

# Hotel Management System

## Problem Statement :-

Manual Hotel operations lead to efficiency and errors. HMS automates tasks for accuracy and service.

## Introduction

The purpose defines requirements for HMS to guide development and ensure stakeholder alignment.

The main objective of the HMS SRS is to provide a base for the project. It gives comprehensive view of how the system is supposed to work and what is to be expected by end users.

Scope:- The world is changing so the HMS making it very promising career option.

Overview:- This project is intended for Booking of rooms through an online platform. Manager will be able to view financial reports and room information. Customers can check availability.

## Functional requirements:

### Reservation management

- Allow users to make room reservation online through front desk.
- Generate reservation confirmation and send notification to guests.

### Guest management

- Maintain guest profiles with personal information and booking history.

### Interface requirements.

#### User interface

- Intuitive and user friendly interface for hotel staff and guests.

#### Integration interface.

- Integration with payment gateways



## Credit card processing Management

### Problem statement:-

Credit card processing through offline to the merchant collecting order info, storing database, and entering it. using then is not very service.

### Introduction

The Software requirement specification is designed to document and describe the agreement b/w customer and developer regarding specification of software product requested. This provides a clear idea.

### Purpose:-

The purpose of this document is to outline requirements and specifications for developing a credit card processing. It defines the goals and intended audience of the project and ensure all stakeholders have understanding.

Scope:- Defines objective and working of Credit card transaction processing system concluding authorization clearing

### or General description.

This system involves signing up for a free business be configured and then you can accept payment from visa, master card.

It consists of admin, customer Admin responsible for managing credit process including credit authorization.

### Functional requirements

Process credit card authorization request in real-time. This function should be smooth and meet user needs.

Encrypt and transmit data to appropriate payment gateway

- Settlement Management
- Fraud detection

### Interface requirements

User interface :- An initiative web-based dashboard for merchant, view transaction

### Performance requirement

Response time :- The system must process and authorize request within 15 sec.

Scalability :- The system must ensure that status of book.

Data integrity :-

### Design constraints

Hardware limitation :- The system should be compatible with standard lib hardware.

### Software dependencies

Utilize a relational database like MySQL or PostgreSQL for data storage.

### Non-functional Attributes

• Security :- login for librarian to prevent unauthorized access.

• Reliability :- The system should be highly

• Usability :- The interface should be easy to understand

• Compatibility :- Should be compatible for all users.

### Preliminary Schedule Budget

The development of the LMS is estimated to take 4 months requirement budget 50,000.



## Stock Maintainer System.

### Introduction

#### 1.1 Purpose

This document specifies the functional and non-functional requirements for Stock Maintainer.

#### 1.2 Scope.

The system will allow users to add, update and delete alerts for low stock of products.

#### 1.3 Intended Users.

- Inventory manager
- Stock keeper
- Admin staff

## 2 Functional Requirements

1. User Authentication
2. Stock Maintainer.
3. Stock Movement.

#### 4. Search and Filter

- Search stock by ID, name
- Filter by low stock

#### 5. Reports

- Generate daily inventory reports
- Export report as PDF

#### 6. Notifications:-

- Alert for low stock levels.

### Non functional Requirements

- Usability :- Easy to use interface.
- Performance :- Fast response for operation and reports
- Scalability :- Support for growing inventory
- Backup :- Daily data backup

### System Requirements

- Frontend :- HTML / CSS / JavaScript
- Backend :- PHP appropriate backend language
- Database :- MySQL / PostgreSQL

- Hosting: Local server or cloud based hosting

### 5 Assumptions and Constraints

- The system will be used only by authorized users
- Users must be trained to use the system

### 6 Schedule & Budget

Schedule: 3-4 months

Budget: 3-4 lakhs approx

## Passport Automation System

### Problem Statement

Manual passport application and verification processes are time consuming and error prone. An automated system is needed to simplify application tracking & approval.

### Introduction

#### 1.1 Purpose

To develop a passport automation system that enables online application verification and issuance of passport.

#### 1.2 Scope

- Online application & document submission
- Automated verification & police clearance
- Status tracking and notification
- Appointment scheduling

#### 1.3 Overview

The system reduces paper work, speed up processing & provide transparency for applicants.



### 2) General Description

The system is a web based application connecting applicants passport office and police department for efficient passport processing.

### 3) User classes and characteristics

- Applicant: Applies, uploads document and track status.
- Police department: Conducts background verification.
- Admin: manages system operations.

### 4) Interface Requirement

- Web portal & mobile app
- Secure login for different user roles
- User-friendly dashboard for applicant

### 5) Performance Requirements

- Handle threshold of application daily
- Response time < 3 sec per request
- 24/7 availability

### 6) Design Constraints

- Must comply with government IT & security standards.
- Encrypted data transfer.
- Integration with national ID & police database.

### 7) Non-functional Requirements

- Security: Strong encryption, OTP verification.
- Reliability: Regular data backup & recovery system.
- Usability: Simple interface for all age groups.
- Scalability: Handle increasing applications each year.

### 8) Schedule & Budget

- ~~6-8 months~~ 6-8 months for complete development
- 15-20 lakhs depending on scale & security measures.

## Library Management System

Problem Statement :- Manual library operations such as issuing & backing books are inefficient.  
An automated system is required.

### Introduction

- 1) Purpose :- To build the LMS that streamline book issuing & return & inventory tracking.
- 2) Scope :-
  - Book search & catalog management.
  - Issuing & retrieving books.
  - Fine calculation.

### 1.3 Overview

The system ensure quick book access reduces errors & maintain accurate library record.

### 2) General description

The system is a web-based app that automates library process, manages books and provides real time availability of resources.

### 3) User classes & characteristics

- Admin: Manage books, user, system settings.
- Librarian: Handle book transaction & overview.
- Member (Student / Faculty): Search, borrow & return books.

### 4) Functional Requirements

- Add, update, delete book record.
- Issue & return books.
- Search book by title.
- Calculate fines for late return.

### 5) Interface Requirement

- Web & desktop interface.
- Login system with different role.
- Search & filter option for books.



## 6 Performance Requirement

- Support 200 + Simultaneous User
- Book search result within 2 sec
- Database can store thousands of book entries

## 7) Design Constraints

- Runs on standard browser / computer
- Database: MySQL / Oracle
- Language: Java / Python

## 8) Non-functional Requirement

- Security: Role-based access & data protection
- Usability: Easy to use interface for all users.
- Reliability: System back-up & recovery support
- Scalability: Ability to manage multiple branches.

## 9) Schedule & Budget

- 2-3 months development time
- 1-2 lakhs depending on feature.