

1st semester 2018-19; CSF 213(OOP) Mini-Project (Home Assignment)

Project Title: Online Hotel Booking Portal **Wt:** 15% **Dt:** 18-Oct-2018

Project Description:

You will have to create an online hotel booking portal. This portal will enable the users to compare the prices of available rooms in hotels in different locations across India and book the rooms of their choice. The following functionalities should be supported by the portal.

- A user should first register in the portal before viewing and booking the hotel rooms. The fields that are required during registration are - Name, Date of Birth, Residential Address and Email ID. Additionally, the user will have to select a username and a password that will be used for subsequent logins. The username selected by a new user at the time of registration should not be same as any one of the existing usernames. After registration, the user's details should be saved in a persistent storage like a database or a file (at your choice).
- For viewing the available hotel rooms, a user will need to first login to the portal. After that, he/she has to provide the location, the check in and check out dates, number of rooms and number of people. Depending upon the availability, the relevant rooms and the corresponding prices on a per night basis will be displayed to the user. This will enable the user to compare the prices of the different hotel rooms. The total cost of staying at the hotels for the specified number of days will also be displayed. Note that at least 3 hotels should be displayed so that the user can select depending upon his/her requirement. Out of the hotel rooms displayed, when the user clicks on a particular room, the details and the associated amenities (like complementary breakfast, Wifi facility, car rental service, toiletries etc.) will also be shown. Moreover, the user should be able to see the rating for that hotel given by previous occupants and the total number of such feedbacks given. The rating will help the user in making a choice. If suppose for a particular location, no rooms are available in the hotels located there, then the user should be given an option to enroll in a waiting list. The waiting list is intended to allow an interested user to go ahead with the booking in case any cancellations happen. In the event of any cancellation, the first user in the waiting list will get a chance to book.
- After selecting the hotel room of his/her choice, the user will be able to go ahead with the booking. For booking, the user will not be charged any amount. However, an ID proof has to be provided like Adhaar number or PAN card number. Without an ID proof, the booking formalities cannot be completed. Once the booking is done successfully, a booking reference number will be provided to the user.
- A user can cancel/modify an existing booking up to 3 days before the specified check in date. Such a cancellation can be done free of cost. If a user wants to modify the check in and/or check out dates, the modification will be subject to the availability of the rooms on those dates. Beyond 3 days, no modification will be allowed. If a user wants to cancel

2 days or 1 day before the check in date, then he/she will be liable to pay 50% of the total chargeable amount as per the room rate and the number of days of stay.

The portal has to be created using Java. For storing user information in persistent storage, you can use any type of database connectivity or files. The graphical user interface should be made user friendly and should be usable by a user belonging to any age group. Also, a user should be able to navigate across the interface in an efficient manner. You may use IDEs/tools to develop this application. But you must be in a position to explain minute details of your code.

Guidelines:

1. This is a **group** activity. Each group will have 4 students. All team members must contribute.
2. Give team members' details by 23rd Oct. Hence talk to your friends and form teams.
3. Apply OO concepts to design the solution - specify classes, roles, functionality etc.
4. Maintain a separate hard copy (on A4 sheet) that details the design of the system.
5. Final evaluation consists of reviewing the design, Demo and viva.
6. Evaluation dates: will be announced before 31st Oct. Probably it will be in the third week of Nov.
7. Marking strategy: Design-4, Demo of the system functionality-18, and Viva-6. And 2 marks are kept for extraordinary work; only few (up to 10%) will get this 2 marks.
8. Special Note: Plagiarism check can be done. Hence please make sure that your work is original.
9. Please note that the Demo should be given through your laptop, not on mobile phones.

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