**RetailStoreDB:** **SQL Database Design & Implementation for Multi-Store Retail Operations**

**Background**

Our company operates a growing chain of retail stores across multiple regions. Currently, data on inventory, sales, staff, and customer interactions is siloed in spreadsheets and legacy systems. This leads to data duplication, inconsistency, and limited reporting capabilities.

To improve operations, we aim to design and implement a centralized, normalized SQL database that supports clean, reliable, and scalable data management.

**Objective**

Design and build a relational SQL database from scratch to:

* Store structured data related to stores, employees, customers, sales, inventory, and products.
* Ensure data integrity, consistency, and scalability.
* Support reporting, dashboards, and integrations with other applications.

**Key Entities**

* Stores: Store details (location, size, open date)
* Employees: Staff info (name, position, hire date, store assignment)
* Customers: Basic customer records (name, email, phone, loyalty info)
* Products: Product catalogue (name, category, price, brand)
* Inventory: Stock levels per store
* Sales: Transactions by date, store, customer
* Suppliers: Who we buy products from (supplier name, contact info)

**Deliverables**

1. Scrum project board (Trello or something similar)
2. ERD
3. SQL DDL scripts to create tables with constraints
4. Sample SQL DML (insert/update/delete) queries
5. Data dictionary

**User Stories:**

As a data analyst, I want to have a centralised and normalised database so that I can generate reliable reports across all stores without data duplication

As a data governance officer, I want to ensure that all records in the database follow consistent format and relationships.

As a data engineer, I want to have an ERD so that I can run DDL/DML SQL Scripts.

As a BI Analyst, I want to use data dictionary so that they can run queries and create dashboards.

As a procurement manager, I want to use an inventory dashboard to track inventory and sales per store.

As a marketer, I want to use customer data such as customer loyalty history to create personalised customer recommendation and improve customer retention.

As an employee, I want to be able to find stock data tables so that I can track stocks.

As a user of the database, I want to easily navigate it so that I can make good planning/business decisions.

As a business analyst, I want to join tables and query data to make useful insights.

As a dashboard creator, I want to be able to use the structured tables to create insightful graphs/charts.

As an HR manager, I want to use a customer relationship system to manage employee record per store.