4) Stock Maintainance System

1. Introduction

1.1 : Purpose of this document

The purpose of this document is to define the requirements & specifications for the development of a stock maintainance system. It provides a clear understanding of the system's goals, scope and deliverables.

1.2 : Scope of this document

The Stock maintainance System will automate inventory tracking, stock update, supplier management, reporting.

It will benefit store managers, employees, & business owners by maintaining accurate stock levels and reducing losses.

1.3 : Overview

The System ensures efficient management of stock by providing functionalities like item tracking, purchase Sales record management, stock alerts, & reporting.

2. General Description

- The Stock maintainance System will serve administrators warehouse staff, and managers. It will include models for inventory control, supplier management, transaction records and reporting.

3. Functional Requirements

3.1 Inventory management

- add, update, and remove stock items.
- Track item details like ID, name, quantity and Price
- generate alerts for low stock.

3.2 Supplier Management

- register suppliers and maintain contact details
- Track purchase history with suppliers.

3.3 Transaction Records

- Record purchases, sales, and stock transfers
- Generate invoices and receipts.

3.4 Reporting

- Generate reports on stock levels, sales trends and supplier performance.
- Provide analytics for inventory optimization.

4. Interface Requirement

4.1 User interface

- Easy to use interface for staff and managers.
- Accessible on desktops, tablets and mobile devices.

4.2 Integration Interfaces

- Integration with accounting systems for financial reporting.
- Support for barcode and RFID scanning devices.

5. Performance Requirement

5.1 response time: system should update stock data within 2 seconds of transactions.

5.2 scalability: support management of atleast 100,000 stock items

5.3 data integrity: ensure accurate updates for all stock operation?

6. Design Constraints

6.1 Hardware: To be compatible with warehouse computers, barcode scanners & printers

6.2 Software dependencies:
usage of RDBMS like mySQL

7. Non-functional attributes

7.1 Security: role based access control for staff & managers

7.2 Reliability: ensure reliable stock data with backup mechanism

7.3 portability: support usage across devices and & platforms

7.4 Scalability: Allow system expansion for larger business.

7.5 Reusability: modular design for integration with other business tools.

7.6 Compatibility: Support standard browsers & operating systems.

8. <u>Preliminary</u> <u>Schedule</u> and <u>Budget</u>

- development will take approx 6 months

- a budget of $120,000

-> inclusive of planning development, testing and deployment