



Alpha Inventory Management System

Track Better, Manage Faster, Grow Bigger



Presented By :
Team Alpha



Our Team

Meet our team

Shaheer Ahmed

PM + Full stack
developer +
Tester

Hasan Mustafa

Marketing Expert

Hunain Amjad

Business Analyst

Hamza Aijaz

Content Writing

Sarim Hassan

Social Media
Handling

Mauzam Abbas

Surveys Support



OUR PROJECT VISION

A modern, user-friendly web application is designed to help businesses efficiently track, manage, and optimize their inventory in real time by providing a centralized control panel for comprehensive visibility across all stock locations. It focuses on delivering actionable insights through customizable reports and analytics dashboards to inform smart purchasing and sales decisions. The application automates low-stock alerts and reorder processes to effectively prevent costly stockouts and overstocking, ensuring optimal inventory levels.



Challenges in the Market



Challenges

- Without organized inventory data, business owners can't make informed business decisions.
- Inventory shrinkage due to theft or mishandling is common.

Challenges

- Businesses often buy too much or too little stock, leading to wasted money or lost sales.
- Stock ordered at different prices can cause difficulties in business while closing.





How We Solved these Problems



Features we add to solve problems

- Product count tracking
- Total quantity management
- Total value calculation
- Profit Tracking
- Category Management
- Out of Stock Alerts

Main Goal: To effectively track, manage, communicate, and validate project success.



Documents Journey

1. Project Initiation & Planning

- Business Case
- Project Charter
- Scope Management Plan
- Scope Management Plan
- WBS (Work Breadwan Structure)
- Project Plan
- Critical Path Identification

2. Project Execution & Monitoring

- SRS (System Requirements Specification)
- Q SDLC (Sottware Development Lycle) Management)
- ✓ Code and Database Structure Testing (Black Box Functional Testting)

3. Project Closure & Learning

- Report on performance (by PM)
- Risk Register
- COCCMO Effort Estimation Testing)
- Integrated Change Control Board
- **Lesson learned**

Project Documentation



Business Case

Justification for the project and expected benefits



Project Plan

Timeline, deliverables, and milestones



Scope Management Plan

Defining, validating, and controlling scope



Change Control Board

Governs project change requests and approvals



Business Charter

Objectives, scope, and stakeholders



Work Breakdown Structure

Hierarchical decomposition of project tasks



SRS Document

Functional and non-functional requirements



cOCOMO Effort Estimation

Cost drivers and calculated effort metrics



main ▾ 1 Branch 0 Tags

Go to file

DOCUMENTS SPM

shaheerahmedcoder	Revise team roles and fix spelling in README	...
Communication with Miss	spm project resources	
DataBase, Code Structure and UI UX	project closure	
Marketing	project closure	
PPT (final submission)	project closure	
Project Documentations	project closure	
Project Live URL	project closure	
Risk Management (Individual)	risk management added	
SDLC Preview Task(online class)	spm project resources	
Team Meetings	project closure	
Team Surveys	project closure	
Timely submission proof	project closure	

Documents contain our communication with miss

Images of code snippets, ui design and database overview

Pictures of our project marketing includes posts, reels

Final presentation

Includes all the project documentation from Business case to Lesson Learned

Our project live URL

Risk management individual task each member

SDLC task Online class

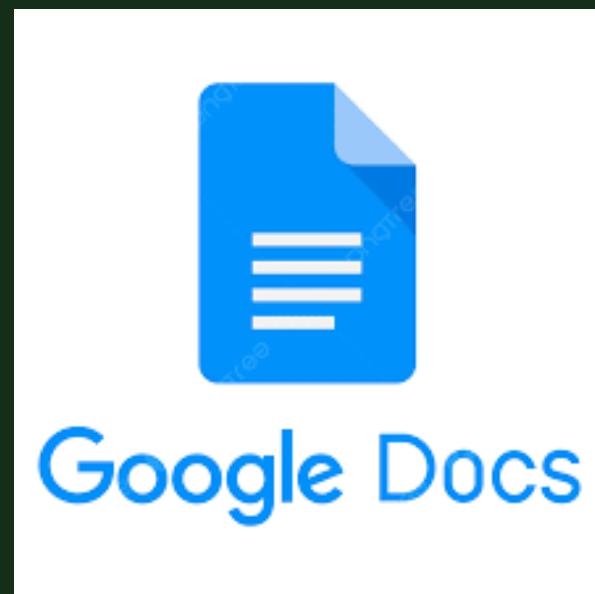
Team meetings (8 meetings)

Surveys conducted onsite (11 surveys)

Picture proof of our timely submissions (last repo pics with dates shown)



Project Management Tools we used



Product Key Features



Core Features

Product Management

Add, edit, and delete products with ease



Category Management

Organize products into logical categories



Stock Tracking

Monitor stock levels with real-time alerts





Product Key Features



Core Features

Search & Filter



Quickly find items by name, category, or ID

User Authentication



Role-based access for enhanced security

Responsive Design



Works seamlessly across all devices



Technology Stack

Frontend

HTML,CSS,
Vanilla JS

Database

Firebase,
Firestore

Hosting

Netlify



UI Design



The screenshot shows the homepage of the AlphaSolutions inventory management system. At the top, there's a navigation bar with the AlphaSolutions logo, a search bar, and links for Features, Benefits, Pricing, Contact, and Signin / Register. The main heading is "Inventory Management with Alpha Solutions" in bold black and green text. Below it is a sub-headline: "Take control of your inventory with our powerful, cloud-based management system. Track stock levels, manage suppliers, and optimize your operations in real-time." Two call-to-action buttons are present: "Start Free Trial →" and "Watch Demo". At the bottom of this section, there are three checked checkboxes: "14-day free trial", "No credit card required", and "24/7 support". To the right of the main content area is a large, semi-transparent callout box titled "Dashboard Overview". It contains six data cards with the following information:

Dashboard Overview	
1,247	15,420
Total Products	Total Quantity
\$247K	\$89K
Total Value	Total Profit
24	7
Categories	Out of Stock

Live Demo Showcase

The AIMS dashboard provides a comprehensive overview of business performance. Key metrics include:

- Low Stock Items:** 1 item (Product B)
- Total Sales:** PKR 6730.00
- Total Profit:** PKR 1130.00

Visualizations include:

- Distribution:** A pie chart showing Category A1 (green) and Category B (blue).
- Sales Trend:** A line graph showing sales volume increasing from Oct 15 to Oct 21.
- Stock Levels:** A bar chart showing high stock levels for Product A (~17 units) and low stock levels for Product B (~2 units).

Alerts:

- Low Stock Alerts:** Product B has 3 units left.

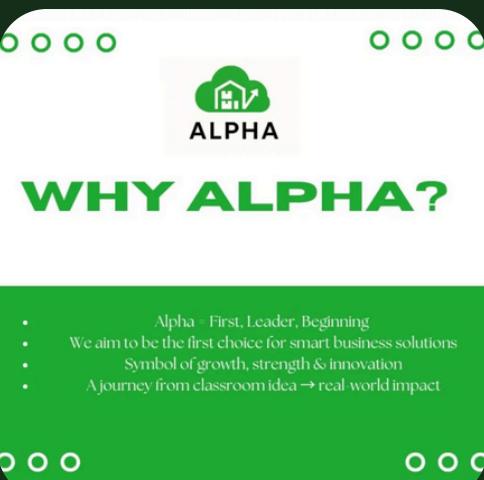
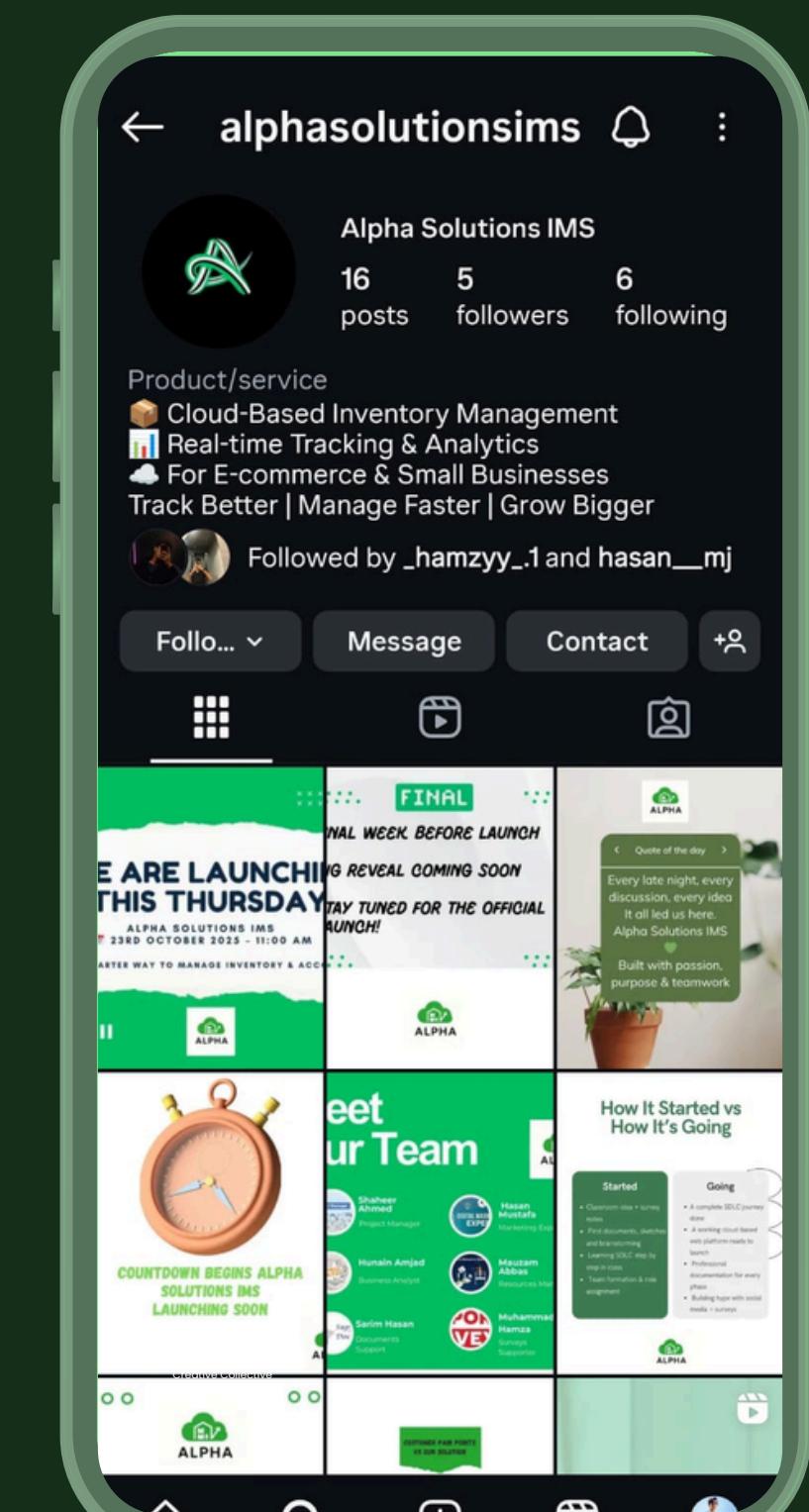
The Profit/Loss Analysis section displays the following data:

- Total Profit:** PKR 1130.00
- Net Profit:** PKR 1130.00

A line graph illustrates the profit trend over time, starting at PKR 0.00 on Oct 15, dipping slightly, and then rising sharply to PKR 1130.00 by Oct 20.

Marketing Showcase

SOCIAL MEDIA MARKETING





Lessons Learned

- Building AIMS helped us understand the importance of efficient inventory tracking in reducing human error and improving business decision-making.
- We learned how automation can simplify complex manual tasks like stock updates, order processing, and report generation.
- Working on this project enhanced our knowledge of database management, frontend-backend integration, and real-time data handling.
- We realized the value of user-friendly UI/UX design, as it directly affects how easily managers can navigate and use the system.
- Collaboration within the team improved our project management and communication skills, ensuring tasks were completed effectively.
- Implementing features like analytics, alerts, and supplier management taught us how small functionalities can greatly improve overall system efficiency.
- We also learned the importance of testing and debugging, ensuring smooth performance before deployment.
- Deploying the system on Netlify gave us hands-on experience in web hosting and version control using platforms like GitHub.



Thank You!

“Add Our journey throughout SPM Project from documentation to implementation taught us the value of structure, collaboration, and clarity – turning a process into a shared learning experience.”

Key Takeaway:

“Together, we documented not just a project – but a process of teamwork and growth.”



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