

1 Hotel Management system.

problem statement:-

Hotels struggle with manual booking, check in/out, and billing processes, causing delays and errors. An automated system is needed to improve efficiency and guest satisfaction.

SPS document purpose.

1) Introduction

1.1 purpose: To define requirements for a Hotel management System that automates booking, guest management, and billing.

1.2 scope: The system will help staff manage rooms, reservations, guest check in/out, and billing.

1.3 overview: This document outlines the features and design of the hotel management system.

2) General description

The system will be used by hotel staff to simplify operations, track rooms, manage bookings, and generate reports.

3) Functional requirements

- * User login with roles.
- * Manage rooms & availability
- * Create and cancel bookings
- * Guest check-in & check-out
- * Billing & payment processing
- * Generate reports

4) Interface requirements

- * Web interface for users
- * Payment gateway integration
- * Email (SMS) notifications

5) Performance requirements

System must process bookings in under 2 seconds and handle multiple concurrent users

6) Design constraints

Compliance with PCI DSS for credit card data; System must work on Windows and web platforms

7) Non-functional attributes

Reliability, security, maintainability

8) Preliminary Schedule & budget:

Estimated 6 months development;
budget \$50,000

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✓
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2. Credit Card processing

problem statement

Manual credit card transaction handling causes delays & errors. Automated processing is required for accuracy & security.

SPS Document

1) Introduction:

1.1 purpose :- To automate authorization, capture, & settlement of credit transactions.

1.2 Scope:- Manages transaction validation, fraud detection, & secure communication with banks

1.3 Overview :- provides a reliable system for fast & secure credit card payments

2) General description :-

users include merchants & banks;
System supports multiple card types & payment networks.

3) Functional requirements

- * Transaction authorization
- * Fraud detection

4) Interface Requirements: ~~both~~ ~~APIs~~
APIs for merchants; secure connection
to banking networks.

5) Performance requirements:
Transactions processed within 3 seconds.

6) Design Constraints:
Must comply with PCI DSS standards.
Secure data storage & transmission.

7) Non functional attributes:
* Security
* Reliability
* Scalability to handle transaction spikes.

8) Preliminary Schedule & Budget:
8 months; budget \$1000,000.

R&D

3) Library Management system.

problem statement:

Manual tracking of books leads to mismanagement, lost books, & inefficient lending processes.

SRS document

1) Introduction:

1.1 purpose: To automate book cataloging, lending, & return processes.

1.2 Scope: Supports member registration, book search, lending & fine calculation.

1.3 Overview: Simplifies library operations & enhances user access.

2) General description:

users include librarians & members;
features include inventory management & notifications

3) Functional requirements:

- * Catalog management
- * Lending/return tracking

4) Interface requirements

- * Web based interface
- * Barcode scanner integration

- 5) performance requirements:
Search responses under 2 seconds.
- 6) Design constraints:
Support for multiple device types;
sparse member data handling
- 7) Non-Functionality attributes:
* Usability
* Reliability
* Data integrity

8) preliminary schedule & budget

~~10/88~~

5 months; budget: \$ 30,000

4) Stock maintenance system

problem statement

Inefficient manual stock tracking causes inventory errors, loss, & delays.

SRS document

1 Introduction

1.1 purpose: To automate inventory tracking & stock level management

1.2 Scope: Real time stock updates, alerts on low inventory & reporting

1.3 Overview: Enables efficient stock control & reduce losses

2. General description

users include warehouse managers & sales teams; features include item tracking & order alerts.

3 Functional requirements

* Stock input recording, alerts

* Report generation

4. Interface Requirements

Mobile & desktop interfaces; barcode scanner support

- 5) performance Requirements:
Real time updates
- 6) Design constraints
Must integrate with existing ERP:

Off

passport automation system

problem statement

Manual passport application and verification is time-consuming, error-prone, and requires multiple visits. A digital system is needed to automate the process for faster, secure, and transparent services.

srs document

1. Introduction

- * purpose : To automate passport application, verification, & issuance.
- * scope : Online application, fee payment, appointment booking, and tracking.

2. general description

web-based system for applicants, officers, and admins to manage passport service.

3. Functional Requirements

Apply online, upload documents, book appointments, track status.

4. Interface requirements:

web portal, payment gateway, police verification system.

5. Performance requirements:

99.9% uptime, support 10,000+ concurrent users.

6. Design constraints:

Must follow government security policies and require internet access.

7. Non-Functional Attributes

Secure, reliable, scalable, multilingual support.

8. Preliminary Schedule & Budget

Development within 4-6 months with moderate budget for software, servers, & maintenance.

Cost