9 Stock Maintenance System

1. Introduction

1.1 Purpose of this document

This document outlines software req. for the system. It serves as guide for developers, stakeholders and also end users, detailing the system's functionalities performance criteria and design constraints.

1.2 Scope of this document

The document covers objectives, functionalities, expected outcomes of stock maintenance system. It includes an estimation of developments cost and time required, providing valuable insights for customer.

1.3 Overview

The system is designed to automate inventory tracking & managing stock levels, & facilitates order processing. It ensures real-time data accuracy, reduces manual efforts, supports efficient stock management practices.

2. General Description

The system aims to assist users in maintaining optimal stocks levels, preventing overstocking or stockouts, users will benefits from automated alerts detailed inventory reports and user-friendly interface. The primary users include inventory managers, warehouse staff & procurement teams.

3. Functional Requirements

- Real-time inventory tracking and updates.
- Automated reorder alte alerts when stock level fall below predefined threshold
- Detailed reporting on stock levels, reorder history and stock movements.
- User authentication and role based allert controls.
- Integration with existing ERP system for seamless data flow
- Search and filter capabilities for quick access to stock information.

4. Interface Requirements

- A user-friendly graphical interface for easy navigation and operation.
- API's for integration with external systems external systems
- Data import/export capabilities in standard formats
- Notification interfaces for email & SMS alerts

5. Performance Requirements

- System should handle upto 10,000 stocks entries.
- Real time processing with response time with 2sec for user actions
- Minimal memory usage to ensure efficient performance.
- Ensure Error rate should be very less.

6. Design Constraints

- The system must be compatable with all devices.
- MYSQL can be used for database
- Compliance with industry standards for data security eg privacy
- Implementation of Restful API for external integration.

7. Non-Functional attributes.

- Security should be provided for data, logins sign ups.
- Should accessible via browser & mobile.
- It should be reliable
- Design must be modular for every updates & changes.
- It should be scalable.

8. Preliminary Schedule and Budget

Schedule: Requirements Gathering : 2 weeks

System Design : 3 weeks

Development : 8 weeks

Testing : 4 weeks

Deployment : 2 weeks

Total type for completion : 19 weeks.

Budget:

- Requirements documentation - ₹ 50000
- Design & tools - ₹ 150000
- Development - ₹ 400000
- Testing - ₹ 50000

Total estimated budget : ₹ 750000.