CS591 P1 Object Specification

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1. **Main.java**
   This is the entrance of the program. Initialized data are put here.

2. **Login.java**
   This is the login **interface** of the whole program. Customers and managers can login using their username and password through this interface to do the operations. There is another button for those who have not the account in the bank, they can open new account using the button.

3. **OpenAccount.java**
   This is the **interface** of opening a new account, when people do not have an account in the bank, they need to open a new account.

4. **ShowInfo.java**
   This is the **interface** used to show the information about the new customer after opening a new account, including name, phone, username, checking account number and saving account number if the customer have. The customer can back to login after getting that.

5. **Account.java**
   This is for the user's general account, including name, phone, username and password. If the account need more information, it can be put here. And the user contains customers and managers.

6. **CheckandSave.java**
   This is super class of Checking and Saving. All the common properties of checking and saving are added here. In the future if they have more common properties, they can be added here.

7. **Customer.java**
   This is for the customer account. Apart from the general information, customers also have their own checking and saving account. If the customer need more than one checking or saving account, just add another Checking or Saving member. Also, they can have many loans and transactions. Here I also add some methods to show the information about the customer and their loans and transactions. If the customers have other properties, these properties can be added here.

8. **CustomerFrame.java**
   This is the **interface** of the customer operation options after login. There are buttons relating balance, withdraw, deposit, loan, transaction and close the account.

9. **Checking.java**
   This class extends CheckandSave class. This is the class of checking account. It inherits the

methods of super class and this class can have checking's own properties. If the checking account have more its own properties, such properties can be added here.

10. Saving.java

This class extends CheckandSave class. This is the class of saving account. It inherits the methods of super class and this class can have saving's own properties. If the saving account have more properties, such properties can be added here.

11. Currecy.java

This is the class of a single currency that can be stored in the bank. The currency should have its own mark and amount of money. It is a general class because it only have gets and sets methods.

12. Balance.java

This is the class of balance in the account. The balance contains three currency and its can change(add or subtract) with the operations about money. If there are other currency should be included into the balance, they can also be added here.

13. BalanceFrame.java

This is the **interface** of showing the balance of a customer. The three currencies in the checking and saving account will all show here.

14. Loan.java

This is the class of customers' loan. The loan should have its own currency, interest and length of loan. Also, every time customer loan, they should have collateral. And because the bank charge the interest of all loans, I add methods to calculate the amount of the interest of the loan according to its currency. If the loan have more properties, they can be added here.

15. LoanFrame.java

This is the **interface** of the loan. Customers can request a loan here. Three currency of the loan will be allowed.

16. Transaction.java

This is the class of a single transaction. For customers, they have their own transactions, for managers, they need to see all the transactions. So it should be a single class. In this class, currency, date, the account of sender and receiver should be considered.

17. TransactionFrame.java

This is the **interface** of the transaction operations. Customers can do transaction entering the receivers' checking account number and choose one currency to do the transactions.

18. DepositFrame.java

This is the **interface** of the deposit operations. Three currencies are allowed.

19. WithDrawFrame.java

This is the **interface** of the withdraw operations. Three currencies are allowed.

20. CloseAccountFrame.java

This is the **interface** for customers to close their accounts. They can choose to close only one saving account or both of checking and saving. If the customer do not have enough money in checking account to pay the charge, they will not be allowed to close the account.

21. Manager.java

This is the class of manager. Every manager have its own account. And it is a general class. If the manager have more properties in the future, they can be added here.

22. ManagerFrame.java

This is the **interface** of the manager operations options after login. There are buttons relating the operations of managers.

23. Income.java

This is about the income/charge of the bank. In this class, every charge will have its own type like loan and withdraw, and also amount of charge. The income should be a single class that it can show to manager more conveniently.

24. IncomeFrame.java

This is **interface** of the income of the bank. Managers can see the list of the income and the total income.

25. DailyReportFrame.java

This is the **interface** of the daily report about the transactions. All the transactions will be put in the report.

26. CheckupFrame.java

This is the **interface** for the managers to check up a specific customer. Much information will show. The information includes loans.

27. PaymentFrame.java

This is the **interface** for the managers to see how much the bank need to pay for the interest on savings accounts that have high balances.