Oops concept in java:

CODE:

class BankAccount {

private String accountHolderName;

private int accountNumber;

protected double balance;

public BankAccount(String accountHolderName, int accountNumber, double balance) {

this.accountHolderName = accountHolderName;

this.accountNumber = accountNumber;

this.balance = balance;

}

public void deposit(double amount) {

balance += amount;

System.out.println("Deposited: " + amount + ". New balance: " + balance);

}

public void withdraw(double amount) {

if (amount <= balance) {

balance -= amount;

System.out.println("Withdrawn: " + amount + ". New balance: " + balance);

} else {

System.out.println("Insufficient balance.");

}

}

public void displayAccountDetails() {

System.out.println("Account Holder: " + accountHolderName);

System.out.println("Account Number: " + accountNumber);

System.out.println("Balance: " + balance);

}

}

class SavingsAccount extends BankAccount {

private double interestRate;

public SavingsAccount(String accountHolderName, int accountNumber, double balance, double interestRate) {

super(accountHolderName, accountNumber, balance);

this.interestRate = interestRate;

}

public void addInterest() {

double interest = balance \* interestRate / 100;

balance += interest;

System.out.println("Interest added: " + interest + ". New balance: " + balance);

}

@Override

public void displayAccountDetails() {

super.displayAccountDetails();

System.out.println("Interest Rate: " + interestRate + "%");

}

}

public class Main {

public static void main(String[] args) {

BankAccount account1 = new BankAccount("Alice", 1001, 5000.00);

account1.displayAccountDetails();

account1.deposit(1000);

account1.withdraw(1500);

System.out.println();

SavingsAccount savingsAccount = new SavingsAccount("Bob", 1002, 10000.00, 5);

savingsAccount.displayAccountDetails();

savingsAccount.addInterest();

savingsAccount.withdraw(2000);

}

}

Output:

Account Holder: Alice

Account Number: 1001

Balance: 5000.0

Deposited: 1000.0. New balance: 6000.0

Withdrawn: 1500.0. New balance: 4500.0

Account Holder: Bob

Account Number: 1002

Balance: 10000.0

Interest Rate: 5.0%

Interest added: 500.0. New balance: 10500.0

Withdrawn: 2000.0. New balance: 8500.0

A screenshot of a computer

AI-generated content may be incorrect.