



# PROMINEO TECH

## Intro to Java Week 5 Coding Assignment

**URL to GitHub Repository:** <https://github.com/vlantzilo87/Promineo/tree/main/Week5>

**URL to Public Link of your Video:** <https://youtu.be/ELY-H8V6Sfo>

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### 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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The screenshot shows the Eclipse IDE with the file `SpacedLogger.java` open. The code defines an interface `Logger` and a class `SpacedLogger` that implements it. The `log` method uses a loop to print each character of the log string with a space. The `error` method prints the error message and then each character with a space. The console output shows the result of running the application.

```
1 package interfacelogger;
2
3 public class SpacedLogger implements Logger {
4
5     @Override
6     public void log(String log) {
7         for (int i = 0; i < log.length(); i++) {
8             System.out.print(log.charAt(i) + " ");
9         }
10    }
11
12    @Override
13    public void error(String error) {
14        System.err.print("ERROR: ");
15        for (int i = 0; i < error.length(); i++) {
16            System.err.print(error.charAt(i) + " ");
17        }
18    }
19 }
20
```

Console Output:

```
<terminated> App [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (Apr 8, 2023, 9:27:25 PM - 9:27:25 PM) [pid: 18420]
***Here is the log.***
***ERROR: Uh oh, error!***
Here is the log.
ERROR: U h o h , e r r o r !
```

The screenshot shows the Eclipse IDE with the file `AsteriskLogger.java` open. The code defines an interface `Logger` and a class `AsteriskLogger` that implements it. The `log` method prints the log string surrounded by asterisks. The `error` method prints the error message and then each character with a space. The console output shows the result of running the application.

```
1 package interfacelogger;
2
3 public class AsteriskLogger implements Logger {
4
5     @Override
6     public void log(String log) {
7         System.out.println("*****" + log + "*****");
8     }
9
10    @Override
11    public void error(String error) {
12        for (int i = 0; i < error.length() + 13; i++) {
13            System.err.print("");
14        }
15        System.out.println();
16        System.err.println("***ERROR: " + error + "***");
17        for (int i = 0; i < error.length() + 13; i++) {
18            System.err.print("");
19        }
20    }
21 }
22 }
23
```

Console Output:

```
<terminated> App [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (Apr 8, 2023, 9:37:43 PM - 9:37:43 PM) [pid: 848]
***Here is the log.***
***ERROR: Uh oh, error!***
Here is the log.
ERROR: U h o h , e r r o r !
```



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```
package interfacelogger;

public interface Logger {
    public void log(String log);
    public void error(String error);
}
```

Problems Javadoc Declaration Console Coverage

<terminated> App [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (Apr 8, 2023, 9:37:43 PM - 9:37:43 PM) [pid: 848]

```
***Here is the log.***
***ERROR: Uh oh, error!***
Here is the log.
ERROR: Uh oh, error!
```

```
package interfacelogger;

public class App {
    public static void main(String[] args) {
        Logger asteriskLogger1 = new AsteriskLogger();
        Logger spacedLogger1 = new SpacedLogger();

        asteriskLogger1.log("Here is the log.");
        asteriskLogger1.error("Uh oh, error!");
        System.out.println();
        spacedLogger1.log("Here is the log.");
        spacedLogger1.error("Uh oh, error!");
    }
}
```

Problems Javadoc Declaration Console Coverage

<terminated> App [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (Apr 8, 2023, 9:59:05 PM - 9:59:05 PM) [pid: 24052]

```
***Here is the log.***
***ERROR: Uh oh, error!***
Here is the log.
ERROR: Uh oh, error!
```



## Intro to Java Week 5 Coding Assignment

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