

Transaction System

Access Finance Assessment



Scenario

You have been assigned to work on a new transaction system. This system should allow users to perform the following operations:

1. Create an Account
 - Users can create a new account by providing their name, initial balance, and a unique account number.
 - The system should store account details (name, balance, account number).
2. Deposit Money
 - Users can deposit a specified amount of money into their account.
 - The system should update the account balance accordingly.
3. Withdraw Money
 - Users can withdraw a specified amount of money from their account.
 - The system should verify that the account has sufficient balance before allowing the withdrawal.
4. Check Account Balance
 - Users can inquire about their current account balance.
 - The system should display the account balance.

Instructions

- Create a simple console application in C# that allows users to perform the listed operations.
- Consider thread safety if multiple users can access the system concurrently.
- Consider utilizing in-memory data structures as a database solution.
- You don't need to worry about security features like authentication or encryption for this assignment.

Bonus (Optional)

- Allow users to transfer money between accounts.
- Add unit tests to validate the correctness of your code.

Deliverables

- Delivery for this assignment should consist of an archive named **<your_name>.zip** containing the source code of the task.
- Any feedback you may wish to give about improving the assignment.