

```
1 package asn3;
2
3 import java.util.*;
4
5 public class Customer {
6
7     //attributes mentioned in the question
8     //Can be accessed only by instance methods
9
10    private String name;
11    private String username;
12    private String password;
13    private int age;
14    private String ssn;
15    private String address;
16    private String email;
17    private long phone;
18    private double balance;
19
20    //user defined variables
21    private Scanner sc = new Scanner(System.in);
22    public boolean login = false;
23    private double deposit;
24    private double withdraw;
25
26
27    public void login() {
28        System.out.println("-----LOGIN PAGE-----");
29        System.out.println("*****Welcome to XYZ Bank Ltd. *****");
30
31        System.out.println("Do you want to login?");
32        System.out.println("Type yes/no");
33        String ch = sc.nextLine();
34
35        if(ch.equals("yes")) {
36            System.out.println("Enter username: ");
37            username = sc.nextLine();
38            System.out.println("Enter password: ");
39            password = sc.nextLine();
40            login = true;
41            System.out.println("User logged in successfully\n");
42        }
43        else {
44            System.out.println("Close the login window");
45            System.exit(0);
46        }
47    }
48
49    public void deposit() {
50        if(login) {
51            System.out.println("Enter the amount you want to deposit: ");
52            deposit = sc.nextDouble();
53            sc.nextLine();
54            balance += deposit;
55        }
56    }
57}
```

```
58     public void withdrawal() {
59         if(login) {
60             System.out.println("Enter the amount you want to withdraw: ");
61             withdraw = sc.nextDouble();
62             sc.nextLine();
63             balance -= withdraw;
64         }
65     }
66
67     public void checkBalance() {
68         if(login)
69             System.out.print("The current balance in your account is: " + balance);
70         System.out.println();
71     }
72
73     public void editProfile() {
74         if(login) {
75             System.out.println("PROFILE DETAILS");
76             System.out.println("Name: " + name);
77             System.out.println("Age: " + age);
78             System.out.println("Address: " + address);
79             System.out.println("Email: " + email);
80             System.out.println("Phone: " + phone);
81             System.out.println("SSN: " + ssn);
82
83             System.out.println("\nWant to edit profile?");
84             System.out.println("Type yes/no");
85             String ch = sc.nextLine();
86
87             if(ch.equals("no"))
88                 return;
89             else {
90                 while(true) {
91                     System.out.println("Select an option to edit: ");
92                     System.out.println("1. Name\n2. Age\n3. Address\n4. Email\n5. Phone\n6.
SSN");
93                     int c = sc.nextInt();
94                     sc.nextLine();
95
96                     switch(c) {
97                         case 1:
98                             System.out.println("Enter name: ");
99                             name = sc.nextLine();
100                            break;
101
102                         case 2:
103                             System.out.println("Enter age: ");
104                             age = sc.nextInt();
105                             sc.nextLine();
106                             break;
107
108                         case 3:
109                             System.out.println("Enter address: ");
110                             address = sc.nextLine();
111                             break;
112
113                         case 4:
```

```
114         System.out.println("Enter email: ");
115         email = sc.nextLine();
116         break;
117
118     case 5:
119         System.out.println("Enter phone: ");
120         phone = sc.nextLong();
121         sc.nextLine();
122         break;
123
124     case 6:
125         System.out.println("Enter SSN: ");
126         ssn = sc.nextLine();
127         break;
128
129     default:
130         System.out.println("WRONG CHOICE!!!\"");
131         break;
132     }
133
134     System.out.println("Want to continue editing?\"");
135     System.out.println("Press 1 to continue\nPress 0 to exit\"");
136     int choice = sc.nextInt();
137     sc.nextLine();
138     if(choice == 1)
139         continue;
140     else {
141         System.out.println("EXIT from Edit Profile");
142         break;
143     }
144 }
145 }
146 }
147
148 }
149
150 public void changePassword() {
151     if(login) {
152         System.out.println("Enter current password: ");
153         String current = sc.nextLine();
154
155         if(password.equals(current)) {
156             System.out.println("Enter new password: ");
157             String newPass = sc.nextLine();
158             System.out.println("Confirm new password: ");
159             String confirm = sc.nextLine();
160             if(newPass.equals(confirm)) {
161                 password = confirm;
162                 System.out.println("PASSWORD CHANGED");
163             }
164             else {
165                 System.out.println("Password doesn't match");
166                 System.out.println("Call the function again");
167             }
168         }
169     }
170     System.out.println("WRONG PASSWORD\nUnauthorised user");
```

```
171         System.out.println("Call the function again");
172     }
173 }
174
175 }
176
177 }
178
```

```
1 package asn3;
2
3 import java.util.*;
4
5 public class Bank {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9         Scanner sc = new Scanner(System.in);
10
11         Customer c = new Customer();
12         c.login();
13
14         /*this label is used as when user exits he/she is directed to the login page,
15          * so after they log in, they must be directed to the menu so that they can
16          * operate their account
17          */
18
19         repeat:
20         while(true) {
21             System.out.println("Select any one option: ");
22             System.out.println("1. Deposit\n2. Withdrawal\n3. Check Balance\n4. Edit Profile
23 \n5. Change Password\n6. EXIT");
24             int ch = sc.nextInt();
25             sc.nextLine();
26
27             switch(ch) {
28
29                 case 1:
30                     c.deposit();
31                     break;
32
33                 case 2:
34                     c.withdrawal();
35                     break;
36
37                 case 3:
38                     c.checkBalance();
39                     break;
40
41                 case 4:
42                     c.editProfile();
43                     break;
44
45                 case 5:
46                     c.changePassword();
47                     break;
48
49                 case 6:
50                     break;
51
52                 default:
53                     System.out.println("WRONG CHOICE!!!!");
54                     break;
55             }
56
57             System.out.println("Do you want to continue accessing the Bank application?");
```

```
57     System.out.println("Type yes/no");
58     String s = sc.nextLine();
59
60     if(s.equals("yes"))
61         continue;
62     else {
63         c.login = false;
64         System.out.println("*****EXIT*****");
65         System.out.println("Press Enter to redirect to the login page");
66         sc.nextLine();
67         c.login();
68         continue repeat;
69     }
70 }
71 }
72 }
73
74 }
75
```

Problems Javadoc Declaration Console X

Bank [Java Application] C:\Users\SUBHASHREE\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.j

-----LOGIN PAGE-----

*****Welcome to XYZ Bank Ltd.*****

Do you want to login?

Type yes/no

yes

Enter username:

subhashree

Enter password:

12345

User logged in successfully

Select any one option:

1. Deposit
2. Withdrawal
3. Check Balance
4. Edit Profile
5. Change Password
6. EXIT

1

Enter the amount you want to deposit:

500

Do you want to continue accessing the Bank application?

Type yes/no

yes

Select any one option:

1. Deposit
2. Withdrawal
3. Check Balance
4. Edit Profile
5. Change Password
6. EXIT

3

The current balance in your account is: 500.0

Do you want to continue accessing the Bank application?

Type yes/no

yes

Select any one option:



16:20

28-01-2022

Bank [Java Application] C:\Users\SUBHASHREE\p2\pool\plugins\org.eclipse.justj.openjdk.

6. EXIT

3

The current balance in your account is: 500.0

Do you want to continue accessing the Bank application?

Type yes/no

yes

Select any one option:

- 1. Deposit
- 2. Withdrawal
- 3. Check Balance
- 4. Edit Profile
- 5. Change Password
- 6. EXIT

2

Enter the amount you want to withdraw:

200

Do you want to continue accessing the Bank application?

Type yes/no

yes

Select any one option:

- 1. Deposit
- 2. Withdrawal
- 3. Check Balance
- 4. Edit Profile
- 5. Change Password
- 6. EXIT

3

The current balance in your account is: 300.0

Do you want to continue accessing the Bank application?

Type yes/no

yes

Select any one option:

- 1. Deposit
- 2. Withdrawal
- 3. Check Balance
- 4. Edit Profile
- 5. Change Password

```
Bank [Java Application] C:\Users\SUBHASHREE\.p2\pool\plugins\org.eclipse.justj.o
2. Withdrawal
3. Check Balance
4. Edit Profile
5. Change Password
6. EXIT
4
PROFILE DETAILS
Name: null
Age: 0
Address: null
Email: null
Phone: 0
SSN: null

Want to edit profile?
Type yes/no
yes
Select an option to edit:
1. Name
2. Age
3. Address
4. Email
5. Phone
6. SSN
1
Enter name:
Subhashree Mitra
Want to continue editing?
Press 1 to continue
Press 0 to exit
1
Select an option to edit:
1. Name
2. Age
3. Address
4. Email
5. Phone
```



Problems Javadoc Declaration Console X

Bank [Java Application] C:\Users\SUBHASHREE.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot

- 2. Age
- 3. Address
- 4. Email
- 5. Phone
- 6. SSN

2

Enter age:

22

Want to continue editing?

Press 1 to continue

Press 0 to exit

1

Select an option to edit:

- 1. Name
- 2. Age
- 3. Address
- 4. Email
- 5. Phone
- 6. SSN

3

Enter address:

34/5, D. Gupta Lane, Kolkata - 700050

Want to continue editing?

Press 1 to continue

Press 0 to exit

1

Select an option to edit:

- 1. Name
- 2. Age
- 3. Address
- 4. Email
- 5. Phone
- 6. SSN

4

Enter email:

subhashreem@trainee.nrifintech.com

Want to continue editing?

Bank [Java Application] C:\Users\SUBHASHREE\p2\pool\plugins\org.eclipse.justj.open

4
Enter email:
subhashreem@trainee.nrifintech.com
Want to continue editing?
Press 1 to continue
Press 0 to exit
1
Select an option to edit:
1. Name
2. Age
3. Address
4. Email
5. Phone
6. SSN
5
Enter phone:
9836281074
Want to continue editing?
Press 1 to continue
Press 0 to exit
1
Select an option to edit:
1. Name
2. Age
3. Address
4. Email
5. Phone
6. SSN
6
Enter SSN:
123456789
Want to continue editing?
Press 1 to continue
Press 0 to exit
0
EXIT from Edit Profile
Do you want to continue executing the Bank application?



Problems Javadoc Declaration Console

Bank [Java Application] C:\Users\SUBHASHREE\p2\pool\plugins\org.eclipse.justj.openjdk.hots
123456789

Want to continue editing?
Press 1 to continue
Press 0 to exit
0

EXIT from Edit Profile

Do you want to continue accessing the Bank application?
Type yes/no
yes

Select any one option:
1. Deposit
2. Withdrawal
3. Check Balance
4. Edit Profile
5. Change Password
6. EXIT
4

PROFILE DETAILS

Name: Subhashree Mitra
Age: 22
Address: 34/5, D. Gupta Lane, Kolkata - 700050
Email: subhashreem@trainee.nrifintech.com
Phone: 9836281074
SSN: 123456789

Want to edit profile?
Type yes/no
no

Do you want to continue accessing the Bank application?
Type yes/no
yes

Select any one option:
1. Deposit
2. Withdrawal
3. Check Balance
4. Edit Profile
5. Change Password

Problems Javadoc Declaration Console X

Bank [Java Application] C:\Users\SUBHASHREE\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre

yes

Select any one option:

- 1. Deposit
- 2. Withdrawal
- 3. Check Balance
- 4. Edit Profile
- 5. Change Password
- 6. EXIT

5

Enter current password:

12345

Enter new password:

45678

Confirm new password:

45678

PASSWORD CHANGED

Do you want to continue accessing the Bank application?

Type yes/no

yes

Select any one option:

- 1. Deposit
- 2. Withdrawal
- 3. Check Balance
- 4. Edit Profile
- 5. Change Password
- 6. EXIT

6

Do you want to continue accessing the Bank application?

Type yes/no

no

*****EXIT*****

Press Enter to redirect to the login page

-----LOGIN PAGE-----

*****Welcome to XYZ Bank Ltd. *****

Do you want to login?

Type yes/no



Problems

@ Javadoc



Declaration



Console X



Bank [Java Application] C:\Users\SUBHASHREE\.p2\pool\plugins\org.eclipse.justj.openjdk.h

- 2. Withdrawal
- 3. Check Balance
- 4. Edit Profile
- 5. Change Password
- 6. EXIT

5

Enter current password:

12345

Enter new password:

45678

Confirm new password:

45678

PASSWORD CHANGED

Do you want to continue accessing the Bank application?

Type yes/no

yes

Select any one option:

- 1. Deposit
- 2. Withdrawal
- 3. Check Balance
- 4. Edit Profile
- 5. Change Password
- 6. EXIT

6

Do you want to continue accessing the Bank application?

Type yes/no

no

*****EXIT*****

Press Enter to redirect to the login page

-----LOGIN PAGE-----

*****Welcome to XYZ Bank Ltd. *****

Do you want to login?

Type yes/no

yes

Enter username:



ENG

28

```
1 package asn3;
2
3 import java.util.*;
4
5 class Account{
6     String accountId;
7     String description;
8     double minimumBalance;
9
10    void display() {
11        System.out.println("Account Id: " + accountId);
12        System.out.println("Description: " + description);
13    }
14}
15
16 class Current extends Account{
17
18    Current(){
19        super.minimumBalance = 0;
20    }
21
22    @Override
23    void display() {
24        super.display();
25        System.out.println("Minimum Balance: " + super.minimumBalance);
26    }
27
28}
29
30 class Saving extends Account{
31
32    Saving(){
33        super.minimumBalance = 500;
34    }
35
36    @Override
37    void display() {
38        super.display();
39        System.out.println("Minimum Balance: " + super.minimumBalance);
40    }
41}
42
43 public class AccountTest {
44
45    public static void main(String[] args) {
46        // TODO Auto-generated method stub
47        Scanner sc = new Scanner(System.in);
48
49        Current c = new Current();
50        Saving s = new Saving();
51
52        System.out.println("Current account details: ");
53        System.out.println("Enter account id: ");
54        c.accountId = sc.nextLine();
55        System.out.println("Enter description of current account:");
56        c.description = sc.nextLine();
57    }
}
```

```
58     System.out.println("Saving account details: ");
59     System.out.println("Enter account id: ");
60     s.accountId = sc.nextLine();
61     System.out.println("Enter description of saving account:");
62     s.description = sc.nextLine();
63
64     System.out.println("CURRENT ACCOUNT DETAILS");
65     c.display();
66     System.out.println();
67     System.out.println("SAVING ACCOUNT DETAILS");
68     s.display();
69
70 }
71
72 }
73
```

Problems Javadoc Declaration Console X

<terminated> AccountTest [Java Application] C:\Users\SUBHASHREE\.p2\pool\plu

Current account details:
Enter account id:
C1001
Enter description of current account:
current account with min bal. 0/-
Saving account details:
Enter account id:
S2001
Enter description of saving account:
savings account with min bal. 500/-

CURRENT ACCOUNT DETAILS
Account Id: **C1001**
Description: **current account with min bal. 0/-**
Minimum Balance: **0.0**

SAVING ACCOUNT DETAILS
Account Id: **S2001**
Description: **savings account with min bal. 500/-**
Minimum Balance: **500.0**