

# Software Requirement Specification (SRS)

## Problem Statement:-

### Hotel Management System:

Traditional hotel management processes often rely on manual methods, leading to inefficiencies, errors, and delays. To address these challenges, there is a need for a comprehensive Hotel Management System (HMS) that automates various tasks, including reservation management, guest services, billing, inventory control, and reporting. The goal is to develop a robust HMS that enhances operational efficiency, improves guest satisfaction, and enables hotel staff to focus on delivering exceptional services.

## Introduction:-

### 1.1 Purpose of this Document:-

To provide a comprehensive understanding of the requirements and functionalities of the Hotel Management System.

### 1.2 Scope of the Document:-

Describe the intended users, features and benefits of the HMS, along with development cost and time estimates.

### 1.3 Overview:-

Gives a brief summary of the HMS.

administering a variety of functions such as room booking, check-in/out, and billing.

General Description:

Objective: To automate and streamline hotel operations, improving efficiency and guest experience.

User Characteristics: Front desk staff, housekeeping, guests.

Features:-

Room Booking: Allows guests to book rooms online or through the front desk.

Check-in/out: Facilitates the check-in and check-out process for guests.

Inventory Management: Tracks room availability, housekeeping status, and amenities.

Billing: Generates invoices, processes payments, and manages accounts.

Importance: Enhances guest satisfaction, increases revenue, and optimizes resource utilization.

User Community: Includes hotel staff and guests, with varying levels of access and privileges.



## Functional Requirements:

### Room Booking:

Users can view reservation for available rooms based on criteria such as date, room type, and occupancy.

Users can select rooms and proceed with the booking process, providing necessary details.

### Check-in/Out:

Front desk staff can check-in guests, assign rooms, and issue room keys.

Guests can check-out, settle room bills, and receive invoices.

### Inventory Management:

System automatically updates room availability based on reservation and housekeeping status.

Staff can track inventory levels for amenities, supplies, and maintenance.

### Billing:

Generates invoices for room charges, additional services, and taxes.

Integrated with payment gateways for secure transactions.

## Interface Requirements:

### User Interface:

Intuitive interfaces for staff and guests.

accessible via web browsers or mobile app

### Payment Integration:

- Integration with payment gateways for secure online payment.

### Communication:

- Email notifications for booking confirmations, reminders, and feedback requests.

### Performance Requirements:

#### Response Time:

- System should respond promptly to user queries with minimal latency.

#### Availability:

- System should be available 24/7, with scheduled maintenance windows communicated in advance.

#### Scalability:

- Ability to handle peak loads during high-demand periods.

### Design Constraints:

#### Hardware/Software Limitations:

- Compatibility with existing hardware and software infrastructure.
- Support for multiple platforms (Windows, macOS, iOS, Android).



- Regulatory compliance: compliance with data protection regulations and industry standards

### Non-Functional Attributes:

- Encryption of sensitive data.
- Role-based access control to restrict with power mechanisms prevent downtime.

### Usability:

- intuitive user interfaces with clear navigation and helpful tooltips.

### Scalability:

- Architecture should support horizontal scaling to accommodate growth in user base and transaction volume.

### Preliminary Schedule and Budget

#### - Schedule:

- Estimated timeline for development, testing and deployment phases.

#### Budget:

- cost estimates for development resources, software licenses, and infrastructure.