



# Smart Stock Inventory Management System

An Innovative Solution for Efficient Inventory Control

# **Smart Stock Inventory Management System**

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# Project Name: SmartStock Inventory Management

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SmartStock is a cutting-edge web-based system that enables businesses to monitor stock levels in real time using AI, ensuring that inventory is maintained efficiently and accurately.





# Stakeholders / Target Audience

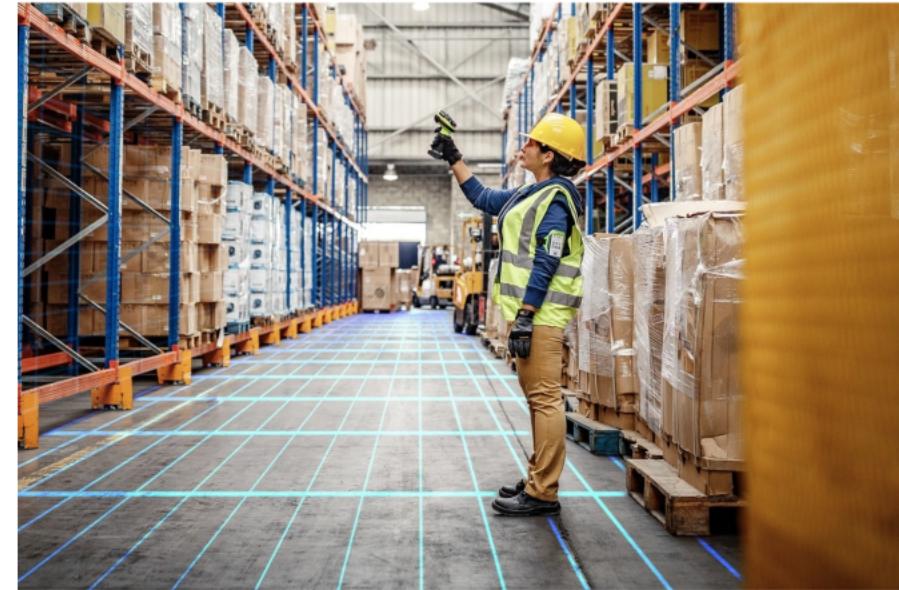
SmartStock is tailored for various stakeholders including:

- small and medium-sized businesses
- retail store owners
- e-commerce platforms looking to enhance inventory efficiency.

# Development Tools / Environment

SmartStock will be built using powerful technologies:

- React.js
- Tailwind CSS
- Firestore
- Visual Studio Code
- NPM
- Firebase Cloud Messaging
- OpenAI LLM Integration



# Key Changes Made

Minor changes were implemented to improve user interaction, including adjusted button styles for better visibility. The inventory table was enhanced for responsiveness, signin/signup page was improved to streamline inventory search processes. Minor adjustments were made to enhance responsiveness and functionality, ultimately improving usability across devices.



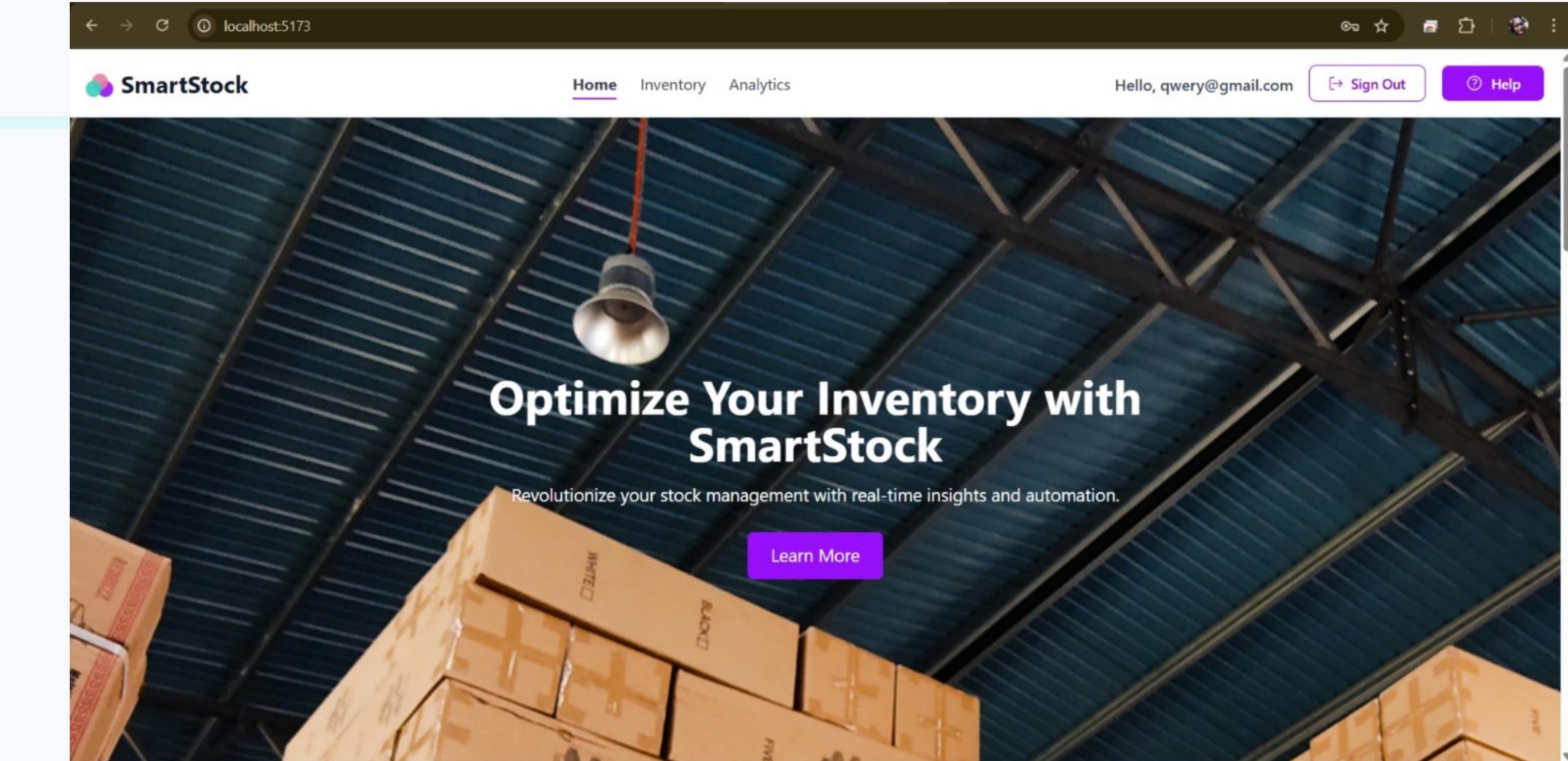
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# Key Accomplishments

Three notable accomplishments include the successful designing of mobile application for users, the creation of an intuitive inventory dashboard, and the implementation of Firebase integration.



# Screenshots of Work Progress



A screenshot of a web browser displaying the SmartStock inventory management software. The URL in the address bar is localhost:5173. The page features a dark header with the SmartStock logo, navigation links for Home, Inventory, and Analytics, a user greeting (Hello, qwery@gmail.com), and sign-out/help buttons. The main content area has a background image of a warehouse interior with stacked boxes. The central text reads "Optimize Your Inventory with SmartStock" and "Revolutionize your stock management with real-time insights and automation." A purple "Learn More" button is visible at the bottom of the text block.

## SmartStock Features

SmartStock offers a comprehensive suite of tools designed to enhance inventory management through real-time tracking, stock optimization, and increased operational efficiency.

### Real-Time Tracking

Monitor your inventory status instantly with our real-time tracking feature, ensuring you are always informed about stock levels and movements.

[Try now](#)[Learn more](#)

### Stock Optimization



## Stock Optimization

Optimize your stock levels efficiently to reduce waste and meet demand accurately, thanks to our smart algorithms and predictive analytics.

[Try now](#)[Learn more](#)

### Hear from our awesome users!



Michael Matthew



SmartStock transformed our inventory management process.

### Order Product

Product ID

Product Name

Quantity

Price

Select Category

Cancel

Add Product

[Home](#)[Inventory](#)[Analytics](#)

Hello, qwery@gmail.com

[Sign Out](#)[Help](#)

## Inventory Overview

[All Categories](#)[+ Order a New Product](#)

Product ID	Product Name	Remaining Qty	Average Price	Category		
0182726hshs0	Costco 1 Gallon Milk	10	\$5.99	Dairy	<a href="#">Order More</a>	<a href="#">Remove</a>
9938yyuevwhevu8	Marlboro Ultra Lite 10 Pack	180	\$16.65	Cigarettes	<a href="#">Order More</a>	<a href="#">Remove</a>



# Issue: Protected Route Issue

Unauthorized users could access dashboard of the website even after logout which was fixed by protected route.



## Database error

When adding products, the expiration date of the already ordered items is not getting merged with the newly ordered items and need to fix it in the database.

# Issue: UI Layout on Smaller Screens

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The UI layout faced challenges during testing on smaller screens, causing disruptions in user engagement and usability. Ensuring a responsive design across devices was critical for user satisfaction.





# Resolution: Tailwind Responsive Utilities

Tailwind's responsive utilities were used to adapt the design for smaller screens, ensuring the layout remained functional and visually appealing across devices. This solution enhanced accessibility and user experience significantly.



# Plan to Fix Remaining Issues

Future efforts will focus on further optimizing database queries and improving error handling for network failures. These enhancements are pivotal for maintaining system stability and user trust.

# Upcoming Tasks for Next Build

Key tasks for the next build include completing backend implementing Multi Factor user authentication. Additionally, I will work on creating a reporting and analytics dashboard to provide insights into stock performance and trends. Also I will work on AI and LLM integration.



“Thank You

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