

Q4. 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, stakeholder 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 that 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 stock levels, preventing overstocking or stockouts, users will benefit 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 alerts when stock level fall below predefined threshold.
- Detailed reporting on stock levels, ~~reorder~~ history and stock movements.
- User authentication and role based alert 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.
- APIs for integration with external systems.
- Data import / export capabilities in standard formats.
- Notification interfaces for email & SMS alerts.

5. Performance requirements

- System should handle upto 10,000 stock entries
- Real time processing with response time within 2 seconds for users actions.
- Minimal memory usage to ensure efficient performance
- Error rate should be very less.

6. Design Constraints

- The sys must be compatible with all devices.
- MySQL can be used for database.
- Compliance with industry standards for data security & privacy.
- Implementation of Restful APP for external integration.

7. Non Functional Attributes

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

8. Preliminary Schedule & Budget :

Schedule : Requirements Gathering : 2 weeks

System Design : 3 weeks

Developments : 8 weeks

Testing : 4 weeks

Deployment : 2 weeks.

Total time for completion : 19 weeks.

Budget :

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

Total estimated budget : ₹ 750000