SEHH2242 Assignment 2 FAQ

Q1: What is the difference between "availableBalance" and "totalBalance"?

Ans: "totalBalance" represents the book value of the bank account whereas "availableBalance" represents the actual value of the bank account. Most of the time, "totalBalance" and "availableBalance" are with the same value (except when it takes time to validate the deposit with cheques which causes delay in updating the availableBalance).

In ATM operations, the "availableBalance" and "totalBalance" should be updated with the same values.

Q2: What is the unit used in ATM?

Ans: The unit used in ATM should be HK Dollars, not cents.

Q3: How would saving account and current account be implemented?

Ans: Saving account and Cheque account should be implemented as the subclasses of Account. In saving account, it should have an attribute "interest rate" with default value 0.1%, together with the related "get" and "set" methods, which could be accessed by other banking systems. Similarly, in Cheque account, it should have an attribute "limit per cheque" with default value HK$10,000, together with the related "get" and "set" methods.

Q3b. Can the customers use the ATM to update the "interest rate" and "limit per cheque"?

Ans: No. The "get" and "set" methods for "interest rate" and "limit per cheque" are just *reserved for other banking (back office) systems* to access to the values of "interest rate" and "limit per cheque".

Q4: Can the ATM users transfer amounts with decimal values?

Ans: Yes, the transfer operation should support amounts with decimal values, e.g. HK$9.90.

Q5: Do we need to consider the cases of non-digit input as the test cases?

Ans: It depends on your assumption about the symbols available in the input pad of the ATM system.

Q6: Should the "availableBalance" and "totalBalance" have decimal places?

Ans: Yes, because the unit used in ATM is HK$, the amount in the balance may contain decimal places (e.g. HK$1,000.35).

Q7: What options should we provide for the withdrawal operation?

Ans: It would be nice to have preset options for the users to choose (e.g. $200, $400, $800, etc.) as well as allowing the users to key in the amounts by themselves (e.g. key in the amount of $2300).

Q8: Do we need to keep the original two objects of Account for testing?

Ans: No. Instead, you should create some objects of Savings Account and some objects of Cheque Account for testing.

Q9: Do we need to show the total balance of all accounts possessed by the same customer?

Ans: No needed. The Savings Account objects and Cheque Account objects are considered as independent accounts. Each has its own "totalBalance" and "availableBalance".

Q10. Do we need to consider foreign exchange?

Ans: Only HKD in the transactions. No needed to consider foreign exchange.