Ford Motors(---RETIRED---)

Grade settings: Maximum grade: 100

Disable external file upload, paste and drop external content: Yes

Based on: Ford Motors(---RETIRED---)

Run: Yes Evaluate: Yes Automatic grade: Yes

Ford Motor is one of the most famous car manufacturers. They conducted a contest at the 20th LA Auto Show in Los Angeles. Ford has approached you to create software that would calculate the final price of the car based on the tax amount.

Component Specification: CustomerInfo

Type(Class)	Attributes	Methods
	String customerId	
CustomerInfo		Necessary getters, setters and constructors are provided as a
		part of the code skeleton.
	double cost	

Functional Requirement 1: Extract the details of the car order and create an object of the CustomerInfo class.

Type(Class)	Methods	Responsibilities
		This method
		accepts
		customerDetails
		as an argument
	public static	and extract the
UserInterface	CustomerInfo extractDetails(String	properties from
	customerDetails)	the argument. Set
		these values to
		the CustomerInfo
		object and return
		this object.

Functional Requirement2: Calculate the total amount to be paid by the customer for the car order placed.

Type(Class)	Methods	Responsibilities
Type(Class) CustomerInfo		Responsibilities This method is used to calculate the total amount to be paid by the customer. If the carType is a Hatch Back, the tax is 1% of the cost. If the carType is a a Sedan, the tax is 2% of the cost. If the carType is an SUV, the tax is 3% of the cost. If the carType is an MUV, the tax is 4% of the cost.
		 Condition: carType is case-insensitive. If the carType is invalid, the

Formula to calculate the total amount to be paid:

Total amount to be paid = cost + tax amount

The main method in the UserInterface class is excluded from the evaluation. You are free to write your own code in the main method to invoke the business methods to check its correctness.

Note:

- In the Sample Input / Output provided, the highlighted text in bold corresponds to the input given by the user and the rest of the text represents the output.
- Ensure to follow the object-oriented specifications provided in the question.
- Ensure to provide the names for classes, attributes, and methods as specified in the question.

• Adhere to the code template, if provided.

Sample Input / Output 1:

Enter the car details

FZ123:John:suv:300000

Car Details

Customer Id: FZ123

Customer Name: John

Car Type: suv

Total Amount to be paid: 309000.0

Sample Input / Output 2:

Enter the car details

GH345:Mariam:sedan:250000

Car Details

Customer Id: GH345

Customer Name: Mariam

Car Type : sedan

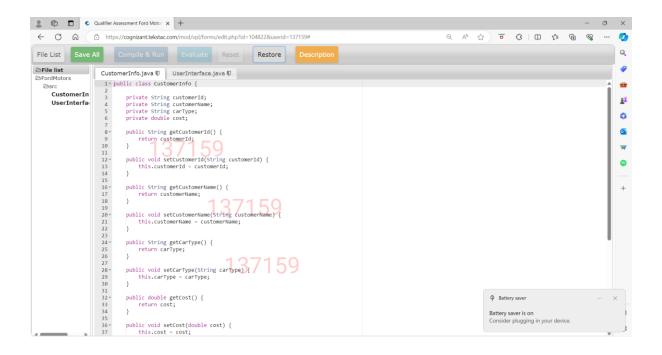
Total Amount to be paid: 255000.0

Sample Input / Output 3:

Enter the car details

PQ123:Larry:abc:12345

Invalid details



```
Qualifier Assessment Ford Motor X +
  ← C A https://cognizant.tekstac.com/mod/vpl/forms/edit.php?id=104822&userid=137159#
                                                                                                                                                                  Q A 1 1 0 0 0 0 0 0
                                                                                                                                                                                                                                       Q)
 File List Save All Compile & Run Evaluate Reset Restore Description
                                                                                                                                                                                                                                       Q
 ⊝File list
                        CustomerInfo.java 

UserInterface.java 

□
                                                                                                                                                                                                                                       23 24 25 26 27 28 29 30 31 32 2 3 3 3 3 3 3 3 3 3 3 5 3 3 6 4 3 2 4 4 4 4 5 4 6 4 7 4 8 8 4 9 5 5 1 5 5 5 5 5 5 5 5 5 5 5 5 5 7 5 8 }
                                    public String getCarType() {
   return carType;
                                                                                                                                                                                                                                       21
        UserInterfa
                                    }
                                                                                                                                                                                                                                       Ģ
                                    public void setCarType(String carType) {
    this.carType = carType;
                                                                                                                                                                                                                                       o-
                                    public void setCost(double cost) {
   this.cost = cost;
                                    public CustomerInfo() { 137159
                                    public CustomerInfo(String customerId, String customerName, String carType, double cost) {
                                    pupulc customerino(string customerid, string customerNa super(); this.customerId = customerId; this.customerName; this.carType = carType; this.cost = cost; 137159; }
                                    public double calculateBillAmount()
{
                                       // Fill the code return 0;
                                                                                                                                                                                   Φ Battery saver
                                                                                                                                                                                   Battery saver is on
Consider plugging in your device.
```

```
2 Qualifier Assessment Ford Moto: x +
 ← C 🙃 🗅 https://cognizant.tekstac.com/mod/vpl/forms/edit.php?id=104822&userid=137159#
                                                                                                           Q A & & B & B & B
                    Compile & Run Evaluate Reset Restore Description
 File List Save All
 •
                                                                                                                                                        public static CustomerInfo extractDetails(String customerDetails)
{
    // Fill the code
                                                                                                                                                        Ģ
                                                                                                                                                        <u>o</u>-
                       return null;
}

public static void main(String[] args) {
                         Scanner sc=new Scanner(System.in);
                                             137159
                                                  137159
                                                                                                                      Φ Battery saver
                                                                                                                      Battery saver is on
Consider plugging in your device.
 https://cognizant.tekstac.com/mod/vpl/forms/edit.php?id=104822&userid=137159#vpl_fi...
```