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Programming Languages

Programming assignment 1 (Java) Report

In this assignment, I use the sample solution as basis of my program, it consists of account that inherits Checking account, saving account, CD account, and loan account. All of this account will implement full functional account that consists of withdrawable account, depositable account and interestable account, and it will throw a banking exception if it encounters an error. The withdrawable account, depositable account and interestable account is an interface that inherit basic account function.

For the program, the checking account can show the balance and name of the owner, deposit and withdraw have certain conditions that must be fulfilled in order to work. There is also `computer_computeInterest ()` for checking account that count the interest in daily rate.

For saving account, the first 3 transaction per month will be free, but if more than 3 transaction is made in a month, it will charge \$1 per transaction after the first 3 transaction. I use count to count how many transaction is made per month and if it is a new month then it will reset the count. Saving account can made a withdraw as long as the balance is not 0. The interest will be monthly.

For CD account, it cannot deposit after first deposit is made, if withdraw are made when the duration of the account made is less than 12 months, it will charge \$250 per transaction. It can also show the balance and owner name. it will count monthly interest through `computeInterest()` function and interest stop after 1 year.

For loan account, it is similar to saving account but the balance is negative and there will be no charge for every transaction made. Deposit will be use to pay the loan until all the loan is payed. The interest of this account will also be made to pay the loan.

Graphical illustration of my inheritance hierarchy:

class 
interface 

