

HOTEL Management:

→ Problem Statement:

In hotel management, the main aim is to develop software that effectively manages various aspects of a hotel's operations, such as room reservation, checking, cleaning, room service, housekeeping, billing & reports to improve guest experience & streamline hotel operations.

→ SRS

1. Introduction:

1.1 To clearly document & define functional & non-functional requirements by ensuring effective hotel management system can serve as a road map for development team to improve the hotel management which will then enhance the guest experience.

1.2) To sum & ensure that hotel function are smooth or poor. Development time depends on how complex the management sum is & the size of the system.

1.3) Hotel Management System (SRS), contains general description, functional requirements, non-functional requirement, interface & performance, real-time data & constraints.

2) General Description:

Help hotel employees efficiently manage hotel operations & provide customer support. Features are: Room reservations, checking in (or) out, Billing (or) Accounting, management of the inventory. Benefits are increasing the efficient & accurate, better reviews and improved guest experience user communication in case of any issues with staff, guests, or problems we implement & maintain the system.

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3. Functional Requirements:

- making sure that all the rooms can be booked easily, making sure that manager is also available.
- checking in, checking out with guest for payment.
- Housekeeping & room management.
- Scans.

a) Interoperability:

- making it more easy to access by integrating with other booking platform so that customer can access pricing information & room information.
- make accessible & integrate with payment gateway to make sure that the payment process is efficient & secure.

b) Performance Requirements:

- Response time: user requests have to be responded in a timely manner.
- Amount of Memory: depends on the size of the hotel data access. Exact memory requirement is determined on needs & requirements.
- Scalability: should be able to handle more traffic during peak period without showing any error.
- Scans: should be capable to provide information.

b)

Design constraints:

- Hardware limitations: System has to neatly interpret within the already existing hotel information.
- Software limitation: constraint for the amount of data that can be processed or stored, the speed of the data.
- Time constraint: Cannot take multiple years to develop & implement

c)

Non-functional Attributes:

- Portability: Has to work on all different platforms like tablet, mobile phone, computer.
- Scalability: Capacity: Needs to handle growth & increased demand, ensuring that growth is not limited.
- Security: ensure that data does not get leaked

d)

Preliminary: Schedule & budget

- planning: 15 days
- Development: 6 months 15 days
- Testing: 2 months
- Deployment: 3 weeks

2) CREDIT CARD

Problem Statement:

Ensure secure handling of credit card information, prevent fraud, ensure operation; provide user friendly interface that is easy to understand should also be compatible with different devices.

I) Introduction:

1.1) Purpose of this document:-

Outline the necessary requirements & specifications of developing a credit card processing system.

1.2) Scope:

Overall working & the objective/ tasks development cost & time, ensure system is secure, reliable & user friendly.

1.3) Overview:

Describe main features, requirement, team. Eg serves as a supervisor all team, ensure that all deadlines & objectives are met.

2) General Description:

User community for the system is the business customer, merchants who use their Credit Card to make purchase. benefit are that there is more security & efficient in handling credit cards.

3) Functional Requirements:

- Provide customer support for any problem.
- Verify customer card information.
- Accept & process credit card info.
- report on the history of trends.

4) Interface requirements:

- Integrate with already existing software that my credit card company is using.
- Provide user friendly interface for home of merchant.
- Interface various payment gateway & credit card networks.

5) Performance Requirements:

- Response time should be less than 5 sec.
- must process very quickly within 2-5 seconds
- handle many requests

6) Design Constraints:

- Designed with scalability in mind, so that upgradations can be possible.
- Increase transaction.
- employ firewalls to ensure that data is secure.
- Type of Payment methods accepted.

7) Non-functional attributes:

- Security system has to ensure that all the credit card information is stored & transmitted to prevent unauthorized access.
- Portability: Has to be designed to run on multiple platforms & deliver to more than one account at a time & everyone.
- Reliability: Should be oriented in a way such that recovery is possible.

8) Preliminary schedule & budget:

- plan: 1 month → Test → 4 month
- Overlap = 3 months ; Deployment → 1 month
- Budget: \$300,000 → 80 hours = \$30,000

3) LIBRARY MANAGEMENT SYSTEM:

Problem Statement:

The current library system uses a manual system to manage the collection of books & other material. The library staff spends a significant amount of time manually checking books in and out.

1) Introduction:

1.1) Purpose of the document:

Outline the requirements & specifications for the development of a LMS.

1.2) Scope: describe the features, functions and capabilities of the library management.

1.3) Overview: The system will be able to allow users to keep track of their issued books and manage the inventory of books.

2)

General Description: To provide an automatic solution for managing the library collection of books & other material.

3)

Function Requirements:

-) allows librarians to manage user, managing their account, modifying user information.
-) inventory management adding, adding & modifying items.
-) allows library to check in & check out
-) would allow library user to check in & check out
-) overcome manual work.

1) Initial requirements:

-) Web based interface - should be access through a web browser
-) barcode scanning interface - to scan the ISBN id of the books
-) email notifications - generate & send email reminders

2) Performance Requirements:

-) the response time for searching functionality should be less than 2 seconds.
-) the system should support 500 or 1000 users.
-) the system should be capable of handling books.

3) Design constraints:

-) Should be compatible with existing software
-) Should be designed with security in mind
-) Should be random both physically & digitally

4) Non-functional attributes

-) Security - protect user data & library records
-) Should be reliable & available 24x7.
-) the system must ensure data accuracy & prevent data loss.

5) Schedule & Budget

Timeline → 6 weeks

Budget: ₹ 75 - 80 lakhs

includes cost of web service, clone server & salaries for engineers.

3) Stock Maintenance System

Problem Statement:

Design UML diagram for Stock Maintenance Problem with given requirements specific.

1)

Introduction

- 1.) The stock maintenance system will allow the employer to record information of the item availability in the store & generate based on the total quantity. See.
- 2.) The new system will have a windows-based desktop interface to allow employees to enter the information of sale, Purchase orders, change employer, prepare & create reports.

2)

General Requirements

The system retains the records of the cost, expiry date, vendor details, discount, quantity. The employee maintains the information of these of the item. He can add the item at the right time & update the database.

3)

Functional Requirements

The process of stock maintenance system is to take the current logs into the particular file to place the Order to purchase product. The stock maintenance system is divided into two steps.

a)

- 1) Inventory item :- Add the item at the right time and update the database with the availability of required item & the price of the item.

- .) They will copy in to the particular file
- .) They will add custom detail to it.
- .) They plan to draw its their program
- .) The vendor copy in & rich the custom detail & draw.

(i) Passport Automation System

1) Problem Statement:

Aim to automate the passport application process, reduce processing time, minimize human errors & enhance security measures.

1) Involvement

1.1) Purpose: The purpose of this document is to outline the requirements & objectives for developing the Passport automation system.

1.2) Scope: The system will be used to automate passport automation application process, reduce processing time & improve efficiency & accuracy.

1.3) Overview: The system will consist of an Online application portal or a biometric identification system & centralized database storing the managed passport application data.

2) General Description

The system will enable users to apply for a passport online, check application status of their application & it shall be accessible to all users who receive a pass.

3) Functional Requirements:

1) Online application portal: the user will also user complete & submit their appn online.

2) Biometric identification: for user verification by identifying of passport applicant.

3) Centralized database for storing & managing passport data.

(d) Interface Requirements:

-) Easy to use online application portal that can be accessed from any device.
-) The system will have a biometric identification system that can be used to capture & verify applicant data.
-) A centralized database that can be access by authorities.
-) Support Scheduling function for user.

(e) Performance Requirements:

-) The system will have a processing time of no more than 24 hours for each user.
-) Adopt a error rate of 99.5% or minimum.
-) Compliance with all govt. regulations for data security & privacy.

(f) Design constraints:

-) Govt-regulations compliance for application Procurement & user data security.
-) System will be able to accommodate 500 users.

(g) Non-functional requirements:

-) Security
-) Reliability
-) Scalability

(h) Project Schedule & Budget:

-) Develop within a period of 20 months
-) Budget - INR 10 crores which includes database maintenance, team development, etc.

Railway Reservation System

Problem Statement: Design one that allows passengers to book & manage their reservations online. Features: Registration, Train Search, Reservations, Seat Selection, Cancellation Report.

Q) Innovation:

1.1 Purpose: To provide understanding the system working of reservation w.r.t the system. Explain the functionalities & provide detailed description of all the features.

1.2 Snap: It includes: login / sign-in, Search (book seat availability), Payment, cancellation, Answer customer support.

1.3. Overview: A software application to answer a streaming problem of ticket booking & give a user friend system to book many reservations.

Q) General Description:

→ Objective of Our: Provide user friendly, platform to book bookings.

→ User Chassis: Passengers, authority to manage their operation etc., exist the engine.

→ Feature: Login, Search & Book, Available, payment, cancellation, ticket history, etc.

→ User Community: Passengers and other with various knowledge & various techniques especially different requirements.

3) Functional Requirements

- User Management
- Search a book
- Seat Allocation
- Payment Gateway
- Cancel
- Cash Receipt

a) Initial Requirements:

- Work with railway operating system from
- Have virtually applied user in term
- keep container in unit & rever

b) Performance Requirements:

- .) response time , system availability & system
- .) reliability & minim error rate,
- .) Request from user Ongt to be handle by system without it strong colour.

c) Design constraint:

application of programming language s/w g
bus restriction , and security restriction are
among the design constraints for the railwa
rever von automation . system should be
scalable & seem & simple to maintain

d) Non-functional attribute:

Scalability , dependability , portability , applicatio
data integrity , scaling are some of
non - functional attribute

e) Preliminary Schedule & Budget:

Based on design restriction & human
need , development , testing & deployment
ex per ten ion no employee , who is in

7) Online Shopping System

Problem Statement

By automating & streamlining, online shopping automation system seen to give customer a smooth platform experience & user should be able to track their cart, price comparison - browsing, product search.

1) Information

1.1) Purpose: goal of this document is to layout the specification for creating an online shopping system, that offer customer a practical, friendly user platform.

1.2) Sope: despite the characteristics & function of the online shopping system. Would provide a time & budget for system.

1.3) Overview

System that lets client browse, choose & buy item from a variety of merchant, custom ready to have a platform as per needs.

2) General Requirements

Users will be able to explore products, choose & create & user management will buy a variety of user including non user.

3) Functional Requirements

must be able to carry out functions of user registration, product listing, searching, & manage shopping cart.

4) Internal Requirements

Online shopping moves have an easy home
Independent & simple for user to buy
& buy item should incorporate system
with other proportion like payment gateway
& social media platform

5) Performance Requirements

- system should be able to process maximum
- and securely manner large traffic, being
platform experienced

6) Design Requirements

System should be able to interpret with
other techniques & systems now in by
external supplies. Security & scalable be
taken into confidentiality

7) Non functional Attribute

System has to be dependable, scalable &
secure & has to be compatible with other
device

8) Preliminary Schedule & Budget

Should be published within a certain time of
months & financially should be planned.

Start
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