



# 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

# 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 calls-to-action 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 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 image of a warehouse.

# 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.

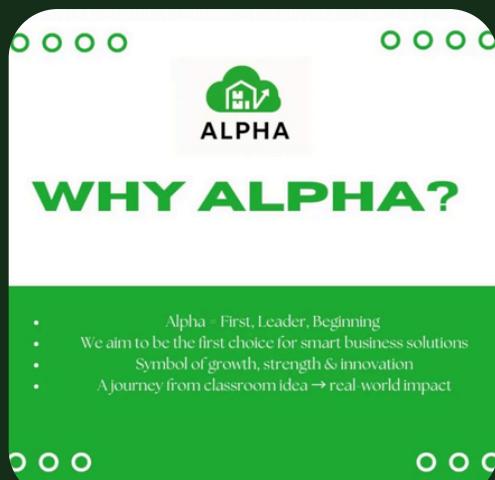
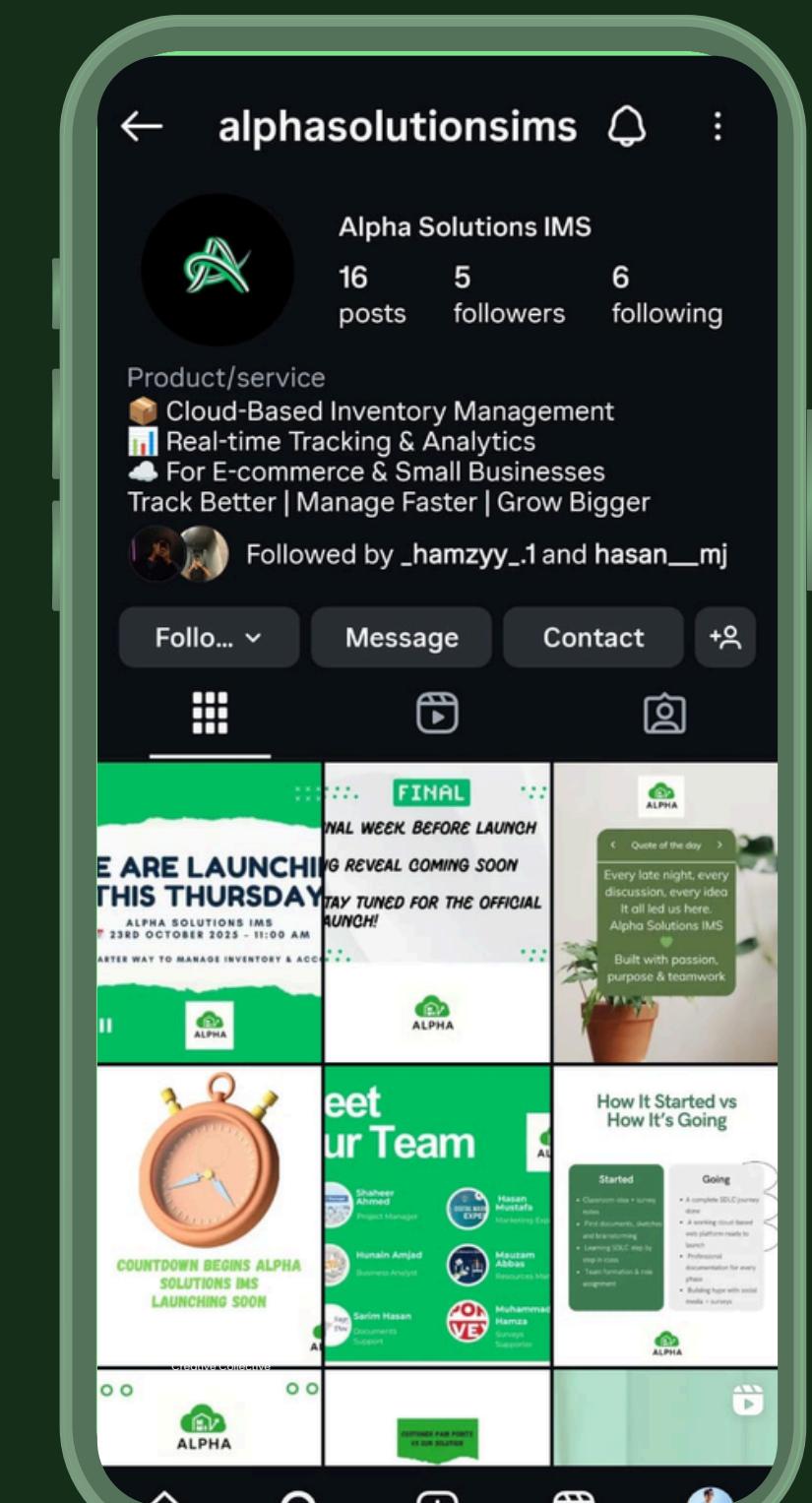
The Profit/Loss Analysis section displays the following data:

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

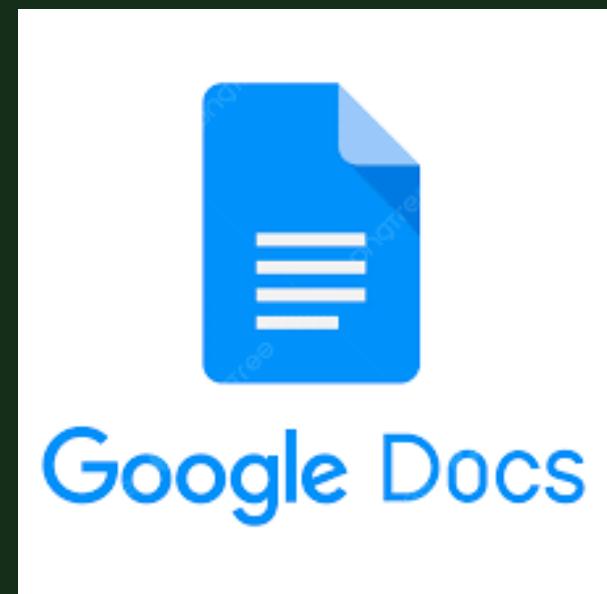
A line graph illustrates the profit trend over time, starting at PKR 0.00 on Oct 15, dipping slightly, and then rising sharply to PKR 1130.00 by Oct 20.

# Marketing Showcase

## SOCIAL MEDIA MARKETING



# Project Management Tools we used





# 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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