**STOCK MAINTENANCE SYSTEM**

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**1. Introduction**

**1.1 Purpose of this Document**

The purpose of this document is to outline the requirements and specifications for the development of a stock management system. It defines the system’s objectives, and constraints.

**1.2 Overview**

The stock management system aims to track inventory, manage stock levels, and facilitate efficient stock replenishment. It will be used by warehouse staff, managers, and administrators.

**1.3 Business Context**

The system will be deployed in a retail organization with multiple warehouses and stores. It will integrate with existing inventory systems and provide real-time stock information.

**2. General Description**

**2.1 Product Functions**

Inventory Tracking: Monitor stock levels, item quantities, and locations.

Order Management: Process stock orders, including purchase orders and stock transfers.

Reporting: Generate stock reports, low-stock alerts, and historical usage data..

**2.2 User Characteristics**

Users include warehouse staff, managers, and administrators. Basic computer literacy is assumed.

**2.3 User Problem Statement**

The current manual stock tracking process is time-consuming and error-prone. The organization needs an automated solution.

**2.4 User Objectives**

Efficiently manage stock levels.

Reduce stockouts and overstock situations.

Improve order fulfillment processes.

**3. Functional Requirements**

The system shall:

Allow users to add, update, and delete stock items.

Provide real-time stock availability information.

Support stock transfers between warehouses.

**4. Interface Requirements**

**4.1 User Interfaces**

Dashboard: Display stock levels, alerts, and order status.

Item Management: Add, edit, and delete stock items.

Reports: Generate stock reports.

**4.2 Hardware Interfaces**

The system will run on standard web browsers and require internet connectivity.

**4.3 Software Interfaces**

Database: Integrate with the existing inventory database.

ERP System: Exchange data with the organization’s ERP system.

**5. Performance Requirements**

Response time for stock queries: < 2 seconds.

Concurrent user support: 50 users.

**6. Other Non-functional Attributes**

**6.1 Security**

User authentication and authorization.

Data encryption for sensitive information.

**6.2 Reliability**

System uptime: 99.9%.

Backup and recovery mechanisms.

**6.3 Maintainability**

Modular code structure.

**6.4 Portability**

Web-based system accessible from various devices.

**6.5 Application Affinity/Compatibility**

Compatible with major web browsers.

**7. Preliminary Use Case Models and Sequence Diagrams**

**7.1 Use Case Model**

View Stock Levels

Add Stock Item

Process Stock Order

**7.2 Sequence Diagrams**

Sequence diagram for stock replenishment process.

**8. Updated Schedule**

The development timeline will be provided separately.

**9. Appendices**

**9.1 Definitions, Acronyms, Abbreviations**

ERP: Enterprise Resource Planning

SRS: Software Requirements Specification

**9.2 References**

[Organization’s internal documentation]

[Industry best practices]