

User Guide for the E-Commerce Information Management System

1. Introduction

Welcome to the **E-Commerce Information Management System**! This system enables administrators to manage customers, products, and orders while allowing customers to interact with products and track their order history.

The system follows object-oriented principles and stores all information in structured files (data/users.txt, data/products.txt, data/orders.txt, data/figure/). This guide will help you navigate the functionalities available for **Admins** and **Customers**.

2. System Requirements

To run the system, ensure you have:

- Java SE 22 or higher installed, javafx 24.0.1 library and json-simple-1.1.1.jar tool kit
- A terminal for input/output interactions
- Required data folder (data/users.txt, data/products.txt, data/orders.txt, data/figure/) to be available, and the folder must be located on the same level as the src folder used to hold and run the code.

3. Getting Started

Launching the Application

Run the main class:

Main.java

Once the application starts, you'll be presented with the **Main Menu**.

(For all menus and dashboards, please enter the number assigned to the option you wish to choose).

4. Main Menu

Upon launching the application, you will see:

(===== Welcome =====)

- (1) Login
- (2) Register
- (3) Quit

Option 1: Login

- If you are an **Admin**, you will enter the Admin Dashboard.
- If you are a **Customer**, you will enter the Customer Dashboard.
- Please enter your username and password correctly

Option 2: Register

- Allows new customers to create an account.
- You'll be asked to provide:
- **Username:** Must be at least 5 characters (letters or underscores only).
- **Password:** Must be at least 5 characters (letters and numbers required).
- **Email:** Must follow a standard email format (username@domain.extension).
- **Mobile:** Must be exactly 10 digits and start with 04 or 03.

Option 3: Quit

- Exits the program.

5. Admin Dashboard

Upon logging in as an admin, you will see:

(===== Good day, Admin! =====)

- (1) Show products
- (2) Add customers
- (3) Show customers
- (4) Show orders
- (5) Generate test data (generate orders to data/orders.txt file)
- (6) Generate all statistical figures
- (7) Delete all data
- (8) Logout

Admin Functions

1. **Show Products:** View a paginated list of all products.
2. **Add Customers:** Register new customers.
3. **Show Customers:** View paginated customer records.
4. **Show Orders:** View paginated order records.
5. **Generate Test Data:** Populate the system with test orders in data/orders.txt file.
6. **Generate Statistical Figures:** Create charts related to orders and customers.
7. **Delete All Data:** Wipes all customer, product, and order records.
8. **Logout:** Returns to the main menu.

6. Customer Dashboard

Upon logging in as a customer, you will see:

(===== Enjoy your shopping :) =====)

- (1) Show profile
- (2) Update profile
- (3) Show products
- (4) Show history orders
- (5) Generate all consumption figures
- (6) Logout

Customer Functions

1. **Show Profile:** Displays user account details.
2. **Update Profile:** Allows modification of:
 - Username
 - Password
 - Email
 - Mobile number

After selecting this option, enter “username”, “userpassword”, “useremail” or “usermobile” to select which attribute you wish to change.

3. **Show Products:** View the product catalog.
4. **Show History Orders:** Displays previous purchases.

5. **Generate Consumption Figures:** Creates spending reports.
6. **Logout:** Returns to the main menu.

7. File Storage

The system saves user, product, and order data in structured files.

- **Users:** data/users.txt
- **Products:** data/products.txt
- **Orders:** data/orders.txt
- **Figures:** data/figure/

Ensure these files exist before running the application.

8. Existing problems

Sometimes you will encounter problems relating to data/users.txt (parse NULL), please check the file manually to see if there's any blank line, for example:

```
11 { user_id : u_0000000011 , user_name : manager , user_password : "0v9Wx0yz1ab2c3$ , user_register_time : 0
12 {"user_id":"u_0000000012", "user_name": "nguyenhung", "user_password": "^^mHhVBu5on99gXhdAteKXpAJtL8rtUap0ik01L
13 {"user_id":"u_0000000013", "user_name": "binhkhongbao", "user_password": "^^DAbCaijJnADhmVbWPaSwoNy1v02eN3$$",
14 |
```

Or

```
11 { user_id : u_0000000011 , user_name : manager , user_password : "0v9Wx0yz1ab2c3$ , user_register_time : 01-01-2024 10:00:00 , user_role : admin , user_email :
12 {"user_id":"u_0000000012", "user_name": "nguyenhung", "user_password": "^^mHhVBu5on99gXhdAteKXpAJtL8rtUap0ik01LF2uF3$$", "user_register_time": "19-05-2025_00:32:49",
13
14 {"user_id":"u_0000000013", "user_name": "binhkhongbao", "user_password": "^^DAbCaijJnADhmVbWPaSwoNy1v02eN3$$", "user_register_time": "19-05-2025_00:36:34", "user_role":
```

Please delete the correspond line 14 and 13 in 2 pictures above manually, save and rerun your code, it should work normal again.

This also applies to data/orders.txt or data/products.txt

9. Closing Notes

This system helps efficiently manage users, products, and orders while allowing customers to interact with the e-commerce database.

Enjoy using the **E-Commerce Information Management System!**

GitHub link: <https://github.com/trankhanhbinh/E-Commerce-System>