Hamleys Laptop Store

Grade settings: Maximum grade: 100
Disable external file upload, paste and drop external content: Yes
Based on: Hamleys Laptop Store
Run: Yes **Evaluate**: Yes
Automatic grade: Yes

"Hamleys Laptop store" announced a massive New Year's Eve sale on four laptop brands. They wanted to calculate the laptop cost based on the brand of the laptop. The manager contacts a software developer for assistance with their process. You as a software developer, create a java program based on the requirement.

Component Specification: LaptopInfo

Type(Class)	Attributes	Methods
LaptopInfo	String laptopId String modelName String brandName double cost	Necessary getter, setter and a four-argument constructor are provided as a part of the code skeleton.

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

Type (Class)	Methods	Responsibilities
UserInterface	public static LaptopInfo **extractDetails**(String laptopDetails)	This method accepts laptopDetails as an argument and extract the properties of the LaptopInfo from the argument and set these values to the LaptopInfo object and return this object

Functional Requirement2: Calculate laptop cost to be paid by the customer.

Type (Class)	Methods	Responsibilities
LaptopInfo	public double **calculateLaptopCost**()	This method is used to calculate the laptop cost to be paid by the customer after deducting the discount . If the **brandName** is **"Apple "**, the discount is **5%** of the cost. If the **brandName** is **"Dell "**, the discount is **10%** of the cost. If the **brandName** is **"Samsung"**, the discount is **15%** of the cost. If the **brandName** is **"Lenovo "**, the discount is **20%** of the cost. **Condition:** • ***brandName*** *is case-insensitive.* • *If the brandName does not match any of the above type, return -1.* • *If the cost is less than or equal to zero, return -1.*

Formula to calculate the laptop cost:

Laptop Cost = cost-((cost * Discount percentage) / 100)

Example:

Let the cost be 50000, brandName be "Dell", so the discount is 10%

Laptop Cost = 50000-((50000* 10) / 100) =45000.0

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 1:

Enter the laptop details

LAP101:FX506IdeaPad:Lenovo:50000

Sample Output 1:

Laptop Details

Laptop Id: LAP101

Model Name : FX506IdeaPad

Brand Name: Lenovo

Laptop cost : 40000.0

Sample Input 2:

Enter the laptop details

LAP102:FX506IdeaPad:Toshib:50000

Sample Output 2:

Invalid laptop details

Explanation : As brandName is invalid the laptop details are considered to be invalid

Sample Input 3:

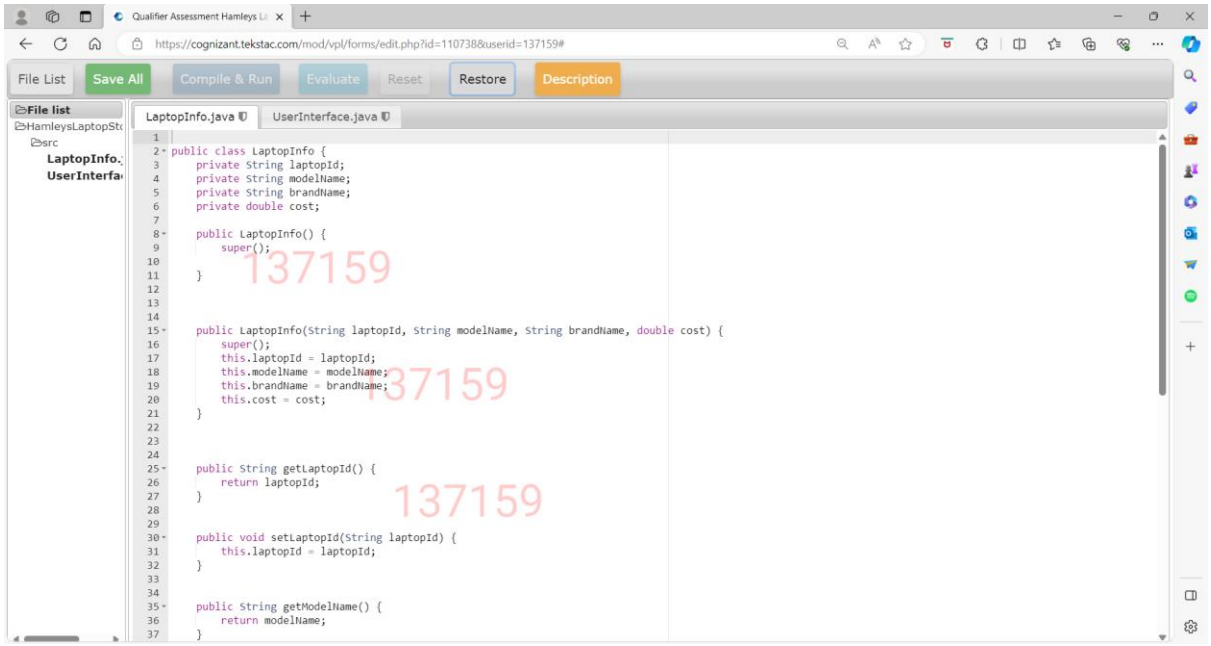
Enter the laptop details

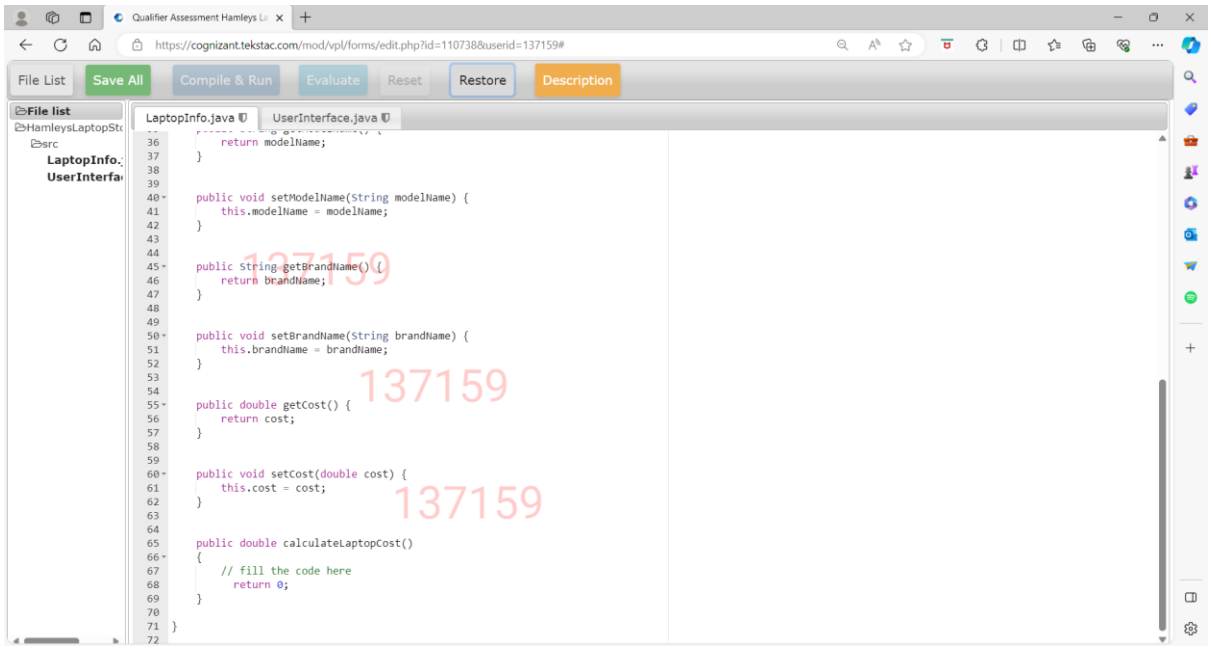
Sample Output 3:

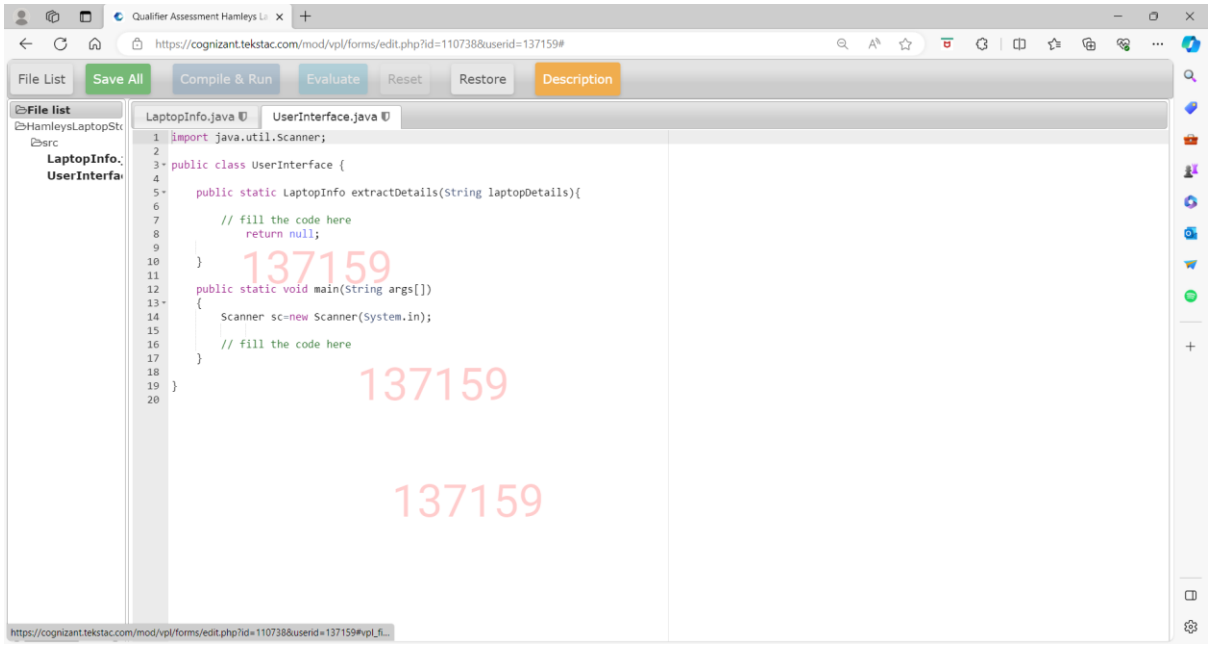
LAP103:FX506IdeaPad:Lenovo:-80000

Invalid laptop details

Explanation : As cost is invalid the laptop details are considered to be invalid






Qualifier Assessment Hamleys
https://cognizant.tekstac.com/mod/vpl/forms/edit.php?id=110738&userid=137159#
File List
Save All
Compile & Run
Evaluate
Reset
Restore
Description
File list
HamleysLaptopSt
src
LaptopInfo.
UserInterfa
LaptopInfo.java
UserInterface.java
import java.util.Scanner;
public class UserInterface {
public static LaptopInfo extractDetails(String laptopDetails){
// fill the code here
return null;
}
public static void main(String args[])
{
Scanner sc=new Scanner(System.in);
// fill the code here
}
}
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