

STORE MANAGER: KEEP TRACK OF INVENTORY

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1. Introduction

Inventory management plays a crucial role in ensuring that a business maintains adequate stock levels while avoiding overstocking. Manual tracking is error-prone and inefficient. This project introduces an automated Store Manager system to streamline inventory processes, increase efficiency, and provide real-time monitoring.

2. Objectives

Develop a user-friendly inventory management application. Minimize manual errors in stock handling. Provide real-time tracking of items. Enable generation of detailed analytical reports. Ensure scalability for future growth.

3. Existing System & Limitations

The traditional system of inventory management relies on manual record keeping or basic spreadsheets. Such systems are prone to data entry errors, lack real-time updates, and often fail to generate insightful reports. As a result, decision-making becomes difficult and inefficient.

4. Proposed System

The proposed Store Manager system provides a centralized platform where inventory details can be added, updated, searched, and reported in real time. It ensures accuracy, improves efficiency, and supports better decision-making by managers. It also offers features like report generation and user authentication for secure access.

5. Methodology

The project follows a modular development approach. Major modules include: Authentication Module, Inventory Module, Report Generation Module, Database Management Module. The methodology ensures systematic design, development, and testing of each module.

6. System Design

The system design is divided into three layers: User Interface, Backend, and Database. The architecture diagram below illustrates the relationship between these layers.

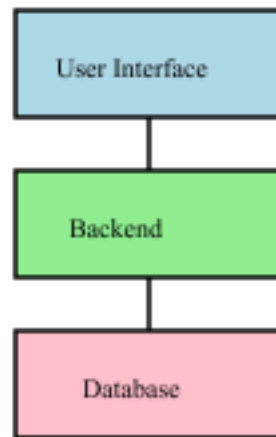
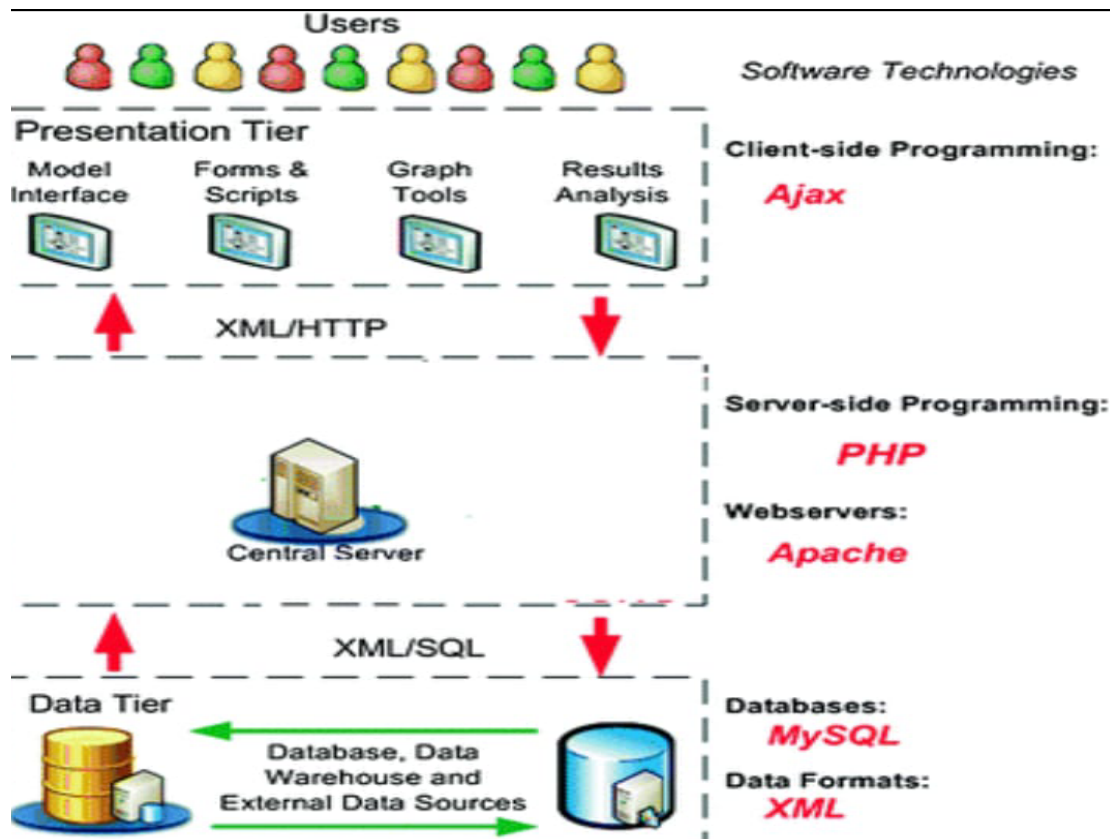


Figure 1: System Architecture Diagram shows how the User Interface communicates with the Backend, which in turn connects to the Database.

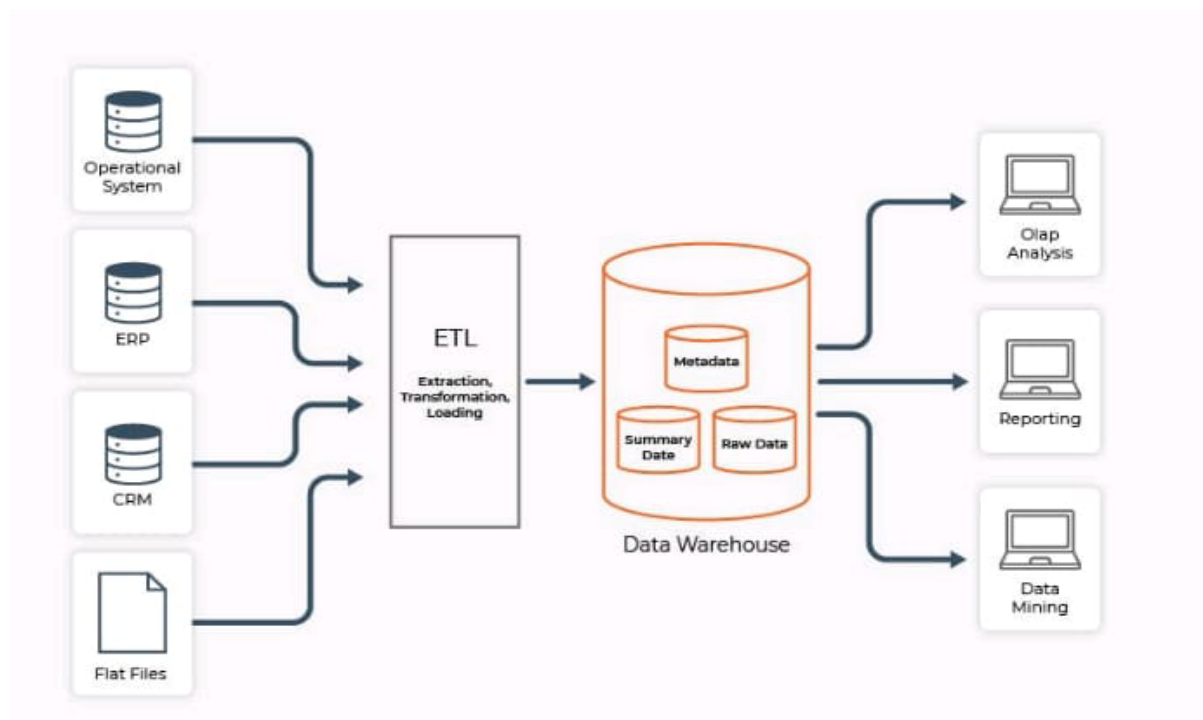


7. Implementation

The implementation phase includes the integration of all modules. The flowchart below represents the step-by-step flow of the system from login to logout.



Figure 2: System Flowchart depicts the user journey through login, performing operations like Add/Update/Search/Report, and finally logging out.



8. Results & Discussion

The system was successfully implemented and tested. It efficiently tracks inventory, minimizes errors, and generates real-time reports. Managers can now make better decisions based on accurate data.

9. Conclusion & Future Work

The Store Manager system has proven effective in managing inventory in real-time, improving efficiency, and reducing manual workload. Future improvements may include Barcode/QR integration, cloud-based data storage, and mobile app support for remote access.

