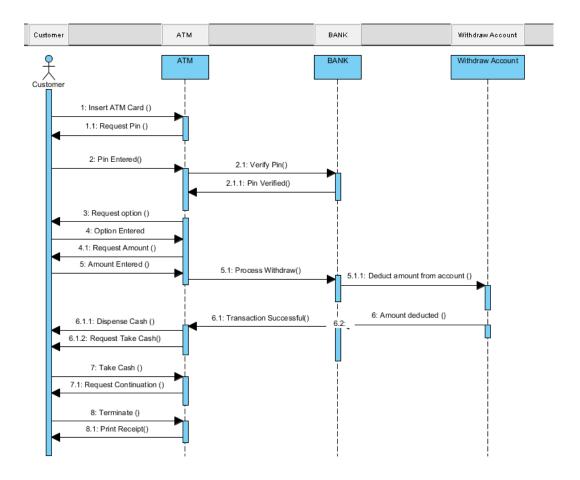
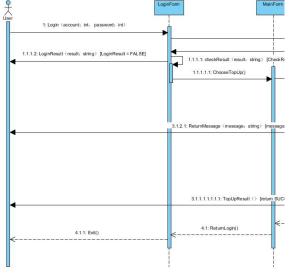
## **Sequence Diagrams for ATM Machine.**

## 1. Withdraw:

Here is the withdraw sequence diagram for the ATM Machine. The objects in the sequence diagram are the ATM, Bank, Withdrawal account. First the customer inserts ATM card, and the ATM Requests pin number, when the customer enters the pin it will be verified by the Bank. After verification the ATM will prompt the user to choose an option when the customer enters the option it will ask to enter an amount after entering the amount the ATM will process the withdraw. When the withdraw process is successful, the ATM will deduct the amount from the withdraw account. After the deduction of the amount the transaction is successful and the ATM will dispense the cash to the customer. When the money is dispensed the ATM request's the customer to receive the money and will check if the user need another transaction or not. When the customer terminates the request the machine will print a receipt.



## 2. Top up Phone



There are In the sequence diagram that we have implemented the user goes to the atm



and login to the account using an account id and password. When the user login to the account the id and password will be verified via the bank database. When the details are verified the database send a message back to the login form and customer checks the result. If the id and pass is wrong the login will fail and the customer will be returned to the main page. If the login is successful the customer can choose top up phone option and use cash to the machine, then the machine counts the cash, return the counted amount and top up the money in the phone. When the money is recharged, customer will get a message about the successful transaction.

We have also designed the atm for top up in a way that the user can use the money in his bank account. So if user chooses to use — money in the bank card, then the machine will prompt user to input money amount and the bank will check if the account has enough money and send message to the machine, if there is balance the machine displays the top up result is successful. Otherwise it will take the user to the main page to exit.

## 3. Deposit Sequence Diagram

Finally we implemented the sequence diagram for depositing money.

Here customer comes and insert the card and it will prompt to enter login details. The login details are



then verified by the bank and send the verification result back to the login form. If the result is successful the user can see the message and check the option menu. Here customer chooses the option to deposit and input the cash. (*Note:In Chinese ATM machines, the customer can only see the transaction option when the customer enters the pincode.*) The cash amount is then counted by the machine and send back to the bank database. If the deposit is successful, the bank sends the result of the transaction to the machine and the money will be saved to the account. Once the money is saved the machine shows the transaction result to the customer. If the transaction was not successful customer will be requested to return to the main menu and exit.

