Inventory and Warehouse Management System – SQL Backend

Introduction

This project aims to develop an SQL backend for managing inventory across multiple warehouses. It provides features such as stock tracking, low stock alerts, and stock transfer.

Abstract

The project models an inventory system using MySQL. It includes key database components like Products, Warehouses, Suppliers, and Stock. Triggers and stored procedures add dynamic logic for real-time inventory management.

Tools Used

- MySQL Workbench

- DBeaver

- SQL language

Steps Involved in Building the Project

1. Designed schema for Products, Warehouses, Suppliers, Stock

2. Created tables and relationships

3. Inserted sample data

4. Wrote queries for stock check and reorder alerts

5. Added a trigger for low stock notification

6. Built a stored procedure for stock transfer

7. Applied constraints for data integrity

Conclusion

This project helped in understanding SQL from the ground up—schema design, data manipulation, query writing, triggers, and procedures. It also shows how SQL can be used in real-world applications.