# Software Requirements Specification (SRS)

## Sale and Stock Management System

### 1. Introduction

#### 1.1 Purpose

The purpose of this document is to define the requirements for the Sale and Stock Management System. The software will handle sales, purchases, stock management, reporting, and administrative controls in real-time with database connectivity.

#### 1.2 Scope

This system will be used to manage and track stock, sales, purchases, and customers efficiently. It includes generating invoices, handling returns, viewing and printing reports, managing suppliers/customers/products, and administrative tools. All modules will be connected to a central database for real-time data processing and integrity.

#### 1.3 Definitions, Acronyms, and Abbreviations

- **DB** – Database

- **CR/DB Notes** – Credit/Debit Notes

- **MRV** – Maximum Retail Value

- **Exp/Brkg** – Expired/Broken

- **Zap** – Delete or remove expired/damaged items

#### 1.4 References

Not applicable.

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### 2. Overall Description

**2.1 Product Perspective**

This is a standalone software application with multiple modules interacting with a central database. It includes an intuitive GUI for easy navigation across modules.

**2.2 User Classes and Characteristics**

- **Admin:** Full access including user management

- **Cashier:** Can handle sales and payments

- **Inventory Manager:** Manages stock, batches, and products

- **Accounts Officer:** Views ledgers and financial reports

- **Viewer:** Read-only access to reports

**2.3 Operating Environment**

- **Platform:** Windows-based desktop application

- **Database:** MySQL/PostgreSQL/SQL Server

- **Language:** .NET / Java / Python (based on development choice)

- **Middleware:** JDBC/ODBC or ORM framework

**2.4 Design and Implementation Constraints**

- System must handle concurrent operations

- Real-time DB syncing

- Secure user authentication and role-based access

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# 3. Functional Requirements

**3.1 Sales Module**

- New Sales Invoice generation

- Invoice correction (including batch-wise)

- Invoice viewing (single, multiple, estimate, free of cost)

- Printing of invoices

- Special Less, Cash, Bank/Online, Credit/Debit notes

- Sales Reports (bill summary, stock summary)

- Customer management

## 3.2 Purchases Module

- New Purchase entry and editing

- View and Print Purchase invoices

- Purchase Demands and Returns

- Supplier management and reports (balances, ledgers, notes)

## 3.3 Stock Module

- Stock movements (godown, exp/brkg, transfers)

- Product and batch management

- Company and generic management

- Stock reporting: batchwise, category-wise, reorder, expiry, etc.

## 3.4 Reports Module

- Sales reports: area wise, invoice wise, profit/loss, etc.

- Customer reports: ledgers, receipts, transaction history

- Stock reports: positions, value, expiry, narcotics, etc.

- Daily summaries: invoices, returns, discounts

- Duplicates and code lists

## 3.5 Software Settings

- System and security password changes

- User account creation, permissions, deletions

## 3.6 Tools

- TBD (Tool functionality to be defined during design)

## 3.7 Exit

- Application shutdown

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# 4. External Interface Requirements

## 4.1 User Interfaces

- Tab-based navigation for each module

- Data entry forms with validation

- Report preview and printing interface

- Login and user management screens

## 4.2 Hardware Interfaces

- Standard PC hardware

- Optional: barcode scanner, receipt printer, etc.

## 4.3 Software Interfaces

- Relational Database System

- Export/Import functions for backups

**4.4 Communication Interfaces**

- Optional for networked version (e.g., TCP/IP for multi-user support)

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# 5. Non-Functional Requirements

**5.1 Performance**

- Fast response to DB operations

- Load handling for concurrent users

**5.2 Security**

- Login authentication

- Role-based access control

- Activity logging

**5.3 Reliability**

- Real-time updates

- Backup and recovery features

**5.4 Maintainability**

- Modular codebase

- Configurable reports and product fields

**5.5 Usability**

- User-friendly interface

- Help menus and tooltips