ASSESSMENT 2 - SPECIFICATIONS

checklist for your Banking System

User types

The banking system has two types of user: customer and admin.

Account types

There are two account types in the system: current account and saving account.

Current account
- Current account does not have interest.
- The overdraft limit may vary from users, range from 0 to 1000.
- One current account per user only.

Saving account
- The interest rate may vary from users, range from 0.01% to 5.00%.
- It has no overdraft.
- A user can have multiple saving account(s).

Pre-set data

The banking system starts with the following users and accounts:

*Both username and password are case-sensitive.

Username	Password	User type	Other information
Arthur	123	admin	N/A
Boris	ABC	user	Address: • 10 London Road Current account • overdraft limit: 100, balance: 1000
Chloe	1+x	user	Address: • 99 Queens Road Current account • overdraft limit: 100, balance: 1000 Saving account • interest rate: 2.99%, balance: 4000
David	aBC	user	Address: • 2 Birmingham Street Saving account 1 • interest rate: 0.99%, balance: 200 Saving account 2 • interest rate: 4.99%, balance: 5000

Application workflow

*For all menus, they must have the same item orders and follow the exact same steps.

1. When the application starts, it will ask for log in (first username, then password).
2. After logging in, depends the user type, it will display the relevant information and menu.

3. If customer, it displays the following menu:

```
Please select an option:
  1 - View account
  2 - View summary
  3 - Quit
Enter a number to select your option:
```

Select 1 - View account	1) Display the "***the account selection***" view: List all the user's accounts and ask the user to select an account (the account list always starts with number 1):
	 ``` --Account list-- Please select an option: 1 - Saving account: £200 2 - Saving account: £5000 Enter a number to select your option:▌ ```
	 2) Then display the balance of the selected account plus the following menu:
	 ``` You selected 2 - Saving account: £5000. Please select an option: 1 - Deposit 2 - Withdraw 3 - Go back Enter a number to select your option:▌ ```
	 1. **Deposit**: user enters a number which will be added into the balance. Then the menu goes back to the account selection.
	 2. **Withdraw**: user enters a number which will be deducted from the balance. Then the menu goes back to the account selection.
	 • The amount available is subject to the balance and overdraft limit.
	 3. **Go back**: back to the account selection.

Select 2 - View Summary	Display the following information: 1. Total number of accounts in the bank 2. Total balance of all accounts 3. Address
Select 3 - Quit	Exit the banking system.

4. If admin, it displays the following menu:

```
Please select an option:
  1 - Customer Summary
  2 - Financial Forecast
  3 - Transfer Money - GUI
  4 - Account management - GUI
Enter a number to select your option:▌
```

Select 1 - Customer Summary	List all customers information, for each customer: - Name - Address - All accounts, for each account: - Account type - Balance - Overdraft limit (current) / Interest rate (saving)
Select 2 - Financial Forecast	For each customer, display: - Name - Number of accounts in bank - Total money in bank - A forecast of total money in bank after a year, where interests might be applicable
Select 3 - Transfer Money - GUI	When this option selected, a window should appear where the admin can make money transfer between customers/accounts.
Select 4 - Account management - GUI	When this option selected, a window should appear where the admin can add a new account to the customer or close(delete) an existing account. - A customer can have no more than one current account. - A customer should have at least one account in the bank, i.e., cannot delete the last account.