FOX OF HOOD Programmer's Guide for Portfolio Management System

Team-D

Sai Bharadwaj Mukkera

Nithin Reddy Aenugu

Purna Sai Kumar Cheedirala

Tejas Manu Srinivasan

Shreeya Krishna Shiva

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Introduction

This guide provides step-by-step instructions to install and set up the Stock Market Portfolio Management System. This full-stack web application allows users to manage their personal investment portfolios, analyze profit/loss, buy/sell stocks, and offers administrators tools to manage users.

Prerequisites

- Node.js: v14.x or higher
- PostgreSQL: v13.x or higher
- npm: v6.x or higher

Backend Setup

Follow these steps to set up the backend:

1. Repository:

Clone the repository using the given code below, replace your username in place of *{your-username}.*

- ***git clone https://github.com/tejas-manu/fox-of-hood***

2. Install dependencies:

Open terminal window and navigate to the backend folder and install all dependencies.

- ***cd fox-of-hood/src/backend***
- ***npm install***

3. Configure Database (PostgreSQL):

- Create a database named `myapp_db`.
- Run the SQL scripts in `src/backend/db/schema.sql` to set up the database tables.
- Update the database connection in `server.js`.

```
const pool = new pg.Pool({
  user: 'postgres',
  host: 'localhost',
  database: 'myapp_db',
  password: 'your_password',
  port: 5432,
});
```

4. Start the backend server:

- ***node server.js***

Frontend Setup

Follow these steps to set up the frontend:

1. Open a new terminal and navigate to the root directory:
   - ***cd fox-of-hood***

2. Install dependencies:
   - ***npm install***

3. Start the frontend server:
   - ***npm start***

Access the application at http://localhost:3000 .

Known Issues and Debugging Tips

Common Issues

- Database Connection Error: Verify PostgreSQL is running and credentials are correct.

- Chart Not Displaying: Ensure you have made transactions and have some data populated in the database.

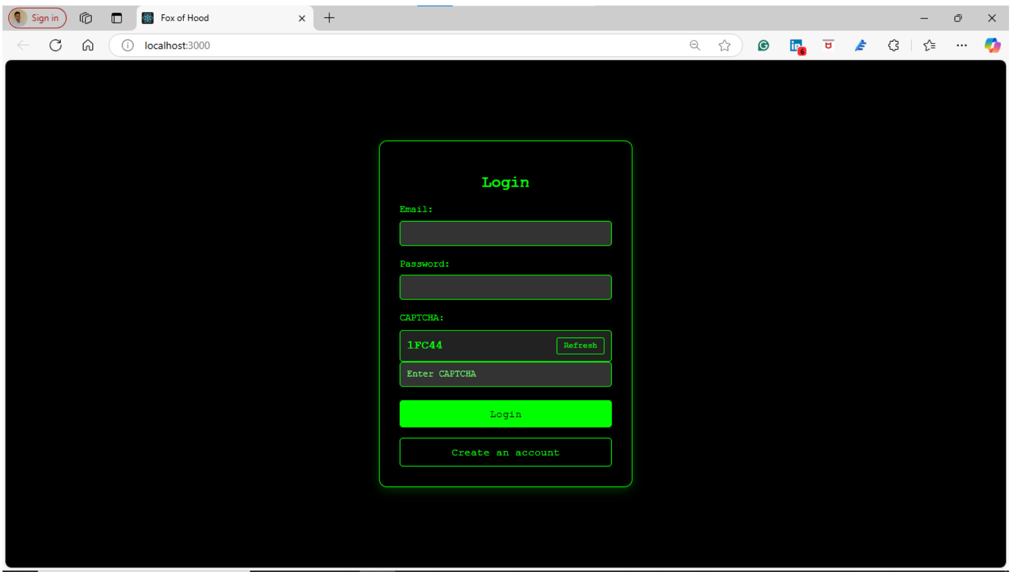
Debugging Tips

- Check logs in the backend (`backend/application.log`) for detailed errors.

1. Login and Registration

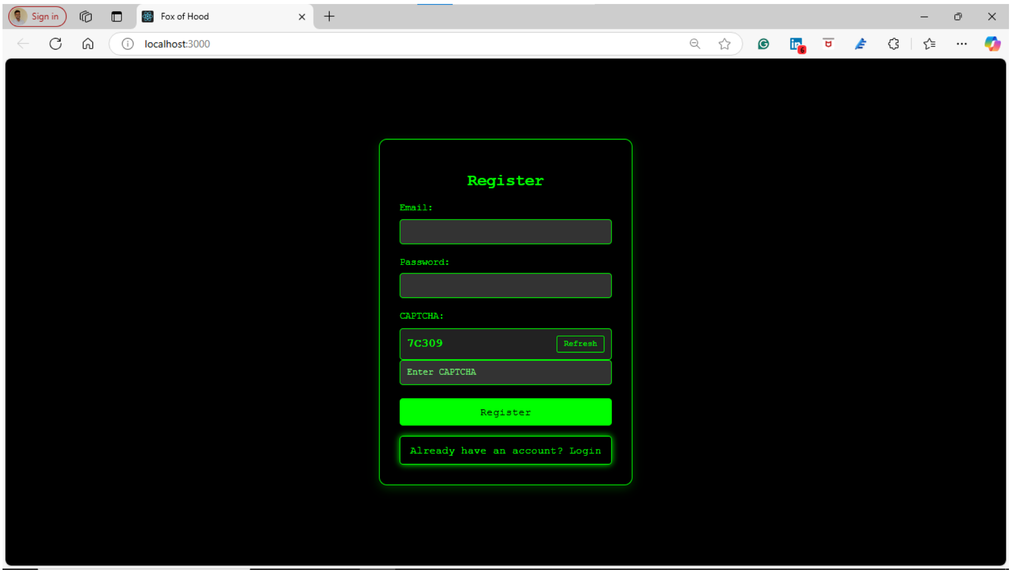
1.1 Login Steps

1. Open the application and navigate to the Login page.
2. Enter your registered email and password.
3. Click the Login button.
4. Upon successful login, you will be directed to the Dashboard.
5. If login fails, verify your credentials and try again.



1.2 Registration Steps

1. If you are a new user, click the Register button on the Login page.
2. Enter your email and password in the provided fields.
3. Click the Register button.
4. A success message will appear upon successful registration.
5. Use the registered credentials to log in.



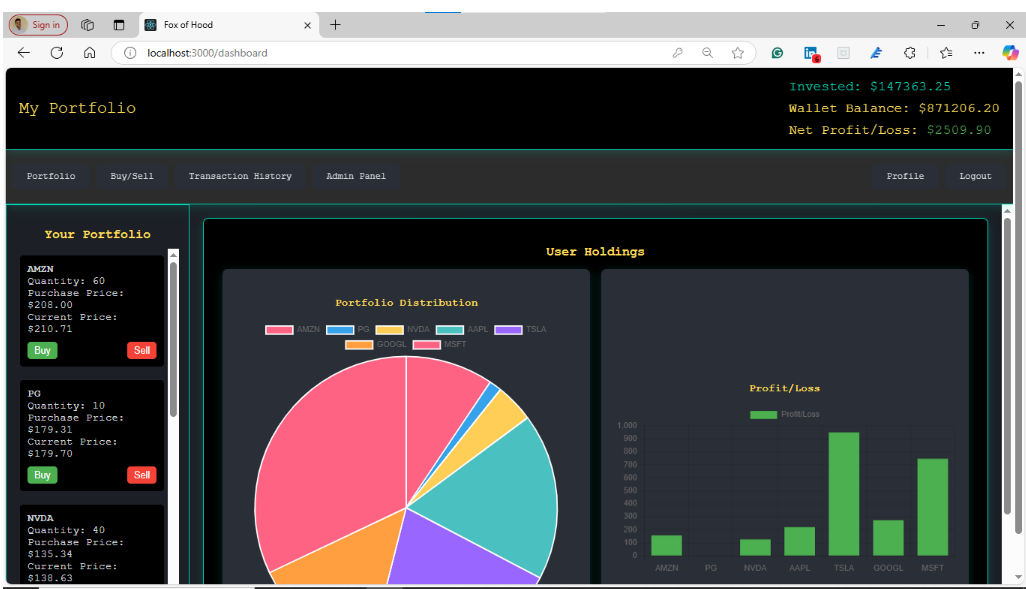
2. Dashboard Overview

2.1 Accessing the Dashboard

1. After logging in, the Dashboard is the default page.
2. The Dashboard displays:
   - Wallet Balance: Your current financial balance.
   - Navigation Menu: Links to Portfolio, Buy/Sell, Transaction History, and Profile.

Features:

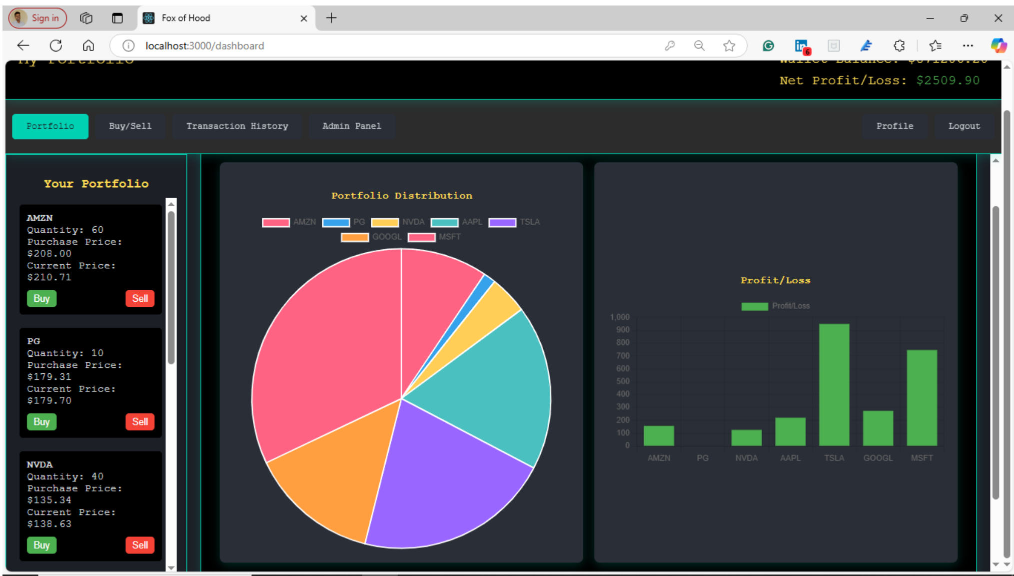
1. Access all functionalities using the Menu Bar.
2. View a summary of your financial standing at the top of the page.



3. Viewing and Managing Portfolio

3.1 Steps to View Portfolio

1. Click the Portfolio button on the Menu Bar.
2. The Portfolio page will display:
   - The stocks you currently own.
   - Their respective quantities.
   - Purchase price and current market price.



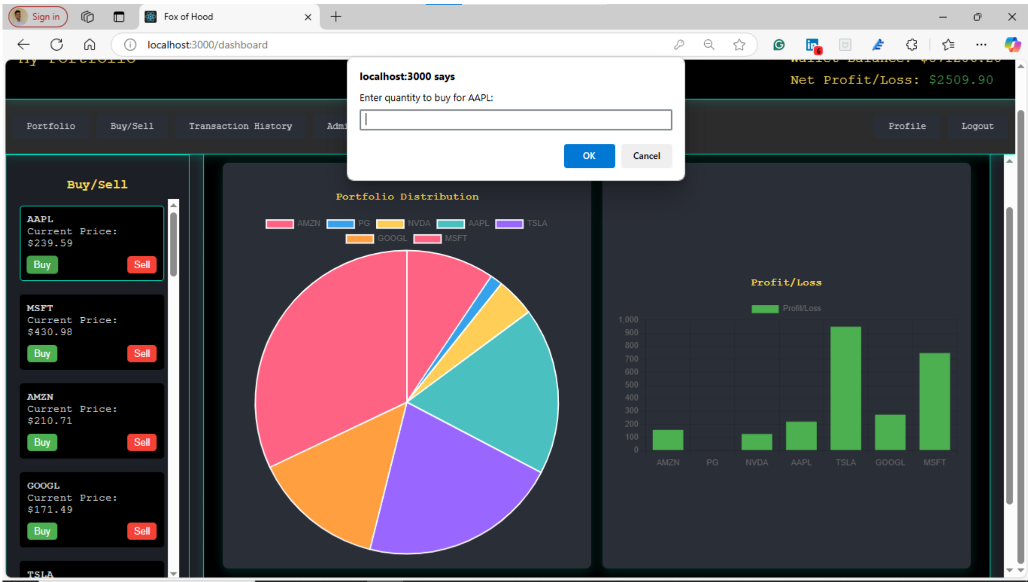
4. Buying Stocks

4.1 Steps to Buy Stocks

1. Click the Buy/Sell button on the Menu Bar.
2. A list of available stocks will be displayed.
3. Click the Buy button next to the stock you want to purchase.
4. Enter the quantity you want to buy in the prompt.
5. Confirm the transaction.

Result:

1. The stock will be added to your Portfolio.
2. Your Wallet Balance will update accordingly.



5. Selling Stocks

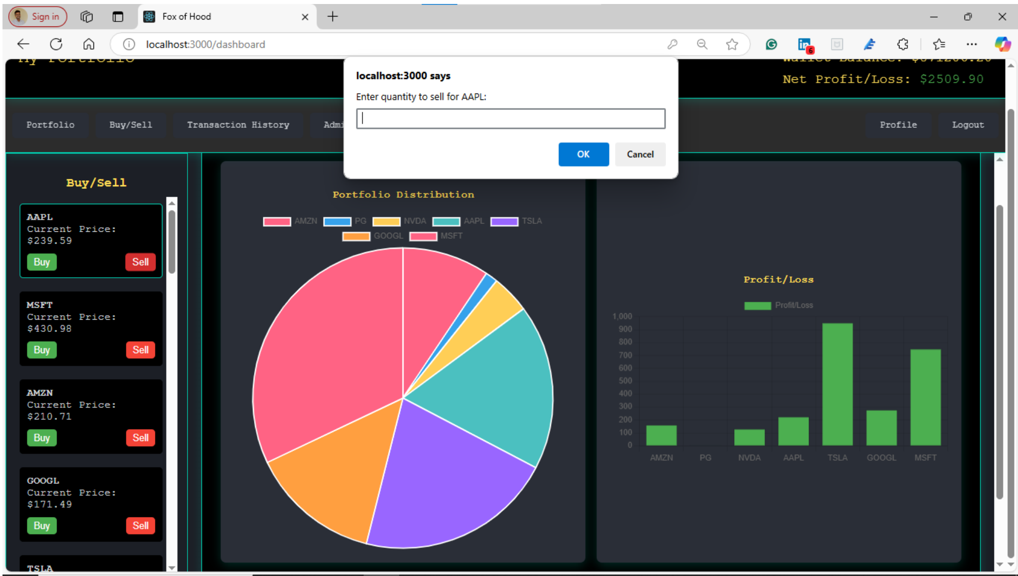
5.1 Steps to Sell Stocks

1. Navigate to the Portfolio page.
2. Click the Sell button next to the stock you want to sell.

3. Enter the quantity you want to sell in the prompt.
4. Confirm the transaction.

Result

1. The stock will be removed (or updated) in your Portfolio.
2. Your Wallet Balance will update accordingly.



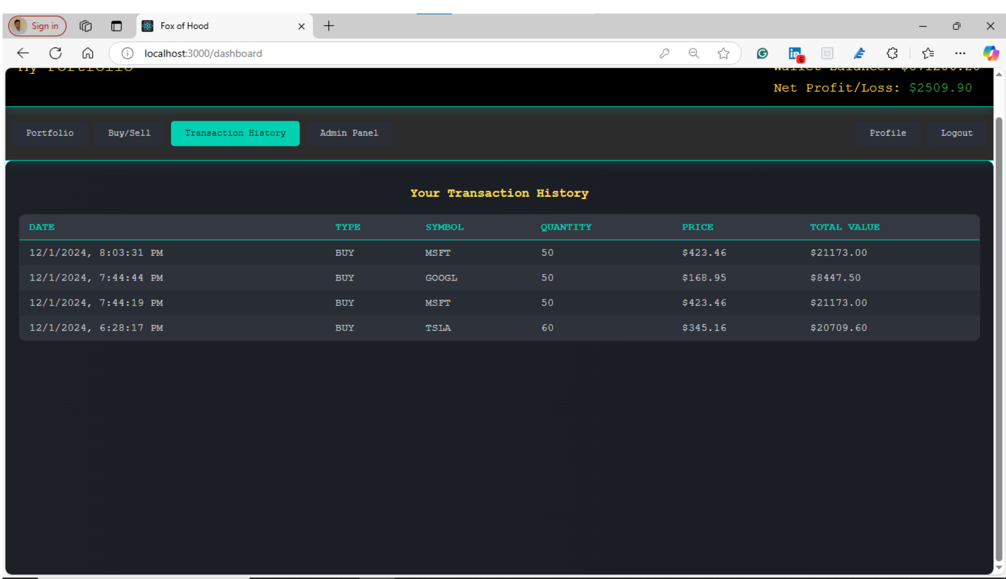
6. Viewing Transaction History

6.1 Steps to View Transaction History

1. Click the Transaction History button on the Menu Bar.
2. A table will display all your transactions, including:
   - Transaction date
   - Stock symbol
   - Quantity
   - Transaction type (Buy/Sell)
   - Price and total value

Features

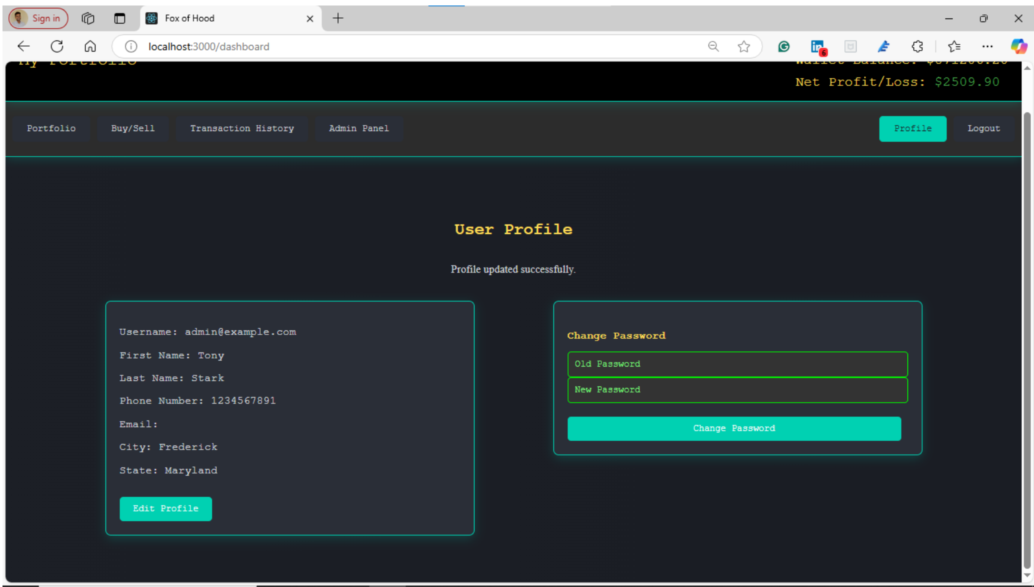
1. Admin users can view all users' transaction histories.



7. Managing User Profile

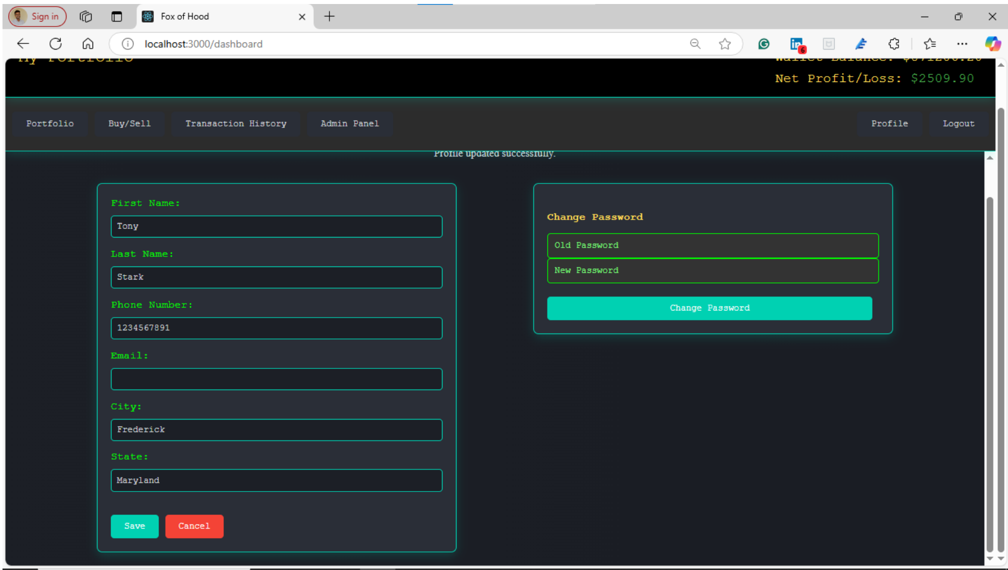
7.1 Steps to View Profile

1. Click the Profile button on the Menu Bar.
2. The Profile page displays:
   - Username, Email, Phone Number, and Wallet Balance.
   - Personal details like First Name, Last Name, City, and State.



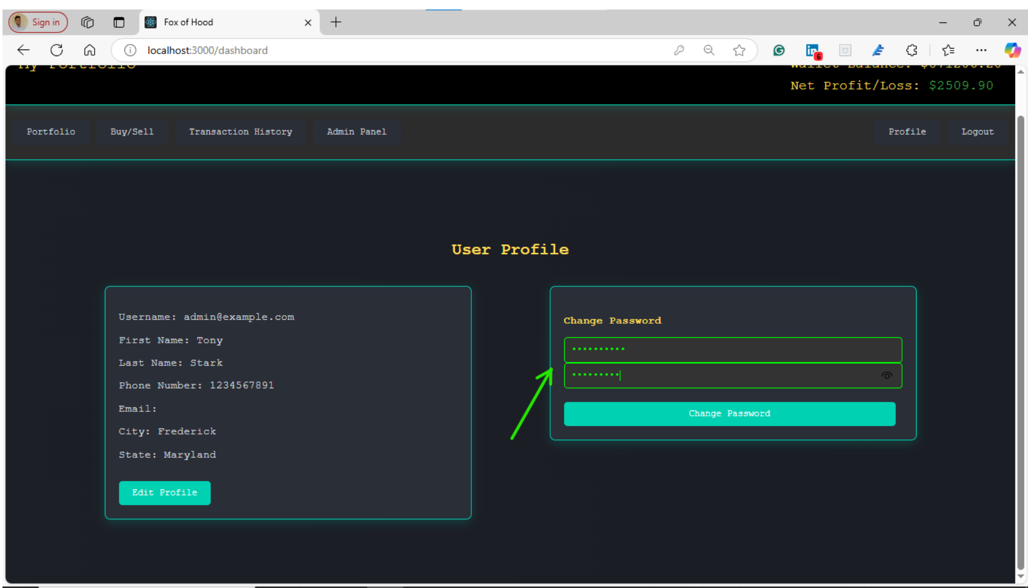
7.2 Steps to Edit Profile

1. Click the Edit Profile button on the Profile page.
2. Update the fields you want to edit.
3. Click Save to update your profile.



7.3 Steps to Change Password

1. Enter your old password in the Old Password field.
2. Enter a new password in the New Password field.
3. Click the Change Password button.



8. Admin Panel (for Admin Users Only)

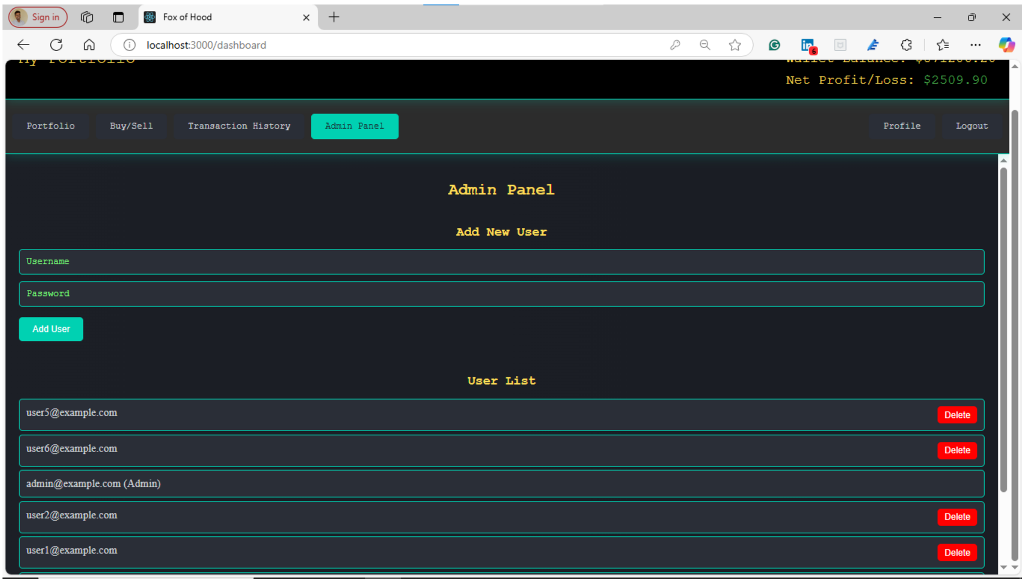
8.1 Accessing the Admin Panel

1. Admin users will see an Admin Panel button on the Menu Bar.

2. Click the button to navigate to the Admin Panel.

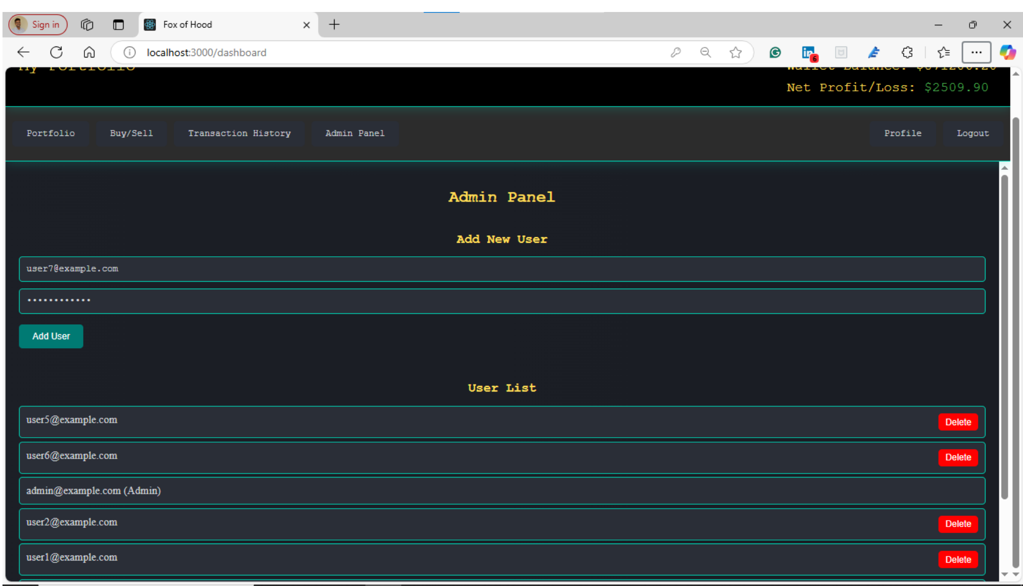
Features

1. View and manage all users.
2. Add new users by entering their details.
3. Delete users using the Delete button.



8.2 Add New Users

1. Click the Add User button.
2. Fill in the required details (e.g., Email, Password).
3. Click Save to add the new user.
4. A confirmation message will appear once the user is successfully added.



8.3 Delete Users

1. Click the Delete button next to the user you want to remove.
2. Confirm the deletion in the prompt.
3. The user will be removed from the system, and a success message will appear.