CMP-4008Y Coursework 2 - Toll Road

100392753 (afn22ehu)

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TollRoadMain.java 100392753 (afn22ehu)

TollRoadMain.java

```
import java.io.*;
   import java.util.LinkedList;
  import java.util.Scanner;
  public class TollRoadMain {
       //method is used to read the txt file and assign the customers into the list link
           by the variables that are
       //created in CustomerAccount class, the method uses scanner for easy split of the
           document. The method also
       //uses switch to find what type of vehicle customer owns.
       public static TollRoad initialiseTollRoadFromFile() throws FileNotFoundException
          {
11
           TollRoad myTollRoad = new TollRoad();
           File inputFile = new File ("customerData.txt");
           Scanner scan = new Scanner(inputFile);
           scan.useDelimiter("#");
15
           Scanner lineScan;
           LinkedList < CustomerAccount > customerAccountsData = new LinkedList <> ();
           String firstName, lastName, vehicleRegistration, manufactureOfVehicle,
              typeOfVehicle;
           double accountBalance;
           CustomerAccount.Discount discounts;
           int vehicleLimits;
21
           while(scan.hasNext()){
               lineScan= new Scanner(scan.next());
               lineScan.useDelimiter(",");
25
                   typeOfVehicle=lineScan.next();
                   vehicleRegistration=lineScan.next();
                   firstName=lineScan.next();
29
                   lastName=lineScan.next();
                   manufactureOfVehicle=lineScan.next();
                   vehicleLimits=Integer.parseInt(lineScan.next());
                   accountBalance=Double.parseDouble(lineScan.next());
33
                   discounts = CustomerAccount.Discount.valueOf(lineScan.next());
               switch (typeOfVehicle) {
                   case "Van" : {
37
                       Vehicle car = new Van(vehicleRegistration, manufactureOfVehicle,
                           vehicleLimits);
                       CustomerAccount firstCustomer = new CustomerAccount(firstName,
39
                           lastName, accountBalance, car, discounts);
                       customerAccountsData.add(firstCustomer);
                       break;
41
                   }
                   case "Car" : {
43
                       Vehicle car = new Car(vehicleRegistration, manufactureOfVehicle,
                           vehicleLimits);
                       CustomerAccount firstCustomer = new CustomerAccount(firstName,
45
                           lastName, accountBalance, car, discounts);
                       customerAccountsData.add(firstCustomer);
                       break;
                   case "Truck" : {
                       Vehicle car = new Truck(vehicleRegistration, manufactureOfVehicle
                           , vehicleLimits);
                       CustomerAccount firstCustomer = new CustomerAccount(firstName,
51
                           lastName, accountBalance, car, discounts);
```

TollRoadMain.java 100392753 (afn22ehu)

```
customerAccountsData.add(firstCustomer);
                        break:
                   }
               }
           }
57
           myTollRoad.setCustomerAccountData(customerAccountsData);
59
           return myTollRoad;
61
       //method is used to read the file and execute two different methods, the file is
63
           read and split with use of scanner
       //while splitting the method finds which of the method should be called add
           founds or make trip, it will be then
       //call the right method and run a try though it, if there is not enough funds to
65
           make the tip the exception will be thrown
       //if the customer doesn't exist the exception also will be thrown. In successful
           tries the methods will run correctly
67
       public void simulateFromFile(TollRoad road) throws FileNotFoundException {
           File inputFile2= new File("transactions.txt");
           Scanner scan2= new Scanner(inputFile2);
           scan2.useDelimiter("\\$");
71
           Scanner lineScan2;
           String which Method, vehicle Registration;
           int amount;
           while(scan2.hasNext()){
               lineScan2= new Scanner(scan2.next());
               lineScan2.useDelimiter(",");
               whichMethod=lineScan2.next();
               if (whichMethod.equals("addFunds")){
                    vehicleRegistration=lineScan2.next();
                    amount=Integer.parseInt(lineScan2.next());
                    try {
                        CustomerAccount person = road.findCustomer(vehicleRegistration);
                        int indexToFind = road.getCustomerAccountData().indexOf(person);
                        road.getCustomerAccountData().get(indexToFind).addFunds(amount);
87
                        System.out.println(vehicleRegistration + ": " + amount + " amount
                            added successfully ");
                    catch(CustomerNotFoundException e){
                        System.out.println(vehicleRegistration + ": " + " add Funds
                           failed. CustomerAccount does not exist");
                    }
93
               else if(whichMethod.equals("makeTrip")){
                    vehicleRegistration=lineScan2.next();
                   try{
                        road.chargeCustomer(vehicleRegistration);
                        System.out.println(vehicleRegistration + ": " + " Trip completed
                           successfully" + road.getMoneyMade() );
                    catch(CustomerNotFoundException er){
101
                        System.out.println(vehicleRegistration +": " + " makeTrip failed.
                            CustomerAccount does not exist");
103
                    catch(InsufficientAccountBalanceException e){
                        System.out.println(vehicleRegistration + ": " + "makeTrip failed.
105
                            Insufficient funds");
```

```
}
                 }
107
            }
109
       }
111
        public static void main(String[] args) throws FileNotFoundException,
113
           In sufficient {\tt AccountBalanceException}, \ {\tt CustomerNotFoundException} \ \{
                TollRoad file1 = initialiseTollRoadFromFile();
                TollRoadMain mainRoad = new TollRoadMain();
                 System.out.println(file1);
117
                mainRoad.simulateFromFile(file1);
                 System.out.println("total of the money made : " + file1.getMoneyMade());
   }}
```

Vehicle.java 100392753 (afn22ehu)

Vehicle.java

```
//Base class for the Vehicle type, aka SuperClass. This class will work as our core
      for other vehicle type so we don't
  //need type extra data to every sub-class. We running here our base toString method
      and \ calculate Basic Trip Cost.
  public abstract class Vehicle {
      protected String vehicleRegistration;
      protected String manufactureOfVehicle;
       public Vehicle (String vehicleRegistration, String manufactureOfVehicle){
           this.vehicleRegistration=vehicleRegistration;
           this.manufactureOfVehicle=manufactureOfVehicle;
       public String getVehicleRegistration() {return this.vehicleRegistration;}
12
       public String getManufactureOfVehicle() {return this.manufactureOfVehicle;}
       public String toString() { return "Vehicle registration : " + vehicleRegistration
16
               " and manufacture of vehicle: " + manufactureOfVehicle; }
       public abstract int calculateBasicTripCost();
  }
```

Car.java 100392753 (afn22ehu)

Car.java

```
//Car class that represents car vehicle used to divide vehicles easier due to
      different payment rules and data.
  //Here we need number of seats that car has to calculate the right amount the person
      needs to pay.
  public class Car extends Vehicle {
       private int numberOfSeats;
       public Car (String vehicleRegistration, String manufactureOfVehicle, int
          numberOfSeats){
           super(vehicleRegistration,manufactureOfVehicle);
           this.numberOfSeats=numberOfSeats;
       }
10
       public int getNumberOfSeats(){return this.numberOfSeats;}
       //Overriding calculateBasicTripCost method from vehicle to calculate the right
14
          amount for customer
       //when customer has 5 or fewer seats in the car they have to pay 500p hence £5 or
           if they have 6 or more they will
       //have to pay 600 p hence £6
16
       @Override
       public int calculateBasicTripCost() {
           if (numberOfSeats <= 5){</pre>
               return 500;
20
           else {
               return 600;
       }
26
       @Override
       public String toString() { return super.toString() + " Your total = " +
28
          calculateBasicTripCost() + "p " ;}
30
       public static void main(String[] args) {
           Car firstCarTest= new Car("74747G", "Honda", 4);
           Car secondCarTest= new Car("ABH6J", "Toyota", 20);
           Car thirdCarTest= new Car("ALA9J", "Nisan", 5);
34
           System.out.println(firstCarTest);
           System.out.println(secondCarTest);
           System.out.println(thirdCarTest);
       }
42
  }
```

Van.java 100392753 (afn22ehu)

Van.java

```
//Van class that represents van vehicle used to divide vehicles easier due to
      different payment rules and variables.
  //In Van class we need payload data and we will be calculating the cost of trip based
       on how heavy is the payload.
  public class Van extends Vehicle{
       private int payload;
       public Van(String vehicleRegistration, String manufactureOfVehicle, int payload){
           super(vehicleRegistration, manufactureOfVehicle);
           this.payload=payload;
       }
       public int getPayload(){return this.payload;}
       //overriding calculateBasicTripCost method from Vehicle to calculate how much
          does it cost to carry certain amount of
       //payload when payload weights less or equal to 600kg it costs 500p when payload
          weights over 600kg but less
       //or equal to 800k the cost is 750p when payload is over 800kg then cost goes up
          to 1000p
       @Override
       public int calculateBasicTripCost() {
           if (payload <= 600){</pre>
20
               return 500;
           }
           else if (payload <= 800){
               return 750;
           }
           else {
               return 1000;
28
       }
       public String toString() {return super.toString() + " your total = " +
32
          calculateBasicTripCost() + "p";}
       public static void main(String[] args) {
34
        Van firstVanTest= new Van("AEE45", "Citroen", 600);
        Van secondVanTest= new Van("LALA3", "Ford", 300);
        Van thirdVanTest= new Van("ABEN32", "Opel", 800);
        Van fourthVanTest= new Van("ALEL321", "BMW", 700);
        Van fifthVanTest= new Van("AOEPAO22", "Ford", 893);
           System.out.println(firstVanTest);
           System.out.println(secondVanTest);
42
           System.out.println(thirdVanTest);
           System.out.println(fourthVanTest);
           System.out.println(fifthVanTest);
       }
46
  }
```

Truck.java 100392753 (afn22ehu)

Truck.java

```
// truck class that represents truck vehicle used to divide vehicles easier due to
      different payment rules and
  //data needed. In Truck class we need number of trailers that are attached to the
      truck to be able to calculate the right
   //cost of the trip the truck will take.
  public class Truck extends Vehicle{
       private int numTrailers;
       public Truck(String vehicleRegistration, String manufactureOfVehicle, int
          numTrailers){
           super(vehicleRegistration, manufactureOfVehicle);
           this.numTrailers=numTrailers;
10
       }
       public int getNumTrailers(){return this.numTrailers;}
14
       //overriding calculateBasicTripCost method to adjust the price for the number of
          trailers that the truck can carry
       //if truck can carry one or less it will be charged 1250p if it carries more than
           1500p will be charged
       @Override
       public int calculateBasicTripCost() {
           if(numTrailers <= 1){</pre>
20
               return 1250;
           }
           else {
               return 1500;
           }
       }
       @Override
28
       public String toString() {return super.toString() + " your total = " +
          calculateBasicTripCost() + "p";}
30
       public static void main(String[] args) {
           Truck firstTruckTest= new Truck("ABABABA123", "10D", 0);
           Truck secondTruckTest= new Truck("yayay1", "SA",1);
           Truck thirdTruckTest= new Truck ("AFJSAL13", "ororo", 2);
34
           System.out.println(firstTruckTest);
           System.out.println(secondTruckTest);
           System.out.println(thirdTruckTest);
       }
42
  }
```

CustomerAccount.java

```
//class is used to decleare the data for customer account when new customer is
      created the values from this class will
  //be applied. This class will also charge customers for their joruney accordingly to
      the vehicle they own.
  public class CustomerAccount implements Comparable <CustomerAccount>{
      public enum Discount{NONE, STAFF,FRIENDS_AND_FAMILY}
       private String firstName;
       private String lastName;
       private double accountBalance;
       private Vehicle car;
      private Discount discounts;
10
       /\!/I didn't fallow the specification about the constructor because I found that
          for testing this worked the best
       //and also later on in assigning the discounts from splitting the file it was
          more clear and nicer to read.
       public CustomerAccount(String firstName, String lastName, double accountBalance,
14
          Vehicle car, Discount discounts){
           this.firstName=firstName;
           this.lastName=lastName;
           this.accountBalance=accountBalance;
           this.car=car;
           this.discounts=discounts;
20
       }
       public String getFirstName(){return firstName;}
       public String getLastName(){return lastName;}
       public double getAccountBalance(){return accountBalance;}
       public Vehicle getCar (){return car;}
       public Discount getDiscount(){return discounts;}
28
       //method which is triggered by makeTrip method when Staff discount is applied, it
           returns a value of the trip cost from
       //the right Vehicle sub-class and then it works out 50% of the value which will
          be substructure from the total of
       // calculateBasicTripCost method from right sub-class
       public double activateStaffDiscount()
34
       {return Math.floor(car.calculateBasicTripCost()*50 /100);}
       //same as above but this time it gets triggered by applying Friends and family
          discount and this discount is 10%
       //so this method works out 10% of the total value from calculateBasicTripCost
          method from Vehicle sub-class
       public double activateFriendsAndFamilyDiscount()
       {return Math.floor(car.calculateBasicTripCost()*10/100);}
40
       //this method is to remove a discount which has been applied within account at
42
          fist but they might not have it anymore
       public Discount deactivateDiscount()
       {return discounts = Discount.NONE;}
       //this method allows to add more funds to the account
46
       public int addFunds(int amount){
           int newAccountBalance = (int) (amount + accountBalance);
           this.accountBalance=newAccountBalance;
           return newAccountBalance;
50
       }
```

```
52
       //In this method we can apply the right trigger for the discount so we have 3
           cases of ifs and they will be triggered
       //while the customer account is made so they have right discount associated with
           them it will be triggered everytime
       //they make a trip and the ifs will call the right methods which will calculate
           te 50% or 10% off the total value
       //this value is then subtracted here and returns the total of 50% for staff or
           90% for friends and family
       public int makeTrip() throws InsufficientAccountBalanceException {
           int total = car.calculateBasicTripCost();
           if (discounts == Discount.STAFF){
60
               double appliedStaffDiscount = total - activateStaffDiscount();
               if (accountBalance-appliedStaffDiscount<0) {</pre>
                    throw new InsufficientAccountBalanceException("Insufficient funds");
               accountBalance=accountBalance-appliedStaffDiscount;
               return (int) (appliedStaffDiscount);
           else if (discounts == Discount.FRIENDS_AND_FAMILY){
               double appliedFAFDiscount= total- activateFriendsAndFamilyDiscount();
               if (accountBalance-appliedFAFDiscount<0) {</pre>
                    throw new InsufficientAccountBalanceException("Insufficient funds");
72
               accountBalance=accountBalance-appliedFAFDiscount;
               return (int) (appliedFAFDiscount);
           }
           if (accountBalance-total<0) {</pre>
               throw new InsufficientAccountBalanceException("Insufficient funds");
           accountBalance= accountBalance-total;
80
               return total;
       //compare to method exists to check if different customer have the same vehicle
           registration, it will return 0 if
       //they have the same vehicle registration, -1 when they are different but
           alphabetically the registration of the
       //first vehicle is second and 1 when fist vehicle registration comes first
           alphabetically
       public int compareTo(CustomerAccount anotherCustomerAccount){
           int check= car.vehicleRegistration.compareTo(anotherCustomerAccount.car.
               vehicleRegistration);
           if (check<0){
               return 1;
90
           else if (check>0){
               return -1;
           }
           else {
               return 0;
           }
       }
98
       public String toString() {
               return "Your account balance is: " + accountBalance + " After this trip
102
                   it will be: "+
                        makeTrip();
           } catch (InsufficientAccountBalanceException e) {
104
               throw new RuntimeException(e);
```

```
}
106
       }
108
       //test
110
       public static void main(String[] args) throws InsufficientAccountBalanceException
            Vehicle firstVehicleTest= new Car("ABC123", "Opel", 3);
112
            Vehicle secondVehicleTest= new Car( "BDP123", "Volvo",7);
            Vehicle thirdVehicleTest = new Truck("ACD20","Kia",2);
114
116
            CustomerAccount firstCustomerTest= new CustomerAccount("Mel", "Sam", 500,
                    firstVehicleTest,Discount.STAFF);
118
            CustomerAccount secondCustomerTest = new CustomerAccount("Josh", "Lai", 1000,
120
                    secondVehicleTest, Discount.NONE);
122
            CustomerAccount thirdCustomerTest = new CustomerAccount("Megan", "Salty", 1500,
                    thirdVehicleTest, Discount.FRIENDS_AND_FAMILY);
124
            CustomerAccount fourthCustomerTest = new CustomerAccount("Student", "Poor", 0,
                    thirdVehicleTest,Discount.FRIENDS_AND_FAMILY);
128
130
            //test if the Staff discount works
            System.out.println(firstCustomerTest);
132
            //test if no discount works
            System.out.println(secondCustomerTest);
            //test if F&F discount works
            System.out.println(thirdCustomerTest);
136
            //Insufficient funds exception test
            //System.out.println(fourthCustomerTest.makeTrip());
138
            //addFunds test
140
            System.out.println(firstCustomerTest.addFunds(100));
            //CompareTo test
            System.out.println(firstCustomerTest.compareTo(secondCustomerTest));
144
            System.out.println(thirdCustomerTest.compareTo(firstCustomerTest));
            System.out.println(fourthCustomerTest.compareTo(thirdCustomerTest));
       }
148
   }
```

TollRoad.java 100392753 (afn22ehu)

TollRoad.java

```
import java.util.LinkedList;
     import java.util.Objects;
     //this class is used to add customers into customer account, find customers by their
             registration number and also charge them for their journey.
     public class TollRoad {
              //I decided to use linked list instead of array list because it seems more
                     efficient in this case, the linked list
              // is faster to use when adding or removing objects. So, in our case is more
                     useful to use something faster to add
              //the customers quicker so the code can process quicker as well.
              private LinkedList<CustomerAccount> customerAccountData= new LinkedList<>(); //
10
                     deleted static
              private int moneyMade =0;
14
              public LinkedList<CustomerAccount> getCustomerAccountData(){return
                     customerAccountData;}
              public int getMoneyMade(){return moneyMade;}
16
              public void setCustomerAccountData(LinkedList < CustomerAccount >
                     customerAccountData){this.customerAccountData=customerAccountData;}
              public boolean addCustomer(CustomerAccount account){
                      return customerAccountData.add(account);
              //method used to find customer by registration number, when registration is given
                       the method will go through the list
              //to find customer when customer is found it will return the customer number from
26
                       the list and if the customer
              //is not found it will throw an exception
              public CustomerAccount findCustomer(String regNum) throws
                     CustomerNotFoundException{
                      int customerNumber=0;
                      boolean carNotFound=false;
                      for (int i =0; i < customerAccountData.size(); i++) {</pre>
32
                              if (Objects.equals(customerAccountData.get(i).getCar().
                                     getVehicleRegistration(), regNum)) {
                                       carNotFound = false;
                                       break;
                              }
                              carNotFound = true;
                              customerNumber++;
38
                      if (carNotFound){
                              throw new CustomerNotFoundException("Customer not found");
42
                      return customerAccountData.get(customerNumber);
              }
              public void chargeCustomer (String registrationNumber) throws
                     {\tt CustomerNotFoundException,\ InsufficientAccountBalanceException \{ for each of the content o
                              CustomerAccount p1 = findCustomer(registrationNumber);
                              moneyMade += p1.makeTrip();
              }
```

TollRoad.java 100392753 (afn22ehu)

```
52
       public static void main(String[] args) throws InsufficientAccountBalanceException
          , CustomerNotFoundException {
54
          TollRoad road1= new TollRoad();
          Truck firstTruck= new Truck("AF1", "opel", 3);
          Truck secondTruck= new Truck("BA3","opel",3);
58
          CustomerAccount personal= new CustomerAccount("Yola","L",2000,firstTruck,
             CustomerAccount.Discount.NONE);
          CustomerAccount persona2 = new CustomerAccount("Jhon", "B", 2031, secondTruck,
             CustomerAccount.Discount.NONE);
          //testing adding the customers into the tollRoad
          road1.addCustomer(persona1);
          road1.addCustomer(persona2);
          //testing the money being made in tollRoad
          road1.chargeCustomer("AF1");
          road1.chargeCustomer("BA3");
          System.out.println(road1.moneyMade);
72
       }
<sub>76</sub> }
```

${\tt InsufficientAccountBalanceException.java}$

```
public class InsufficientAccountBalanceException extends Throwable {
    public InsufficientAccountBalanceException (String info){
        super(info);
    }
}
```

${\tt CustomerNotFoundException.java}$

```
public class CustomerNotFoundException extends Throwable {
    public CustomerNotFoundException (String noCustomer) {
        super(noCustomer);
    }
}
```

Application 100392753 (afn22ehu)

Application

Compiler Invocation

```
javac -Xlint:unchecked -Xlint:deprecation -encoding UTF-8 -d
    prepasg7574845565620477604classes TollRoadMain.java Vehicle.java Car.java Van.
    java Truck.java CustomerAccount.java TollRoad.java
    InsufficientAccountBalanceException.java CustomerNotFoundException.java
```

Compiler Messages

None.

Application Invocation

java TollRoadMain

Messages to STDOUT

```
TollRoad@d716361
OE080QF: 900 amount added successfully
CJ65DVB: 600 amount added successfully
UJ12CRW: 900 amount added successfully
KR60XNS: Trip completed successfully250
ZMO2EUX: Trip completed successfully925
CE02ESF: Trip completed successfully2050
JT11YMK: makeTrip failed. CustomerAccount does not exist
LO17FFK: Trip completed successfully2500
GV14RRM: Trip completed successfully3100
ZR60JGI: makeTrip failed. Insufficient funds
GP66KQL: Trip completed successfully3600
ZR60JGI: 4000 amount added successfully
GV14RRM: Trip completed successfully4200
QJ55HTR: Trip completed successfully4950
HQ09WIJ: Trip completed successfully5700
WQ10FZI: makeTrip failed. CustomerAccount does not exist
ZR60JGI: Trip completed successfully6150
YS06ESV: Trip completed successfully6900
ZJ04XSG: Trip completed successfully7400
ZJ04XSG: Trip completed successfully7900
ZJ04XSG: 2000 amount added successfully
TR52YTU: makeTrip failed. CustomerAccount does not exist
CJ65DVB: Trip completed successfully8400
OG57MWO: makeTrip failed. CustomerAccount does not exist
ZQ11PMI: makeTrip failed. CustomerAccount does not exist
BB14UPJ: Trip completed successfully9400
RD16GDY: Trip completed successfully10750
IL12KYE: Trip completed successfully11250
BQ63HWH: makeTrip failed. CustomerAccount does not exist
ZR60JGI: Trip completed successfully11700
QM17VBV: makeTrip failed. CustomerAccount does not exist
ND53BHO: Trip completed successfully12150
OD14STV: Trip completed successfully12650
CJ65DVB: Trip completed successfully13150
NK62WPC: makeTrip failed. Insufficient funds
HE52JEL: 500 amount added successfully
IL12KYE: Trip completed successfully13650
HI14WRW: Trip completed successfully14250
FL55YST: makeTrip failed. CustomerAccount does not exist
EKO2DEU: makeTrip failed. CustomerAccount does not exist
JH67HRE: Trip completed successfully14875
LU16KLS: 1500 amount added successfully
RD16GDY: Trip completed successfully16225
```

```
HE52JEL: Trip completed successfully17475
HE52JEL: 1000 amount added successfully
HE57YSO: Trip completed successfully17975
NK62WPC: 15000 amount added successfully
CI60ESO: makeTrip failed. CustomerAccount does not exist
ZJ04XSG: Trip completed successfully18475
YLO9PTN: Trip completed successfully19825
VS56SYX: Trip completed successfully20425
OD14STV: Trip completed successfully20925
QJ55HTR: 900 amount added successfully
CE02ESF: Trip completed successfully22050
RD16GDY: makeTrip failed. Insufficient funds
YJ55XPM: 1000 amount added successfully
LU16KLS: Trip completed successfully22550
TY62BSA: makeTrip failed. CustomerAccount does not exist
UJ12CRW: Trip completed successfully23050
JH67HRE: makeTrip failed. Insufficient funds
YJ55XPM: Trip completed successfully23550
CJ65DVB: Trip completed successfully24050
HQ09WIJ: 1100 amount added successfully
HE57YSO: Trip completed successfully24550
WZ14EWB: Trip completed successfully25000
IDO8GMV: Trip completed successfully25500
ZMO2EUX: Trip completed successfully26175
OZ53PUX: Trip completed successfully26625
QJ55HTR: Trip completed successfully27375
ND53BHO: 2000 amount added successfully
VS56SYX: Trip completed successfully27975
JF15BCM: Trip completed successfully28475
QJ55HTR: Trip completed successfully29225
ZDO4UKP: makeTrip failed. Insufficient funds
ZD04UKP: 1500 amount added successfully
ZDO4UKP: Trip completed successfully30725
ZMO2EUX: Trip completed successfully31400
WZ14EWB: Trip completed successfully31850
ES66WHE: makeTrip failed. CustomerAccount does not exist
VB58LNG: makeTrip failed. CustomerAccount does not exist
NK62WPC: Trip completed successfully32350
KY09MDZ: Trip completed successfully33350
KR60XNS: Trip completed successfully33600
YJ55XPM: Trip completed successfully34100
HC17NRJ: Trip completed successfully34600
HH01VMY: makeTrip failed. CustomerAccount does not exist
KY09MDZ: makeTrip failed. Insufficient funds
CJ65DVB: Trip completed successfully35100
FM66JPE: Trip completed successfully36225
NK62WPC: Trip completed successfully36725
CB13IIZ: Trip completed successfully37025
GV14RRM: Trip completed successfully37625
ZMO2EUX: Trip completed successfully38300
JF15BCM: 1000 amount added successfully
JF15BCM: Trip completed successfully38800
KY09MDZ: makeTrip failed. Insufficient funds
VS56SYX: Trip completed successfully39400
total of the money made: 39400
```

Messages to STDERR

None.