

IT314

Group 6

**Guesthouse Booking and
Management System**

Functional Requirements,
Non-Functional Requirements,
Use Cases and
User Stories

Functional Requirements:

- Hierarchical login portal for staff.
- Implementing a database of room reservations & current guests.
- Acquiring successful booking details from online booking channels.
- Management of staff schedules.
- Onspot booking of guests by the receptionist.
- Monitoring inventory problems.
- Acquiring customer feedback.
- Generating monthly statistics of the business.

Non-Functional Requirements:

- The system should be active 24/7.
- Verify guests with their Authentic ID.
- All the guests' data should be private and can only be accessed by authorized personnel.

Use Cases:

Use case I

Use case name: Online booking

Description: Booking rooms in a guesthouse through an online portal.

Actors: Guests, Online portal

Precondition: The guest has already logged in on the online portal.

Main flow:

1. Search and select a favourable hotel.
2. Select dates for stay.
3. Select types of rooms.
4. Select the number of rooms from the available room list.
5. Enter all guest details.
6. Checkout for payment.
7. Pay by a favourable online payment method.
8. Get an invoice.

Alternate flow:

- 4.a No favourable room is available.
 - 4.a.1 Change room type and date.
- 7.a The payment fails.
 - 7.a.1 Ask the user to pay again.

Postcondition: Guests can show the invoice at check-in time for confirmation of booking.

Extension:

8.a The user wants to cancel the booking.

8.a.1 Refund the user according to the time of cancelling.

Use case II

Use case name: Offline booking at reception

Description: Booking rooms offline by the receptionist.

Actors: Receptionist(hotel staff), guest, system

Precondition: Hotel staff is logged in to the website.

Main flow:

1. The guest comes to reception for check-in.
2. The receptionist asks guests for the type of room and number of rooms needed.
3. The receptionist enters details given by guests into the system.
4. The receptionist asks for the verification ID of the guests.
5. The receptionist asks for the payment from guests and enters the payment details into the system.
6. The receptionist confirms the room and gives room numbers and the invoice to the guests.

Alternate flow:

- 1.a The Guest already booked rooms online.
 - 1.a.1 Receptionist checks the invoice.
 - 1.a.2 Ask the guest to verify himself/herself using the proper ID.

1.a.3 Allot the room to the guests if the verification credentials are legit.

PostCondition: Room is allotted to the guest.

Extension: none

Use case III

Use case name: Staff management

Description: The hotel admin manages details about the staff.

Actors: Hotel admin, hotel staff

Precondition: Hotel admin is logged in to the website.

Main flow:

1. Admin views the details about the hotel staff and their shifts.
2. Admin checks out the leave requests of the staff members.
3. Admin approves the leave request and the staff member is informed about their updated schedule.

Alternate flow:

1.a The admin fires or recruits new staff members.

1.a.1 Admin updates the staff details on the website.

3.a The admin rejects the leave request of the staff member.

3.a.1 Inform staff about the same.

Postcondition: Staff is informed about the leave request status.

Extension: none

User Stories

1. As a receptionist, I want to view the data of online registered customers so that I can validate their confirmation.
 - If the customer is registered, the query is a success and we can view their data, etc.
2. As a receptionist, I want to view the check-in & check-out details of customers/guests already staying in the guest house so that I can edit the vacancy details of the rooms.
 - If vacant, show the room numbers, if not vacant then show who is currently living in that room.
3. As a receptionist, I want to view customer feedback so that I can reply to them appropriately.
 - The receptionist replies to any particular customer feedback
4. As a receptionist, I want to see the inventory of the guest house so that I can manage the items according to their availability.

- If stock is available, then show how much is available.
- If not available then ask admin to order more stock of the same.

5. As a receptionist, I want to do registration on the spot for the customers who approach the guest house directly (offline bookings).

- Save the customer data securely in the database.

6. As an admin, I want a hierarchical login portal for me, staff and customers so that the privacy of users can be maintained.

- If he is a receptionist, load page details containing the customer and hotel.
- If he is an admin, load page details of staff along with customer and hotel details.

7. As an admin, I want to approve the leave applications of staff.

- If the leave request is reasonable then approve it.
- If not then tell the reason to staff why not reasonable.

8. As an admin, I want to see all the details that the receptionist can access and also view the statistics of staff.
 - If a particular staff member is working, then the admin can contact him and display his working details.
 - If not working then display that he is off shift.
9. As an admin, I want a good interface to view the performance of the guest house so that I could know how well the business is running.
 - If the option is selected, then the representation of business analytics is shown.
10. As a guest, I should be able to book my visit to this hotel online. I should also be able to book rooms offline (through the receptionist).
11. As a guest, I should be able to make payments in both online and offline modes (for offline bookings). Moreover, the money transferred should be through a safe transaction portal if an online payment mode is used.

- For a safe transaction, the customer must have various secure banking portals to make the transaction.
- If there's any cancellation for any reason, then the cancellation charges and the refund system should be adaptable to make these changes.
- According to the cancellation policy the user must receive an acknowledgement of the cancellation and receive the refund as per the policy.

12. As a guest, I should be able to receive a confirmation prompt for my final booking.

- Via email or a message prompt, the user should receive a confirmation of the final booking.

13. As a guest, I want to rate and review my stay at this guesthouse so that future customers can get an honest opinion of the guest house and the guest house can improve their service accordingly.

- The customer has the option to give feedback after completing the stay.