**SRS**

**HOTEL BOOKING SYSTEM**

**1. INTRODUCTION**

**1.1 PURPOSE**

The purpose of this document is to define the requirements for a hotel booking system website. The system aims to provide users with a convenient platform to search, compare, and book hotel accommodations.

**1.2 SCOPE**

The hotel booking system website will allow users to browse available hotel rooms, view detailed information about each hotel room, make reservations, and manage their bookings.

**2. OVERALL DESCRIPTION**

**2.1 PRODUCT PERSPECTIVE**

The hotel booking system website will be a standalone system accessible via web browsers. It will interact with a database to store and retrieve hotel information, user details, and booking records.

**2.2 USER CHARACTERISTICS**

The website will cater to two primary user characteristics:

Guests: Users who browse and book hotels.

Administrators: System administrators responsible for managing hotel and user data.

**2.3 OPERATING ENVIRONMENT**

The website will be accessible on popular web browsers and will utilize server-side technologies for data storage and retrieval.

**2.4 DESIGN AND IMPLEMENTATION CONSTRAINTS**

The website must be designed to be user-friendly and responsive on different devices and screen sizes.

The system should utilize secure authentication and encryption techniques to protect user data.

**2.5 USER DOCUMENTATION**

The system will provide user documentation in the form of an online help center or a user manual to assist users in navigating and using the website effectively.

**3. FUNCTIONAL REQUIREMENTS**

**3.1 USER REGISTRATION**

**3.1.1 New User Registration**

- Users should be able to create a new account by providing necessary information such as name, username, and password.

- The system should validate the user's email address and ensure uniqueness.

**3.1.2 User Login**

- Registered users should be able to log in using their username and password.

- The system should authenticate the user's credentials and grant access to the user account.

- User have to sign up before reserving a room.

**3.2 HOTEL SEARCH AND BOOKING**

**3.2.1 Hotel Rooms Search**

- Users should be able to search for rooms based on criteria such as location, dates, and number of guests.

- The system should display a list of available rooms.

**3.2.2 Room Details**

- Users should be able to view detailed information about a specific room, including amenities, room types, prices, and availability.

**3.2.3 Booking Process**

- Users should be able to select a room, specify booking details (dates, room type, number of guests, etc.), and proceed to book.

- The system should validate the booking details, calculate the total cost, and allow users to confirm the booking.

**3.3 USER INFORMATION AND BOOKING MANAGEMENT**

**3.3.1 User Information**

- Users should have a page where they can manage their personal information, including contact details and preferences.

**3.3.2 Booking History**

- Admin should be able to view booking history, including past and upcoming reservations.

**3.4 ADMINISTRATOR FUNCTIONS**

**3.4.1 Hotel Management**

- Administrators should be able to add, update, and remove hotel listings from the system.

- They should also be able to manage hotel details such as room types, prices, and availability.

**3.4.2 User Management**

- Administrators should have the ability to manage user accounts, including creation, modification, and deletion.

**4. NON-FUNCTIONAL REQUIREMENTS**

**4.1 PERFORMANCE**

The website should be responsive and provide quick search results, even with a large number of rooms and users.

The system should handle simultaneous user requests efficiently and ensure minimal downtime.

**4.2 SECURITY**

The system should employ secure authentication mechanisms to protect user accounts and prevent unauthorized access.

User data, including personal and payment information, should be encrypted during transmission and storage.

**4.3 USABILITY**

The website should have an intuitive and user-friendly interface, allowing users to navigate and perform actions easily.

Error messages should be provided to guide users during the booking process.

**4.4 SCALABILITY**

The system should be scalable to accommodate a growing number of users, and bookings without significant performance degradation.

**4.5 COMPATIBILITY**

The website should be compatible with commonly used web browsers, ensuring a consistent experience across different platforms.

Mobile responsiveness should be ensured to allow users to access and use the system on various devices.