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1  import java.io.IOException;
2  import java.util.Scanner;
3  import java.text.DecimalFormat;
4  import java.util.HashMap;
5
6
7  public class OptionMenu extends Account
8  {
9      Scanner menuInput = new Scanner(System.in);
10     DecimalFormat moneyFormat=new DecimalFormat("$'###,##0.00");
11     HashMap<Integer,Integer>data=new HashMap<Integer,Integer>();
12
13     public void getlogin() throws IOException
14     {
15         int x=1;
16
17
18         do
19         {
20             try
21             {
22                 data.put(952141,191904);
23                 data.put(989947,71976);
24                 data.put(986085,12345);
25                 data.put(567432,98765);
26
27                 System.out.println("Welcome to the ATM Machine project");
28                 System.out.println("Enter your customer Number:");
29                 setCustomerNumber(menuInput.nextInt());
30
31                 System.out.println("Enter the PIN Number:");
32                 setPinNumber(menuInput.nextInt());
33             }
34             catch(Exception e)
35             {
36                 System.out.println("\n"+"Invalid Character(s).only Number."+"\n");
37                 x=2;
38             }
39             int cn=getCustomerNumber();
40             int pn=getPinNumber();
41             if(data.containsKey(cn) && data.get(cn)==pn)
42             {
43                 getAccountType();
44             }
45             else
46             {
47                 System.out.println("\n"+"Wrong Customer Number or pin Number."+"\n");
48             }
49         }while(x==1);
50     }
51
52
53     public void getAccountType()
54     {
55         System.out.println("Select the Account you want to Access:");
56         System.out.println("Type 1- Checking Account");
57         System.out.println("Type 2- Saving Account");
58         System.out.println("Type 3- Exit");
59
60         int selection = menuInput.nextInt();
61
62
63         switch (selection)
64         {
65             case 1:
66                 getChecking();
67                 break;
68             case 2:
69                 getSaving();

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70         break;
71     case 3:
72         System.out.println("Thank you for using this ATM, bye.\n");
73         break;
74     default:
75         System.out.println("\n"+"Invalid choice"+" \n");
76         getAccountType();
77     }
78 }
79
80 public void getChecking()
81 {
82     System.out.println("Checking Account:");
83     System.out.println("Type 1- View Balance");
84     System.out.println("Type 2- Withdraw Funds");
85     System.out.println("Type 3- Deposit Funds");
86     System.out.println("Type 4- Exit");
87     System.out.println("Choice:");
88
89     int selection=menuInput.nextInt();
90     int getChecking=0;
91
92     switch(selection)
93     {
94         case 1:
95             System.out.println("Checking Account
96             Balance:"+moneyFormat.format(getChecking));
97             getAccountType();
98             break;
99         case 2:
100             getCheckingWithdrawInput();
101             getAccountType();
102             break;
103         case 3:
104             getCheckingDepositInput();
105             getAccountType();
106             break;
107         case 4:
108             System.out.println("Thank you for using this ATM,bye.");
109             break;
110         default:
111             System.out.println("\n"+"Invalid choice."+" \n");
112             getChecking();
113     }
114 }
115 public void getSaving()
116 {
117     System.out.println("Saving Account:");
118     System.out.println("Type 1- View Balance");
119     System.out.println("Type 2-Withdraw Funds");
120     System.out.println("Type 3-Deposit Fund");
121     System.out.println("Type 4-Exit");
122     System.out.println("Choice:");
123
124     int selection=menuInput.nextInt();
125     int getSaving=0;
126
127     switch(selection)
128     {
129         case 1:
130             System.out.println("Saving Account
131             Balance:"+moneyFormat.format(getSaving));
132             getAccountType();
133             break;
134         case 2:
135             getsavingwithdrawInput();
136             getAccountType();
137             break;

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137         case 3:
138             getsavingDepositInput();
139             getAccountType();
140             break;
141         case 4:
142             System.out.println("Thank you for using this ATM,bye.");
143             break;
144         default:
145             System.out.println("\n"+"Invalid choice."+"\n");
146             getChecking();
147     }
148 }
149 }
150
151
```