CODSOFT TASK 3

ATM INTERFACE

import java.util.Scanner;

class BankAccount {

private double balance;

public BankAccount(double initialBalance) {

this.balance = initialBalance;

}

public double getBalance() {

return balance;

}

public void deposit(double amount) {

balance += amount;

System.out.println("$" + amount + " deposited successfully.");

}

public boolean withdraw(double amount) {

if (amount <= balance) {

balance -= amount;

System.out.println("$" + amount + " withdrawn successfully.");

return true;

} else {

System.out.println("Insufficient funds. Withdrawal failed.");

return false;

}

}

}

class ATM {

private BankAccount account;

private Scanner scanner;

public ATM(BankAccount account) {

this.account = account;

this.scanner = new Scanner(System.in);

}

public void displayMenu() {

int choice;

do {

System.out.println("\nATM Menu:");

System.out.println("1. Check Balance");

System.out.println("2. Deposit");

System.out.println("3. Withdraw");

System.out.println("4. Exit");

System.out.print("Enter your choice: ");

choice = scanner.nextInt();

switch (choice) {

case 1:

checkBalance();

break;

case 2:

deposit();

break;

case 3:

withdraw();

break;

case 4:

System.out.println("Thank you for using the ATM. Goodbye!");

break;

default:

System.out.println("Invalid choice. Please enter a number between 1 and 4.");

}

} while (choice != 4);

}

private void checkBalance() {

System.out.println("Your balance is: $" + account.getBalance());

}

private void deposit() {

System.out.print("Enter amount to deposit: $");

double amount = scanner.nextDouble();

account.deposit(amount);

}

private void withdraw() {

System.out.print("Enter amount to withdraw: $");

double amount = scanner.nextDouble();

if (account.withdraw(amount)) {

System.out.println("Please take your cash.");

}

}

public void closeScanner() {

scanner.close();

}

}

public class Main {

public static void main(String[] args) {

BankAccount account = new BankAccount(1000); // Initial balance $1000

ATM atm = new ATM(account);

atm.displayMenu();

atm.closeScanner();

}

}