Page No.	Teacher Sign / Remarks

PAGE EDGE

DATE : 22/8/25

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 a clear understanding of the project 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 operations, 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 - allow users to reserve room online or through desk, and generate reservation confirm^n and send notificat^n 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 1000 concurrent users during peak hours.

• Data integrity - ensures data consistency and accuracy accross all modules.

(6). Design constraints -

Hardware limitation - The system should be compatible with computers, printers, POS terminals.

Software dependencies - utilize a relational database management system for data storage

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PAGE EDGE
DATE: / /

(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
- scalability - Design the system to accomodate future growth and expansion
- Portability - 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 requirements and specifications for the development of a credit card processing system. It ~~ur~~
- 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 expiry 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.

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(4) interface requirements -
- User interface - intuitive and user-friendly web-console for merchants and operations
- integration interfaces - integration with payment networks for secure 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 secure hardware (and HSM
- software dependency - Utilize an RDBMS.

(7) Non-functional requirements -
- 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 schedule & Budget -
approx 6 months, $120,000, includes planning development testing, certification and deployment.

SRS for library Management system

(1) Introduction -

- Purpose- to outline the requirements and specifications for the development of a library Management system scope and deliverables

- Scope - defines the overall working and main objectives of the LMS including cost & time estimates

- 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 requirement -

- Catalog & search - Maintain bibliographic records, availability status.
- Membership management - register members and manage profiles, validity and categories.
- Circulation - Issue/ return & renew items with due date calculation.
- Fines & payment - Calculate fine for overdue & record payments.

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PAGE EDGE
DATE: 22/8/25

(4). Interface requirements.

(1) User interface - Interractive web UI for librarians and member portal for self service.

(2). Integration Interfaces. 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 campus hours.
- Integrity - Enforce integrity for items, members & transactions.

(6). Design Constraints.

- Hardware limitations - work with standard PCs, barcode, printers & scanner.
- Software Dependences - 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 months, estimated budget : $ 70,000

SRS for stock Maintenance system (SMS)

(1) Introduction-

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

(2) General description - The system supports storekeepers, purchasing staff and managers with features such as reorder alerts, batch/ lot tracking, valuation reports & supplier performance.

(3) Functional Requirements.

- Item & warehouse management - maintain item master, categories, units and locations, Track on reserved & available quantities
- Procurement - create purchase requisitions & purchase orders, record goods recieptes with supplier, batch expiry and cost.
- Stock movements - Issue / transfer / adjust stock, record reasons & approvals.
- Alerts & Replenishment - reorder point calculation and low stock alerts.
- Reporting - stock valuation, ageing & consumption alerts.

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PAGE EDGE

DATE : 22/8/25

(4) interface requirements -

- User interface - interactive dashboards for stock status & alerts. & accessible via browsers 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 - Supports at least 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.
- reliability - High availability.
- Scalability - scale across multiple warehouse / branches
- portability - Multi-platform browser support.
- Usability - Role-specific views
- Reusability - Modular components for items, procurements 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, issuance & status tracking including costs & schedule.
- overview - The PAS is a secure solution enabling online application, document uploads, appointment scheduling; biometric capture.

(2). General description - The system will be used by applicants, verification officer & administrators. Supports role-based processing, document verification, fee payments & dispatch tracking.

(3). Functional requirements.

(1) applicant services - user registration, profile management & applicatn form submission, Doc upload with validation.

(2). Verification & processing - officer work queues for document review and application scrutiny; record police verification status and remarks.

(3) Biometric & photo Handling - captures & store biometric reference IDs., Quality checks & secure transfer to central systems.

(4) Notifications & Tracking - Real-time status updates via email/ SMS/ portal.

(5) Reports - daily applications received processed, pending & SLA compliance.

(4) Interface requirem

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(4) Interface requirements.
- User Interface :- User-friendly portals for applicants & back office console for officers.
- Integration Interfaces - integration with payment gateways for secure transactions.

(5) Performance requirements.
- response time - portal actions should respond within 2 seconds.
- Scalability - Handle a min of 1000 concurrent users
- Data integrity - Ensure consistency across application, verificat^n & issuance modules.

(6) Design constraints.
- Hardware limitation - compatible with standard office hardware & biometric ~~upd~~ capture.
- Software Dependencies - RDBMS.

(7) Non-functional attributes
- security - Robust authentication / authorization.
- Reliability - High availability & disaster recovery to minimize downtime.
- Scalability - architecture to accomodate growing applicant volumes & new centers.
- Portability - Multiplaform browsers support for broad accessibility.
- usability - Clear navigation, progress indicators & form validations.

(8) Preliminary schedule & budget. Estimated duration 6 months, estimated budget: $ 110,000