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Quick Work

Page No.:

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M T W T F S S

Assignment

- 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        System.out.println("+" + amount + " withdrawn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++);
```

```
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 performWithdraw(){
    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");
}

```

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```

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.println("Enter your choice:");
}

```

```

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

```

```

switch (choice) {

```

Case 1 : createAccount();

Case 2 : performDeposit();

Case 3 : performWithdraw();

Case 4 : showAccountDetails();

Case 5 : updateContact();

case 6 : System.out.println("Thank You!");

~~case 7 : System.out.println("Invalid");~~

default :

System.out.println("Invalid");

while (choice != 6);

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