



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.

"Make inventory management simple for businesses"



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

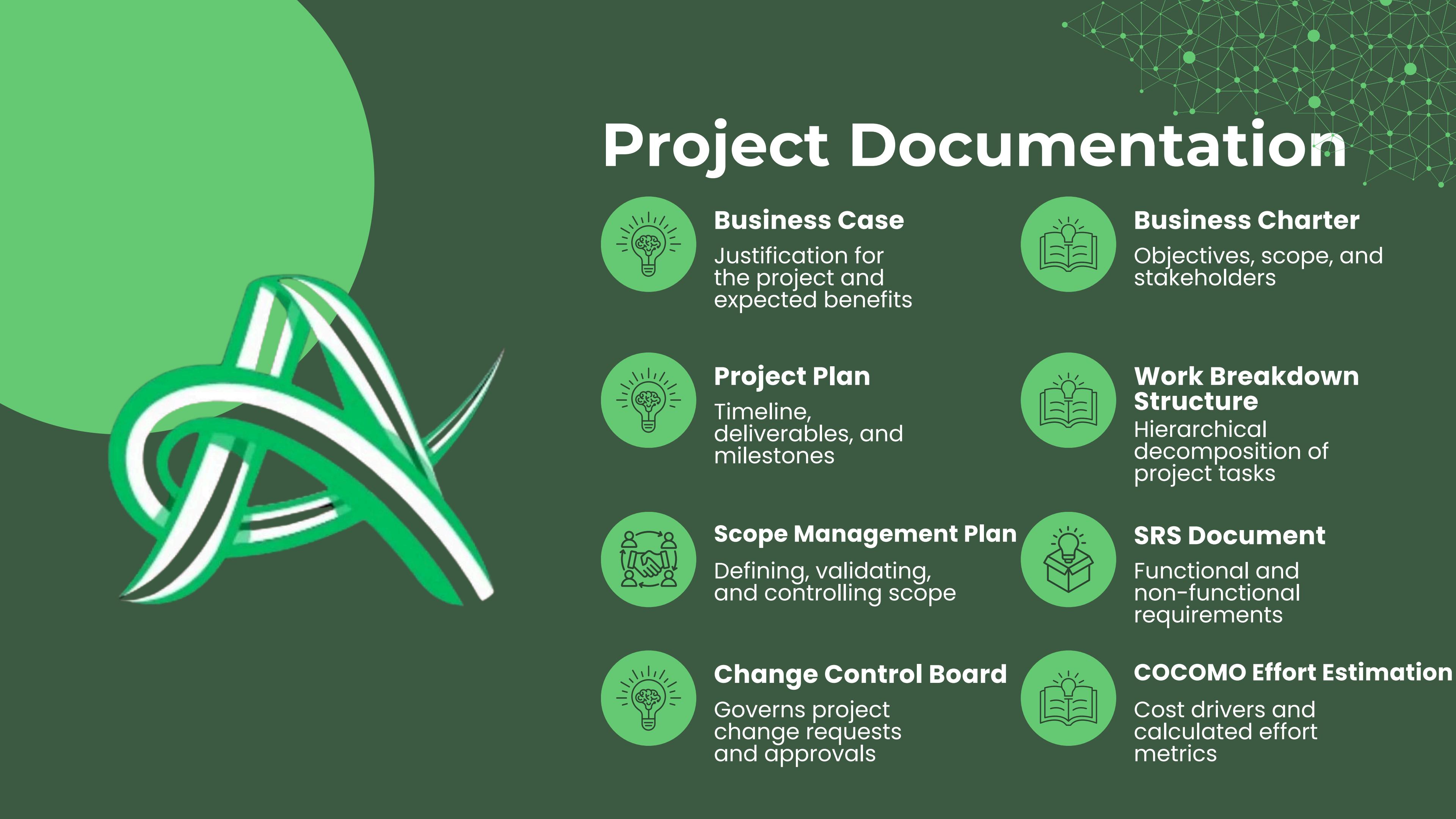
- Business Case
- Project Charter
- Scope Management Plan
- Scope Management Plan
- WBS (Work Breadwan Structure)
- Project Plan
- Critical Path Identification

2. Project Execution & Monitoring

- SRS (System Requirements Specification)
- Q SDLC (Software 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 is a "Dashboard Overview" box containing six metrics: "1,247 Total Products" (purple), "15,420 Total Quantity" (light blue), "\$247K Total Value" (orange), "\$89K Total Profit" (pink), "24 Categories" (yellow), and "7 Out of Stock" (red). The background of the page features a faint watermark of a person working at a desk.

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.

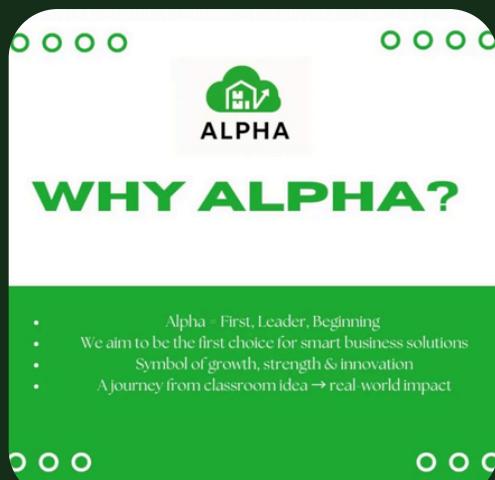
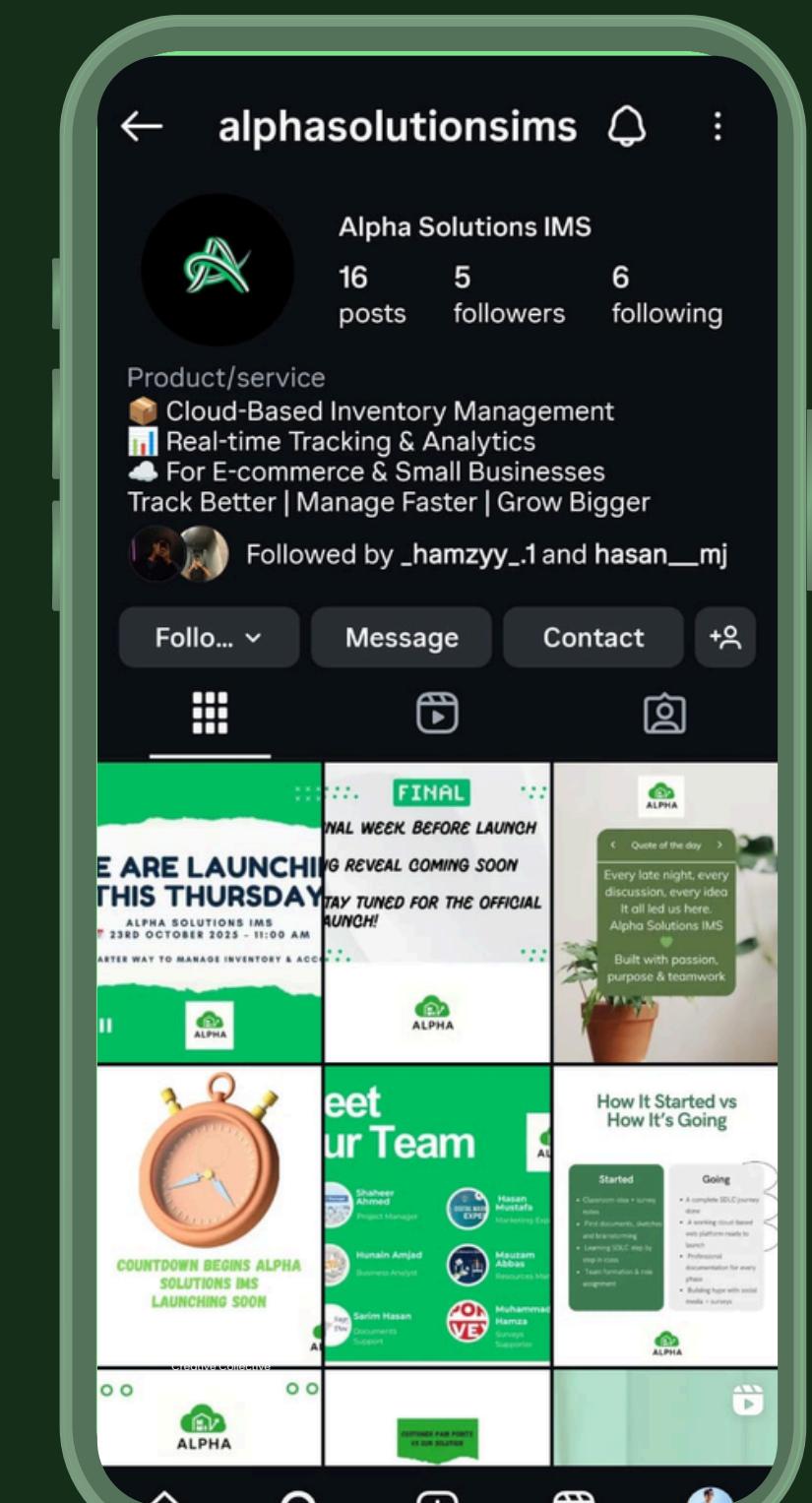
The Profit/Loss Analysis section displays the following data:

- 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.

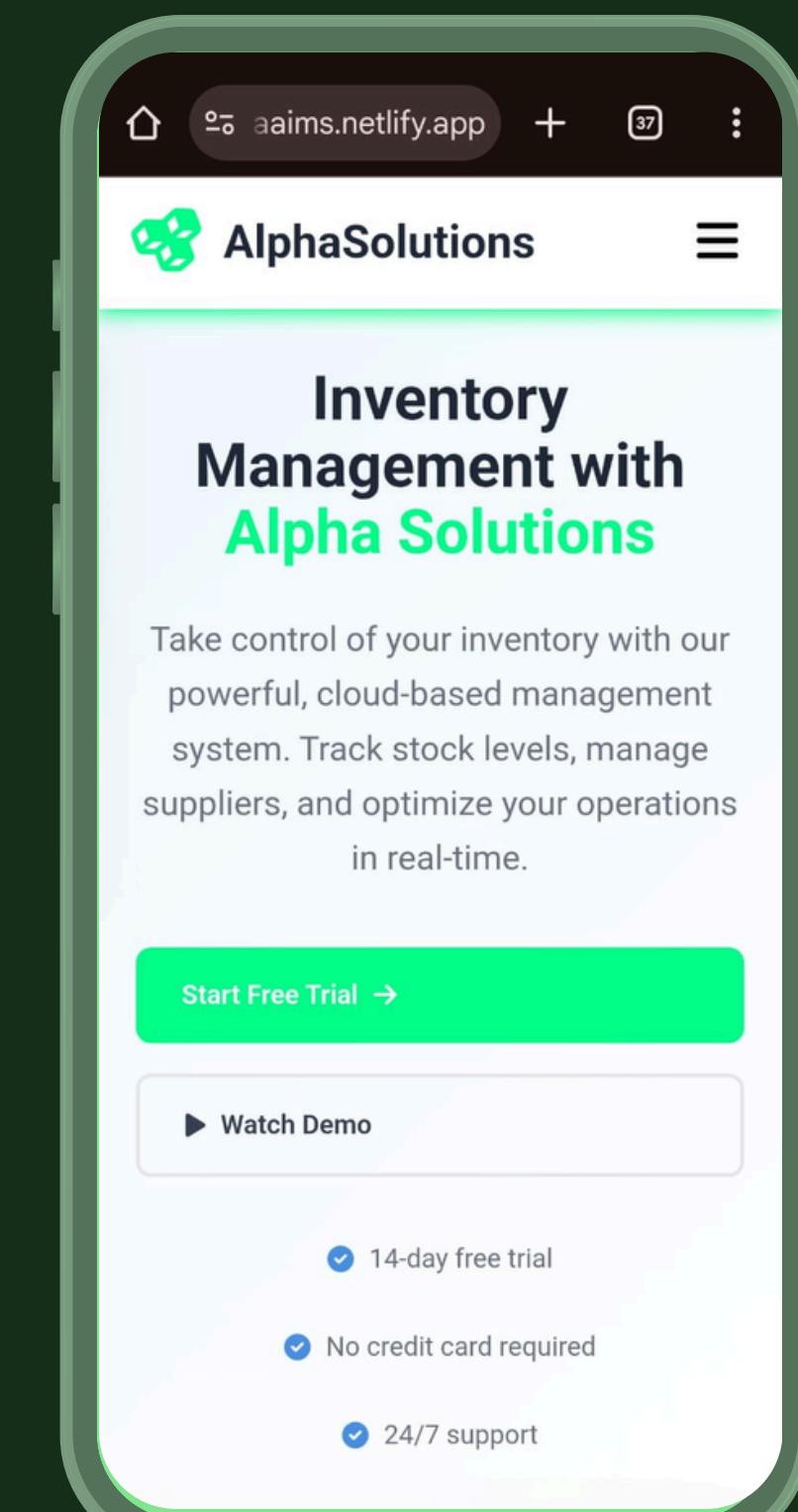
Marketing Showcase

SOCIAL MEDIA MARKETING



Content Showcase

Website & Social Media



Inventory Management with Alpha Solutions

Take control of your inventory with our powerful, cloud-based management system. Track stock levels, manage suppliers, and optimize your operations in real-time.

[Start Free Trial →](#) [▶ Watch Demo](#)

14-day free trial • No credit card required • 24/7 support

Why Choose AlphaSolutions?

Join thousands of businesses that have transformed their inventory management with our solution.

 30% Cost Reduction <small>Reduce Costs</small> Minimize carrying costs and prevent stockouts with optimized inventory levels.	 99.9% Accuracy Rate <small>Improve Accuracy</small> Eliminate human errors with automated tracking and real-time data synchronization.
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How It's Going

Started <ul style="list-style-type: none">Classroom idea + survey notesFirst documents, sketches and brainstormingLearning SDLC step by step in classTeam formation & role assignment	Going <ul style="list-style-type: none">A complete SDLC journey doneA working cloud-based web platform ready to launchProfessional documentation for every phaseBuilding hype with social media + surveys
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Powerful Features

everything you need to manage your inventory efficiently and scale your business operations.

 Total Quantity Management <small>Get real-time visibility into your total quantity across all products and locations in one view.</small>	 Total Value Management <small>Get real-time visibility into your total value across all products and locations in one view.</small>
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ALPHA

Managing inventory with spreadsheets is messy, time-consuming and full of errors X

That's where Alpha Solutions IMS comes in. Our vision is to empower small businesses and e-commerce with smart, cloud-based tools that save time and boost growth.

What's coming your way:
Real-time Inventory Tracking
Powerful Analytics Dashboard
Secure & Cloud-Based Solution
Designed for Business Growth

This is not just a project. It's a step towards smarter business management.
Stay tuned, more updates on the way! 🎉

Dashboard Overview

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

Survey Showcase

Alpha Inventory Management System

Features Added After Survey:

- Khata
- Multilingual
- Reports Feature for backup
- Feasible payment methods



INVENTORY MANAGEMENT SURVEY REPORT

Store Name: Almas Mart
Interviewer: Mhummed Ahmed
Business Type: General Store / Mini-Mart
Location of Survey: Baharabad, Karachi – Pakistan
Meeting Duration: 6:00 pm – 6:20 pm
Survey Conducted By: Syed Sarim Hassan Naqvi

PURPOSE OF THE SURVEY

To study how Almas Mart currently manages its inventory, identify the difficulties faced, and explore practical ways to make stock control easier and more reliable—while respecting the owner's preference to stay completely offline.

BUSINESS OVERVIEW

Almas Mart is a privately run grocery and convenience shop that sells packaged foods, beverages, confectionery, and household essentials. It serves local residents and nearby offices with steady daily sales and frequent restocking from multiple suppliers. All operations are managed without any Internet-based or cloud systems.

KEY FINDINGS

1. Business Nature: Retail general store (grocery and snacks)
2. Range of Stock: Snacks, drinks, packaged foods, household items
3. People Handling Inventory: Owner with help from 1–2 assistants
4. Current Tracking Method: Manual counting and visual checks
5. Frequency of Stock Updates: Daily, especially in the evening
6. Recording of Sales & Purchases: Cash register and handwritten notes
7. Identifying Low Stock: By observation and customer feedback
8. Current Challenges:
 - Fast-moving items run out quickly during busy hours

Creative Collective

INVENTORY SYSTEM SURVEY REPORT

Shop Name:	PAK RICE
Person Interviewed:	Asad
Business Type:	General Items / Grocery
Survey Location:	Alfalal, Malir Halt Society, Karachi – Pakistan
Meeting Start:	6:57 pm
Meeting End:	7:10 pm
Survey Conducted By:	Hasan Mustafa



Shop Name:	MashaAllah Milk Shop
Person Interviewed:	Usman (Owner)
Survey Location:	Karachi, Pakistan
Survey Conducted By:	Muhammad Hamza
Meeting Start:	10:00 pm
Meeting End:	10:30 pm

OBJECTIVE OF SURVEY:

INVENTORY MANAGEMENT SURVEY REPORT

Store Name: Bilal Medical Stores
Interviewee: Bilal Ahmed
Business Type: Pharmacy / Medical Store
Location of Survey: Baharabad, Karachi – Pakistan
Meeting Duration: 4:45 pm – 5:15 pm
Survey Conducted By: Syed Sarim Hassan Naqvi



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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