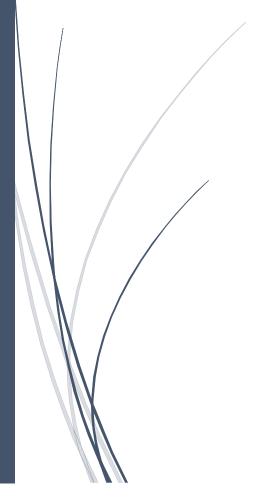8/24/2023

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Question 1

1.1 Create a basic Java Application that will help CTU banking clients to perform basic transactions. The Application should meet the following menu requirements:

Code:

```java
import java.util.*;

class BankAccount {
        static Scanner input = new Scanner(System.in);
        String name, actype;
        int accNo, bal, amt;
        double saved, rate1, rate2, rate3;

        BankAccount(String name, int accNo, String actype, int bal) {
                this.name = name;
                this.accNo = accNo;
                this.actype = actype;
                this.bal = bal;

        }

        int deposit() {
                System.out.print("Enter amount to deposit:");
                amt = input.nextInt();
                if (amt < 0) {
                        System.out.println("Invalid Amount");
                        return 1;
                }
                bal = bal + amt;
                return 0;
        }

        int withdraw() {
                System.out.println("Your Balance=" + bal);
                System.out.print("Enter amount to withdraw:");
                amt = input.nextInt();
                if (bal < amt) {
                        System.out.println("Not sufficient balance.");
                        return 1;
                }
                if (amt < 0) {
                        System.out.println("Invalid Amount");
                        return 1;
                }
                bal = bal - amt;
                return 0;
        }
```

Display all account details.

Code:

```java
void display() {
        System.out.println("Name:" + name);
        System.out.println("Account No:" + accNo);
        System.out.println("Balance:" + bal);


}
```

Output:

```
Menu
1. Deposit Amount
2. Withdraw Amount
3. Display Information
4. Save Amount
5. Exit
Please enter your choice:
3

Name:Gabriella
Account No:34232
Balance:540
Please enter your choice:
```

Deposit the amount.

Code:

```java
int deposit() {
        System.out.print("Enter amount to deposit:");
        amt = input.nextInt();
        if (amt < 0) {
                System.out.println("Invalid Amount");
                return 1;
        }
        bal = bal + amt;
        return 0;
}
```

Output:

```
Balance:540
Please enter your choice:
→   1

Enter amount to deposit:
→   500
```

Save the amount.

Code:

```java
double saved() {
        rate1 = bal*0.005;
        rate2 = bal*0.02;
        rate3 = bal*0.05;
        if (bal >= 500){
                System.out.println("You saved: "+ rate1);
        }
        if (bal >= 1000) {
                System.out.println("you saved: "+ rate2);
        }
        if (bal <= 1000) {
                System.out.println("You saved: "+ rate3);
        }
return 0;
}
```

Output:

```
Please enter your choice:
4

You saved: 2.0
```

Withdraw the amount

Code:

```java
int withdraw() {
        System.out.println("Your Balance=" + bal);
        System.out.print("Enter amount to withdraw:");
        amt = input.nextInt();
        if (bal < amt) {
                System.out.println("Not sufficient balance.");
                return 1;
        }
        if (amt < 0) {
                System.out.println("Invalid Amount");
                return 1;
        }
        bal = bal - amt;
        return 0;
}
```

Output:

```
    Please enter your choice:
→   2

    Your Balance=1040
    Enter amount to withdraw:
→   1000
```

Exit

Code:

```java
void exit() {
        System.out.println("Thank you! Goodbye :)");
}
```

Output:

```
    Please enter your choice:
→   5

    Thank you! Goodbye :)
```

I Gabriella Rakgotsoka_____ hereby

(FULL NAME)

declare that the contents of this assignment JD521_FA1_____is entirely my own workexcept for the following documents: (List the documents and page numbers of work in this portfolio

that were generated in a group)

Activity	Date

Signature: Date: 2023/08/24