Description   Code Editor   Grading view

EZEE Transport

EEZEE TRANSPORT - Ticket Booking

EEZEE TRANSPORT is one of the renowned travel service providers. They are in a need of system which helps customer book vehicle from Chennai to various cities and find appropriate travel cost. You being their software consultant have been approached by them to develop a software system which can be used for managing their business.

Provided **Booking** class with the below **private attributes** as a part of code skeleton

customerName	String
mobileNumber	Long
destination	String
dateOfJourney	java.util.Date

Getter and setter methods for all the above attributes have been provided as a part of code skeleton.

Customer class should be registered as a **bean** with the spring container via **XML file**.

Provided Vehicle class with the below **private attributes** as a part of code skeleton

source	String
destinationMap	Map<String, Double>

Getter and setter methods for all the above attributes have been provided as a part of code skeleton.

Vehicle class should be registered as a bean with the spring container via **XML file**.

The values for source attributes should **be injected via constructor based injection** and the default source must be "**Chennai**".

The Map should be configured in the bean.xml file with the below key-values should be **injected via setter based injection.**

Key -destination (String)	Value- cost(Double)
Bangalore	1500
Delhi	2500
Mumbai	2000
Hyderabad	1000
Pune	2500

Main.java. main(String[] arg):void

    a. Using ApplicationContext, get TransportService bean and Booking bean.
    b. Invoke the registerBooking(booking) method using the transportService bean.

Technical Specifications:

Component Name	Method Name	Input	Output	Exception
TransportService	registerBooking	Booking booking	Void	ParseException
	calculateTravelCost	String source, String destination, Date doj	Void	
	checkAvailableDateForTravel	Date doj	boolean:result	
	getCost	String destination	double: cost	
bean.xml	Contains all the XML configurations related to Service			

Business Rules & Validations:

In **TransportService class** includes the following private attribute **and inject via setter based injection**.

private Vehicle vehicle;

Getter and setter methods for the above attribute has been provided as a part of code skeleton

Service 1: **registerBooking(booking): void**

    This method used to get booking information and calculate travel cost based on customer information.

    a. Inject Booking bean using application context.
    b. Get Booking information like customerName, mobileNumber, destination, date of journey (date format must be dd-MM-yyyy) from customer.
    c. Invoke calculateTravelCost() method, Use booking bean to get the destination,dateOfJourney and use vehicle bean to get default source.

Service 2: calculateTravelCost(String source, String destination, Date doj) : void

    a. Invoke checkAvailableDateForTravel(doj).
    b. If it returns true then display the **"Total Travel Cost is Rs. "**and invoke **getCost(destination)** method.
    c. If it returns false then display "Invalid Travel Date".

Service 3: **checkAvailableDateForTravel(doj): boolean**

    a. If DOJ is current date/next date, then return true.

Service 4: **getCost(destination): double**

    b. Use Vehicle Bean, get the travelcost from map if destination exists

Limitations and Constraints:

1. **Booking** and **Vehicle class** should be in **com.cts.eezee.model** package.

2. **TransportService** class should be in **com.cts.eezee.service** package**.**

3. **Main class** should be in **com.cts.eezee** package.

5. **Vehicle** should be declared as an **inner bean** in the **TransportService** class and should

   be injected by autowire inside **bean.xml.**

6. **Vehicle** should be configured as bean inside bean.xml with the bean id as **"vehicle"**

7. The cost for each destination should be declared as a MAP in the **bean.xml** and

   should be injected using setter.

11. Use ONLY **bean.xml** for all configurations.

Sample Input Output 1:

Enter the Customer Name

Antony Prakash

Enter the Mobile Number

9845623456

Enter the Destination

Delhi

Enter the Date of Jouney <dd-MM-yyy>

27-04-2020

Total Travel Cost is Rs. 2500.0

Sample Input Output 2:

Enter the Customer Name

Renita Colette

Enter the Mobile Number

9763458245

Enter the Destination

Delhi

Enter the Date of Jouney <dd-MM-yyy>

26-04-2020

Invalid Travel Date