Software Requirements Specification (SRS)
Simplified Inventory Management System

1. Introduction

The simplified Inventory Management System (IMS) is a lightweight solution designed to help small businesses manage product stock levels efficiently. This project is intended as a foundational system, focusing only on core functionalities while keeping the architecture extensible for future enhancements.

2. Objectives

The main objectives of this simplified IMS are:
- Provide a secure login for admin access.
- Display available products with their stock quantities.
- Allow admin to update stock (reduce quantity when products are used/sold).
- Generate basic reports in PDF format for remaining stock.

3. Functional Requirements

3.1 User Authentication	Simple login with static admin credentials (no multi-role support).
3.2 View Products & Stock	Display product list with name, category, and remaining quantity.
3.3 Update Stock	Admin can reduce stock quantities when products are sold or consumed.
3.4 Reports	Generate/download PDF report of current stock levels.
3.5 Optional Add-ons	Add new products, record daily transactions, highlight low stock.

4. Technology Stack

Frontend	React.js (UI components, state management, routing)
Backend	Node.js + Express.js (REST API)
Database	MongoDB (store product details and stock levels)
Authentication	Basic hardcoded admin credentials or JWT (future)
Report Generation	jsPDF / PDFKit for PDF export
Hosting	Free tier options (Render, Vercel, or MongoDB Atlas for DB)

5. Future Scope

- Role-based authentication (Admin, Supervisor, Staff, Viewer).
- Audit trail for all transactions (who updated what and when).
- Supplier management and purchase order tracking.
- Low stock alerts and automatic notifications.
- Graphs and analytics (fast-moving vs slow-moving items).
- Multi-branch synchronization with cloud-based storage.

6. Conclusion

The simplified IMS offers a clean, minimal implementation for small-scale inventory management. It ensures core functionality such as authentication, stock updates, and basic reporting, while providing room for expansion into a more feature-rich solution in the future.