SmartInventory

Project description:

An application for easy management of stock for businesses or warehouses. Tracks items, monitor quantities, and sends alerts when stock is low.
SmartInventory helps you optimise and grow your business by focussing on the winning products minimising costs, and channeling efforts.

Main Functionalities:

Stock management: Add, modify, delete and consult your items.

Alerts: Reminder when refill is needed for each item.

Reports: On demand reports with graphics showing percentage-based comparisons for return on investment, space usage, supply and sales intervals, return rate...

Stock list: Display location, margin, ongoing discounts, warranties, supplier informations, average storage duration, and damaged items tracking ...

Advance Functionalities:

Performance Analysis: Product, reseller, and location-based comparison with recommendations.

Stock history and evolution tracker.

Extra: Web interface and multi-store management for large businesses.

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Feasibility Overview

Technical Feasibility

- Tech Stack: Python + Flask + SQLite + HTML/CSS/JS
- Team has basic/intermediate skills: main learning curve: Flask APIs, frontend JS, Git workflow & testing
- No major hardware constraints

Market & User Feasibility

- Target: Small/medium shops using Excel/manual logs
- Competitors: Excel (too manual) / Odoo & Zoho (too expensive/complex)
- SmartInventory bridges gap: lightweight, automated, affordable

Schedule Feasibility

- 10-week development plan
- Core features only (extras deferred)
- Achievable if tasks split efficiently between team members

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Requirements Summary

Functional Requirements

- Item & Supplier Management
- Stock Transactions (purchases, sales, returns, damages)
- Alerts & Reports (low-stock, periodic summaries)
- Analytics & Recommendations (ROI, best sellers)
- Multi-user Access + Role Management

Non-Functional Requirements

- Security: HTTPS, role-based access, SQL injection protection
- Usability: Responsive & intuitive UI with help section
- Reliability: Daily backups + maintainable codebase

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