

Synopsis:

Major Project Title:

Stock Management System

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Synopsis:

The Stock Management System is a software application designed to streamline and automate the processes involved in managing inventory and stock levels in an organization. This system aims to replace the traditional manual methods of inventory control with a more efficient, reliable, and scalable digital solution.

The project focuses on tracking stock quantities, managing product details, updating inventory levels in real-time, and generating reports for decision-making. It helps businesses maintain optimal stock levels, reduce losses due to overstocking or stockouts, and improve overall operational efficiency.

The system supports features such as product categorization, supplier management, stock inward and outward tracking, purchase and sales records, and alert mechanisms for low-stock items. Additionally, it includes user role-based access to ensure secure and controlled operations.

Objectives:

1. To develop an easy-to-use interface for stock monitoring.
2. To automate stock entry and update processes.
3. To minimize human errors in stock tracking.
4. To generate real-time reports for analysis.
5. To provide notifications for low-stock or overstocked items.

Modules:

1. Admin Dashboard
2. Product Management
3. Stock In/Out Management
4. Supplier & Customer Management
5. Sales & Purchase Tracking
6. Reports & Analytics
7. User Management and Authentication

Technology Stack:

- Frontend: HTML, CSS, JavaScript (or Angular/React if using frameworks)
- Backend: PHP / Java / Python / Node.js (choose one based on preference)
- Database: MySQL / PostgreSQL / MongoDB
- Tools: Visual Studio Code / Eclipse / NetBeans

Conclusion:

This project provides a comprehensive solution to manage stock effectively and can be adapted to various business domains like retail, warehouse, or manufacturing units. It enhances productivity and supports data-driven decision-making.