4) Stock Maintenance System

=> ① Develop a problem statement.

As a stock broker, monitoring stock levels often leads to delays, overstocking, or shortages. I need a system that tracks inventory in real-time, manages supplies & generates reports for better decision-making.

=> ② Develop a complete SRS document.

1. Introduction

1.1) Purpose of this Document

The purpose of this document is to define the requirement & specification for developing Stock Maintenance System (S It provides understanding of objectives, scope & deliverable for efficient inventory & stock control.

1.2) Scope of this document

This document outlines the functionalities, cost, & time req. of the SMS. The system will manage stock level, supplier details, product, purchase/sell tracking & reporting.

1.3) Overview.

The SMS is a software solution designed to help organizations manage inventory. It supports product entry, stock updates, reorder notifications, & supplier management & report generation.

2. General Description

The system will help effective management of stocks, track stocks level, record purchase & issues, send low-stock alert, & generate inventory & financial reports

3. Functional Requirements.

3.1) Stock Management:

- Add, Update, & delete product records.
- Maintain stock levels with real-time updates

3.2) Supplier Management

- Record supplier details, purchase history

3.3) Purchase & Issue Tracking:

- Log purchase entries and stock additions
- Record product issues to departments or customers

3.4) Reorder Management.

- Alert users when stock reaches minimum levels.
- Generate purchase order automatically.

3.5) Reporting:

- Generate stock summary reports.

4. Interface Requirements

4.1) User Interface:

- Intuitive dashboard showing analysis & statistics
- An Admin Panel for managers and store staff.

4.2) Integration Interfaces:

- Integration with accounting software for purchase/ expense tracking.
- Barcode scanner support for stock entry and retrieval

5. Performance Requirements:

- The system should update stock transaction within 2 seconds
- Support up to 10,000 product records & multiple concurrent users
- Ensure consistency and accuracy in all stock updates.

6. Design Constraints:

6.1) Hardware Limitations:
- Must support standard PCs, barcode scanners, & printers.

6.2) Software Dependencies.
- Relational DBMS (MySQL / Oracle)
- Computer language technology (AdminLTE, Java, Bootstrap)

7. Non-Functional Attributes

7.1) Security:
- Role-based access to restrict unauthorized services.

7.2) Reliability:
- System should ensure backup & recovery of stock data.

7.3) Scalability:
- Allow adding new products, supplies & warehouses easily

7.4) Portability
- Support all platforms in desktop & mobile.

7.5) Reusability
- Modular design for future updates.

7.6) Data Integrity:
- Guarantee accuracy of stock levels & supplier records.

7.7) Usability:
- Easy-to-use interface for store staff with minimal training.

8. Preliminary Schedule and Budget

The SMS is expected to be completed in 3-6 months, covering all modules from stock management to reporting. With an estimated 10,000 LOC, the total development cost is $90,000, including planning, coding, testing, & deployment.