

Stock Maintenance System.

1. Introduction

1.1 Purpose of this Document.

This document defines the requirements for the Stock Maintenance System (SMS).

It serves as a guide for developers & stakeholders to align on the functionalities, performance, expectations & overall design of the system.

1.2 Scope of this document

The SMS will streamline the management of inventory, track stock levels, and handle replenishments for businesses. The estimated development cost is \$100,000, with a project time of 5 months.

1.3 Overview

The Stock Maintenance System is designed to efficiently manage stock levels, automate inventory updates & support purchase order creation. It will cater to businesses of various sizes ensuring real-time stock visibility and minimizing inventory related disruptions.

2. General Description.

The SMS allows businesses to track & manage their stock levels across multiple locations, generate reports & automatically create purchase orders when stock levels fall

below a set threshold. Users include inventory managers, store employees & administrators. Key features include:

- Stock Tracking & real-time updates
- Automated restocking through purchase order generation
- Inventory reports & analytics.
- Multi-location inventory management

3. Functional Requirements

1. Stock Tracking: Real time stock updates
2. Purchase Orders: Auto generate orders when stock is low
3. Multi-location: manage stock ~~are~~ across locations
4. Reports: Generate inventory & turnover reports
5. Supplier Management: Maintain supplier records

4. Interface Requirements

- UI: Web & mobile interface
- POS Integration: Sync with point-of-sale systems.
- Supplier APIs: For Order updates.
- ERP integration. Optional for financial sync.

5. Performance

- Handle 2000 stock transactions simultaneously
- Support 10,000 SKUs across locations
- Update stock within 2 seconds.

6. Design Constraints.

- Secure handling of supplier & inventory data
- Developed with Python & Postgre SQL, hosted on cloud infrastructure.

7. Non Functional Attributes

- Security: Role-based access control
- Reliability: 99% uptime
- Scalability: Expandable for more SKUs & locations

8. Schedule & Budget

Budget: \$100,000

• Timeline: 5 months.

• Requirements: 0.5 month

• Design: 1 month

• Development: 2.5 months

• Testing & deployment: 1 month.