



PROMINEO TECH

Intro to Java Week 5 Coding Assignment

URL to GitHub Repository: https://github.com/Ete wolde2023/Week-05-Object_Oriented_Programming

URL to Public Link of your Video: <https://youtu.be/d-sF5dd8K6Q>

Instructions:

1. Follow the **Coding Steps** below to complete this assignment.

- In Eclipse, or an IDE of your choice, write the code that accomplishes the objectives listed below. Ensure that the code compiles and runs as directed.
- Create a new repository on GitHub for this week's assignment and push your completed code to this dedicated repo.
- Create a video showcasing your work:
 - In this video: record and present your project verbally while showing the results of the working project.
 - Easy way to Create a video: Start a meeting in Zoom, share your screen, open Eclipse with the code and your Console window, start recording & record yourself describing and running the program showing the results.
 - Your video should be a maximum of 5 minutes.
 - Upload your video with a public link.
 - Easy way to Create a Public Video Link: Upload your video recording to YouTube with a public link.

2. In addition, please include the following in your Coding Assignment Document:

- The URL for this week's GitHub repository.
- The URL of the public link of your video.

3. Save the Coding Assignment Document as a .pdf and do the following:

- Push the .pdf to the GitHub repo for this week.
 - Upload the .pdf to the LMS in your Coding Assignment Submission.
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Coding Steps — Object Oriented Programming:

1. Create an interface named `Logger`.
2. Add two void methods to the `Logger` interface, each should take a `String` as an argument
 - a. `Log`
 - b. `Error`
3. Create two classes that implement the `Logger` interface
 - a. `AsteriskLogger`
 - b. `SpacedLogger`
4. The `log` method on the `AsteriskLogger` should print out the `String` it receives between 3 asterisks on either side of the `String` (e.g. if the `String` passed in is “Hello”, then it should print `***Hello***` to the console).
5. The `error` method on the `AsteriskLogger` should print the `String` it receives inside a box of asterisks, with the `String` preceded by the word “ERROR:”. For example, if “Hello” is the argument, the following should be printed:

```
*****  
  
***Error: Hello***  
  
*****
```

6. The `SpacedLogger` should add spaces between each character of the `String` argument passed into its methods.
7. If the `log` method received “Hello” as an argument, it should print `H e l l o`
8. The `error` method should do the same, but with “ERROR:” preceding the spaced out input (i.e. `ERROR: H e l l o`)
9. Create a class named `App` that has a `main` method.
10. In this class instantiate an instance of each of your logger classes that implement the `Logger` interface.



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11. Test both methods on both instances, passing in Strings of your choice.

Answers for the above assignment are attached below.

```
1 package codingAssignment;
2
3 public interface Logger {
4     public void log(String log);
5     public void error(String error);
6 }
7
8
```



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The screenshot shows the Eclipse IDE with the file `AsteriskLogger.java` open. The code is as follows:

```
1 package codingAssignment;
2
3 public class AsteriskLogger implements Logger {
4     @Override
5     public void log(String log) {
6         System.out.println("****" + log + "****");
7     }
8
9     @Override
10    public void error(String error) {
11        String newline = System.lineSeparator();
12        System.out.println("*****" + newline + "****" + error + "****" + newline + "*****");
13    }
14
15
16
17 }
18
19
20
```

The IDE interface includes a Package Explorer on the left showing the project structure, a Console window, and a status bar at the bottom indicating the time as 12:14:375.

The screenshot shows the Eclipse IDE with the file `SpacedLogger.java` open. The code is as follows:

```
1 package codingAssignment;
2
3 public class SpacedLogger implements Logger{
4
5     @Override
6     public void log(String log) {
7         System.out.println(log.replace(" ", " ").trim());
8     }
9
10
11     @Override
12     public void error(String error) {
13         System.out.println("ERROR:" + error.replace(" ", " ").trim());
14     }
15
16
17 }
18
19
```

The IDE interface includes a Package Explorer on the left showing the project structure, a Console window, and a status bar at the bottom indicating the time as 13:44:271.



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```
1 package codingAssignment;
2
3 public class Application {
4
5     public static void main(String[] args) {
6         Logger logger = new AsteriskLogger();
7         logger.log("Hello");
8         logger.error("Error:Hello");
9
10        Logger logger2 = new SpacedLogger();
11        logger2.log("Hello");
12        logger2.error("Hello");
13
14
15
16
17
18
19
20
21
22
23
24    }
25 }
26
27
28
29
```

```
<terminated> Application (1) [Java Application] C:\Users\emih\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.17.0.7.x20230425-1502\jre\bin\javaw.exe (Jun. 11, 2023, 12:54:42 p.m. - 12:54:43 p.m.)
***Hello***
***Error:Hello***
*****
H e l l o
ERROR: H e l l o
```