

## IV Stock Maintenance System

### Problem statement:

Manual stock management often leads to errors, shortages, & overstocking. An automated system is required to track updates & maintain inventory accurately.

### 1) Introduction

#### 1.1) purpose

To create Stock Maintenance System that tracks inventory levels, manages, updates & generates reports.

#### 1.2) Scope

- Add / update / delete stock items
- Monitor stock levels & alerts
- Generate Sales & purchase reports
- Supplier & customer record management

#### 1.3) Overview

The System provide - real-time inventory details, ensuring smooth supply chain & reduced losses.

## 2) General Description

The system is a web-based application that helps businesses maintain product records, monitor stock availability, & prevent shortages or excess inventory.

## 3) User classes & characteristics

- Admin: Full control over stock & users
- Staff: Manage daily stock operations
- Manager: Analyze reports & track performance

## 4) Functional Requirements

- Add / Remove / update stock details
- Automatic alerts for low stock
- Sales & purchase tracking
- Supplier & customer record management
- Generate inventory reports

## 5) Interface Requirements

- Web based dashboard
- Mobile - friendly access
- Role-based login system



## 6) Performance Requirement

- Quick response time ( $< 2$  sec)
- Support 300+ users simultaneously
- Handle large database with thousands of products

## 7) Design Constraints

- Works on standard browser
- Database : MySQL
- Language : Java / Python

## 8) Non-functional Requirement

- Security : clear authentication & data encryption
- Usability : Easy-to-use interface for staff
- Reliability : 24/7 system availability
- Scalability : Support for multiple warehouses / branches

## 9) Schedule & Budget

- Schedule : 3-4 months
- Budget : 3-4 lacs approx