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Quick Work

Page No.:

Date:

M T W T F S S

Assignment-1

- ① Project Title: Banking Application for Account Management.
code: →

```
import java.util.Scanner;  
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;  
    }  
  
    public void deposit(double amount) {  
        if (amount > 0) {  
            balance += amount;  
            System.out.println("₹" + amount + " deposited");  
        }  
        else {  
            System.out.println("Enter a valid amount");  
        }  
    }  
}
```

```

public void withdraw(double amount) {
    if (amount <= 0) {
        System.out.println("withdrawal amount should be positive");
    } else if (amount > balance) {
        System.out.println("Insufficient balance");
    } else {
        balance -= amount;
        System.out.println("₹" + amount + "withdrawn successfully");
    }
}

```

```

public void displayAccountDetails() {
    System.out.println("Welcome to the Banking Application");
    System.out.println("Account Number: " + accountNumber);
    System.out.println("Account Holder: " + accountHolderName);
    System.out.println("Balance: ₹" + balance);
    System.out.println("Email: " + email);
    System.out.println("Phone Number: " + phoneNumber);
}

```

```

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

```

```

public int getAccountNumber() {
    return accountNumber;
}

```

```

public class UserInterface {
    private Account[] accounts;
    private int count;
}

```

```

private Scanner sc;
public UserInterface() {
    accounts = new Account[100];
    count = 0;
    sc = new Scanner(System.in);
}

```

```

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

```

```

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

```

```

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

```

```

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

```

```

    int accNumber = 1000 + count + 1;
    accounts[count] = new Account(accNumber, name, balance,
    count++;
    email, phone);
    System.out.println("Account created successfully");
}

```

```

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

```

```
public void performDeposit() {  
    System.out.print("Enter account number: ");  
    int accNo = sc.nextInt();  
    System.out.print("Enter amount to Deposit: ");  
    double amount = sc.nextDouble();  
    sc.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 = sc.nextInt();  
    System.out.print("Enter amount to withdraw: ");  
    double amount = sc.nextDouble();  
    sc.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 = sc.nextInt();  
    sc.nextLine();
```

```
    Account acc = findAccount (accNo);  
    if (acc != null) acc.displayAccountDetails();  
    else System.out.println("No Account");  
}
```

```

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

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

    Account acc = findAccount(accNo);
    if (acc != null) acc.updateContactDetails(email, phone);
    else System.out.println("Account not found.");
}

```

```

public void mainMenu() {
    int choice;
    do {
        System.out.println("Welcome to 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: ");

        choice = sc.nextInt();
        sc.nextLine();

        switch (choice) {

```

Case 1 : create Account();

Case 2 : performDeposit();

Case 3 : performWithdrawal();

Case 4 : ShowAccountDetails();

Case 5 : update Contact();

Case 6 : System.out.println("Thank you!");

~~Case 7 : System.out.~~

default:

System.out.println("Invalid");

}
while (choice != 6);

}
public static void main (String[] args) {
 UserInterface ui = new UserInterface();
 ui.mainMenu();
}

}