

# SRS for Hotel management System

- (1) Introduction - purpose of this document.
- It is to outline the requirements and specifications for the development of a hotel management system. It will provide objectives, scope and deliverables.
- Scope of this document.
- This document defines the overall working and main objectives of the Hotel Management system. It includes a description of the development cost & time req for the project.
- Overview:
- The hotel management system is a software solution designed to streamline hotel operation - including reservation management, guest check-in / check-out, room assignment, billing & reporting.
- (2) General Description - The hotel Management system will cater to the needs of hotel staff and management, providing features such as room booking, guest profiles and financial reporting. It will be accessible to users with varying levels of technical expertise.
- (3) Functional requirements -
- Reservation management - allows users to reserve room online or through desk and generate reservation confirm & send notification to guests.
  - Room management - assign rooms to guests based on availability and preferences and track room status in real-time.
  - Guest management - Maintain guest profiles with personal info, preferences & booking history & facilitates guest check-in & check-out processes.
  - Billing and invoicing - Generate accurate bills for room charges, additional services & taxes & accepting various payment methods & generate invoices.

#### (4) Interface requirement -

- User interface -

intuitive and user-friendly interface for hotel staff and guests & accessible via web browsers, mobile devices & desktop applications.

- Integration interface -

integration with payment gateways for secure transactions & integration with third-party booking platforms for seamless reservation management.

#### (5) Performance requirement -

- Response time - The system should respond to user actions within 2 seconds.

- Scalability - Handle a minimum of 100+ concurrent users during peak hours.

- Data integrity - ensures data consistency and accuracy across all modules.

#### (6) Design constraints -

Hardware limitation - The system should be compatible with standard computer hardware, printers, POS terminals, and other peripherals.

Software dependencies - Utilize a relational database management system for data storage.

#### (7) Non-functional attributes -

- Security - Implement robust authentication and authorization mechanisms to protect sensitive data.

- Reliability - Ensure high availability and fault tolerance to minimize system downtime.

- Usability - Support multiple platforms and devices for user accessibility.

- Usability - The system shall have a user-friendly interface with clear navigation.

#### (8) Preliminary schedule and Budget -

The development of the Hotel management system is estimated to take 6 months with a budget of \$ 100,000.

This includes project planning, development, testing, and deployment phases.

# SRS for credit card processing system (CCPS)

## (1) Introduction

- Purpose - To outline the requirement and specifications for the development of a credit card processing system.
- Scope - It defines the overall working and main objectives of CCPS. It includes cost & time required for the project.
- Overview - The CCPS is a secure software solution for transaction, authorization, clearing, settlement & reporting.

## (2) General description -

The system will serve merchants and provides features such as card validation, authorization routing, batch settlement, fraud checks & financial reporting.

## (3) Functional requirements -

- Authorization & validation - validate card number expiring and CVV.
- Clearing & settlement - capture authorized transaction and batch them for settlement.
- Refunds & chargebacks - initiate partial / full refunds.
- Fraud management - apply rule-based and velocity checks, trigger alerts & hold / deny transactions.
- Reporting & statements - provide merchant statements, fees & summaries

## (4) Interface requirement -

- User interface - intuitive and user-friendly web-console for merchants and operations.
- Integration interface - integration with payment networks for Sun transactions.

## (5) Performance requirements -

- Response time - the system should respond to authorization requests within 2 seconds.
- Scalability - handle min of 1000 concurrent transactions during peak hours.

- (data) integrity - ensures consistency & accuracy.

#### (6) design constraints -

- Hardware - compatible with standard ~~standard~~ hardware and HSM.
- Software dependency - utilize an RDBMS.

#### (7) Non-functional requirement -

- Security - strong authentication, authorization and encryption of cardholder data.
- Reliability - high availability & fault tolerance.
- Scalability - designed for horizontal scaling.
- Portability - support multiple platforms & devices.
- Usability - clear navigation.

#### (8) Preliminary Schedules & Budget -

approx. 6 months, \$120,000 includes planning, design, testing, certification and deployment.

# SRS from library Management System

## (1) Introduction -

- purpose - to outline the requirements and specifications for the development of a Library Management system scope & deliverables.
- scope - defines the overall working and main objectives of the LMS including cost & time estimate.
- overview - the LMS streamlines cataloging, member management, circulation, fines & reporting.

## (2) General description -

The system will support librarians, members, and admins with features such as catalog search, reservations, holds, overdue processing & analytics. It will be usable by non-technical staff.

## (3) Functional requirements -

- Catalog & search - Maintain bibliographic records, availability status.
- Membership management - register members and manage profiles, which can be categorized.
- Circulation - Issue / return & renew items with due date calculation.
- Fines & payment - Calculate fees for overdues & record payments.

## (4) Interface requirements

- (1) User interface - interactive web application for librarians and member portal for self service.
- (2) Integration interface - support import / export via MARC / CSV.

## (5) Performance requirements

- Response time - typical search and circulation actions should respond within 2 seconds.
- Scalability - support at least 1000 concurrent users during peak usage.
- Integrity - enforce integrity for items, members & transactions.

- (6) Design Constraints -
- Hardware limitations - work with standard PCs barcode, printers & scanner.
  - Software dependencies - RDBMS for data storage, web stack.

(7) Non-functional attributes

- Security - role based access control.
- Reliability - Backup / restore and minimal downtime during maintenance.
- Portability - Multi-platform browser support.
- Usability - Clear navigation.
- Reusability - Modularization of circulation, catalog.

(8) Preliminary schedule and budget -

Estimated duration 4 month, estimated duration 4 months, estimated budget: \$ 70000

# SRS for Stock Maintenance System (SMS)

## (1) Introduction

- purpose - to outline requirements and specifications for a SMS detailing objective, scope & deliverables.
- scope - defines the overall working and main objective of inventory control.
- overview - The SMS manages stock levels, item masters, suppliers, good receipts & consumption / sales tracking.

## (2) General description -

The system supports stockkeepers, purchasing staff and managers with features such as reorder alerts, batch / lot tracking, valuations reports & supplier performance.

## (3) Functional Requirements

- item & warehouse management - Maintain item masters, categories, units and location, track on reserved & available quantities.
- Procurement - Create purchase requisitions & purchase orders, records goods received with suppliers, batch expiry and cost.
- Stock movements - Issue / transfer / adjust stock, records reasons & approvals.
- Alerts & Replenishment - re-order points calculation and issue stock alerts.
- Reporting - Stocks valuation, aging & consumption alerts.

## (4) Interface Requirements -

- User interface - interactive dashboards for stock states & alerts. & accessible via browser/mobile devices.
- Integration Interfaces - Integration with barcode scanners / POS systems.

- (5) Performance requirements -
- response time - stock lookup and transaction posting  
Should respond within 2 seconds.
  - Scalability - Support atleast 1000 concurrent users
  - Data integrity - Enforce transaction integrity

(6) Design constraints -

- Hardware limitations - Compatibility with standard desktops, label printers, barcode devices
- Software dependencies - RDBMS

(7) Non-functional attributes -

- Security - Authentication / authorization & least privilege access to stock area.
- Usability - High availability.
- Scalability - scale across multiple warehouse/ branches.
- portability - Multi-platform browsers support.
- Usability - Role specific views.
- Reusability - Modular components for items, processes and reporting.

(8) Preliminary schedule & budget -

estimated duration - 5 months, estimated budget  
\$ 85,000

# SRS for Passport Automation System (PAS)

## (1) Introduction -

Purpose - To outline the requirements and specification for a passport automation system.

- Scope - defines overall working and main objectives for end-to-end passport app, verification & status tracking including costs & schedule.
- Overview : The PAS is a secure sol'n enabling online applications, document storage, appointment scheduling, biometric capture.

## (2) General description -

The system will be used by applicants, verification officer & administrators. Supports role-based processing, document verification for payments & dispatch tracking.

## (3) Functional requirements :

- (1) applicant services - user registration, profile management & application form submission. Doc upload with validation.
- (2) Verification & processing - officer work queries for document review and application sort, record police verification status and remarks.
- (3) Biometric & photo Handling - Captures & store biomarker reference IDS, Quality checks & secure transfer to control systems.
- (4) Notification & Tracking - Real-time status updates via email / SMS / portal.
- (5) Reports - daily application received, processed, pending & CLA completion.

## (4) Interface requirements

- User interface → User-friendly portals for efficient & back office console for officers.
- integration interface → integration with payment gateways for secure transactions.

## (5) Performance requirements

- response time - portal actions should respond within 2 seconds
- availability - Handle a min. of 1000 concurrent users
- Data integrity - Ensure consistency across application verification & issuance modules.

## (6) Design constraints

- Hardware limitation - compatible with standard office hardware & biometric capture.
- Software Dependencies - RDBMS

## (7) Non-functional attributes

- Security → Robust authentication / authorization
- Reliability → High availability & disaster recovery to minimize downtime.
- Scalability - architecture to accommodate growing application volumes & new centers.
- Portability → Multi-platform browsers support for broad accessibility.
- Usability - clear navigation progress indication & form validation.

## (8) Preliminary schedule & budget

estimated duration 6 months, estimated budget

\$ 110,000