



K.R. MANGALAM UNIVERSITY
THE COMPLETE WORLD OF EDUCATION

Git Hub ASSIGEMENT

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// Course: B.Tech CSE(Full Stack Development)

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// Assignment: 01

```
import java.util.*;
class Account {
    private int accountNumber;
    private String accountHolderName;
    private double balance;
    private String email;
    private String phoneNumber;

    public Account(int accountNumber, String accountHolderName, double balance, String
email, String phoneNumber){
        this.accountNumber = accountNumber;
        this.accountHolderName = accountHolderName;
        this.balance = balance;
        this.email = email;
        this.phoneNumber = phoneNumber;
    };

    //Deposit money
    public void deposit(double amount){
        if(amount > 0){
            balance += amount;
            System.out.println("Balance after deposit: "+ balance);
        }
        else{
            System.out.println("Amount should be positive");
        }
    }

    //Withdraw money
    public void withdraw(double amount){
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        if(amount > 0 ){
            if(amount < balance){
                balance -= amount;
                System.out.println("Balance after deposit: "+ balance);
            }
            else{
                System.out.println("Insufficient balance");
            }
        }
        else{
            System.out.println("Amount should be positive");
        }
    }

    //Display detail
    public void displayAccountDetails(){
        System.out.println("Account number: "+accountNumber);
        System.out.println("Account holder Name: "+accountHolderName);
        System.out.println("Balance: "+balance);
        System.out.println("Email: "+email);
        System.out.println("Phone Number: "+ phoneNumber);
    }

    //Update details
    public void updateContactDetails(String newEmail, String newPhoneNumber){
        this.email = newEmail;
        this.phoneNumber = newPhoneNumber;
        System.out.println("Details updated successfully!!!");
    }

    //Get account no
    public int getAccountNumber() {
        return accountNumber;
    }
}

public class BankingApplication{
    Account[] accounts = new Account[100]; // Array of accounts
    int count = 0; // Number of accounts created
    Scanner sc = new Scanner(System.in);

    // Create a new account
    public void createAccount() {

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System.out.print("Enter account holder name: ");
String name = sc.nextLine();

System.out.print("Enter initial deposit amount: ");
double amount = sc.nextDouble();
sc.nextLine(); // clear input buffer

System.out.print("Enter email: ");
String email = sc.nextLine();

System.out.print("Enter phone number: ");
String phone = sc.nextLine();

int accNum = 1000 + count + 1; // simple auto account number

Account newAcc = new Account(accNum, name, amount, email, phone);
accounts[count] = newAcc;
count++;

System.out.println("Account created successfully with Account Number: " + accNum);
}

// Deposit money
public void performDeposit() {
    System.out.print("Enter account number: ");
    int accNum = sc.nextInt();
    sc.nextLine();

    Account acc = findAccount(accNum);
    if (acc == null) {
        System.out.println("Account not found!");
        return;
    }

    System.out.print("Enter amount to deposit: ");
    double amount = sc.nextDouble();
    sc.nextLine();

    acc.deposit(amount);
}

// Withdraw money
public void performWithdrawal() {
    System.out.print("Enter account number: ");

```

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int accNum = sc.nextInt();
sc.nextLine();

Account acc = findAccount(accNum);
if (acc == null) {
    System.out.println("Account not found!");
    return;
}

System.out.print("Enter amount to withdraw: ");
double amount = sc.nextDouble();
sc.nextLine();

acc.withdraw(amount);
}

// Show account details
public void showAccountDetails() {
    System.out.print("Enter account number: ");
    int accNum = sc.nextInt();
    sc.nextLine();

    Account acc = findAccount(accNum);
    if (acc == null) {
        System.out.println("Account not found!");
    } else {
        acc.displayAccountDetails();
    }
}

// Update contact details
public void updateContact() {
    System.out.print("Enter account number: ");
    int accNum = sc.nextInt();
    sc.nextLine();

    Account acc = findAccount(accNum);
    if (acc == null) {
        System.out.println("Account not found!");
        return;
    }

    System.out.print("Enter new email: ");
    String email = sc.nextLine();

```

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        System.out.print("Enter new phone number: ");
        String phone = sc.nextLine();

        acc.updateContactDetails(email, phone);
    }

    // Find account by account number
    private Account findAccount(int accNum) {
        for (int i = 0; i < count; i++) {
            if (accounts[i].getAccountNumber() == accNum) {
                return accounts[i];
            }
        }
        return null;
    }

    // Main Menu
    public void mainMenu() {
        while (true) {
            System.out.println("\nWelcome to the Banking Application!");
            System.out.println("1. Create a new account");
            System.out.println("2. Deposit money");
            System.out.println("3. Withdraw money");
            System.out.println("4. View account details");
            System.out.println("5. Update contact details");
            System.out.println("6. Exit");

            System.out.print("Enter your choice: ");
            int choice = sc.nextInt();
            sc.nextLine();
            switch (choice) {
                case 1: createAccount(); break;
                case 2: performDeposit(); break;
                case 3: performWithdrawal(); break;
                case 4: showAccountDetails(); break;
                case 5: updateContact(); break;
                case 6:
                    System.out.println("Thank you for using the Banking Application!");
                    return;
                default:
                    System.out.println("Invalid choice!");
            }
        }
    }
}

```

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}
```

```
public static void main(String[] args) {  
    BankingApplication ba = new BankingApplication();  
    ba.mainMenu();  
}  
}
```