

④) Stock maintaining system

Problem Statement: a

Design and implement an SMS for a stock maintenance system.

1. Introduction

1.1 Purpose of Document

This document specifies the requirements for the stock maintenance system, its features, and constraints to help organize, track, manage, and update inventory levels efficiently.

1.2 Scope of Document:

The SMS will ~~automate~~ stock records, real-time updates of quantities, generation of records at least, and reporting of stock usage. It will allow present stocks and ensure transparency in stock controls.

1-3 Overview:

The system will

- ✓ record stock increases and decreases.
- ✓ track variable quantities of each item.
- ✓ generate alerts for low stock levels.
- ✓ provide sales and assumption reports.
- ✓ support user roles.

2) General Description

The SMS functions as a centralised inventory system it is enabled to keep accurate stock records.

Use includes

- ✓ Admin: Full control over system, user management
- ✓ Stock Manager: held (update stock, set record level & expiry)
- ✓ Staff: View stock, request items, update usage.

3) Functional Requirements:

- ✓ Add, Edit, delete stock items
- ✓ Update stock levels upon purchase, sales on consumptions.
- ✓ ~~Gen~~ Generate supplies automatic orders for low / ready, stocks.
- ✓ Maintain supplies info
- ✓ Provide daily, weekly and monthly stock. &

4) Interface Requirements:

- ✱ User Interface: web dashboard with login and role based
- ✱ External interface: Barcode / scanner, POS System Integration.
- ✱ API integration: REST API, for integration with accounting.

5) Performance Requirement:

- * Handle 500 concurrent users.
- * Support upto 1 million static records
- * A browser responds time ≤ 3 seconds for queries and updates.

6) Design Constraints:

- * Database must be relational
- * Must run on standard windows / linux
- * Secure
- * Should comply accounting / inventory.

7) Non functional Attributes.

- * ~~Security~~
- * Reliability
- * Usability
- * Maintainability

8) Preliminary Schedule and Budget

Schedule

Requirement Analysis : 1 week
System design : 2 weeks
Development : 6 weeks
Testing : 1 week
Deployment / testing - 1 week

Total - 12 weeks

Estimated Budget :

- 24 - 25 Lakh