Airlink Plans

**Grade settings**: Maximum grade: 100  
**Disable external file upload, paste and drop external content**: Yes  
**Based on**: [Airlink Plans](https://cognizant.tekstac.com/mod/vpl/view.php?id=99215)  
**Run**: Yes **Evaluate**: Yes  
**Automatic grade**: Yes

These days, almost all businesses rely heavily on internet connectivity for both internal and external strategies. Based on its intentions, Airlink is a corporation that provides high-speed connections.

 The business has asked you to develop software that would determine bills according to different plan types.

**Component Specification: Customer**

|  |  |  |
| --- | --- | --- |
| **Type(Class)** | **Attributes** | **Methods** |
| **Customer** | String customerId  String customerName  String planType  int numberOfMonths | Necessary getters, setters, no argument and a four-argument constructor is provided as a part of the code skeleton. |

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

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

**Functional Requirement 2: Calculate the bill to be paid by the customer**.

|  |  |  |
| --- | --- | --- |
| **Type(Class)** | **Methods** | **Responsibilities** |
| **Customer** | public double **calculateBill()** | This method is used to calculate the bill based on their planType.   * If the planType is **Diamond**, the cost is **3999** per month. * If the planType is **Platinum**, the cost is **2999** per month. * If the planType is **Gold**, the cost is **1999** per month. * If the planType is **Silver**, the cost is **999** per month.   **Condition:**   * If the **planType** does not belong to any of the above-mentioned planType, then return -1. * The **numberOfMonths** should be greater than zero. otherwise return -1. * The**planType** is case-insensitive. |

**Formula to calculate the bill:**

(If the planType is Diamond the cost is 3999 per month and let the number of month is 2 then,)

**Amount to be paid** **by the customer** = numberOfMonths\*costPerMonth

**Amount to be paid** **by the customer** = 2\*3999

**Example**

Enter the customer details

**CS01:Steve:Diamond:2**

**Amount to be paid** **by the customer** = 2\*3999 = 7998.0

**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 customer details

**CS01:Steve:Diamond:2**

Customer Details

Customer Id:CS01

Customer Name:Steve

Plan Type:Diamond

Number Of Months:2

Amount to be paid by the customer:7998.0

**Sample Input / Output 2:**

Enter the customer details

**CS02:Peter:Platinum:1**

Customer Details

Customer Id:CS02

Customer Name:Peter

Plan Type:Platinum

Number Of Months:1

Amount to be paid by the customer:2999.0

**Sample Input / Output 3:**

Enter the customer details

**CS03:Sharma:Platinum:0**

Invalid customer details

[**Explanation**: As the **numberOfMonths** is 0, the input is considered as invalid.]

**Sample Input / Output 4:**

Enter the customer details

**CS03:Marshal:Classic:2**

Invalid customer details

[**Explanation**: As the **planType** is incorrect, the input is considered as invalid.]