

# HOTAL RESERVATION

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## PREFACE

1. **Receptionist** was added as **Operator** option, but I made it as procedure style not OOP.
2. Unfortunately, my code is more Procedure, and less **OOP** that because my thinking to the problem, I hope it's not annoying.
3. I apply a lot of comments in each statement, function, and class I have been used.

## ASSUMPTION

1. Assume Capacity of hotel is **20 guests**.
2. Assume (Monster: 1) and (Human: 0).
3. Assume Receptionist is Operator to include many other general tasks.
4. I used Composition instead of Inheritance.
5. Create Id by random operation and id take value in range [10,9999]

## RESULT

### NEW RESERVATION

1. Enter identity, System will return back random ID

```
D:\coding\c++\assignment\Hotel_Reservation_System\Debug\Hotel_Reservation_System.exe
WELCOME TO TRANSILVANIA HOTEL

TYPE OF SERVICE YOU NEED?
1) New Reservation.
2) Extend Reservation.
3) Additional Services.
4) Cancel Reservation.
5) Operator.
6) End.
>>1

Hello Sir,
Is this first time to you here.
(yes/no) : yes

Plase, Enter this Registration
-----
Class (1:monster / 0:human) : 0
How many rooms : 2
Name : youssef
Number of nights : 3

Your ID : 1714
Costs : 3000
Thank You for visiting us
```

```
TYPE OF SERVICE YOU NEED?
1) New Reservation.
2) Extend Reservation.
3) Additional Services.
4) Cancel Reservation.
5) Operator.
6) End.
>>1

Hello Sir,
Is this first time to you here.
(yes/no) : yes

Plase, Enter this Registration
-----
Class (1:monster / 0:human) : 1
How many rooms : 2
Name : mony
Number of nights : 5

Your ID : 1998
Costs : 2000
Thank You for visiting us
-----

TYPE OF SERVICE YOU NEED?
1) New Reservation.
2) Extend Reservation.
3) Additional Services.
4) Cancel Reservation.
5) Operator.
6) End.
```

## EXTEND RESERVATION

1. First display information from Receptionist section

```
-----HOTEL GUESTS-----
Name : youssef      Class : Human      rooms : 2      Id : 5378      Cost : 3000      Nights : 3
Name : Mohamed      Class : Human      rooms : 2      Id : 5417      Cost : 5000      Nights : 5
-----
```

2. Then Extend Youssef by 10 nights.

```
-----Extend Section-----
Hello sir.
Please, Could I know Your ID : 5378
How many nights do you want to append : 10
Now you extended 10 night with total costs 6500$
-----
```

3. Display information after extension.

```
-----HOTEL GUESTS-----
Name : youssef      Class : Human      rooms : 2      Id : 5378      Cost : 6500      Nights : 13
Name : Mohamed      Class : Human      rooms : 2      Id : 5417      Cost : 5000      Nights : 5
-----
```

## SERVICE

1. Mohamed will take spa.

```
-----Service Center-----
Welcome To Service Section sir.
Please, Could I know Your ID : 5417
How could I help you..
1) Dry Cleaning.          2) Spa.
>>2
Cost of your service : 100
-----
```

2. Display information to see how money added.

```
-----HOTEL GUESTS-----
Name : youssef      Class : Human      rooms : 2      Id : 5378      Cost : 6500      Nights : 13
Name : Mohamed      Class : Human      rooms : 2      Id : 5417      Cost : 5100      Nights : 5
-----
```

## CANCEL

1. Cancel Mohamed.

```
=====
TYPE OF SERVICE YOU NEED?
1) New Reservation.
2) Extend Reservation.
3) Additional Services.
4) Cancel Reservation.
5) Operator.
6) End.
>>4
-----
User Id : 5417
Ok, Thank you for visiting us.
-----
```

```
-----HOTEL GUESTS-----
Name : youssef      Class : Human      rooms : 2      Id : 5378      Cost : 6500      Nights : 13
-----
```

## RECEPTIONIST

1. Receptionist List could access.

```
#####
Acknowledgment:
1) Information about guests
2) Number of Guestes
3) Number of busy Human rooms.
4) Number of busy Monster Rooms.
5) Total income.
6) Number of Available Human rooms.
7) Number of Available Monster rooms.
>>
```

```
-----HOTEL GUESTS-----
Name : dracula      Class : Monster      rooms : 4      Id : 8770      Cost : 2400      Nights : 3
-----
```

Available Human rooms : 5

Available Monster rooms : 12

Number of monster room busy : 3

Number of Human room busy : 0

Total income to Hotal : 2400

