***Hotel Room Availability System***

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# **INTRODUCTION**

Like any other business, the hotel industry provides socioeconomic prospects for both the owner and the client. Its role is to provide clients with hospitality services. Customers might include travelers, foreigners, businesspeople, tourists, and visitors, among others. Customers are mainly restricted in their attempts to find a place to spend the night, since the standard procedure is to seek for a hotel when they arrive in a certain location, walk in, and see if there is an empty room. If there are no available rooms, you must proceed to the next nearest hotel to inquire once again. So what happens if you travel about late at night in quest of a place and all nearby hotels are fully booked? Sometimes you're lucky enough to have the hotel's phone number and can call them to reserve a room. But do the hotel staff actually make an effort to keep a room for you? You'd be lucky if you could obtain a room reserved for you. They are more likely to service individuals who wander in rather than those who call to arrange a room. Other times, if you have friends or family members in the region where you wish to rent a place, they must go and conduct the checking for you. There is no mechanism in place that connects the hotel and the client to ensure that the customer has booked a room and, more importantly, that he is promised a room. Customers may become trapped as a result of this, especially if it is late at night.

As a result, the research intended to create an online hotel reservation system that would allow clients to book anything they needed from wherever they were before staying in the hotel. The system should make it simple to access and retrieve information, as well as report on it.

# **USE CASE DIAGRAM**



Use Case Diagram

# **CLASS DIAGRAM**



Class Diagram

# **SEQUENCE DIAGRAM**

## **REGISTRATION**



Customer Registration

|  |  |
| --- | --- |
| Use case name | Registration |
| Actors | Customer |
| Pre-Condition | Customer must be on registration page |
| Flow of events | 1. Open Registration web page 2. Provide their personal information 3. The user enters their username and password 4. Click on Sign In button |
| Alternative flow | 1. If any input field is empty show error message 2. Go back to Login page |
| Failure scenario | 1. The user forgets personal information and/or password 2. The user isn’t able to sign in |
| Successful scenario | Registration is successful |

## **LOGIN**



Customer Login

|  |  |
| --- | --- |
| Use case name | UC\_ Login |
| Actors | Student / Staff |
| Pre-Condition | Student and Staff must be on registration page |
| Flow of events | 1. Open Registration web page 2. Provide their personal information 3. The user enters their username and password 4. Click on Sign In button |
| Alternative flow | 1. If any input field is empty show error message 2. Go back to Login page |
| Failure scenario | 1. The user forgets personal information and/or password 2. The user isn’t able to sign in |
| Successful scenario | Sign In successfully |

## **MAKE RESERVATION**



Make Reservation

|  |  |
| --- | --- |
| Use case name | Reservation |
| Actors | Customer |
| Pre-Condition | Customer must contact the hotel |
| Flow of events | 1. Customer open hotels website 2. Provide their personal information 3. The customer selects a certain room as well as dates they will be available 4. They click the make reservation button |
| Alternative flow | 1. If any input field is empty show error message 2. Go back to the date and room selection stage |
| Failure scenario | 1. There are no dates or rooms available 2. The customer chooses a different hotel |
| Successful scenario | Customer makes booking at the hotel |

## **MAKE PAYMENT**



Next page represents this diagram via a use case:

Make Payment

|  |  |
| --- | --- |
| Use case name | UC\_ Make Payment |
| Actors | Customer |
| Pre-Condition | Customer must login on system. |
| Flow of events | 1. Enter Payment Method 2. Enter Account Details 3. Enter Amount 4. Click ok 5. Payment is processed |
| Alternative flow | 1. If the account balance is less than required balance then send error message. 2. Go back to payment page |
| Failure scenario | 1. The payment doesn’t go through 2. The customer has to communicate to their bank about the transaction 3. The user can’t pay for the course at this time |
| Post condition | Payment is made successfully. |

## **ADD NEW ROOM**



|  |  |
| --- | --- |
| Use case name | Adding a room |
| Actors | Hotel website |
| Pre-Condition | A hotel room must exist |
| Flow of events | 1. Website opens a specific section on adding new rooms 2. They enter in the room details 3. They get confirmation with the hotel 4. They add the room into the availability section |
| Alternative flow | 1. If any input field is empty show error message 2. They re-enter the room details |
| Failure scenario | 1. The user forgets personal information and/or password 2. The room isn’t added to the availability section 3. They must redo the previous steps |
| Successful scenario | Room is successfully added and is now viewable by the public |

## **DELETE ROOM**



|  |  |
| --- | --- |
| Use case name | Deleting a room |
| Actors | Hotel website |
| Pre-Condition | A hotel room must exist |
| Flow of events | 1. Website opens a specific section on deleting existing rooms 2. They enter in the room details 3. They get confirmation with the hotel 4. They delete the room from the availability section |
| Alternative flow | 1. If any input field is empty show error message 2. Go back to Login page |
| Failure scenario | 1. The room isn’t deleted to the availability section 2. They must redo the previous steps |
| Successful scenario | Room is successfully removed |

1. **STATE DIAGRAM**

