

Write Java Program for ATM machines

Two Banks (Bank A & B)

Hard Code, 2 customers for Bank A with \$50 in the account (each customer have their own cash cards)

Hard Code, 3 customers for Bank B with \$50 in the account (each customer have their own cash cards)

Cash Cards come with expiration date and withdraw transaction only.

Design 2 ATM machines (ATM_A1 & ATM_A2) for Bank A

Design 2 ATM machines (ATM_B1 & ATM_B2) for Bank B

Each ATM machine take their own bank's cash card's account number, password, and expiration date.

Requirements are:

Bank A only work with ATM_A1 & ATM_A2

Bank B only work with ATM_B1 & ATM_B2

When accounts are verified, customers can withdraw money on their cash card's balance.

NOTE: error messages should show if the requirements are not met. For example, Bank A cash card try to withdraw money from Bank B ATM machines vice versa. Customers withdraw more than account balance. (see sample output below).

At least 4 or 5 different classes (for example, ATMSystem.java, ATM.java, Bank.java, CashCard.java, Customer.java, BankDatabase.java, or ...) that has is-a (inheritance classes) or has-a relationship.

Javadoc each class such that `/**@param*/ /**@return */`

If possible, include use cases or UML

Sample Output

State of 2 Banks //Hard code started

Set accounts \$50 preloaded.

BankA (2 customers)

Customer with Cash Card (bankid: A, account number 11, expires on 12/12/16, password aaa

Customer with Cash Card (bankid: A, account number 12, expires on 05/01/17, password bbb

BankB (three customers)

Customer with Cash Card (bankid: B, account number 111), expires on 11/11/11, password ccc

Customer with Cash Card (bankid: B, account number 112), expires on 12/12/12, password ddd

Customer with Cash Card (bankid: B, account number 113), expires on 12/12/17, password eee

State of 4 ATMs (2 for each Bank)

ATM1_A: (ATM1 from BankA)

The maximum amount of cash a card can withdraw per day: \$60

ATM2_A: (ATM1 from BankA)

The maximum amount of cash a card can withdraw per day: \$60

ATM1_B: (ATM1 from BankB)

The maximum amount of cash a card can withdraw per day: \$60

ATM2_B: (ATM1 from BankB)

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The maximum amount of cash a card can withdraw per day: $60
//Hard code ended

//User input started

% Enter your choice of ATM
ATM1_A
% Enter your card
11
    "This card is expired please enter different card"
/*if enter 12, then OK because not expired & correct card */
% Enter your card
112
    "This card is not supported by this ATM Enter your card again"
% 12
    "The card is accepted"
% Please enter your password
aaa
    "This is a wrong password. Enter correct password"
% Please enter your password
bbb
    "Authorization is accepted"
% Please enter withdraw amount.
100
    "This amount exceeds the max can withdraw per transaction. Please enter the
amount or quit"
% Please enter withdraw amount.
25
    "$25 is withdrawn from your account. The remaining balance of this account
is $25. If you have more withdraw transactions, enter the amount or quit"
% Please enter withdraw amount.
55
    "This amount exceeds the current balance. Enter another amount or quit."
% 15
    "$25 is withdrawn from your account. The remaining balance of this account
is $0. If you have more transactions, enter the amount or quit.
quit
//users input ended
```