

→ SRS for stock maintainance.

1. Introduction:

- 1.1 Purpose: This document outlines the requirements for the stock maintainance system to assist stakeholders in understanding its objectives and functionalities.
- 1.2 Scope: The SMS will facilitate the management of stock levels, tracking inventory, and generating reports. It includes preliminary estimates of development costs and timelines.
- 1.3 Overview: The stock maintainance system will ^{automate} maintain the inventory management, for efficient tracking of stock level, receive notifications, and reporting on stock movements.

2. General description:

The SMS will serve multiple user roles, including inventory managers and administrators, i.e.

- 1) Inventory Tracking: Monitoring stock levels in real-time
- 2) Receive Alerts: Notifications for low stock items.
- 3) Supplier management: Keeping records of supplier information.
- 4) Reporting: generating reports on stock levels, movements, and trends.

The SRS will essential for businesses to maintain optimal stock levels and prevent shortages or overstock situations.

3. Functional requirements:

The SRS will include:

- 1) User Registration and login
- 2) Add~~ing~~ and deleting inventory items.
- 3) Stock level monitoring and Alerts
- 4) Supplier Information management
- 5) Generation of stock movement Reports
- 6) Search functionality for inventory items.

4. Interface Requirements:

- 1) User interface: A web-based interface for end-users
- 2) API interface: RESTful APIs for integration with other systems.
- 3) Database interface: SQL interface for the data management and retrieval.

5. Performance Requirements:

~~The SMS will communicate through:~~

1) ~~User Interface~~ The SMS should meet the following performance criteria:

- 1) Response time: The system should respond to user actions within 8 seconds
- 2) Concurrent users: Support up to 100 concurrent users without performance degradation
- 3) Data storage: Ability to handle up to 10000 inventory items and 1000 suppliers
- 4) Error Rate: Maximum allowable error rate of 1% for transactions.

6. Design Constraints:

- 1) Use of specific database management system
- 2) Compliance with relevant data protection regulations
- 3) Compatibility with existing business system

7. Non-functional attributes:

1) Security: Implementation of user authentication and data encryption.

2) Portability: The system should be accessible ~~to~~ from various devices

3) Reliability: 99.9% of up time and regular backup procedures.

4) ~~Scalability~~ Scalability: ability to accommodate more users & inventory items as the business grows

8. Preliminary Schedule & Budget.

The ~~estimated~~ project duration is 4 seconds, with a budget of approximately \$40,000.

1) Development costs: \$25000

2) Testing: \$8000

3) Deployment: \$4000

4) Training & support: \$3000

Schedule:

• Requirement analysis & Design: 2 weeks

• Development: 6 weeks

• Testing & Quality assurance: 2 weeks

• Deployment & user training: 1 week