

HOTEL MANAGEMENT SYSTEM

Software Requirement Specification

1 Introduction:

- 1.1 **Purpose of this Document:** The main purpose of this document is to provide a basis for this
- 1.2 **Scope of this document** – In this, overall working and main objective of document and what value it will provide to customer is described and explained. It also includes a description of development cost and time required.
- 1.3 **Overview** – In this, description of product is explained. It's simply summary or overall review of product.

2 General description:

The Hotel Management System is a software application designed to automate the operations of a hotel. It provides an efficient and user-friendly interface for hotel staff to manage various functions such as reservations, check-ins, check-outs, room assignments, guest profiles, billing, and reporting. The system is accessible through desktop and mobile devices, and is integrated with other hotel systems and ensures smooth communication and coordination among different departments.

The system allows hotel staff to create, modify, and cancel reservations for guests, capturing guest information such as name, contact details, and special requests. It also enables hotel staff to manage room availability, room types, and room rates, and assign rooms to guests based on their preferences and availability. Guest profiles are maintained, storing guest information and history for personalized services and targeted marketing. The system also generates bills and invoices for guests, supports various payment methods, and provides reports and analytics on hotel performance for financial analysis and decision-making.

3 Functional Requirements:

- The system should allow guests to reserve rooms based on availability.
- Staff should be able to view all reservations made.
- The system should allow hotel staff to manage the allocation of rooms to guests, based on availability and guest preferences.
- Allows for room maintenance, cleaning and inspection.
- Allows hotel staff to manage the check-in and check-out of guests.
- Generate invoices for hotel items and services used
- Generate reports on occupancy, customer preferences.

4 **Interface Requirements:**

- The interface should have a modern and visually appealing design.
- The interface should be easy to navigate.
- The interface should be responsive and adapt to different screen sizes.
- The interface should allow for customization, such as the ability to change colors, logos, and fonts.
- The interface should support multiple languages.
- The interface should allow for different user roles and permissions, with restricted access to sensitive information.
- The interface should provide alerts and notifications to keep staff informed of important events, such as room availability or upcoming reservations.
- The interface should allow for easy search and filtering of information.
- The interface should be able to integrate with other systems used by the hotel, such as payment gateways or property management systems.

5 **Performance Requirements:** In this, how a software system performs desired functions under specific condition is explained. It also explains required time, required memory, maximum error rate, etc.

6 **Design Constraints:**

- The system needs to be designed to run on specific technologies, such as a particular operating system, database management system based on the hotel's existing technological infrastructure.
- The system may need to meet specific user experience requirements, such as accessibility standards, multi-language support, or intuitive user interfaces, to ensure usability and satisfaction for hotel staff and guests.
- The hotel management system may have constraints on the available processing power, memory, and storage capacity of the server workstations, and mobile devices, which may affect system performance and scalability.
-
- Network Limitations: The system may be limited by the available bandwidth and reliability of the network infrastructure, which may impact data transfer speeds, system responsiveness, and user experience.
-
- Operating System Limitations: The system may be constrained by the specific operating system requirements, compatibility issues, and licensing restrictions, which may affect system deployment, maintenance, and upgrades.
-
- Database Management System Limitations: The system may be constrained by the capabilities and limitations of the chosen database management system, such as data storage capacity, performance, and scalability, which may impact system functionality and data management.
-

- **Programming Language and Development Framework Limitations:** The system may be constrained by the features, capabilities, and limitations of the chosen programming language and development framework

7 **Non-Functional Attributes:**

- The system should be reliable and available 24/7 with minimum downtime and data.
- The system should be able to handle a high volume of users, transactions, and data.
- The system should be fast and responsive.
- The system should be secure and protect sensitive data such as guest information, financial transactions, and employee data.
- The system should be easy to maintain and upgrade.
- The system should be user-friendly and easy to use.
- The system should be compatible with existing hardware and software systems used by the hotel.
- The system should be accessible to users with disabilities and support different languages and alphabets.
- The system should be available to authorized users at all times.
- The system should be able to communicate and exchange data with other systems used by the hotel and its partners.

8 **Preliminary Schedule and Budget:** The project is scheduled to be completed within six months of the start date. The budget is allotted only for the man-hours and not for different softwares used.