

SRS for Hotel Management System.

1) Introduction

1. Purpose :

Hotel Management System is designed to automate daily hotel operations such as booking rooms, managing check in/check out, generating invoices. It eliminates manual records and provides central database for all hotel related activities.

2. Document conventions :

- Guest means customers, Room ID means unique identifier of each room.
- HMS is used consistently.

3.

Intended Audience & Reading suggestions

- Hotel owners / Managers
- Receptionist
- Developers
- Testers

4. Project scope

HMS will provide user-friendly interface for hotel staff & customers. It supports room reservations, bill generation, housekeeping and staff allocation. It ensures accuracy, reduces workload and enhances customer satisfaction.

5. References

IEEE standard guidelines, database design standards.

2. Overall description

1. Product perspective:

A centralised system for managing application can be integrated with third party payment gateways.

2. Product functions:

Room reservation, guest check-in & checkout, Billing, report generation.

3. User classes and characteristics:

- Administrator
- Receptionist
- Housekeeping

4. Operating environment: System will run on web browser with windows, Mac OS, Linux.

5. Design & implementation constraints:

Must use secure database to protect guest data. It should be scalable, reliable.

6. User documentation.

User manual

7. Assumptions and dependencies:

Reliable power supply & network connection.
Depends on 3rd party payment gateway for payments.

3. Specific Requirements

1. Functional requirements:

- Shall allow guest checking room availability & make reservations.
- shall enable receptionists to check-in & check-out.
- Generate invoices & accept payments.
- Shall allow staff to view & update rooms

2. External Interface Requirements:

- user interface
- hardware interface: compatible with standard desktop computers
- software requirements: integrates with payment gateway API.

3. Non-financial requirements:

- Performance
- Security
- Usability

4. System Features:

Automated email confirmation for bookings
& real time room availability updates.

4. Appendices

Reservation - confirmed booking

Guest - user.

IEEE 802 doc. for Credit card Management

1. Introduction.

1. Purpose:

To define financial & non-financial requirements for CCMIS, which will manage all aspects of CC accounts.

2. Document conventions.

Standard technical & financial jargon will be used with definitions. OTP provided in the glossary - CVV (card verification value).

3. Intended Audience & Reading suggestions:

Developers, Testers, financial analysts & auditors, customers, bank employees.

4. Project scope:

CCMS automates billing, improves security with DTP & encryption, fraud detection alerts enables customers to manage cards online.

5. Differences:

RBI banking guidelines.

2. Overall description:

1. Product perspective:

System will work as part of bank's IT infrastructure, connected to payment gateways, ATMs & apps.

2. Product functions:

- process transactions.
- generate bill & statements
- fraud detection & alerts.
- card activation/deactivation.

3. Use cases:

• Customers

• Bank employee

• Admin.

4. Operating environment:

- Banking servers with 24/7 uptime.
- Serve cloud services.

5. Constraints:

- RBI & PCI DSS statements & real time fraud detection.

6. User documentation:

- Online FAQ's & call centre support

7. Assumption & dependencies:

- Secure connection & encryption protocols.

3. Specific requirements:

1. Functional requirements:

- Transaction approval/rejection.

- Statement generation.

- OTP verification.

- Fraud detection alerts.

2. External interface requirements:

- ATMs

- Mobile apps

- Web portal.

3. Non-functional requirements:

- Performance

- Security

- Reliability.

4. System features:

- Transaction logs.

- Fraud scoring.

- Online payment.

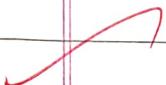
- Immediate card blocking.

4. Appendices:

1. Glossary:

CVV, OTP fraud scoring method for assessing the risk of transaction being fraudulent.

PCI DSS - set of security standards for companies that handle credit card info.



Library Management System.

1. Introduction

1.1 Purpose

Define requirements for LMS to automate book lending and cataloging.

1.2 Scope

Improves efficiency by digitalizing 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, reports.
- Benefits: Time saving, better service.

3. Functional Requirements

- Register Library members.
- Maintain digital catalog.
- Borrow & return tracking
- Fine calculation
- Reports.

4. Interface Requirements.

- Barcode / RFID scanner support.
- Online catalog access.

5. Performance Requirements

- Catalog search < 2 sec

5. Design constraints

- Multi branch library support.

7. Non-functional attributes.

- Security : User authentication.
- Reliability : Data back up support.
- Usability : Simple UI.

8. Preliminary Schedule and Budget.

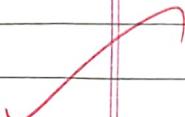
- Development : 4-6 months.
- Cost : Low to medium.

Problem Stmt:

Traditional library operations such as cataloging, lending, returns and fine calculation are often handled manually.

This results in inefficiency, errors in record keeping, difficulty in tracking borrowed items and delays in providing services to users.

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



Stock Management System.

A stock management system is needed to automate product inventory, supplier mgmt, 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 mgmt 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 mgmt.

3. Functional requirements

- Product database
- Stock in & stock out
- supplier records

4. Interface requirements

- Pos system integration.
- Supplier Database API

5. Performance Requirements

- Handle 100k+ product records

6. Design constraints (what's required)

- Work across multiple warehouses

7. Non-functional attributes

- Security : Role based access
- Reliability : Real time sync.

8. Preliminary Schedule & Budget

- Development : 6 months
- Cost : medium

Passport Authentication System.

The traditional process of applying, verifying and issuing passports involve excessive paperwork, long queues, human errors, delays. Citizens often face difficulties in tracking their application status and completing verification procedures. A passport Automation System (PAS) is required to digitize passport applications, enable online submissions of documents, integrate with police DB for verification, schedule biometric appointment and automate passport issuance and tracking, thus improving efficiency, transparency and user convenience.

1. Introduction.

1.1 Purpose

Defines requirements for PAS.

1.2 Scope

Digitalises Passport applications, verification and issuance.

1.3 Overview.

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

2. General Description

• Objective : Automate passport processing

• Users : Citizens, Govt. staff.

• Features : Online applications, status tracking

• Benefits : Faster, transparent, efficient.

3. Ferial Requirements.

- Online application & registration.
- Document upload & verification.
- Appointment scheduling.
- Police verification interface.
- Passport issuance & tracking.

4. Interface Requirements.

- National ID & police DB integration.
- Web portal & mobile app.

5. Performance Requirements.

- Handle 50k+ applications/day.

6. Design constraints

- Govt. security compliance

7. Non ferial attributes

- Security : End-to-End encryption.
- Availability : 24/7
- Scalability : Nationwide usage.

8. Preliminary Schedule & Budget

- Development : 12 months
- Cost : High (govt. level system).