TGI - Mamacita

E-Commerce

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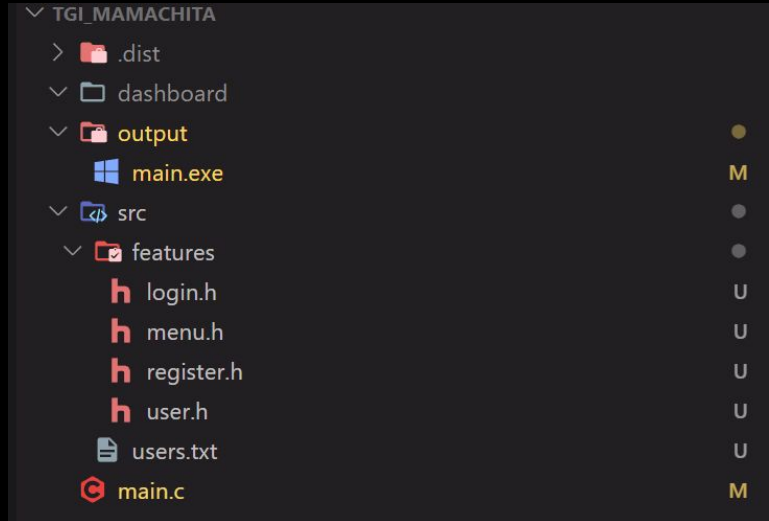
Content

Our Project is based on E-commerce application

Key Functionalities:

- User roles: Admin, User, Store Owner, Guest.
- CRUD operations for entities (Users, Stores, Products).
- Shopping cart, checkout, and invoice generation.
- Sales reports and admin logs.
- Persistent storage using file I/O.

Project Structure:

```
∨ TGI_MAMACHITA
  > 📁 .dist
  ∨ 📁 dashboard
  ∨ 📁 output                        ●
      ⊞ main.exe                     M
  ∨ 📁 src                           ●
    ∨ 📁 features                    ●
        h login.h                    U
        h menu.h                     U
        h register.h                 U
        h user.h                     U
        📄 users.txt                 U
      main.c                         M
```
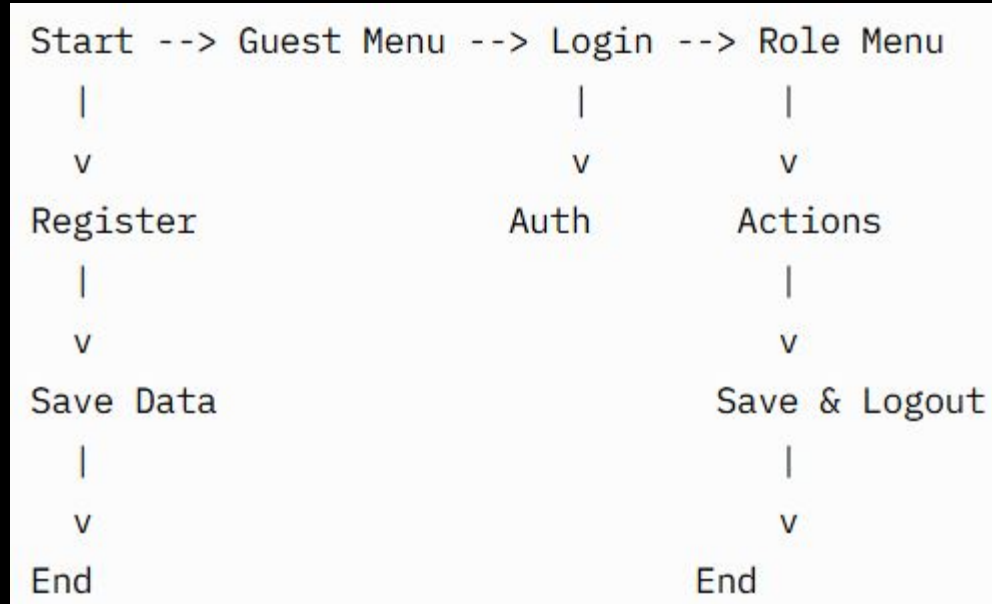
Meet the team

- **Team Members**:

  - **Phok Keomonnyratanak** - Role: Lead Developer
    - Tasks: Core logic, menu system, CRUD operations.
  - **Srun Chanmonika** - Role: Data Engineer
    - Tasks: File I/O, data structures, report generation.
  - **Ny Clinton** - Role: UI Designer
    - Tasks: Console menu design, invoice formatting.
  - **Montra** - Role: Testing Report bug and Assistance to lead
    - Tasks: testing, Handle some features.

Implementation Highlights

- **Data Structures**:
    - User: id, username, password, role, balance.
    - Store: id, name, ownerId.
    - Product: id, storeId, name, price, quantity.
    - Order: orderId, userId, items, total, date.

- **Why?**: Modular, efficient, file-serializable.
- **File I/O**:
    - Files: users.txt, stores.txt, products.txt, orders.txt, logs.txt.

Program Flow

- **Simplified Flowchart**

```
Start --> Guest Menu --> Login --> Role Menu
   |                       |          |
   v                       v          v
Register                  Auth      Actions
   |                                   |
   v                                   v
Save Data                        Save & Logout
   |                                   |
   v                                   v
End                               End
```

Development Workflow:

- We defiance the functions of the applications and handle functions based on the roles
- Github: To store Project
- We Meeting through Physical and Virtual (Google Meet)
- Our project as based on Agile Methodology

Challenge and Experience:

Challenges

- Lack of communication
- Doesn't understand application Function
- Lack of C syntax Understanding

Experience

- Know how to work as a group
- Problem Solving

Application Progress

What we have implemented

- Handle Register store users at users.txt
- Handle Login

What we do next

- Multi Role user Base (admin, store, customer)
- Shop: add to chart, cancel, pruches, invoice, stock, shop, Items, invoice.
- Sales reports, admin logs.

Application Progress

What we have implemented

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- Multi Role user Base (admin, store, customer)
- Shop: add to chart, cancel, pruches, invoice, stock, shop, Items, invoice.
- Sales reports, admin logs.

```
PS D:\1.OneDrive - TUX Global Institute\2.Cprogram\TGI_Mamachita\output> & .\'main.exe'
Welcome to TGI Mamachita!

1. Login
2. Register
3. Exit
Please select an option: 2
You selected option 2

Register
Enter 'back' to return to menu.
Enter your username: customer01
Enter your password: 123
Registration successful! You can now log in.
Returning to menu...

1. Login
2. Register
3. Exit
Please select an option: 1
You selected option 1

Login
Enter 'back' to return to menu.
Enter your username: customer01
Enter your password: 123
Login successful!
Returning to menu...
```

Thank you