

24042020

Bank Application (Java Assignment)

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Date:

import java.util.Scanner;

class Account {

private int accountNumber;
private ~~int~~ String accountHolderName;
private double balance;
private String email;
private String phoneNumber;

public Account (int accountNumber, String accountHolderName, double balance, String email, String phone Number) {

this.accountNumber = accountNumber;

~~this.accountNumber = accountHolder~~

this.accountHolderName = accountHolderName;

this.~~balance~~ = balance;

this.email = email;

this.PhoneNumber = phone Number;

}

public int getAccountNumber () {

return accountNumber;

public void deposit (double amount) {

if (amount > 0) {

balance += amount;

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

}

```

    } {
        System.out.println("Invalid
        deposit amount!");
    }

public void withdraw(double amount) {
    if (amount > 0 && amount <= balance) {
        balance -= amount;
        System.out.println("Withdraw:
        " + amount + ", Remaining
        Balance: " + balance);
    }
    else if (amount > balance) {
        System.out.println("Insufficient
        balance!");
    }
    else {
        System.out.println("Invalid withdraw
        amount!");
    }
}

public void display Account Details() {
    System.out.println("Account Number: "
    + account Number);
    System.out.println("Account Holder: "
    + account Holder Name);
    System.out.println("Balance: " + balance);
    System.out.println("Email: " + email);
    System.out.println("Phone: " + phone Number);
}

```

```
class public void updateContactDetails (String email,  
String phoneNumber) {  
    this.email = email;  
    this.phoneNumber = phoneNumber;  
    System.out.println("Contact details  
updated successfully!");  
}
```

}

```
class UserInterface {
```

```
private Account[] accounts = new Account[10];  
private int accountCount = 0;  
private Scanner scanner = new Scanner(System.in);  
private int accountNumberSeed = 1001;
```

```
public void createAccount () {  
    System.out.print("Enter account  
holder name ");  
    String name = scanner.nextLine();
```

```
System.out.print("Enter initial  
deposit amount: ");
```

```
double balance = scanner.nextDouble();
```

```
System.out.print("Enter email  
address: ");
```

```
String email = scanner.nextLine();
```

```
System.out.print("Enter phone  
number: ");
```

```
String phone = scanner.nextLine();
```

Date:

```
accounts[accountCount] = new Account(
    accountNumberSeed, name, balance,
    email, string, phone);

System.out.println("Account created
successfully with Account Number " +
    accountNumberSeed);

accountNumberSeed++;
accountCount++;

}

private Account findAccount(int accountNumber) {
    for (int i = 0; i < accountCount; i++) {
        if (accounts[i].getAccountNumber() ==
            accountNumber) {
            return accounts[i];
        }
    }
    return null;
}

public void performDeposit() {
    System.out.print("Enter account number: ");
    int accNo = scanner.nextInt();
    System.out.print("Enter deposit amount: ");
    double amount = scanner.nextDouble();
    scanner.nextLine();

    Account acc = findAccount(accNo);
    if (acc != null) {
        acc.deposit(amount);
    } else {
        System.out.println("Account not found.");
    }
}
```

```
public void performWithdrawal() {
    System.out.print("Enter account number = ");
    int accNo = scanner.nextInt();
    System.out.print("Enter withdrawal amount = ");
    double amount = scanner.nextDouble();
    scanner.nextLine();
```

```
Account acc = findAccount(accNo);
if (acc != null) {
    acc.withdraw(amount);
} else {
    System.out.println("Account not found!");
}
```

```
}
```

```
public void showAccountDetails() {
    System.out.print("Enter account number = ");
    int accNo = scanner.nextInt();
    scanner.nextLine();
    Account accountNumber acc = findAccount(accNo);
    if (acc != null) {
        acc.displayAccountDetails();
    } else {
        System.out.println("Account not found.");
    }
}
```

```

public void updateContact() {
    System.out.print("Enter account number = ");
    int accNo = scanner.nextInt();
    scanner.nextLine();

    Account acc = findAccount(accNo);
    if (acc != null) {
        System.out.print("Enter new email ");
        String email = scanner.nextLine();
        System.out.println("Enter new phone number = ");
        String phone = scanner.nextLine();
        acc.updateContactDetails(email, phone);
    } else {
        System.out.println("Account not found.");
    }
}

public void mainMenu() {
    while (true) {
        System.out.println("1. Welcome to the Banking Application.");
        System.out.println("2. Create a new account.");
        System.out.println("3. Deposit money.");
        System.out.println("4. Withdraw money.");
        System.out.println("5. View account details.");
        System.out.println("6. Update contact details.");
        System.out.println("7. Exit.");
        System.out.print("Enter your choice: ");
        int choice = scanner.nextInt();
        scanner.nextLine();
    }
}

```

```
switch (choice) {
```

```
    Case 1 : Create Account(); break;
```

```
    Case 2 : perform Withdrawal Deposit;
```

```
    break;
```

```
    Case 3 : perform Withdrawal; break;
```

```
    Case 4 : Show Account Details(); break;
```

```
    Case 5 : Update Contact(); break;
```

```
    Case 6 :
```

```
        System.out.println("Thank  
you for using the Banking  
Application.");  
        return;
```

```
    default : System.out.println(  
        "Invalid choice  
        Try again.")
```

```
} }
```

```
}
```

```
public class Bank {
```

```
    public static void main (String []
```

```
.args) {
```

```
        UserInterface ui = new
```

```
UserInterface();
```

```
        ui.mainMenu();
```

```
}
```

```
}
```

Welcome to the Banking Application!

1. Create a new account
2. Deposit money
3. Withdraw money
4. View account details
5. Update contact details
6. Exit

Enter your choice: 1

Enter account holder name: Abhishek Thakur

Enter initial deposit amount: 12000

Enter email address: 2401420020@krmu.edu.in

Enter phone number: 9987140536

Account created successfully with Account Number: 1001

Welcome to the Banking Application!

1. Create a new account
2. Deposit money
3. Withdraw money
4. View account details
5. Update contact details
6. Exit

Enter your choice: 4

Enter account number: 1001

Account Number: 1001

Account Holder: Abhishek Thakur

Balance: 12000.0

Email: 2401420020@krmu.edu.in

Phone: 9987140536

Welcome to the Banking Application!

1. Create a new account
2. Deposit money
3. Withdraw money
4. View account details
5. Update contact details
6. Exit

Enter your choice: 2

Enter account number: 1001

Enter deposit amount: 2000

Deposited: 2000.0. New Balance: 14000.0

Welcome to the Banking Application!

1. Create a new account
2. Deposit money
3. Withdraw money
4. View account details
5. Update contact details
6. Exit

Enter your choice: 3

Enter account number: 1001

Enter withdrawal amount: 5000

Withdrawn: 5000.0. Remaining Balance: 9000.0

Welcome to the Banking Application!

1. Create a new account
2. Deposit money
3. Withdraw money
4. View account details
5. Update contact details
6. Exit

Enter your choice: 5

Enter account number: 1001

Enter new email: 2401420020@krmangalam.edu.in

Enter new phone number: 9999935024

Contact details updated successfully!

Welcome to the Banking Application!

1. Create a new account
2. Deposit money
3. Withdraw money
4. View account details
5. Update contact details
6. Exit

Enter your choice: 4

Enter account number: 1001

Account Number: 1001

Account Holder: Abhishek Thakur

Balance: 9000.0

Email: 2401420020@krmangalam.edu.in

Phone: 9999935024

Welcome to the Banking Application!

1. Create a new account
2. Deposit money
3. Withdraw money
4. View account details
5. Update contact details
6. Exit

Enter your choice: 6

Thank you for using the Banking Application!