

IV Stock Management System:

1. Introduction:

a. Purpose:

It is to specify the requirements for the stock maintenance system. It is intended for developers, testers, project managers and end users.

b. Document Convention:

Bold texts are used for section heading & interface labels. Bulleted lists are used for listing actions, options or steps.

c. Intended Audience and Reading Suggestion:

Project managers understand the project scope, deliverables and system constraints. Software developers to design, implement and integrate the system components.

d. Scope:

This system will manage stock items in warehouses, retail shops or industrial settings. It will enable users to add, update, delete stock items. It helps in monitoring stock levels.

e. References:
IEEE Std 830-1998 - IEEE Recommended
practice for software requirements specification

2. Overall Description:

a. Product perspective:

It is a web-based application that interacts with
a backend database. It can be used by inventory
managers, warehouse staff and business owners.

b. Product functions:

- user authentication and access control. to
add/update/delete stock items. to view
current stock levels. Alert for minimum stock.

c. User classes and Characteristics:

Admin - full system access, manages users and
system settings. Managers can view reports
manage stocks. Staff can update stock entries.

d. Operation environment:

- OS: Windows/Linux/MacOS

- Database: MySQL

- Browsers: Chrome, Firefox, Edge

e. Design and Implementation:

System must be web-based. Use of open-source technologies is preferred. Support for at least 500 concurrent users.

f. User Documentation:

User manual

Admin guide

API Documentation.

g. Assumptions & Dependencies:

Users will have basic computer skills. The system will be hosted on a reliable web-server. Barcode scanner integration may be required.

3. Specific Requirements:

a. Functional Requirements:

User management: The system shall allow administrators to create and manage user accounts.
Stock Management - The system shall allow users to add new stock items with detail such as item name

b. Non-Functional Requirements:

The system shall have 99.9% uptime availability.
The system shall respond to stock queries within two seconds. The system shall store all data

securely using encryption.

- c. External Interface Requirements:
Responsive design for desktop and mobile.
login page, dashboard, stock management panel,
report generation interface. Optional integration
with barcode scanner for input.

- d. Appendices:
Integration with accounting software. Mobile
application for Android/iOS. AI-based demand
forecasting. Support for multiple warehouses.

- f. Preliminary schedule & budget:

week

- 1-2 requirement analysis & system design
- 3-5 core development of stock tracking
- 6-7 Implementation of notification
- 8 system testing
- 9 user acceptance testing & deployment preparation
- 10 deployment & post-launch support

Estimated budget : ₹ 15 lacs approx.