

HF Grocery Store Management System

A full-stack web application for managing a grocery store, built with **React**, **Node.js**, **Express**, and **SQL Server (SSMS)**.

The system supports customer login, product browsing, cart management, and admin-level inventory control.

Project Structure

grocery-store/

```
├── backend/      # Node.js + Express APIs
├── frontend/     # React + MUI UI
├   ├── part1_tables.sql # Tables creation
├   ├── part2_views.sql  # Views definitions
├   └── part3_procedures.sql # Stored procedures
└── README.md
```

Features

Customers

- Browse categories and products
- View detailed product pages
- Add/remove items from cart
- Place orders

Admin

- Add new products, categories, and inventory
 - View all orders and update their status
 - Manage stock availability
-

Database (SQL Server)

Database scripts are organized into three parts:

1. **part1_tables.sql** – creates all necessary tables like Product, Inventory, Cart, Orders, Customer, etc.
2. **part2_views.sql** – defines useful views like available_products, cart_details, order_details, and inventory_status.
3. **part3_procedures.sql** – includes stored procedures for:
 - Product management: add_product, update_product, delete_product
 - Customer management: add_customer
 - Cart operations: add_to_cart, remove_from_cart
 - Order handling: place_order, update_order_status

Tech Stack

- **Frontend:** React, Material UI (MUI)
- **Backend:** Node.js, Express
- **Database:** SQL Server (SSMS)
- **Architecture:** MVC Pattern

Getting Started

1. Clone the Repository

```
git clone https://github.com/your-username/grocery-store.git
```

```
cd grocery-store
```

2. Setup the Database

1. Open **SQL Server Management Studio (SSMS)**
2. Execute the SQL files in order:
 - part1.sql
 - part2.sql
 - part3.sql

3. Install Backend Dependencies

```
cd backend
```

```
npm install
```

4. Start Backend Server

```
node index.js
```

Make sure to configure your dbConfig.js with the correct SQL Server credentials.

5. Start Frontend

```
cd ../frontend
```

```
npm install
```

```
npm start
```

To-Do (Optional Enhancements)

- Add user authentication with JWT
- Enable image upload for products
- Add search and filtering functionality
- Implement order tracking and invoice generation

Contact

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