

HOTEL MANAGEMENT SYSTEM

Problem Statement:

To design a user-friendly hotel management system that caters to the needs of all stakeholders involved in the hotel's operations. The existing system is fragmented, with different stakeholders using different systems to manage their tasks, leading to inefficiencies, delays, and errors in the hotel's operations. To address these challenges, a hotel management system is required that integrates all the different systems and provides a unified platform for all stakeholders to manage their tasks. The system should allow the receptionist to manage room reservations, view room availability, check-in guests, manage guest requests, and update guest preferences. Similarly, the cashier/accounts department should be able to manage billing and payments, generate bills, view payment history, and send reminders to customers. Customers should be able to make reservations, view room availability, manage their bookings, and provide feedback on their experience. The manager should be able to view reports on occupancy rates, room revenue, guest preferences, and other important aspects of hotel operations, while the managing director/board of directors should be able to view reports on the overall performance of the hotel, including revenue, expenses, profitability, and customer satisfaction. The hotel management system should be user-friendly, secure, and scalable, accessible from anywhere, and designed to integrate with other systems used by the hotel. Ultimately, the hotel management system will help improve efficiency, reduce costs, and enhance the overall customer experience.

Software Requirement Specification(SRS)

1 Introduction:

1.1 Purpose:

The purpose of this document is to provide a detailed description of the Hotel Management System. The document will explain the functional and non-functional requirements of the software system to be developed.

1.2 Scope:

The Hotel Management System is designed to automate and streamline hotel operations. The system will include features such as room booking, check-in and check-out, inventory management, billing, and reporting. The system will be developed to enhance the overall guest experience and improve the efficiency of hotel operations. The development time for the system is estimated to be six months, and the budget for the project is \$100,000.

1.3 Overview:

The Hotel Management System is a software solution that will automate and streamline hotel operations. The system will be developed to cater to the needs of hotels of all sizes and types. The system will provide features such as room booking, inventory management, billing, and reporting. The software system will be user-friendly and easy to use, ensuring that hotel staff can efficiently perform their duties.

2 General Description:

The Hotel Management System is designed to cater to the needs of the hotel industry. The software system will provide features that will enhance the overall guest experience and improve the efficiency of hotel operations. The system will have the following features:

- **Room Booking:** The system will allow guests to book rooms online or at the hotel reception. The system will provide real-time availability of rooms, and guests will be able to select their preferred room type.
- **Check-in and Check-out:** The system will automate the check-in and check-out process, eliminating the need for manual record-keeping. The system will also keep a record of guest information for future reference.
- **Inventory Management:** The system will keep track of hotel inventory, including food, beverage, and supplies. The system will generate alerts when inventory levels are low, ensuring that the hotel always has adequate supplies.

- **Billing:** The system will automate the billing process, including room charges, food, and other services. The system will generate invoices and receipts, and guests will be able to make payments using various payment methods.
- **Reporting:** The system will generate reports that will provide insights into hotel operations. The reports will include occupancy rates, revenue, and expenses.

The Hotel Management System will cater to the needs of hotels of all sizes and types. The system will be user-friendly and easy to use, ensuring that hotel staff can efficiently perform their duties. The system will provide an exceptional guest experience, ensuring that guests keep coming back to the hotel.

3 Functional Requirements:

The following are the functional requirements of the Hotel Management System:

- The system should allow guests to book rooms online or at the hotel reception.
- The system should provide real-time availability of rooms, and guests should be able to select their preferred room type.
- The system should automate the check-in and check-out process, eliminating the need for manual record-keeping.
- The system should keep a record of guest information for future reference.
- The system should keep track of hotel inventory, including food, beverage, and supplies.
- The system should generate alerts when inventory levels are low, ensuring that the hotel always has adequate supplies.
- The system should automate the billing process, including room charges, food, and other services.
- The system should generate invoices and receipts, and guests should be able to make payments using various payment methods.
- The system should generate reports that will provide insights into hotel operations. The reports should include occupancy rates, revenue, and expenses.

4 Interface Requirements :

The Hotel Management System should provide the following interfaces to enable efficient communication between the system and its users:

- A user-friendly interface for hotel staff to manage room reservations, guest check-ins, check-outs, and room availability.
- An interface for the kitchen staff to receive and manage food orders placed by guests.
- An interface for guests to book rooms online or at the hotel reception.
- An interface for guests to make payments using various payment methods, such as credit card or cash.

5 Performance Requirements:

The Hotel Management System should meet the following performance requirements:

- The system should be able to handle a high volume of guest bookings and transactions.
- The system should be able to generate reports quickly and efficiently.
- The system should have a response time of less than 3 seconds for all user interactions.
- The system should be able to handle multiple user sessions simultaneously without any downtime.

6 Design Constraints:

The following design constraints should be considered during the development of the Hotel Management System:

- The system should be developed using a scalable architecture that can accommodate future growth.
- The system should be compatible with commonly used hardware and software platforms.
- The system should be secure and protect guest data and hotel operations from unauthorized access.
- The system should be designed to minimize maintenance requirements and ensure ease of upgrades.

7 Non-Functional Attributes:

The Hotel Management System should meet the following non-functional attributes:

- Security: The system should be secure and protect guest data and hotel operations from unauthorized access.
- Portability: The system should be portable and able to run on different hardware and software platforms.
- Reliability: The system should be reliable and minimize downtime or errors.
- Reusability: The system should be designed to facilitate the reuse of components and modules in future projects.
- Application Compatibility: The system should be compatible with other applications used in the hotel industry.
- Data Integrity: The system should ensure data integrity and accuracy of information.
- Scalability Capacity: The system should be designed to accommodate future growth and scale easily.

8 Preliminary Schedule and Budget:

The development of the Hotel Management System is estimated to take six months, and the budget for the project is \$100,000. The development team will work in phases, with each phase having specific deliverables and milestones. The schedule and budget will be periodically reviewed and updated to ensure that the project stays on track and within budget.