

## Hotel management System.

Hotels often rely on manual or outdated methods to manage reservations, checking, billing and staff coordination. This leads to inefficiency, customer dissatisfaction etc...

A Hotel management system is needed to automate room booking, customer management, billing, staff allocation and reporting in order to improve customer satisfaction, reduce human errors, and streamline hotel operations.

### SRS document

#### 1. Introduction.

##### 1.1. purpose

This document specifies requirements for the Hotel management system. The purpose is to automate booking, check-in/check-out, billing and staff allocation.

##### 1.2 scope of this document

The HMS will reduce manual errors, improve customer service, and optimise hotel operations by offering centralized control over reservations, billing and staff scheduling.

##### 1.3 overview

The system will manage reservations, guest services, billing, reporting and staff coordination.

## 2. General description

- Objective: Automate hotel operations
- Users: Customers, staff, Admin
- Features: online booking, billing, check-in/out.



### 3. Functional requirements

- customer registration and login
- Room booking, check in / out
- Billing and payment
- staff and house keeping management

### 4. Interface requirements

- web and mobile app
- Database Interface
- Payment gateway

### 5. Performance requirements

- system must support at least 500 concurrent users.
- response time < 3 seconds per request

### 6. Design constraints

- must integrate with payment systems
- works on windows / linux servers

### 7. Non - Functional Attributes

- security: Data encryption
- Reliability: 99.5% uptime
- Usability: mobile - friendly interface

### 8. Preliminary schedule and budget

- Development time: 6-8 months
- Estimated cost: moderate.

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## 2 Credit card management system

A credit card management system is required to automate credit card applications, secure transactions, billing, and customer services, fraud monitoring and reporting etc...

### 1. introduction

#### 1.1. purpose of this document

Defines requirements for credit card management system to automate issuance, transactions, billing and fraud detection.

#### 1.2 Scope of this document

The system ensures secure, fast and efficient credit card management for banks and customers.

#### 1.3 Overview

Includes card applications, transaction processing, fraud monitoring, billing, and reporting.

### 2. General Description.

- objectives: Automate credit card lifecycle
- users: customers, Bank staff, Admins
- Features: Transactions, billing, fraud detection

### 3. Functional requirements.

- user registrations and login
- credit application and approval with o/p support
- Billing statement generation
- card blocking and replacement.



#### 4. Interface requirements.

- mobile and app interface
- payment network API's

#### 5. performance Requirements.

- process transactions  $< 3$  sec
- 10,000+ concurrent users

#### 6. Design constraints

- multi-layer security
- MVP architecture.

#### 7. Non-functional Attributes

- Security: End to End encryption
- Availability and reliability.

#### 8. preliminary schedule and Budget

- Development time: 10-12 months
- Estimated cost: High (due to compliance and integrations).

### 3. library management system

A library management system is required to cataloging, automate borrowing / returning, calculate fines and generate reports to make library services faster, more accurate and user-friendly.

#### 1. introduction

##### 1.1. purpose

Defines requirement for library management to automate books lending and cataloging.

##### 1.2 scope

Improves efficiency by digitizing library processes.

##### 1.3 Overview

System manages books, users, borrowing, fines, and reports.

#### 2. General description.

- objective: digitalize library operations
- users: students, librarians, Admins
- Features: search, borrow, return, fines, reports

#### 3. Function requirements.

- mobile and app interface
- register library members
- Borrow and return tracking
- Fine calculation
- reports.



#### 4. Interface requirements

- Barcode scanner support
- online catalog access

#### 5. Performance Requirements

- catalog search  $\leq 2$  sec

#### 6. Design constraints

- multi-branch library support

#### 7. Non-Functional Attributes

- security: user authentication
- reliability: Data backup support

#### 8. preliminary schedule and Budget

- Development: 4-6 months
- cost: low to medium

## 4. Stock management system.

A stock management system is needed to automate product inventory, supplier management, purchase/sales tracking, and cost efficiency etc...

### 1. Introduction

#### 1.1. purpose.

Defines requirements for stock management system (SMS)

#### 1.2. Scope

Automates inventory tracking, supplier management and reporting.

#### 1.3 overview

Tracks products, sales, suppliers, and generate reports.

### 2. General Description.

- objective: Manage stock effectively
- users: Store staff, Admins
- Features: stock tracking, supplier management

### 3. Functional Requirements.

- product database
- stock-in and stock-out
- supplier records

### 4. Interface requirements

- POS system integration
- supplier database API



## 5. performance requirements

- Handle 100k+ product records

## 6. Design constraints

- works across multiple warehouses

## 7. Non-Functional Attributes

- security: Role-based access
- Reliability: Real-time sync

## 8. Preliminary schedule and Budget

- Development: 6 months
- cost: medium



## 5. Passport Automation System

A passport Automation system is required to digitize passport applications, enable online submission of documents, integrate with government / police databases for verify biometric appointments, and automate passport issuance and tracking, thus improving efficiency, etc...

### 1. Introduction

#### 1.1 purpose

Defines requirements for passport Automation System.

#### 1.2 scope

Digitizes passport applications, verification and issuance

#### 1.3 Overview

Enables online application, document submission, verification and passport delivery.

### 2. General Description

- objective: Automate passport processing
- users: citizens, Govt staff
- Features: online applications, status tracking.

### 3. Functional requirements.

- online application and registration
- Document upload and verification
- Appointment scheduling.
- passport issuance and tracking.

#### 4. Interface requirements

- National ID and police database integration
- Web portal and mobile app

#### 5. performance requirements

- Handle 50k+ applications

#### 6. Design constraints

- Government security compliance

#### 7. Non-Functional Attribute

- security: End-to-End encryption
- Availability and Scalability.

#### 8. preliminary Schedule and Budget

- Development: 12 months
- cost: High

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