Inventory Management System

Complete System Documentation

# 1. INTRODUCTION

The Inventory Management System is a comprehensive Django-based web application designed to streamline inventory operations, user management, attendance tracking, and supplier collaboration. The system provides role-based access control with four distinct user types: Super Admin, Admin, Staff, and Supplier.

Built with security as a priority, the system implements SQL injection protection, CSRF protection, XSS protection, and comprehensive audit logging. It supports multi-user environments with granular permission management and complete activity tracking.

# 2. STANDARD OPERATING PROCEDURES (SOP)

## 2.1 User Management SOP

Step 1: Super Admin creates user accounts with appropriate roles

Step 2: Admin assigns permissions to staff users

Step 3: Users login with credentials

Step 4: System logs all user activities

## 2.2 Inventory Management SOP

Step 1: Create items with auto-generated codes

Step 2: Receive stock and create lots with expiration dates

Step 3: Monitor stock levels and expiration dates

Step 4: Consume stock using FIFO method

Step 5: Generate reorder alerts for low stock

## 2.3 Production SOP

Step 1: Create recipes with ingredients and yield quantities

Step 2: Initiate production with recipe selection

Step 3: System auto-consumes ingredients using FIFO

Step 4: System creates finished goods stock lot

Step 5: Record production in movement history

## 2.4 Purchase Order SOP

Step 1: Create purchase order with items and quantities

Step 2: Submit order to supplier (generates QR code)

Step 3: Supplier reviews and approves with pricing

Step 4: Supplier marks order as shipped

Step 5: Scan QR code to receive order

Step 6: System creates stock lots automatically

## 2.5 Attendance SOP

Step 1: Staff clocks in for AM shift

Step 2: Staff clocks out for AM shift

Step 3: Staff clocks in for PM shift

Step 4: Staff clocks out for PM shift

Step 5: Admin reviews attendance records