

Enterprise Warehouse Management System

Software Requirements Specification (SRS)

1. Introduction

1.1 Purpose

The purpose of this Software Requirements Specification (SRS) document is to describe the requirements for the Enterprise Warehouse Management System (EWMS) that will support the daily operations of warehousing, inventory management, order processing, and reporting.

1.2 Scope

EWMS will enable warehouse staff to efficiently manage goods receipt, storage, picking, packing, and shipment processes through a centralized platform accessible via web browsers.

1.3 Definitions, Acronyms, and Abbreviations

- EWMS: Enterprise Warehouse Management System
- SRS: Software Requirements Specification
- SKU: Stock Keeping Unit

2. Overall Description

2.1 Product Perspective

EWMS is an independent system, designed to replace manual and legacy warehouse tracking methods.

2.2 Product Functions

- Inventory tracking and control
- Receiving and put-away management
- Order picking and packing
- Shipment coordination
- Barcode scanning support
- Query and reporting module

2.3 User Classes and Characteristics

- Warehouse Staff: Executes daily warehouse operations
- Supervisors: Monitors operations, manages exceptions
- Administrators: System configuration and access management

3. Specific Requirements

3.1 Functional Requirements

1. The system shall allow users to receive inventory items and assign put-away locations.
2. The system shall track inventory quantities in real-time.
3. The system shall generate picking lists based on received sales orders.
4. The system shall record shipping details and decrement shipped items from inventory.
5. The system shall allow user authentication and role-based access control.
6. The system shall provide inventory reports by SKU, location, and date range.

3.2 Non-Functional Requirements

- The system must support up to 500 concurrent users without performance degradation.
- The system must be accessible via latest major web browsers.
- The system shall store all inventory data securely with daily backups.
- The system shall respond to user actions within 2 seconds under normal load.

4. System Features

| Feature | Description |
|----------------------|---|
| Inventory Management | Manage stock levels and monitor item movements across locations. |
| Order Fulfillment | Process incoming orders and generate optimized picking routes. |
| Receiving | Digitize receiving process with barcode validation and put-away logic. |
| Reports | Provide real-time data and historical insights on warehouse activities. |

5. Appendices

A. Future Enhancements

- Integration with transportation management system (TMS)
- Support for mobile handheld devices

B. References

- Company Warehouse Process Manual v3.5
- ISO 9001:2015 Quality Management Systems Requirements