The purpose of this project was to design and implement a relational database system for a vintage clothing store. The goal was to manage and organize key business data such as customer information, orders, payments, and inventory in a structured, scalable, and efficient way. The system was developed using MySQL, with initial data migrated from Microsoft Access.

The database consists of four main tables. Customer table stores customer details including name, email, address, and phone number. The orders table records customer orders, including the date, total amount, and current status. The payments table tracks payment methods, dates, and amounts corresponding to each order. Products table maintains a catalog of items available for sale, including product descriptions, categories, pricing, and inventory quantity.

I used SQL create table statements to define each table, followed by insert into statements to populate them with sample data. The structure follows normalization principles to avoid redundancy and ensure data integrity.

One of the main challenges encountered was transferring data from Microsoft Access to MySQL. Since Access and MySQL have slightly different syntax and data handling, it was necessary to clean and reformat the data—especially for date and currency fields—to make it compatible with MySQL.

Another issue was avoiding reserved keywords like date when naming columns. This required renaming fields to prevent syntax errors. Additionally, managing data types such as decimal for prices and var char for text fields required careful attention to ensure the data stored was accurate and queryable.

Although basic relationships are logical next steps, they were not fully implemented in this phase due to time constraints. However, the current setup serves as a strong foundation for adding foreign keys and building more complex queries and reports in the future.

This vintage store database project demonstrates how a small business can benefit from structured data management. By organizing data into related tables and ensuring consistency through SQL standards, the store can better track sales, manage inventory, and understand customer behavior. Future improvements could include implementing foreign key relationships, creating views for reporting, and developing a front-end interface for user interaction.