

## STOCK MAINTENANCE SYSTEM

### 1. Introduction 1.1 Purpose:

This document outlines the requirements for the SMS to assist stakeholders in understanding its objectives and functionalities.

1.2 Scope: The SMS will facilitate the management of stock levels, tracking inventory and generating reports. It includes preliminary estimates of development cost and timelines.

1.3 Overview: The stock maintenance system will automate maintain inventory management, allowing for efficient tracking of stock levels, reorder notifications and reporting on stock movements.

### 2. General description

- Inventory Tracking: Monitoring stock levels in real-time
- Reorder Alerts: Notifications for low stock items
- Supplier Management: Keeping records of supplier information
- Reporting: Generating reports on stock levels, movements and trends.

### 3. Functional Requirements

1. User registration & login
2. Adding and Deleting inventory items
3. Stock level Monitoring and Alerts
4. Supplier Information management
5. Generation of Stock Movement Reports
6. Search functionality for Inventory items.

### 4. Interface Requirements

- User Interface: A web-based interface for end users

- API interfaces: RESTful API's for integration with other systems
- Database Interface: SQL interface for Data management and retrieval.

## 5. Performance requirements

- Response Time: The system should respond to user actions within 2 seconds
- Concurrent Users: Support up to 100 concurrent users without performance degradation
- Data Storage: Ability to handle up to 10,000 inventory items and 1000 suppliers
- Error rate: Maximum allowable error rate 1%

## 6. Design constraints

- Use of specific DBMS (eg MySQL or PostgreSQL)
- Compliance with relevant data protection regulations (eg GDPR)
- Compatibility with existing business systems.

## 7. Non-Functional Attributes

- Security: Implementation of user authentication and data encryption.
- Portability: The system should be accessible from various devices
- Reliability: 99% uptime & regular backup
- Scalability: Ability to accommodate more users/items

## 8. Preliminary Schedule & Budget

The estimated duration is 4 months, budget is \$40k

Approx: Development costs: \$25k • Training & Testing: \$8k • Deployment: \$4k • Support: \$3k