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Practical Record Note

Name : MOHANAA S N

Register Number : 2303811710422098

Subject code/name : Laboratory

Programme : .....

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Certified that this is a bonafide record of work done by **MOHANAA S N** of _____ Semester in **Python Programming - I Year - II Sem - Project Module** Laboratory during the academic year 2023-2024

His/Her University Register Number is **2303811710422098**

Staff Incharge **Head of the Department**

Submitted for the Practical exam held on:

Internal Examiner
Date:

External Examiner
Date:

Aim:

Project Module.

Program:

CTP28132.py

```
import datetime
# Initialize hotel data
rooms = {
    101: {'type': 'Single', 'available': True, 'guest': None},
    102: {'type': 'Single', 'available': True, 'guest': None},
    201: {'type': 'Double', 'available': True, 'guest': None},
    202: {'type': 'Double', 'available': True, 'guest': None},
    301: {'type': 'Suite', 'available': True, 'guest': None},
}

bookings = []

def add_booking(guest_name, room_number, check_in, check_out):
    if room_number not in rooms:
        print(f"Room {room_number} does not exist.")
        return
    if not rooms[room_number]['available']:
        print(f"Room {room_number} is not available.")
        return

    booking = {
        'guest_name': guest_name,
        'room_number': room_number,
        'check_in': check_in,
        'check_out': check_out
    }
    bookings.append(booking)
    rooms[room_number]['available'] = False
    rooms[room_number]['guest'] = guest_name
    print(f"Booking added: {booking}")

def check_availability():
    print("Room Availability:")
    for room, details in rooms.items():
        status = "Available" if details['available'] else "Occupied"
        print(f"Room {room}: {details['type']} - {status}")

def guest_records():
    print("Guest Records:")
    for room, details in rooms.items():
        if details['guest']:
            print(f"Room {room}: {details['guest']}")

def cancel_booking(guest_name, room_number):
    for booking in bookings:
        if booking['guest_name'] == guest_name and booking['room_number'] ==
room_number:
            bookings.remove(booking)
            rooms[room_number]['available'] = True
            rooms[room_number]['guest'] = None
            print(f"Booking cancelled for {guest_name} in room {room_number}")
            return
    print(f"No booking found for {guest_name} in room {room_number}")

def main():
    while True:
        print("\nHotel Management System")
```

```
        print("1. Add Booking")
        print("2. Check Room Availability")
        print("3. Check Guest Records")
        print("4. Cancel Booking")
        print("5. Exit")

        choice = input("Enter your choice: ")

        if choice == '1':
            guest_name = input("Enter guest name: ")
            room_number =                   room number: "))
            check_in = input("Enter check-in date (YYYY-MM-DD): ")
            check_out = input("Enter check-out date (YYYY-MM-DD): ")
            add_booking(guest_name, room_number, check_in, check_out)
        elif choice == '2':
            check_availability()
        elif choice == '3':
            guest_records()
        elif choice == '4':
            guest_name = input("Enter guest name: ")
            room_number =                   room number: "))
            cancel_booking(guest_name, room_number)
        elif choice == '5':
            print("Exiting system.")
            break
        else:
            print("Invalid choice. Please try again.")

if __name__ == "__main__":
    main()
```

Output:

Test case - 1
User Output
Hello World
Hello World

Result:

Thus the above program is executed successfully and the output has been verified