VRSEC
VELAGAPUDI RAMAKRISHNA SIDDHARTHA ENGINEERING COLLEGE

B. Tech – Computer Science and Engineering

23CS3353 – Object Oriented Programming through Java Lab

Title:

Packers And Movers

Home Assignment
Submitted by

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Second Year

ONLINE PACKERS AND MOVERS SERVICE BOOKING

- **An Online Packers and Movers Interface is developed. It has following functionalities**
  Booking of Packers and Movers Service.

Implementation:
List of Packages,Interfaces and Classes used along with the Files.

List of Packages used:
*project
List of Interfaces used:
*Customer
List of Classes used:
*CustomerDetails
*ItemsAndCost
*Acknowledgement
*Packmove
Files:
***packersandmovers*Source Code:**

```
package project;

import java.util.Scanner;

interface Customer

{

    public void getInfo();

    public double disCost();

}

public class CustomerDetails implements Customer{

   String name;

   String mobileNo;

   String email;
```

```
    String fromPlace;

    String toPlace;

    String address;

    int distance;

    public void getInfo() {

        Scanner scanner = new Scanner(System.in);

        System.out.println("**WELCOME TO AP PACKERS AND MOVERS**");

        System.out.println("Enter your name:");

        name = scanner.nextLine();

        System.out.println("Enter your mobile number:");

        mobileNo = scanner.nextLine();

        System.out.println("Enter your email:");

        email = scanner.nextLine();

        System.out.println("Choose your starting place:\n1. Kadapa\n2. Vizag\n3. Krishna\n4.
Khammam");

        int choice = scanner.nextInt();

        System.out.println("**SELECT YOUR DESTINATION ONLY AMONG THE THREE SHOWN
BELOW**");



        switch (choice) {

            case 1:

                fromPlace = "Kadapa";

                System.out.println("Choose your destination place:\n1. Ananthapuram\n2. Chittor\n3.
Kurnool");

                int kadapaChoice = scanner.nextInt();
```

```
        switch (kadapaChoice) {
            case 1: toPlace = "Ananthapuram"; distance = 170; break;
            case 2: toPlace = "Chittor"; distance = 150; break;
            case 3: toPlace = "Kurnool"; distance = 200; break;
            default: System.out.println("Invalid choice."); return;
        }
        break;

    case 2:
        fromPlace = "Vizag";
        System.out.println("Choose your destination place:\n1. East Godavari\n2. Eluru\n3.
                                                    Srikakulam");
        int vizagChoice = scanner.nextInt();
        switch (vizagChoice) {
            case 1: toPlace = "East Godavari"; distance = 180; break;
            case 2: toPlace = "Eluru"; distance = 190; break;
            case 3: toPlace = "Srikakulam"; distance = 115; break;
            default: System.out.println("Invalid choice."); return;
        }
        break;

    case 3:
        fromPlace = "Krishna";
```

```
            System.out.println("Choose your destination place:\n1. Guntur\n2. Prakasam\n3. West Godavari");
            int krishnaChoice = scanner.nextInt();
            switch (krishnaChoice) {
                case 1: toPlace = "Guntur"; distance = 100; break;
                case 2: toPlace = "Prakasam"; distance = 30; break;
                case 3: toPlace = "West Godavari"; distance = 27; break;
                default: System.out.println("Invalid choice."); return;
            }
            break;

        case 4:
            fromPlace = "Khammam";
            System.out.println("Choose your destination place:\n1. Madhira\n2. Wyra\n3. Sathupally");
            int khammamChoice = scanner.nextInt();
            switch (khammamChoice) {
                case 1: toPlace = "Madhira"; distance = 60; break;
                case 2: toPlace = "Wyra"; distance = 30; break;
                case 3: toPlace = "Sathupally"; distance = 80; break;
                default: System.out.println("Invalid choice."); return;
            }
            break;

        default:
```

```
            System.out.println("Invalid choice.");
            return;
        }
        scanner.nextLine();
        System.out.println("Enter the address:");
        address = scanner.nextLine();

        System.out.println("-----------------------------------------------");

    }

    public double disCost() {
        double totalCost = 0;
        double tariffCost = 1000;
        String reason = "";

        System.out.println("**DISTANCE RANGES WITH AVAILABLE COST**");
        System.out.println("1. If the distance is between (0 to 50 Km): cost = $10 per km");
        System.out.println("2. If the distance is between (50 to 100 Km): cost = $9 per km");
        System.out.println("3. If the distance is between (100 to 150 Km): cost = $12 per km");
        System.out.println("4. If the distance is between (150 to 200 Km): cost = $10 per km");
        System.out.print("Do you OKAY with the available plan? (YES/NO): ");
```

```
Scanner sc = new Scanner(System.in);
String ch = sc.nextLine();

if (ch.equalsIgnoreCase("yes")) {
    if (distance <= 50) {
        totalCost = 10 * distance;
        reason = "Local delivery within 50 km.";
    } else if (distance <= 100) {
        totalCost = 9 * distance;
        reason = "Regional delivery from 50 km to 100 km.";
    } else if (distance <= 150) {
        totalCost = 12 * distance;
        reason = "Extended regional delivery from 100 km to 150 km.";
    } else if (distance <= 200) {
        totalCost = 10 * distance;
        reason = "Long-distance delivery from 150 km to 200 km.";
    } else {
        System.out.println("Distance exceeds 200 km, delivery not available.");
        return 0;
    }

    double finalCost = totalCost + tariffCost;
    System.out.printf("***ESTIMATED COST****");
```

```
        System.out.printf("\nFrom: %s\nTo: %s\nDistance: %d km\nDistance Cost: $%.2f\nTariff Cost: $%.2f\nTotal Cost: $%.2f\nReason: %s%n",  fromPlace, toPlace, distance, totalCost, tariffCost, finalCost, reason);



        System.out.println("-----------------******---------------------");



            return finalCost;

        } else {

            System.out.println("Process canceled!");

            return 0;

        }

    }



    public int getDistance() {

        return distance;

    }



    public String getName() {

        return name;

    }



    public String getMobileNo() {

        return mobileNo;

    }
```

```
    public String getEmail() {
        return email;
    }

    public String getFromPlace() {
        return fromPlace;
    }

    public String getToPlace() {
        return toPlace;
    }

    public String getAddress() {
        return address;
    }
}
```

package project;

```
import java.util.Scanner;
public class ItemsAndCost {
    double totalCost = 0.0;
    public void getItemInfo() {
        Scanner scanner = new Scanner(System.in);
        totalCost += handleService("AC Technician", scanner);
```

```
        totalCost += handleService("Electrician", scanner);

        totalCost += handleService("Plumber", scanner);

        System.out.println("Do you want additional protection?\n1. Plants\n2. Musical instruments\n3. Glassware\n4. Chandeliers\n5. Fish tanks\n6. Others\n7. No");

        int protectionChoice = scanner.nextInt();

        if (protectionChoice >= 1 && protectionChoice <= 6) {

            totalCost += 200;

        }

    }

    private double handleService(String serviceName, Scanner scanner) {

        System.out.println("Do you need " + serviceName + "? (yes/no)");

        String response = scanner.next();

        double cost = 0;

        if (response.equalsIgnoreCase("yes")) {

            cost += 1500;

            System.out.println(serviceName + " added for $1500.");

        }

        return cost;

    }

    public double getTotalCost() {

        return totalCost;

    }

}
```

package project;

```
import java.util.Scanner;

 public class Acknowledgement {

    String date,time;



     public static double applyDiscount(double fairCost, int distance) {

        if (distance > 150) {

            System.out.println("Applying 20% discount...");

            System.out.println("Because your distance is above 150Km");

            fairCost *= 0.8;

        } else if (distance > 100) {

            System.out.println("Applying 15% discount...");

            System.out.println("Because your distance is above 100Km");

            fairCost *= 0.85;

        } else if (distance > 50) {

            System.out.println("Applying 10% discount...");

            System.out.println("Because your distance is above 50Km");

            fairCost *= 0.9;

        }

        return fairCost;

    }

    public void getTimeAndDate() {

        Scanner scanner = new Scanner(System.in);

        System.out.println("Enter the date of the move (dd/mm/yyyy):");
```

```
        date = scanner.nextLine();
        System.out.println("Enter the time of the move (hh:mm):");
        time = scanner.nextLine();
        System.out.println("Thank you for choosing our service.");
        System.out.println("Move is scheduled on " + date + " at " + time);
    }
        public String getDate()
       {
           return date;
       }
       public String getTime()
      {
          return time;
      }
}
import project.*;
import java.io.FileOutputStream;
import java.io.IOException;
import java.util.Scanner;

public class Packmove {
    private double totalCost;
    private String name, mob, email, address, from, to, date, time;
```

```
    private int dis;



    public void showConfirmation(CustomerDetails customer, ItemsAndCost items, Acknowledgement
acknowledgement, double totalCost) {

        name = customer.getName();

        mob = customer.getMobileNo();

        email = customer.getEmail();

        address = customer.getAddress();

        dis = customer.getDistance();

        from = customer.getFromPlace();

        to = customer.getToPlace();

        date = acknowledgement.getDate();

        time = acknowledgement.getTime();



        System.out.println("\n---------- Acknowledgement ----------");

        System.out.println("Name: " + name);

        System.out.println("Mobile No: " + mob);

        System.out.println("Email: " + email);

        System.out.println("From: " + from + " to " + to);

        System.out.println("Address: " + address);

        System.out.println("Distance: " + dis + " km");

        System.out.printf("Total Cost: $%.2f%n", totalCost);

        System.out.println("Scheduled Date and Time: On " + date + " at " + time);

        System.out.println("our team will approach soon.....");
```

```
        System.out.println("For any queries:");
        System.out.println("Contact:7013608464") ;
        System.out.println("-----------------------------------------------");

        try  {
      FileOutputStream fos = new FileOutputStream("packersandmovers.txt", true);
            fos.write("-------------------------------------------------------------------------\n".getBytes());
            fos.write("Acknowledgement Details:\n-------------------------------------------------------------
\n".getBytes());
            fos.write(("CUSTOMER NAME: " + name + "\n").getBytes());
            fos.write(("Mobile No: " + mob + "\n").getBytes());
            fos.write(("Email Id: " + email + "\n").getBytes());
            fos.write(("From: " + from + " to " + to + "\n").getBytes());
            fos.write(("Address: " + address + "\n").getBytes());
            fos.write(("Distance: " + dis + " km\n").getBytes());
            fos.write(("Scheduled Date and Time: On " + date + " at " + time + "\n").getBytes());
            fos.write(("Total Cost: $" + totalCost + "\n").getBytes());
            fos.write("-------------------------------------------------------------------------\n".getBytes());
        } catch (IOException e) {
            System.out.println("IO exception occurred: " + e.getMessage());
        }
    }

    public void askForFeedback(Scanner scanner) {
```

```
    System.out.println("We would love to hear your feedback. Please share your thoughts:");
    String feedback = scanner.nextLine();
    System.out.println("*** THANK YOU FOR YOUR FEEDBACK ***");
}

public static void main(String[] args) {
    Scanner scanner = new Scanner(System.in);
    Packmove packmove = new Packmove();

    try {
        CustomerDetails customer = new CustomerDetails();
        ItemsAndCost items = new ItemsAndCost();
        Acknowledgement acknowledgement = new Acknowledgement();

        customer.getInfo();
        double distanceCost = customer.disCost();
        items.getItemInfo();

        double totalCost = items.getTotalCost() + distanceCost;
        System.out.printf("Total cost before discount: $%.2f%n", totalCost);
        totalCost = acknowledgement.applyDiscount(totalCost, customer.getDistance());
        System.out.printf("Total cost after discount: $%.2f%n", totalCost);
```

```
            System.out.println("Do you want to proceed with the process? (yes/no)");
            String proceed = scanner.next();
            scanner.nextLine();

            if (proceed.equalsIgnoreCase("yes")) {
                acknowledgement.getTimeAndDate();
                packmove.showConfirmation(customer, items, acknowledgement, totalCost);
            } else {
                System.out.println("Process cancelled");
            }

            packmove.askForFeedback(scanner);
        } finally {
            scanner.close();
        }
    }
}
```

Outputs:

Customer Details

```
C:\Users\HP\Desktop\packersandmovers>java Packmove
**WELCOME TO AP PACKERS AND MOVERS**
Enter your name:
Gayatri Reddy
Enter your mobile number:
9652773648
Enter your email:
gayatri3716@gmail.com
```

Source to Destination Details

```
Choose your starting place:
1. Kadapa
2. Vizag
3. Krishna
4. Khammam
3
**SELECT YOUR DESTINATION ONLY AMONG THE THREE SHOWN BELOW**
Choose your destination place:
1. Guntur
2. Prakasam
3. West Godavari
1
Enter the address:
D.no:3/17 Vaddeswaram
-------------------------------------------
```

Distance Along with Cost Details

```
**DISTANCE RANGES WITH AVAILABLE COST**
1. If the distance is between (0 to 50 Km): cost = $10 per km
2. If the distance is between (50 to 100 Km): cost = $9 per km
3. If the distance is between (100 to 150 Km): cost = $12 per km
4. If the distance is between (150 to 200 Km): cost = $10 per km
Do you OKAY with the available plan? (YES/NO): yes
```

Estimated Cost

```
***ESTIMATED COST****
From: Krishna
To: Guntur
Distance: 100 km
Distance Cost: $900.00
Tariff Cost: $1000.00
Total Cost: $1900.00
Reason: Regional delivery from 50 km to 100 km.
----------------******--------------------
```

Additional Details

```
Do you need AC Technician? (yes/no)
yes
AC Technician added for $1500.
Do you need Electrician? (yes/no)
yes
Electrician added for $1500.
Do you need Plumber? (yes/no)
no
Do you want additional protection?
1. Plants
2. Musical instruments
3. Glassware
4. Chandeliers
5. Fish tanks
6. Others
7. No
1
```

Discount

```
Total cost before discount: $5100.00
Applying 10% discount...
Because your distance is above 50Km
Total cost after discount: $4590.00
Do you want to proceed with the process? (yes/no)
yes
```

Date and Time Details

```
Enter the date of the move (dd/mm/yyyy):
03/11/2024
Enter the time of the move (hh:mm):
04:00 PM
Thank you for choosing our service.
Move is scheduled on 03/11/2024 at 04:00 PM
```

Acknowledgement

```
------------ Acknowledgement ---------------
Name: Gayatri Reddy
Mobile No: 9652773648
Email: gayatri3716@gmail.com
From: Krishna to Guntur
Address: D.no:3/17 Vaddeswaram
Distance: 100 km
Total Cost: $4590.00
Scheduled Date and Time: On 03/11/2024 at 04:00 PM
our team will approach soon.......
For any queries:
Contact:7013608464
-------------------------------------------
```

Feedback

```
We would love to hear your feedback. Please share your thoughts:
Good
*** THANK YOU FOR YOUR FEEDBACK ***
```

Error Output

```
Choose your starting place:
1. Kadapa
2. Vizag
3. Krishna
4. Khammam
5
Invalid choice.
```

File Output

packersandmovers.txt

File Edit View

```
Acknowledgement Details:
------------------------------------------------------------
CUSTOMER NAME: neha
Mobile No: 6300565702
Email Id: neha@gmail.com
From: Vizag to Srikakulam
Address: ndf
Distance: 115 km
Scheduled Date and Time: On 1/11/2024 at 6:00
Total Cost: $4743.0
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
Acknowledgement Details:
------------------------------------------------------------
CUSTOMER NAME: Gayatri Reddy
Mobile No: 9652773648
Email Id: gayatri3716@gmail.com
From: Krishna to Guntur
Address: D.no:3/17 Vaddeswaram
Distance: 100 km
Scheduled Date and Time: On 03/11/2024 at 04:00 PM
Total Cost: $4590.0
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
Acknowledgement Details:
------------------------------------------------------------
CUSTOMER NAME: Jaya
Mobile No: 3412389456
Email Id: jaya7@gmail.com
From: Kadapa to Chittor
Address: D.NO:5/89 Tirupathi
Distance: 150 km
Scheduled Date and Time: On 12/11/2024 at 6:00 PM
Total Cost: $5100.0
--------------------------------------------------------------------------------
```