

EEC 626 Software Engineering Project

: Project Title:

Inventory Management Web Application

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1. Sponsor Information

Name: SR Business Group

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2. Basic description about the application

This inventory management software is designed to help small to midsized businesses streamline the process of managing orders and product inventory. The system allows the Business Owner, Manager, or Worker to efficiently handle essential inventory tasks while providing clear, intuitive interfaces for order creation, modification, and product management.

3. Initial Requirements:

a. Order Management:

Business Owners or Managers can create and modify upcoming orders, ensuring that inventory needs are met in a timely manner.

b. Order Details Viewing:

Users, including Workers, can easily access details of both upcoming and previous orders, enabling transparency and better decision-making.

c. Product List Management:

Users can add or remove products from the inventory, keeping the list up-to-date with the current stock.

d. Dashboard and Home Screen:

The home screen offers a user-friendly dashboard displaying details about previous and upcoming orders. Additionally, it features two dynamic charts that provide insights into the highest and lowest-selling products, helping users monitor product performance at a glance.

4. Tentative schedule

Sprint Number	Start Date	End Date	Sprint Goal	Tasks
0	2-Sep- 24	8-Sep- 24	Planning and Setup	Finalize requirements, Set up development environment
1	9-Sep- 24	22-Sep- 24	Basic Framework and UI Design	Implement basic structure, Design dashboard layout, Set up database
2	23-Sep- 24	6-Oct-24	Backend Development and Data Integration	Develop backend logic, Integrate frontend with APIs, Render dynamic cards
3	7-Oct- 24	20-Oct- 24	Chart Implementation and API Enhancements	Implement charts, Enhance APIs, Test data flow
4	21-Oct- 24	3-Nov- 24	Detailed Pages and Routing	Implement routing, Develop detailed views
5	4-Nov- 24	17-Nov- 24	Testing, Refinement, and User Feedback	Conduct testing, Gather feedback, Refine features
6	18-Nov- 24	1-Dec- 24	Final Adjustments and Deployment	Make final adjustments, Prepare documentation, Deploy to production

5. Future Requirements:

As the business evolves, the client has identified several future enhancements to the inventory management software to further improve operational efficiency.

1. Automatic Stock Replenishment:

The system will be capable of identifying items with low stock levels and automatically adding them to the order list. Users will receive notifications to review and place these orders.

2. Shipment and Tracking Automation:

Upon receiving emails from suppliers, the system will automatically update shipment and tracking details. Users will be informed about upcoming deliveries without manual input.

3. Monthly Purchase Order Reports:

The application will generate detailed monthly reports summarizing all purchase orders, helping the owner track inventory expenses and stock flow.

4. Sales System Integration:

To ensure seamless operations, the application will integrate with the sales system, enabling the business to maintain accurate accounts and gain a comprehensive view of sales and inventory management.