

23/9/24

## 1] SRS for Hotel Management System

### 1. Introduction

#### 1.1) Purpose:

The purpose of this document is to define the requirements for a Hotel Management System, outlining the functionalities required for efficient hotel operations.

#### 1.2) Scope:

The system will cater both hotel staff and customers, managing room bookings, billing, etc. This will optimize day-to-day hotel operations, reduce manual labor and provide guests with better user experience.

#### 1.3) Overview:

The Hotel Management System will include modules for front desk operations, room management, customer relationship management (CRM), housekeeping and billing. It will be accessible through desktop or mobile devices, ensuring ease of use for hotel employees.

### 2. General Description

#### 2.1) Product Perspective

The system integrates with existing hotel infrastructure and online booking platforms, providing a centralized system for managing hotel operations.

#### 2.2) User Characteristics -

Users will include hotel staff (front desk, housekeeping and managers) and customers (for online booking and inquiries). The interface will be

user friendly for <sup>non-</sup>technical users.

### 2.3) System constraints -

The system must be available 24/7, support multiple users and handle high traffic during peak seasons.

## 3. Functional Requirements

- Room booking and reservation management
- Customer check-in /check-out process.
- Invoice generation and billing.
- Housekeeping status tracking
- Online booking integration
- customer profile and history management

## 4. Interface Requirements

- Graphical User Interface (GUI) for hostel staff.
- Web-based interface for customers.

## 5. Performance Requirements

- Response time should be less than 2 seconds.
- Must handle atleast 500 customers.

## 6. Design Constraints

- The software should adapt to future technology
- Must be compatible with existing hotel hardware.

## 7. Non-Functional Attributes

- Security - secure data handling for sensitive data
- Scalability - scale across all hotel branches.
- Reliability - must be reliable

## 8. Preliminary schedule & Budget

Overall time required - 6 months

overall cost required - ₹80000

## 2] SRS for credit card processing

### 1. Introduction

#### 1.1) Purpose:

The purpose of this document is to outline the functional and non-functional requirements for a secure credit card processing system, which facilitates transactions between bankers and cardholders.

#### 1.2) Scope:

The system will support multiple card types and offer real-time processing, fraud detection and reporting tools.

#### 1.3) Overview:

The credit card processing system will ensure smooth payment transactions for both online and in-person purchases. The system will handle authorization, transactions and ensuring compliance with payment industry standards.

## 2. General Description

### 2.1) Product perspective:

The system will work as an intermediary between the banker and the credit card company.

### 2.2) User characteristics:

Users will include merchants, cardholders and system administrators.

### 2.3) System Constraints:

It must meet Payment Card Industries standard and ensure secure transaction handling.

## 3. Functional Requirements

- Card authorization
- Payment gateway integration
- Fraud detection and prevention
- Transaction reporting
- Refund handling.

## 4. Interface Requirements

- Web API for integration
- Point-of-Sale (Pos) software interface

## 5. Performance Requirements

- Must process transactions under 2 seconds
- Support for upto or atleast 500 customers

## 6. Design Constraints

- Must comply with PCI DSS standards
- The system must be designed for easy integration

## 7. Non-Functional Attributes

- Security - secure handling of data for sensitive data

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- Scalability - must be able to handle high transactions across multiple banks.
  - Reliability - must ensure availability.

### 3. Preliminary Schedule and Budget

Overall time required - 9 months

Overall cost required - ₹ 80000

## 3] SRS for Library Management System

### 1. Introduction

#### 1.1) Purpose:

The purpose of this document is to define the requirements for a Library Management System.

This system will help libraries manage book inventories, member records, lending and returns efficiently.

#### 1.2) Scope:

1.2) Scope: The system will support library staff in managing book collections, tracking member activity and issuing books. It will also allow members to search for books and view their borrowing history.

#### 1.3) Overview:

The Library Management system will consist of modules for book cataloging, member management, fines calculation, etc.

## 2. General Description:

### 2.1) Product Perspective:

The system will integrate with current

library hardware and software systems, allowing staff to manage both physical and digital collections in one platform.

### 2.2) User characteristics:

Users include library staff (librarians, managers) and members (for searching books, viewing account details). The interface will be simple and user friendly.

### 2.3) System Constraints : The

The system must be operational during library hours and support multiple concurrent users.

## 3. Functional Requirements

- Catalog management for books (add, update).
- Member registration and management.
- Book issuance and return tracking.
- Late fee collection.
- Search functionality for books by title, author and genre.
- Report generation for inventory and member activity.

## 4. Interface Requirements

- Graphical User Interface (GUI)
- Web based portal
- Barcode scanner integration for book issuance/return

## 5. Performance Requirements

- Must handle 200 concurrent users
- Search query results should be returned in less than 2 seconds.

## 6. Design Constraints

- Must support integration with existing library barcode scanning systems.
- Modular design to allow easy future updates for digital collection management.

## 7. Non-Functional Attributes

- Security: Protect member personal details and borrowing history with encryption.
- Scalability: Must scale for use in multiple branches.
- Reliability: must be reliable during library hours.

## 8. Preliminary Schedule and Budget

Overall time required - 5 months

Overall cost required - ₹ 60,000.

## 4] SRS for Stock Maintenance System

### i. Introduction

#### 1.1) Purpose:

The purpose of this document is to outline the requirements for a Stock Maintenance System that helps businesses manage inventory levels, track stock movement and generate restocking alerts.

#### 1.2) Scope:

The system will be used by store managers and warehouse personnel to ensure efficient inventory tracking and timely restocking. It will also generate reports to optimize SM.

### 1.3) Overview:

The Stock Maintenance System will have modules for inventory tracking, restock alerts, vendor management and reporting.

## 2 General Description

### 2.1) Product perspective:

The system will integrate with existing warehouse management systems to keep track of stock levels in real-time.

### 2.2) User characteristics:

Users will include warehouse staff, store managers and suppliers. The interface will be easy to use for non-technical staff.

### 2.3) System constraints:

The system should be operational 24/7 and handle inventory across multiple locations.

## 3 Functional Requirements

- Inventory tracking by item, ~~step~~ and location.
- Restocking notifications when inventory falls below threshold levels.
- Stock movement logging.
- Vendor management for ordering and supply tracking.
- Reporting on stock levels, turnover, etc.

## 4 Interface Requirements

- Web-based interface for store managers.
- Integration for with barcode scanners for stock movement.
- API for integration with third-party warehouse.

## 5. Performance Requirements

- Must handle 10000 entries
- Must process stock movement transactions in under 2 seconds.

## 6. Design Constraints

- Must comply with the company's hardware infrastructure.
- Designed for easy integration with third party systems.

## 7. Non Functional Attributes

- Security: Ensure data security and restricted access to inventory data.
- Scalability: Capable of managing inventories for multi-location warehouses.
- Reliability: must be reliable to ensure consistent stock updates.

## 8. Preliminary Schedule and Budget

Overall time required : 7 months

Overall cost required : ₹ 1,50,000

## 5] SRS for Passport Automation System

### i) Introduction

#### 1.1) Purpose:

The purpose of this document is to define the requirements for a Passport Automating System, that will help streamline passport

application processes, including application submission, tracking and appointment scheduling.

#### 1.2) Scope:

The system will support applicants, passport office staff and immigration officers in processing passport requests and renewals.

#### 1.3) Overview:

The Passport Automation System will consist of modules for application submission, verification and tracking.

## 2. General Description

#### 2.1) Product perspective:

The system will integrate with government databases and biometric verification systems to automate passport processing.

#### 2.2) User characteristics:

Users will include passport applicants, government officials and system administrators.

#### 2.3) System constraints:

The system must support secure online submission and tracking for passport applications.

## 3. Functional Requirements:

- Biometrical verification integration
- Reporting for application statistics
- Application status tracking for applicants
- Appointment scheduling for in-person verification
- Online application submission and payment processing.

#### 4. Interface Requirements

- Web-based interface for applicants
- Integration with payment gateways for fee processing.

#### 5. Performance Requirements

- Must process 10,000 applicants annually
- Application status updates should be available in real time

#### 6. Design Constraints

- must comply with government security and data privacy regulations.
- Modular design for easy future upgrades

#### 7. Non-Functional Attributes

- Security: end-to-end encryption for sensitive data
- Scalability: scalable across multiple passport offices
- Reliability: must be reliable for continuous operation

#### 8. Preliminary Schedule and Budget

Overall time required: 8 months

Overall cost required: ₹ 2,00,000

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