



The structure of my fancy bank is shown as above. (Most of the frames are omitted in the GUI layer)

The whole project uses MVC structure. I add a service layer to handle all detailed transaction. Thus, I perfectly separate the backend and front-end.

In the model layer, I use the DAO design pattern to access data. Thus, when I simulate the database operation, the service layer does not need to manipulate data directly, it can retrieve, add, delete or modify data by using DAOImpl class.

All of the controller and DAOImpl use singleton pattern to reduce the cost of initializing the object.

To make class more reusable, I create three abstract class: Account, Currency and BankSystemUser.