

# Stock Maintenance System

## Problem Statement

The current stock maintenance system is manual and prone to errors, leading to inaccuracies in inventory tracking, stock shortages & operational inefficiencies. Implementing an automated stock maintenance system is important to streamline stock management process, minimize errors and improve overall operational effectiveness.

## 1. Introduction

### 1.1. Purpose of this document

To define specifications & requirements for the development of stock main. system.

### 1.2 Scope of this document:

To describe the overall objectives & scope of the stock maintenance system.

### 1.3 Overview

Designed to facilitate the management of stock for business.

## 2. General Description

The stock maintenance system is a digital platform designed to automate & streamline the management of inventory. It facilitates accurate tracking of stock levels, timely replenishment & efficient allocation of resources. Through real time monitoring and reporting capabilities, the

system enhances inventory management process, reduce operational costs & improves overall business efficiency.

### 3. Functional Requirements.

- Stock entry

Ability to add, edit & delete stock items from the inventory database.

- Stock tracking:

Realtime monitoring of stock levels, including available quantity, location & status.

- Stock Movement:

Tracking of stock movement within the organization, including transfers between warehouse sales transaction & returns.

- Reporting

Generation of reports to provide insights into stock-related activities including stock levels by item, stock movement history, inventory valuation.

### 4. Interface Requirements.

- Intuitive & user-friendly interface for easy navigation and data-entry.

- Clear display of stock info.

- Integration with bar code scanners for efficient stock entry and tracking.

- Compatibility with external system for data exchange.



## 5. Performance Requirements

- Quick response time for stock related queries
- Minimal downtime for system maintenance.
- Ability to handle large volume of stock items.
- Scalable arch. to accommodate increasing data loads.

## 6. Design Constraints

- Compatibility with various OS & web browsers
- Compliance with industry standards for data storage & security
- Optimization for both desktop & mobile device.

## 7. Non-functional Attributes

### • Security

Implementation of access controls & encryption mechanism to protect sensitive stock data.

### • Reliability

Reliable backup & recovery mechanism to prevent data loss.

### • Performance

Efficient performance to handle concurrent users & large datasets.

## 8. Preliminary schedule & budget

The development of this system is estimated to take approx. 6 months with a budget of \$40,000. This includes the analysis, design, development, testing, etc.