

Software requirement specification for hotel management system

1. introduction:-

1.1. purpose of the Document

The purpose of the Document is to provide a detailed description of the functional and non-functional requirements for the development of a Hotel Management System. it serves as a guide for the development team

1.2 scope of the Document

This document outlines the complete set of requirements for the hotel management System. The system is designed to streamline the management of the hotel operation, including room bookings, customer check-ins/out, billing and report generation. it will take allow for easy management.

1.3 overview

The HMS will automate the key hotel operations, including room reservation, check-ins and check-outs, billing and payment processing, and room inventory management

2. General Description

The HSM will facilitate tasks for hotel staff and guests. Key user roles include front desk personnel, managers, and guests. Features including room booking, billing, reporting and inventory management. The system's importance lies in reducing manual tasks and errors, enabling better decision-making.

3. Functional requirements

- * User Registration :- User can create account and login securely.
- * Room Reservation :- User can search for and book rooms based on availability.
- * Check-in/Check-out :- Automated processes for guest check-in and check-out.
- * Billing System :- Generate invoice based on services utilized.
- * Reporting :- Generate reports on occupancy, revenue, and customer feedback.

4. Interface requirements

- * User interface : A web-based interface for guests and staff.
- * API Integration : Interface for external payment systems and third-party services.

Data Exchange :- Utilizes JSON for data interchange b/w modules.

5. performance Requirements

+ Response time :- System should respond within 2 seconds for most operations.

+ Concurrent Users :- Support up to 100 concurrent users without performance degradation.

+ Data Handling :- Manage up to 10,000 records efficiently.

6. Design Constraints

+ Technology stack :- Must use specified frameworks

+ Database :- Use of relational database.

+ Regulatory compliance :- Adhere to data protection regulation

7. non-functional attributes

+ Security :- Ensure user data protection with encryption.

+ Scalability :- system should support future expansion

+ Reliability :- 99.9% up time guarantee

+ Usability :- intuitive user interface for ease of use

8. preliminary Schedule and budget

- + Estimated Duration :- 6 months for development and testing
- projected cost :- \$150,000 covering development, testing and deployment

Spiking

requirements :- \$ 30,000

Design & Development :- \$ 50,000

Design

Verification & Testing :- \$ 40,000

Evaluating :- \$ 30,000

SRS for credit card processing system

1. Introduction

1.1. purpose of this document

This document outlines the credit card processing System, it serves as a guideline for developers and stakeholders to understand the system's functionality, compliance needs, and performance expectations.

1.2 scope of this Document

The CCPS will manage secure credit card transaction, facilitating payments for various services. It will enhance transaction efficiency, reduce fraud, and comply with industry standards. Development costs and timelines are also detailed.

1.3 overview

The credit card processing System is designed to handle electronic payments securely and efficiently. it integrates with various payment gateways and ensures compliance with PCI DSS standards.

2. General Description

The system will cater to merchants and customers. key functionalities include transaction processing, fraud detection, and reporting. its significance lies in providing a secure, reliable means of processing credit card transactions.

3. Functional Requirements

- Transaction processing:- ability to authorize, capture and refund transactions
 - Fraud Detection:- Analyze transaction for suspicious activity using algorithms
 - User Authentication:- Secure login for merchant and customers
 - Reporting :- Generate reports on transaction history and analytics
- ### 4. Interface Requirements
- API integration:- APIs for communication with payment gateways.

• UI interface:- Dashboard for merchant to monitor transactions

• Data Format:- Use XML or JSON for data exchange

5. Performance Requirements

• Transaction speed :- Transactions should be processed within 3 seconds.

• Load Handling :- Support up to 500 transactions per second.

• Error Rate :- Maximum error rate of 0.01%

6. Design constraints

- * Compliance standards :- Must comply with PCI DSS regulations.
 - * Technology stack:- Use specified programming languages and libraries.
 - * Database :- Employ secure database systems for transaction data.
- ### 7. Non-Functional Attributes
- * Security :- Implement encryption for all transaction data.
 - * Reliability :- Achieve 99.99% system availability.
 - * Scalability :- System must support increasing transaction volumes.
 - * Maintainability :- code must be modular for easy updates.

8. Preliminary schedule and budget

- * Estimated Duration :- 12 months for development, deployment and testing.
- * Project costs :- \$100,000 covering all development phases.

Phase	Budget (\$)
Requirements	20,000
Design dev	30,000
Deployment	50,000

Library management system

1. Introduction:-

1.1:- purpose of the document:-

to provide detailed description of functional and non functional requirement of Library management system. it serves as a guide for development team

1.2 scope of the requirements document:-

The document specifies outlines the set of requirements for Library management system

The design is designed for operations including Login of the student/Library member , search books, books borrowing, books returning, calculating fines etc

1.3 Overview:-

The Library management system provide complete process of a book from borrow a book to returning the book including some user friendly options

2. General description:-

The Library management system will facilitate tasks for students, Library members, manager with features including borrowing the books, returning the book, renewal of the book, invoice of the fine, report and the inventory management etc

3. Functional requirements

- borrowing and returning the books
- catalog search and for user
- overdue fine calculation and notification

4. Interface requirement

- Real-time stack level
- user-friendly interface for searching and managing book records
- Administrative dashboard for managing users and generating reports
- Mobile-responsive design for access on various devices

5. Performance requirements

- The system should return search result in under 2 seconds
- Support at least 1000 simultaneous user without performance degradation
- Generate reports within 5 seconds

6. Design constraints

- The system must utilize a relational database for data storage.
- user interface must be accessible on both desktop and mobile devices.
- integration with library database

7. non functional attributes

- Ensuring the security and user privacy
- high availability with 99.9% uptime
- Scalability to accommodate increased user load and data

8. preliminary schedule and budget

→ schedule : estimated completion in 6 months

→ budget : \$ 50,000

work broken up into requirement : \$ 10,000

design and development : \$ 15,000

refinement : \$ 15,000

verification & testing

evaluation : \$ 10,000

total

total cost : \$ 50,000

SRS for Stock Maintenance System

1. Introduction

1.1 purpose of this document outlines the requirements for the stock Maintenance System, facilitating effective inventory management and tracking

1.2 Scope of this Document

it details functionalities, user needs, and the overall value to stakeholders, including development costs and timelines

1.3 Overview

The stock Maintenance System will manage inventory levels, automate reordering processes, and provide analytics for inventory usage

2. General Description

- User objectives : Maintain optimal stock levels and ensure accurate inventory tracking

- User characteristics : inventory manager, warehouse staff.

- Features and benefits :

- + real time inventory tracking

- + Automated reorder alerts

- + Detailed reporting on stock usage

- + and trends

3. Functional requirements

- user can add, update, or remove stock item
- The system tracks inventory levels in real time
- Alerts are generated for low stock item

4. interface requirement

- user interface for managing stock items and levels
- dashboard displaying stock levels, alerts, and reports,
- integration with ERP system for seamless data flow

5. performance requirements

- stock update should reflect changes in under 1 minute
- The system must support up to 500 concurrent users
- Generate inventory reports within 5 seconds

6. Design constraints

- Must integrate with existing ERP systems for data synchronization
- Use of cloud-based hosting solutions for availability

→ compliance with data security regulations

7. non-functional Attributes

- high reliability with minimal downtime
- data integrity with regular backups
- scalability to handle increasing inventory volumes

8. preliminary schedule and budget

Schedule :- Estimated completion in 4 months.

Budget :- \$ 40,000

Requirement :- \$ 8000

Design and development :- \$ 10,000

Verification & testing :- \$ 10,000

Evaluation :- \$ 12,000

Evaluation

SRM for passport Automation System

1. Introduction

1.1. purpose

→ this document outlines the requirements for the passport Automation system to streamline the passport application and processing workflow.

1.2. scope

→ it details the functionality, user needs, and the value it brings to applicants and officials, including costs and timelines.

1.3 overview

The passport Automation System will facilitate online application, track application status, and improve the efficiency of document verification process.

2. General Description

→ user objectives: simplify the passport application process and enhance processing efficiency.

→ user characteristics: applicants, govt officials.

→ features and benefits:

3. Functional requirements

- User can submit applications online with required document
- The system verifies uploaded document automatically
- Application can track the status of their applications
- Reports can be generated for application processing times and bottlenecks

4. Interface requirement

- user-friendly online application form
- Administrate interface for processing applications and generating reports
- Notification system for application updates and generating report application updates

5. Performance requirements

- Application processing time should not exceed 10 minutes
- System must handle up to 500 concurrent users
- Status updates should be processed in real-time

6. Design constraints

- Compliance with government security and data protection
- Compatiblity with existing government database

→ work secure encryption for data transmission

7. non-functional requirement

- high reliability and uptime to ensure access
- scalability to accommodate varying application volumes
- security measures to protect sensitive personal data

8. preliminary schedule and budget

Schedule: Estimated completion in 8 months

Budget: \$70,000

Requirement: \$ 20,000

Design development: \$ 25,000

Verification testing: \$ 10,000

Evaluation of sys: \$ 25,000

8/10

7/10