**Online Hotel Booking System**

**1. Introduction**

**1.1 Purpose**

The purpose of this document is to outline the software requirements for the development of an Online Hotel Booking System (OHBS). The system will allow users to search for hotels, view room availability, make bookings, and manage reservations online.

**1.2 Scope**

The OHBS will be a web-based application designed to facilitate the process of hotel booking. It will provide functionalities for hotel managers to manage their properties and for customers to book rooms efficiently.

**1.3 Definitions, Acronyms, and Abbreviations**

* OHBS: Online Hotel Booking System
* User: Any individual who uses the system (including admins, hotel managers, and customers)
* Admin: System administrator with overall control of the system
* Hotel Manager: User who manages hotel listings and reservations
* Customer: User who searches for and books hotel rooms

**2. Overall Description**

**2.1 Product Perspective**

The OHBS is a new, standalone web application that aims to streamline the hotel booking process for both customers and hotel managers. It will provide a user-friendly interface and a robust backend to ensure reliable performance.

**2.2 Product Functions**

* User Registration and Authentication
* Hotel Listings Management
* Room Availability and Booking
* User Profile Management
* Booking Management
* Notifications and Alerts

**2.3 User Classes and Characteristics**

* Admin: Manages the entire system and monitors activities.
* Hotel Manager: Manages hotel listings, room availability, and bookings.
* Customer: Searches for hotels, views room availability, and makes bookings.

**3. Specific Requirements**

**3.1 Functional Requirements**

**3.1.1 User Registration and Authentication**

**Registration**

* Users shall be able to register by providing their name, email address, phone number, password etc.
* The system shall validate the email format and ensure the password meets security criteria (e.g., minimum 8 characters, includes a mix of letters and numbers).

**Login**

* Users shall log in using their registered email and password.
* The system shall provide feedback if the email or password is incorrect.

**3.1.2 Hotel Listings Management**

**Hotel Registration**

* Hotel managers shall be able to register their hotels by providing details such as:
  + Hotel name
  + Address
  + Contact information
  + Description
  + Amenities
  + Uploading images (up to 10 images per hotel)
* The system shall validate mandatory fields and image formats (JPEG, PNG).

**Room Management**

* Hotel managers shall be able to add, edit, and delete room types and details including:
  + Room type (e.g., single, double, suite)
  + Number of rooms available
  + Price per night
  + Uploading images of the rooms

**3.1.3 Room Availability and Booking**

**Search Functionality**

* Customers shall be able to search for hotels using various filters (location, price range, star rating).
* The system shall display search results in a list view with summary information for each hotel.

**Booking Process**

* Customers shall be able to select a hotel and view available rooms.
* The system shall display detailed room information including price and amenities.
* Customers shall be able to book rooms by selecting the check-in and check-out dates.
* The system shall calculate the total cost of the booking and prompt the customer for confirmation.

**Payment**

* Customers shall be able to pay for their bookings
* The system shall confirm the booking and provide a booking reference number upon successful payment.

**3.1.4 User Profile Management**

**Profile Information**

* Users shall have profile pages displaying their personal information such as name, email, phone number, and profile picture.

**Booking History**

* Customers shall be able to view their past and upcoming bookings.

**3.1.5 Booking Management**

**Booking Modification**

* Customers can cancel their bookings based on the hotel’s cancellation policy.
* The system shall handle any refunds or additional charges accordingly.

**Hotel Manager Dashboard**

* Hotel managers shall have a dashboard displaying current and upcoming bookings.

**3.1.6 Notifications and Alerts**

* Users shall receive email alerts for notification