**Hotel management system**

**Problem Statement:**

The hotel industry is a highly competitive and demanding sector, and effective management of hotel operations is critical for its success. One of the biggest challenges faced by hotel managers is managing all the hotel operations efficiently while providing excellent customer service. Without an efficient hotel management system in place, hotels may face various issues, including guest complaints, overbooking, delayed check-ins, inaccurate billing, and loss of revenue.

Therefore, there is a need for a comprehensive hotel management system that can streamline all hotel operations and provide excellent customer service. The system should be user-friendly, efficient, and reliable, and it should be able to manage all hotel operations, including room reservations, room service, billing, inventory management, housekeeping, maintenance, and guest feedback. The system should also be able to generate reports that provide insights into hotel performance, such as occupancy rates, revenue, and customer satisfaction.

**Software Requirements Specification (SRS) for Hotel Management System:**

Introduction: The Hotel Management System (HMS) is a software application that enables hotel managers to efficiently manage hotel operations and provide excellent customer service. The system is designed to manage various aspects of hotel operations, including room reservations, room service, billing, inventory management, housekeeping, maintenance, and guest feedback.

**Functional Requirements**: The functional requirements of the HMS are as follows:

Room Management: The system should be able to manage room reservations, room types, and room availability.

Check-in and Check-out: The system should be able to check-in and check-out guests and generate invoices for room charges.

Inventory Management: The system should be able to manage inventory levels of food and beverage items, toiletries, and other supplies.

Housekeeping: The system should be able to manage housekeeping tasks, such as cleaning schedules and laundry services.

Maintenance: The system should be able to manage maintenance tasks, such as room repairs and equipment maintenance.

Guest Feedback: The system should be able to collect and manage guest feedback to improve customer service.

**Non-Functional Requirements**: The non-functional requirements of the HMS are as follows:

User Interface: The system should have a user-friendly and intuitive interface.

Performance: The system should be fast and responsive, even when handling large amounts of data.

Security: The system should be secure, with access restricted to authorized personnel only.

Scalability: The system should be able to handle an increasing number of users and data without affecting performance.

Reliability: The system should be reliable and available 24/7, with minimal downtime.

**Technical Requirements**: The technical requirements of the HMS are as follows:

Programming Language: The system will be developed using a programming language that supports web application development, such as PHP, Python, or Ruby on Rails.

Database: The system will use a relational database management system (RDBMS) to store and manage data.

Web Server: The system will be deployed on a web server that supports the chosen programming language and RDBMS.

Operating System: The system will be compatible with popular operating systems, such as Windows, macOS, and Linux.

**Constraints:**

The constraints of the HMS are as follows:

Budget: The system development and deployment should be within the allocated budget.

Time: The system development and deployment should be completed within the agreed timeline.

Resources: The system development should use the available resources, such as hardware and software.