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Tutoring Week 1 Assessment

Java Fundamentals & OOP Concepts

Ms. Lewis

Create a simple Java application that prompts the user to enter employee data, store each entry in an arraylist and display each employee entry in the list. Add three employees to the arraylist. Create a Java project name it Employee.

Create a class name it Employee, declare three instance variables, an integer, id, a String, name and a double, salary. Include two constructors, one constructor with parameters for each instance variable and initialize each with incoming arguments (example: `this.name = name`) and the second as an empty constructor that initializes each instance variable to their default values. Also include getters/setters for each instance variable (remember the shortcut).

The Employee class will also include the following methods. The first method will prompt the user to enter the id, name and salary for three employees (hint: loop here) and add each employee object to the arraylist, name it `inputEmpData()`. The second method will loop through the arraylist to display each employee entry, name it `showEmpData()`.

Create an abstract class name it `EmployeeReport`; it will contain one abstract method name it, `displayEmpData()` and one concrete method name it, `displayHeading()`. The `displayHeading()` method will display the company header, "ABC Engineering". (Remember the concrete method will contain your implementation here).

Create an interface name it `EmployeeUtility`; it will contain one abstract method name it, `removeEmployee()`. The Employee class will implement the `EmployeeUtility` interface and override the abstract method, it will display "Deleting Employee Record".

Okay - so what is the goal here... The goal is to allow the Employee class to inherit from the abstract class and the interface. Override the inherited methods and customize. In the Employee class you'll customize the abstract method to display the employees id, name and salary. Call or invoke the `displayHeading()` method to display the company heading.

Finally, test, test, test .....

Create a Java application class, name it `EmpApp`, remember the main method. Create one Employee object and invoke the necessary methods to prompt the user to enter employee data and display each employee entry.

You got this !

Ms. Lewis

Export Employee project

Zip (Compress) the project

Submit assignments on the Slack tutoring channel

