Stock maintanence system 28/8/25

problem statement

many business maintain stock records manually, leading to errors, misplaced inventory, delays in restocking. A stock maintanence system is needed to automate inventory management, ensure real-time stock updates and reduce human error.

SRS Document

1. Introduction

1.1 Purpose

The purpose of this document is to define the functional and non-functional requirements for stock maintanence system. This system will automate stock tracking, help businesses maintain optimal inventory levels.

1.2 Scope:

The SMS will:

- Track stock levels in warehouses
- Update inventory in real time during purchases and sales.
- Generate alerts for low stock and overstock
- Provide reports.

1.3 Overview

SMS will consist of

Inventory Module: Manage stock, categories suppliers.

- Automatic stock deduction
- Alerts and notifications
- Generate daily / weekly stock repo

2. General Description

System will be web based with mobi

- Users are store keepers, managers a administrators
- Dashboard for users, APIs for inte
- Centralised SQL-based stock databas
- Ensure accuracy, security and real synchronisation

3. Functional Requirements

- Add, update and delete product de
- Record purchase and sales transacti
- Automatic alerts / notifications for lo stock
- Generate stock usage and sales reports
- User authentication with role based ac

4. Interface Requirements

- User Interfaces:
  Dashboard for storekeepers and managers
- Software:
  SQL database for stock records
  Rest APIs for integration
- Hardware:
  Barcode scanner or RFID for product entry
- Communication:
  Secure communication over HTTPS

5. Performance Requirements

- Real time update of stock levels after every transaction
- Support 500+ concurrent users
- Database should handle 50,000+ product records efficiently
- Alerts generated within 2 seconds.

6. Design Constraints

- Must follow data security policies for business records.
- Daily data backups
- Should be deployable on both cloud platforms and on-premise servers

7. Non Functional Attributes

- Security: The transactions happening must be secure
- Intuitive Interface
- Automated backup and recovery system

- The market prices and stock values must be reliable
- User authentication

8. Preliminary Schedule and Budget

Week 1-2 : Requirement gathering and
Week 3-5 : Development of Database
Week 6-7 : Testing
Week 8-9 : Deployment.

Budget :

Development costs - ₹ 12,00,000
Hardware Infrastructure - ₹ 4,00,000
Security compliance - ₹ 2,00,00
Testing & Maintanence - ₹ 5,00,000
Total = 23,00,00

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