAME: G. PAVAN PREETHAM

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.

DESCRIPTION: This project is about effective allotment of hotel rooms to the customer by some factors like allotments, number of days, price based, requirement based, analysis. The aim is to make full fill 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)
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
```

```
hotel 2.py - C:\Users\91701\OneDrive\Desktop\hotel 2.py (3.12.3)
File Edit Format Run Options Window Help
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()

Ln: 1 Col: 0
```

OUTPUT:

```
IDLE Shell 3.12.3
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:
Ln: 55 Col: 0
```


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