

Stock Maintenance System

1. Introduction.

1.1 Purpose.

The Stock Maintenance System (SMS) maintains inventory details and streamlines stock tracking.

1.2 Document Convention

This document adheres to standard SRS structure.

1.3 Intended Audience.

The system is for warehouse managers, sales staff, and developers.

1.4 Project Scope.

The system reduces manual stock handling, prevents shortages, and ensures timely updates of inventory.

1.5 References:

Inventory management best practices, IEEE SRS guidelines.

2. Overall Description.

2.1 Product Perspective

The system provides real-time stock management integrated with a central database.

2.2 Product Perspective: Functions.

Stock entry, update, record alerts and report generation.

2.3 User classes.

Admin, Staff and Auditors.

2.4 Operating Environment.

Desktop/web application with database backend.

2.5 Constraints.

System must handle concurrent access.

2.6 Documentation

User manuals and installation guides will be delivered.

2.7 Assumptions and Dependencies.

System assumes proper barcode scanning hardware and stable power supply.

3. Specific Requirements.

3.1 Functional Requirements

- Add and update stock items.
- Track stock levels with alerts.
- Generate purchase orders when below threshold.
- Produce sales and inventory reports.

3.2 External Interface Requirements.

- Barcode scanner support.
- Database and reporting modules.

3.3 System Features

- Real-time stock tracking.
- Low-stock notifications.

3.4 Non-functional Requirements

- 24/7 availability
- Secure data storage

* Accuracy tolerance $< 1\%$.

4. Appendices

4.1 Glossary

SMS - Stock Maintenance System, SKU - Stock Keeping Unit.

4.2 Future Enhancements

Mobile app integration and AI-based demand forecasting.