

# Software Requirement Specification

## 1. Hotel Management System

### 1. Introduction :-

Purpose of this document :- To provide a comprehensive understanding of the requirements and functionalities of the hotel management system.

Scope of this document :- Describes the intended users, features, and benefits of the HMS, along with development cost and time estimates.

Overview :- Give a brief summary of the HMS, outlining its primary functions such as room booking, check-in/out, and billing.

### 2. General Description

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

User Characteristics :- Front desk staff, housekeeping, guests.

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

Billing :- Generate invoices, process payments, and manage accounts.

### 3. Functional Requirements

1. Room booking :- Users can search for available rooms based on criteria such as date, room type, and occupancy.  
Front desk staff can check-in guests, assign rooms, and issue room keys. → Check-in/out

2. Billing :- generates invoices for room charges, additional services, and taxes.

\* Integrate with payment gateways for secure transactions.

### 4. Interface Requirements

• User Interface - intuitive interfaces for staff and guests, access to the system via desktop or mobile apps.

• Payment Integration - integration with payment gateways (e.g. PayPal, Stripe) for secure online payments.

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

13. Performance Requirements -

• Response time: System should respond promptly to user requests with minimal latency.

• Availability: System should be available 24/7 with scheduled maintenance windows communicated in advance.

14. Design constraints

• Hardware/Software Limitations

• Compatibility with existing hardware and software infrastructure.

• Support multiple platforms

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

15. Non-functional requirements

• Encryption of Sensitive Data: - Role based access control to restrict unauthorized access.

• Reliability: - Interactive user interfaces should support a robust and resilient, with failover mechanisms to prevent downtime.

• Usability: - Interactive user interfaces with clear navigation and helpful tooltips.

16. Preliminary Schedule and Budget

• Schedule: - Estimated timeline for development, testing and deployment phases.

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

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## 2. CREDIT CARD PROCESSING SYSTEM

### Introduction:-

1) Purpose of this document:- This document outlines the requirements for the development of a credit-card processing system, detailing its functionalities, interfaces, performance expectations, design constraints, and other relevant aspects.

2) Scope of this document:- The document defines the scope of the credit card processing system project, including its objectives, deliverables, development costs, and time requirements. It also highlights the value the system will provide to customers.

3) Overview:- The credit-card processing system is designed to facilitate secure and efficient processing of credit card transactions. It aims to provide users with a reliable and user-friendly platform for managing transactions, generating reports, and ensuring compliance with relevant standards and regulations.

### 3. General Description

The credit card processing system will cater to merchants and customers, providing a secure and reliable platform for processing credit card transactions. The system will support various transaction types, including purchases, refunds, and voids. It will also offer reporting and analytics features to help merchants track their transactions and make informed business decisions.

### 3. Functional Requirements

1) User Authentication:- Users must be able to authenticate themselves before accessing the system.

2) Transaction processing:- The system should support various transaction types, including purchases, refunds and voids.

3) Reporting:- The system should generate reports on transaction history, sales and customer insights.



## 2.5.3 Interface Requirements

- 1) User Interface :- Interactive user-based interfaces for applicants, agents, and administrators to interact with the system.
- 2) Data Interface :- Channels for real-time data exchange between system components, ensuring timely updates and synchronization.
- 3) File Interface :- Mechanisms for importing and exporting data in standard formats, enabling interoperability with other systems.

## 2.5.4 Performance Requirements

- 1) Response time :- The system should respond promptly to user interactions, with an average response time of less than 5 seconds.
- 2) Throughput :- The system should handle a maximum of 1000 concurrent users during peak hours without significant degradation in performance.

## 2.5.5 Design Constraints

- 1) Regulatory compliance :- The system must comply with local and regulatory requirements related to passport issuance and data protection.

- 2) Hardware Limitations :- The system should be designed to operate within the constraints of available hardware resources, such as processing power & storage capacity.

## 2.5.6 Non-Functionality Attributes

- 1) Security :- Implementation of robust security measures to protect sensitive user data & prevent unauthorized access.
- 2) Portability :- The system should be platform-independent.
- 3) Reliability :- The system should be reliable.

## 2.5.7 Preliminary Schedule and Budget

- \* Timeline :- The project is estimated to span six months, with development, testing and deployment phases.

- \* Budget :- The estimated budget for the project is \$50,000, covering expenses such as software development, infrastructure, etc.

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**Purpose:** - The purpose of this document is to define the requirements and specifications for the development of a stock management system. It serves as a guide for stakeholders and the development team to ensure clarity and alignment throughout the development process.

**Scope:** - This document outlines the overall working and main objectives of the stock management system. It describes the value it will provide to customers, including improved efficiency in stock management processes.

**Overview:** - The stock management system is a software application designed to streamline and automate stock management processes within an organization. It provides functionalities for efficient inventory management, order processing, and reporting.

### 2. General description:

The stock management system aims to

- Enable efficient stock management and tracking
- Provide real-time visibility into stock levels
- Facilitate order management and processing
- Generate comprehensive reports for decision-making

### 3. Functional Requirements

- Adding, updating, and deleting stock items
- Tracking stock levels and movements
- Creating and managing purchase orders
- Generating reports on stock status and transactions.

### 4. Interface Requirements

**1. User Interface:** - The UI allows users to interact with the system, providing interfaces for data input, manipulation, and output. It includes forms, menus, buttons, and other elements for user interaction.



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