MaxFit Equipments(---RETIRED---)

Grade settings: Maximum grade: 100
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Based on: MaxFit Equipments(---RETIRED---)
Run: Yes **Evaluate**: Yes
Automatic grade: Yes

MaxFit Equipments is an importer and supplier of world-class fitness equipment, with the region's top brand position. The resulting products are world-class in their quality and assuredly run with enhanced efficiency, providing long-lasting durability. They have now decided to use user data to automate the creation of bills. So they have asked you to work on a project.

Component Specification: CustomerInfo

Type (Class)	Attributes	Methods
CustomerInfo	String customerId String customerName String phoneNumber String productName int maxWeight int dailyWorkoutHours	Necessary getters, setters, and six arguments constructor are provided as part of the code skeleton.

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

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

Functional Requirement 2: Calculate the bill amount based on productName, maxWeight and dailyWorkoutHours" .

Type (Class)	Methods	Responsibilities
CustomerInfo	public double **calculateBillAmount()**	This method should calculate the bill amount based on the productName,maxWeight and dailyWorkoutHours. *Condition:* - productName is case-insensitive - The product name must be either one of **["Tread mill","Elliptical Trainer","Air Bike"]**, else return 0 - The maxWeight and dailyWorkoutHours should be in the range of the below-mentioned table. If not, then it should return 0.

 Note: The class and methods should be declared as public, and all the attributes should be declared as private.

productName	maxWeight	dailyWorkoutHours	price	GST (in %)
Tread Mill	<=140	<=4	14999	17
		<=8	19999	
		<=13	24999	
Elliptical Trainer	<=120	<=4	9599	
		<=8	12599	
		<=13	14999	
Air Bike	<=140	<=4	4999	
		<=8	7499	
		<=13	9999	

Formula to calculate the bill amount in the CustomerInfo class

billAmount = Price + (Price * GST)

[Find the price based on productName and dailyWorkoutHours using the above table]

Example

Sample input:

C041:Mark:8404529668:Air Bike:90:7

 Here the productName is "Air Bike", maxWeight is 90 and dailyWorkoutHours is "7",

billAmount =7499 + (7499*0.17) = 8773.83

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 Product Details

C001:Smith:9004529668:Tread Mill:90:5

Customer Id : C001

Customer Name : Smith

Phone Number : 9004529668

Product name: Tread Mill

Maximium Weight : 90

Daily Workout Hours : 5

Bill Amount : $ 23398.83

Sample Input/Output 2:

Enter the Product Details

C002:Rocky:8896540321:Air Bike:120:5

Invalid Details

[Explanation: The maxWeight should be less than or equal to 100 for the productName Air Bike.]

Sample Input/Output 3:

Enter the Product Details

C003:James:7896540321:Air Bike:100:14

Invalid Details

[Explanation: The dailyWorkoutHours should be less than 13 for the productName Air Bike.]

Sample Input/Output 4:

Enter the Product Details

C063:Tom:8596540321:Stair Climber:100:14

Invalid Details

[Explanation: The productName must be one of the names displayed in the table.]

```java
public class CustomerInfo {

    private String customerId;
    private String customerName;
    private String phoneNumber;
    private String productName;
    private int maxWeight;
    private int dailyWorkoutHours;

    public CustomerInfo(String customerId, String customerName, String phoneNumber, String productName, int maxWeight,
            int dailyWorkoutHours) {
        super();
        this.customerId = customerId;
        this.customerName = customerName;
        this.phoneNumber = phoneNumber;
        this.productName = productName;
        this.maxWeight = maxWeight;
        this.dailyWorkoutHours = dailyWorkoutHours;
    }

    public String getCustomerId() {
        return customerId;
    }

    public void setCustomerId(String customerId) {
        this.customerId = customerId;
    }

    public String getCustomerName() {
        return customerName;
    }

    public void setCustomerName(String customerName) {
        this.customerName = customerName;
    }
```

```java
    }

    public String getProductName() {
        return productName;
    }

    public void setProductName(String productName) {
        this.productName = productName;
    }

    public int getMaxWeight() {
        return maxWeight;
    }

    public void setMaxWeight(int maxWeight) {
        this.maxWeight = maxWeight;
    }

    public int getDailyWorkoutHours() {
        return dailyWorkoutHours;
    }

    public void setDailyWorkoutHours(int dailyWorkoutHours) {
        this.dailyWorkoutHours = dailyWorkoutHours;
    }

    public double calculateBillAmount() {

        double billamount =-1;

        // Fill the code here


        return billamount;
    }
}
```

```java
import java.util.Scanner;

public class UserInterface {

    public static CustomerInfo extractDetails(String customerDetails)
    {
        //Fill the code here
        return null;
    }

    public static void main(String args[])
    {

        Scanner sc =new Scanner(System.in);
        //Fill the code here

    }
}
```

File List   Save All   Compile & Run   Evaluate   Reset   Restore   Description

File list
Maxfit
  src
    CustomerIn
    UserInterfac

CustomerInfo.java   UserInterface.java