**Hotel management system**

**Problem statement**

The hotel industry is a highly competitive and dynamic environment, where hotel managers are constantly faced with a range of challenges that impact the overall performance of the hotel. In order to remain competitive, hotels must adapt to changing consumer trends, leverage technology, and optimize their operations to provide exceptional guest experiences. However, with limited resources and complex operational processes, hotel management often faces difficulties in achieving these objectives.

Some of the common problems faced by hotel management include high operating costs, low occupancy rates, lack of customer loyalty, difficulty in managing inventory and resources, and maintaining a competitive edge in a rapidly changing market. These issues can lead to reduced profitability and can even threaten the long-term viability of the hotel.

In addition to these operational challenges, hotel managers must also contend with external factors such as economic conditions, political instability, and natural disasters that can significantly impact their business. These factors can make it difficult to forecast demand and adjust pricing strategies accordingly.

Therefore, the hotel management faces a critical challenge of balancing the needs of customers, employees, and stakeholders, while ensuring the hotel's financial sustainability. To address these challenges, hotel managers need to adopt innovative strategies that can help optimize operations, reduce costs, enhance customer experiences, and stay ahead of the competition.

**Software requirements specification(SRS)**

**Introduction:**

**1.1 Purpose of this Document:** At first. main aim of why this document is

necessary and what's purpose of document is explained and described

**1.2 Scope of this document:** In this overall working and main objective of

document and what value 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

**General description:**

In this, general functions of the product which includes the objective of the user. user characteristic, features. benefits. about why its importance Is mentioned. also describes features of user community

**Functional Requirements:**

The functional requirements of the Hotel Management System include:

Ability to manage guest reservations and bookings

Ability to manage guest check-ins and checkouts

Ability to assign rooms to guests

Ability to manage room inventory and availability

Ability to manage billing and payment processing

Ability to generate reports on hotel occupancy, revenue, and inventory

Ability to send notifications to guests about their reservations and bookings

**Interface Requirements:**

The Hotel Management System will communicate with the following interfaces:

User interface: web-based interface for hotel staff and management

Payment gateway: interface for processing guest payments

Reservation system: interface for managing guest reservations and bookings

**Performance Requirements:**The Hotel Management System will perform the following functions:

Process guest reservations and bookings in real-time

Assign rooms to guests in real-time

Process guest payments securely and quickly

Generate reports on hotel occupancy, revenue, and inventory in real-time

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**Design Constraints:**

The Hotel Management System will be designed with the following constraints:

Use of a particular database management system (e.g., MySQL)

Use of a particular programming language (e.g., Java)

Integration with existing hotel systems (e.g., accounting software)

**Non-Functional Attributes:**

The Hotel Management System will have the following non-functional attributes:

Security: the system will be designed with secure access controls and encryption of sensitive data

Portability: the system will be designed to run on multiple platforms

Reliability: the system will be designed to minimize downtime and data loss

Reusability: the system will be designed to allow for reuse of components and modules

Application compatibility: the system will be designed to be compatible with other hotel applications

**Preliminary Schedule and Budget:**

The preliminary schedule and budget for the Hotel Management System project are as follows:

Duration: 12 months

Cost: $500,000

The project will be divided into several phases, including requirements gathering, design, development, testing, and deployment. The budget includes salaries for project team members, hardware and software costs, and other expenses.

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