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Project Proposal

**Inventory Management System**

**Summary:**

This project aims to develop a comprehensive SQL-based Inventory Management System (IMS) to streamline and optimize the tracking, control, and management of inventory for businesses.

An inventory management system is a collection of processes, procedures, and technology (hardware and software) that manages the tracking and upkeep of stocked products. These products can be company assets, supplies and raw materials, or completed goods that are prepared for delivery to suppliers or final customers.

Regular retailers, department stores, and multinational corporations (MNCs) can all effectively manage their stock with this approach. It also includes details about customers, managers, and other information.

**Objectives:**

The primary objectives of the proposed Inventory Management System are:

**Automated Inventory Tracking**: Implement a robust system to automate the tracking of inventory levels, ensuring accuracy and minimizing manual errors.

**Real-time Reporting**: Develop a reporting module that generates real-time insights into inventory levels, turnover, and other relevant metrics.

**User-Friendly Interface**: Create an intuitive and user-friendly interface for easy navigation and accessibility, enabling users to manage inventory efficiently.

**Scope:**

Add, edit, and delete products, including details such as product name, description, and supplier information.

Monitor real-time inventory levels, track stock movements, and receive low-stock alerts.

Create and manage purchase orders, sales orders, and returns, updating inventory levels accordingly.

Sets minimum quantity of any product below which we can order the product from manufacturer.

**Working:**

There will be various front ends for this application depending on the type of user. The individual seated at the billing counter will only be able to alter the quantity of any given product, meaning that they will be able to create an invoice for any goods that are sold or a return note for any goods that customers may return.

If dynamic price inventory is present, the management will be able to change the rates. The final report, which includes all sales made on a given day, the total sales on a given counter, and sales made by any salesperson, can be generated by the business owner.

**Conclusion:**

I am creating a comprehensive back-end program for this project that allows us to forecast, change, and create invoices in addition to updating the stock.

I aim from this application is that the management or owner will find it simple to place another order for the goods from the supplier in order to move past the "Out of Stock" phase if a specific inventory or stock falls short of a predetermined number.

Furthermore, it will assist us in managing the warehouses and adding new ones, which might prove to be quite beneficial features.