Technical Document - System Requirements Specification (SRS)

1. Introduction

This document outlines the system requirements for the client, detailing various functional modules including **user management, inventory, sales, purchases, and reporting functionalities. It provides a comprehensive guide for system design, development, implementation, and ongoing maintenance to ensure efficiency and usability.** The SRS serves as a foundational document to align stakeholders, developers, and business teams on system capabilities and expectations.

1.1 Purpose

The purpose of this document is to define the core requirements for client, ensuring the development team has a clear understanding of system functionality. This document facilitates streamlined operations by outlining user needs, business workflows, and system capabilities. It also acts as a reference for compliance, security, and integration needs within the system.

1.2 Scope

Project is designed to support business operations with integrated functionalities for login, user management, inventory tracking, sales processing, and reporting. The system will be implemented with web and mobile compatibility, ensuring accessibility for various user groups, including customers, suppliers, and administrators. It will also provide seamless integration with third-party systems such as ERP, CRM, and logistics providers to enhance operational efficiency.

1.3 Intended Audience

This document is intended for:

- **Development Team:** For understanding system functionalities and implementation strategies.
- **Business Stakeholders:** To align system requirements with business objectives and financial constraints.
- **QA and Testing Teams:** For verifying system performance, usability, and compliance.
- **End Users:** To understand the system's operational workflows and user interface expectations.
- **System Administrators:** For managing roles, permissions, security protocols, and overall system performance.

2. System Modules

2.1 Login Module

- Secure authentication system allowing users to log in with unique credentials.
- Role-based access control (RBAC) for managing user permissions.
- Multi-factor authentication (MFA) for enhanced security.
- Password recovery and reset functionality with OTP/email verification.
- Session management and automatic logout for inactive users.

2.2 User Management

2.2.1 User Creation

- Admins can create, update, and manage user accounts.
- Users can be assigned specific roles and permissions for system access.
- Profile management with user-specific preferences and activity logs.

2.2.2 User Groups

- Categorization of users based on roles such as Admin, Supplier, and Customer.
- Customizable permissions for different user groups, ensuring appropriate data access.
- User deactivation, reactivation, and audit trail functionality for better security control.

2.3 Inventory Management

- Real-time tracking of stock levels, product availability, and warehouse locations.
- Automated updates for inventory transactions to maintain accuracy.
- Barcode and QR code scanning support for efficient inventory handling.
- Low stock alerts and automatic restocking notifications.
- Integration with procurement and sales modules for seamless operations.
- Historical inventory tracking and audit logs.

2.4 Transfers

- Internal movement of inventory between different warehouses or locations.
- Logs maintained for all transfer activities to ensure transparency.
- Approval workflow for transfer requests with real-time tracking.

2.5 Associates & Customers

2.5.1 Associates

- Managing partner and associate details, including agreements and transactions.
- Tracking interactions and business activities with partners.
- Performance and contract renewal management.

2.5.2 Customers

- Customer registration and profile management.
- Order history and purchasing trends analysis.
- Loyalty programs, discount eligibility tracking, and referral management.
- Integration with marketing campaigns for customer engagement.
- Customer support ticketing system for inquiries and complaints.

2.6 Opportunities, Visits & Holds

- Managing sales opportunities with lead tracking and follow-ups.
- Scheduling and logging customer visits for in-person sales discussions.
- Placing items on hold for specific customers and tracking expiration periods.
- Automated reminders for follow-up actions.

2.7 Sales Management

- Order creation, processing, and invoice generation.
- Payment gateway integration for multiple payment options.
- Real-time order tracking and status updates for customers.
- Return and refund management with automated approval workflows.
- Tax and discount calculations based on customer profiles and order history.

2.8 Purchase Management

- Supplier management and purchase order tracking.
- Approval workflows for procurement and cost validation.
- Automated supplier performance analysis based on past transactions.
- Real-time price comparison for cost-effective procurement decisions.

2.9 Inventory Supplier Management

- Supplier database for contract tracking and compliance management.
- Automated order fulfillment processes, reducing manual intervention.
- Historical data on supplier performance and reliability.
- Integration with payment and invoicing systems for automated transactions.

2.10 Customer & Supplier Login Modules

- Separate portals for customers and suppliers with tailored functionalities.
- Self-service functionalities for account management, order tracking, and support requests.
- Secure document sharing between suppliers and company administration.
- Customizable dashboards for tracking business performance.

2.11 Cart Module

- Shopping cart functionality for easy order placement.
- Real-time stock updates on selected items to prevent overselling.

- Discount application and promotion integration within the cart.
- Multiple payment and checkout options.

2.12 Company Profile & Settings

- Centralized control over company information, branding, and configurations.
- Customizable settings for various system modules, including notifications, tax settings, and discount rules.
- API management and third-party integration settings.

2.13 Reports & Analytics

- Comprehensive reporting on sales, inventory, financials, and operational performance.
- Customizable dashboards for different user roles with KPIs and real-time analytics.
- Data visualization tools such as charts, graphs, and trend analysis.
- Export options (CSV, Excel, PDF) for reporting.
- AI-driven predictive analytics for business forecasting.

2.14 Trucking & Logistics

- Tracking of shipments, delivery schedules, and order fulfillment status.
- Integration with third-party logistics providers for seamless transportation management.
- Real-time updates on estimated delivery times and shipment tracking.
- Optimization of delivery routes for cost reduction.

3. System Integration & Dependencies

- **ERP Integration:** Synchronization with enterprise resource planning (ERP) software for financial and operational data.
- **CRM Integration:** Connection with customer relationship management (CRM) tools for enhanced sales tracking.
- **E-commerce Platform Compatibility:** Seamless integration with existing e-commerce frameworks.
- **API Support:** Open APIs for data exchange with third-party applications and services.
- **Cloud Storage Integration:** Secure document and media storage with cloud-based backup solutions.

4. Security Considerations

- **Data Encryption:** Ensuring all sensitive data is encrypted both in transit and at rest.
- **Access Control:** Role-based permissions to restrict access to critical information.
- **Audit Trails:** Logging all significant user actions for security and compliance.

- **GDPR & Compliance:** Ensuring adherence to data protection regulations.
- **Incident Management:** Protocols for security breaches, data loss, and system failures.

5. Conclusion

This SRS document provides a structured approach to the system design and implementation of the project, ensuring efficiency in operations and enhanced user experience. The integration of multiple functionalities across different business units enables seamless workflows, improved decision-making, and operational transparency. The system is designed to be scalable, ensuring future expansion, adaptability to evolving business needs, and integration with emerging technologies.