

Intro to Java Week 5 Coding Assignment

Points possible: 70

Category	Criteria	% of Grade
Functionality	Does the code work?	25
Organization	Is the code clean and organized? Proper use of white space, syntax, and consistency are utilized. Names and comments are concise and clear.	25
Creativity	Student solved the problems presented in the assignment using creativity and out of the box thinking.	25
Completeness	All requirements of the assignment are complete.	25

Instructions: 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. Take screenshots of the code and of the running program (make sure to get screenshots of all required functionality) and paste them in this document where instructed below. Create a new repository on GitHub for this week's assignments and push this document, with your Java project code, to the repository. Add the URL for this week's repository to this document where instructed and submit this document to your instructor when complete.

Coding Steps:

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:

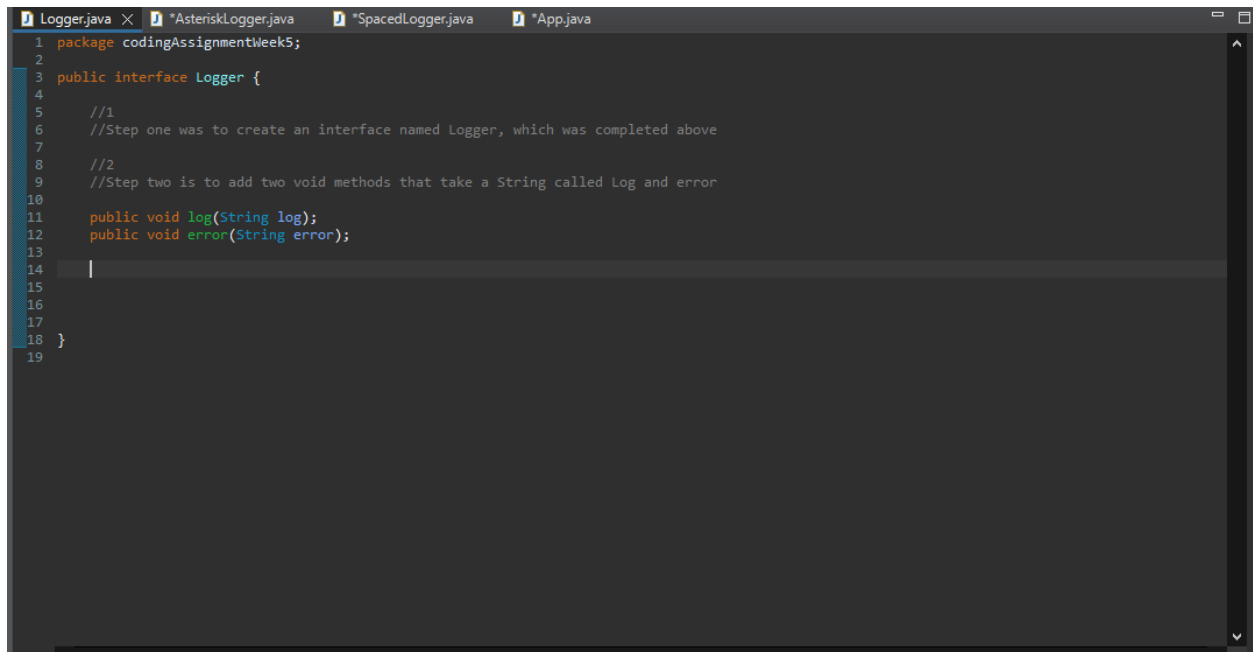
```
*****

***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.

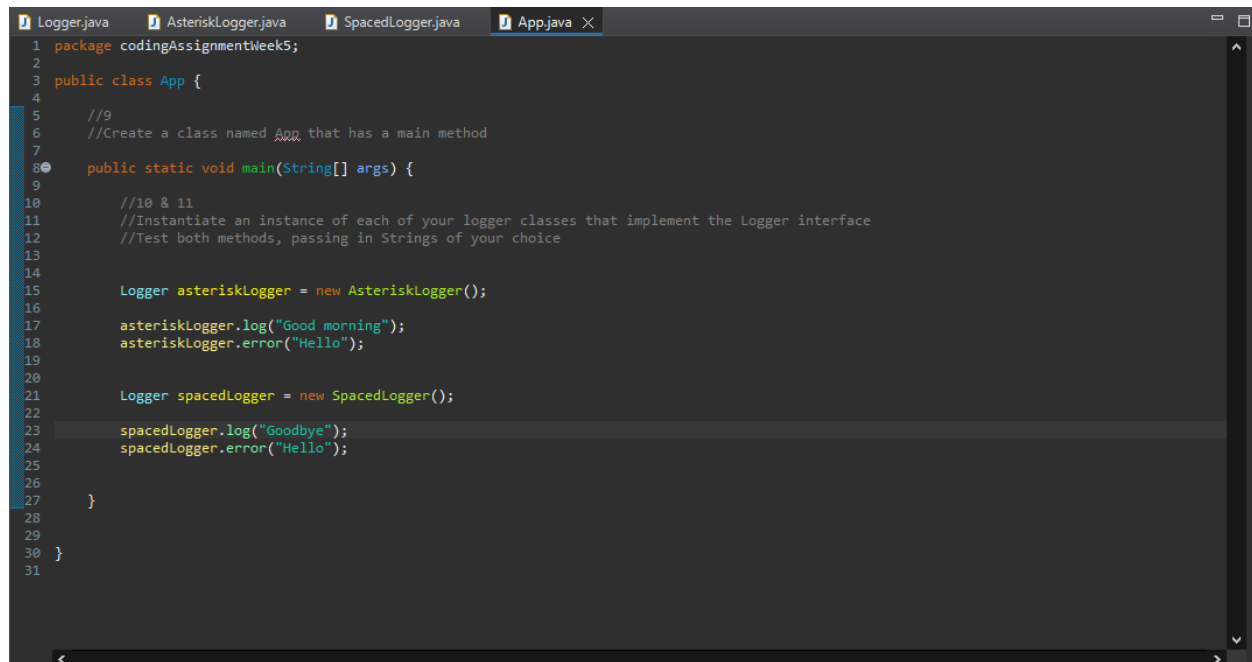
Screenshots of Code:



```
1 package codingAssignmentWeek5;
2
3 public interface Logger {
4
5     //1
6     //Step one was to create an interface named Logger, which was completed above
7
8     //2
9     //Step two is to add two void methods that take a String called Log and error
10
11     public void log(String log);
12     public void error(String error);
13
14
15
16
17
18 }
19
```

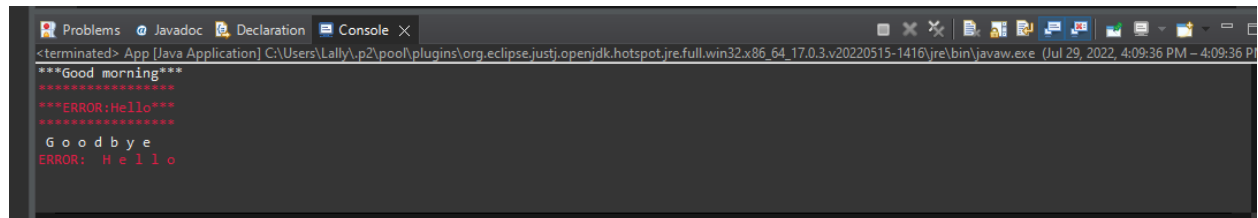
```
Logger.java AsteriskLogger.java X SpacedLogger.java App.java
1 package codingAssignmentWeek5;
2
3 //3a
4 //Create a class named AsteriskLogger that implements the Logger
5
6 public class AsteriskLogger implements Logger {
7
8     //4
9     //Log method should print out the String with 3 asterisks on either side
10
11     @Override
12     public void log(String log) {
13         System.out.println("***" + log + "***");
14     }
15
16     //5
17     //Error method should print the String with the word ERROR inside a box of asterisks
18
19     @Override
20     public void error(String error) {
21         System.err.println("*****");
22         System.err.println("***ERROR:" + error + "***");
23         System.err.println("*****");
24     }
25
26 }
27
28
29
```

```
Logger.java AsteriskLogger.java SpacedLogger.java X App.java
1 package codingAssignmentWeek5;
2
3 //3b
4 //Create a class named SpacedLogger that implements the Logger
5
6 public class SpacedLogger implements Logger {
7
8     //6
9     //There should be spaces between each character of the String
10
11     @Override
12     public void log(String log) {
13         System.out.println(log.replace("", " "));
14     }
15
16     //7
17     //The error method should the same as the log but with ERROR: in front of the String
18
19     @Override
20     public void error(String error) {
21         error.replace("", " ");
22         System.err.println("ERROR: " + error.replace("", " "));
23     }
24
25 }
26
27
28
```



```
1 package codingAssignmentWeek5;
2
3 public class App {
4
5     //9
6     //Create a class named App that has a main method
7
8     public static void main(String[] args) {
9
10        //10 & 11
11        //Instantiate an instance of each of your logger classes that implement the Logger interface
12        //Test both methods, passing in Strings of your choice
13
14
15        Logger asteriskLogger = new AsteriskLogger();
16
17        asteriskLogger.log("Good morning");
18        asteriskLogger.error("Hello");
19
20
21        Logger spacedLogger = new SpacedLogger();
22
23        spacedLogger.log("Goodbye");
24        spacedLogger.error("Hello");
25
26
27    }
28
29 }
30
31 }
```

Screenshots of Running Application:



```
<terminated> App [Java Application] C:\Users\Lally\AppData\Local\Temp\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.3.v20220515-1416\jre\bin\javaw.exe (Jul 29, 2022, 4:09:36 PM - 4:09:36 PM)
***Good morning***
*****
***ERROR:Hello***
*****
G o o d b y e
ERROR: H e l l o
```

URL to GitHub Repository:

<https://github.com/aduran92/Week5-Coding-Assignment>