

SRD for Stock Maintenance System

Purpose

This document defines the requirements for the Stock Maintenance System (SMS).

Scope

The SMS will streamline the management of inventory, track stock levels, and handle replenishments for businesses.

Overview

The SMS is designed to efficiently manage stock levels, automate inventory updates, and support purchase order creation.

General Description

The SMS allow businesses to track and manage their stock levels across multiple locations, generate reports and automatically create purchase orders when stock levels fall below a set threshold.

Key features include:

Functional Requirements

i) Stock tracking

Monitor stock levels in real time.

ii) Purchase order generation

Automatically generate purchase orders when stock levels fall below set thresholds.

3.

Multi-location Management

Support stock management across multiple store and warehouse locations

Interface Requirements

The sys will interface with:

i)

User Interface

Web and mobile interfaces for management, store employees and administrators

ii)

Supplier APIs

Integrate with POS system to track stock changes automatically.

Design Constraints

Developed using Python and PostgreSQL must comply with data security and privacy regulations, especially regarding sensitive supplier and inventory data.

Non Functional Attributes

i)

Security

Implement Role Based Access Control for different user levels.

ii)

Reliability

Ensure a 99.9% uptime to support uninterrupted business operations.

iii)

Scalability

System must be able to scale as the number of SKUs, transactions and locations grow.

Budget:

Initial Budget: \$1,000,000

Project Duration: 5 months

Requirements Gathering: 1 month

Design: 1 month

Development: 2.5 months

Testing: 0.5 months