

Assignment #20

Hotel Room and Cost

The task is to get the details of the hotel room and display the final cost of the room using a menu driven application.

Write a Java program to implement this task.

Create a class **HotelRoom**

Include the following protected data members / attributes:

- hotelName – of type String
- numberOfSqFeet – of type Integer
- hasTV - of type Boolean
- hasWifi – of type Boolean

Include the following public methods :

- Create a constructor that initializes all the data members
- public HotelRoom(String hotelName,Integer numberOfSqFeet,Boolean hasTV,Boolean hasWifi)
- "calculateTariff" – Calculates cost using the number of sq feet and cost per sq feet and returns an Integer
- "getRatePerSqFeet" - This method returns an Integer. In this case, it always returns 0

Create a class **DeluxeRoom** that extends **HotelRoom**

Include the following protected attributes / data members:

- ratePerSqFeet – of type Integer.

Include the following public methods :

- Include a constructor that sets ratePerSqFeet as 10.
- public HotelRoom(String hotelName,Integer numberOfSqFeet,Boolean hasTV,Boolean hasWifi)
- "getRatePerSqFeet" – returns (ratePerSqFeet + 2) if wifi is present, else returns ratePerSqFeet.

Create a class **DeluxeACRoom** that extends DeluxeRoom

Include the following public methods:

- Include a constructor that sets ratePerSqFeet as 12.

Create a class **SuiteACRoom** that extends HotelRoom

Include the following private attributes / data members:

- ratePerSqFeet – of type Integer.

Include the following public methods :

- Include a constructor that sets ratePerSqFeet as 15.
- public HotelRoom(String hotelName,Integer numberOfSqFeet,Boolean hasTV,Boolean hasWifi)
- getRatePerSqFeet – returns (ratePerSqFeet + 2) if wifi is present, else returns ratePerSqFeet.

Create a Main class to test the above classes.

Sample Input Output 1:

Hotel Tariff Calculator

1. Deluxe Room
2. Deluxe AC Room
3. Suite AC Room

Select Room Type:

1

Hotel Name:

Taj

Room Square Feet Area:

3200

Room has TV (yes/no):

yes

Room has Wifi (yes/no):

yes

Room Tariff per day is: 38400

