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```
001 import java.util.Scanner;
002
003 public class ATM {
004
005     private Transaction theTransaction = null;
006     private BankNetwork networkOfBanksOnATM = null;
007
008     // Used to get input from the customer
009
010     static Scanner userInput = new Scanner(System.in);
011
012     ATM(BankNetwork networkOfBanksOnATM){
013
014         this.networkOfBanksOnATM = networkOfBanksOnATM;
015
016     }
017
018     public boolean isStripReadable(Card theCard){
019
020         // Returns the number of digits in stripNumber
021
022         int numberOfDigitsInStrip = (int) (Math.log10(theCard.getStripNumber()+1);
023
024         theTransaction = new Transaction(theCard.getStripNumber());
025
026         if(numberOfDigitsInStrip == 10){
027
028             return true;
029
030         } else {
031
032             return false;
033         }
034
035     }
036
037     // Sends the card inserted to BankNetwork to see if there
038     // are any matching bankIDs
039
040     public boolean isATMCardsBankInNetwork(Card theCard){
041
```

```
042     if(networkOfBanksOnATM.isATMCardsBankInNetwork(theCard)){
043
044         theTransaction.setStripNumber(theCard.getStripNumber());
045
046         // Sets that the stripNumber has been verified so it is ok
047         // to access account info to verify pin later
048
049         theTransaction.setDidTheCardVerify(true);
050
051         return true;
052
053     } else {
054
055         return false;
056
057     }
058 }
059
060
061 public boolean insertPIN(Card theCard, int pin){
062
063     // Finds the number of digits in the PIN
064
065     int numberOfDigitsInPIN = (int) (Math.log10(pin)+1);
066
067     if(numberOfDigitsInPIN != 4){
068
069         System.out.println("You have to enter 4 digits for a PIN");
070
071         return false;
072
073     } else {
074
075         theTransaction.setPIN(pin);
076
077
078         // I decided to pass the transaction instead of the card
079         // like I did in the sequence diagram
080
081         networkOfBanksOnATM.verifyThePIN(theTransaction);
082
083     }
```

```
084
085     return false;
086
087 }
088
089 public void pickAcctToAccess(){
090
091     System.out.println("What Account do you Want to Withdrawal From ");
092     System.out.println("( 1 - Savings, 2 - Checking ) ");
093
094     if (userInput.hasNextInt()){
095
096         int numberEntered = userInput.nextInt();
097
098         theTransaction.setAcctToWithdrawalFrom(numberEntered);
099
100     } else {
101
102         System.out.println("You Entered an Invalid Option");
103
104     }
105
106 }
107
108 public void amountToWithdrawal(){
109
110     System.out.println("How much do you want to withdrawal ");
111     System.out.println("( Increments of 10 ) ");
112
113     if (userInput.hasNextInt()){
114
115         int numberEntered = userInput.nextInt();
116
117         theTransaction.setWithdrawalAmt(numberEntered);
118
119         networkOfBanksOnATM.requestWithdrawalAmt(theTransaction);
120
121     } else {
122
123         System.out.println("You Entered an Invalid Amount");
124
125     }
```

```
126
127     }
128
129     public void getTransactionInfo(){
130
131         System.out.println("Thank you " + theTransaction.getCustomerName() + " for using the XYZ
Bank ATM\n");
132
133         System.out.println("Date / Time of Transaction: " + theTransaction.getCurrentDateTime());
134         System.out.println("\nTransaction");
135
136         System.out.print("Removed $" + theTransaction.getWithdrawalAmt() + " from your ");
137
138         if(theTransaction.getAcctToWithdrawalFrom() == 1){
139
140             System.out.println("Savings Account.\nYour current balance is " +
theTransaction.getAcctBalance());
141
142             } else {
143
144                 System.out.println("Checking Account.\nYour current balance is " +
theTransaction.getAcctBalance());
145
146             }
147
148     }
149
150 }
```