

```

1 package weekFiveCodingAssignment;
2
3 /*
4  * SpacedLogger creates spaces in between letters in the word passed into the two methods.
5  * @param log displays only the word with spaces in between the letters
6  * @param error displays the word ERROR: and the passed in word with spaces in between the letters.
7  */
8 import java.util.Date;
9
10 public class SpacedLogger implements Logger {
11     public void log(String log) {
12         Date date = new Date();
13         System.out.println(date.toString());
14
15         System.out.println(log.replace("", " ").trim());
16     }
17
18
19     public void error(String error) {
20         Date date = new Date();
21         System.out.println(date.toString());
22         System.out.println("ERROR: " + error.replace("", " ").trim());
23     }
24 }
25
26 }

```

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 weekFiveCodingAssignment;
2 /*
3  * Interface Logger the date and time appears with
4  * two different ways of displaying Hello and ERROR: Hello each.
5  */
6
7 public interface Logger {
8
9     public void log(String log);
10
11
12     public void error(String error);
13
14 }
```

```
1 package weekFiveCodingAssignment;
2 /*
3  * SpacedLogger creates spaces in between letters in the word passed into the two methods.
4  * @param log displays only the word with spaces in between the letters
5  * @param error displays the word ERROR: and the passed in word with spaces in between the letters.
6  */
7
8 import java.util.Date;
9
10 public class SpacedLogger implements Logger {
11     public void log(String log) {
12         Date date = new Date();
13         System.out.println(date.toString());
14
15         System.out.println(log.replace("", " ").trim());
16     }
17
18
19
20     public void error(String error) {
21         Date date = new Date();
22         System.out.println(date.toString());
23         System.out.println("ERROR: " + error.replace("", " ").trim());
24     }
25
26 }
```

*Logger.java *SpacedLogger.java *AsteriskLogger.java × App.java

```
1 package weekFiveCodingAssignment;
2 /*
3  * AsteriskLogger displays the date and the passed word in a
4  * box of asterisks or the ERROR:and the word in a box of asterisks.
5  * @param log the word is surrounded by asterisks
6  * @param error the word preceded by ERROR: and surrounded by asterisks.
7  */
8 import java.util.Date;
9
10 public class AsteriskLogger implements Logger{
11     public void log(String log) {
12         Date date = new Date();
13         System.out.println(date.toString());
14
15         int n = log.length();
16
17         for(int i = 0; i < n+ 6; i++) {
18             System.out.print("*");
19         }
20         System.out.println();
21
22         System.out.println("****" + log + "****");
23
24         for(int i = 0; i < n + 6; i++) {
25             System.out.print("*");
26         }
27         System.out.println();
28     }
```

```

29  /*
30  * Continuation of AsteriskLogger.java
31  */
32  public void error(String error) {
33      Date date = new Date();
34      System.out.println(date.toString());
35
36      int n = error.length();
37
38      for(int i = 0; i < n+ 13; i++) {
39          System.out.print("*");
40      }
41      System.out.println();
42
43      System.out.println("***ERROR: " + error + "****");
44
45      for(int i = 0; i < n + 13; i++) {
46          System.out.print("*");
47      }
48      System.out.println();
49  }
50  }
51  }
52

```

```
*Logger.java    *SpacedLogger.java    *AsteriskLogger.java    *App.java ×
1 package weekFiveCodingAssignment;
2
3 /*
4  * App is where we can change the word to be passed into
5  * the previously mentioned loggers.
6  */
7
8 public class App {
9
10     public static void main(String[] args) {
11         Logger asteriskLogger = new AsteriskLogger();
12
13         asteriskLogger.log("Hello");
14         asteriskLogger.error("Hello");
15
16         Logger spacedLogger = new SpacedLogger();
17
18         spacedLogger.log ("Hello");
19         spacedLogger.error("Hello"); {
20
21     }
22 }
23 }
```

Screenshots of Running Application:

Logger.java SpacedLogger.java AsteriskLogger.java App.java ×

```
1 package weekFiveCodingAssignment;
2
3 /*
4  * App is where we can change the word to be passed into
5  * the previously mentioned loggers.
6  */
7
8 public class App {
9
10 public static void main(String[] args) {
11     Logger asteriskLogger = new AsteriskLogger();
12
13     asteriskLogger.log("Hello");
14     asteriskLogger.error("Hello");
15
16     Logger spacedLogger = new SpacedLogger();
17
18     spacedLogger.log ("Hello");
19     spacedLogger.error("Hello"); {
20
21     }
22 }
23 }
```

Console ×

<terminated> App [Java Application] C:\Users\jlcur\.p2\pool\plugins\org.eclipse.justj.open

Mon May 30 19:38:35 MST 2022

Hello

Mon May 30 19:38:35 MST 2022

ERROR: Hello

Mon May 30 19:38:35 MST 2022

H e l l o

Mon May 30 19:38:35 MST 2022

ERROR: H e l l o

Logger.java SpacedLogger.java AsteriskLogger.java App.java X

```
1 package weekFiveCodingAssignment;
2
3 /*
4  * App is where we can change the word to be passed into
5  * the previously mentioned loggers.
6  */
7
8 public class App {
9
10 public static void main(String[] args) {
11     Logger asteriskLogger = new AsteriskLogger();
12
13     asteriskLogger.log("Mello");
14     asteriskLogger.error("Jello");
15
16     Logger spacedLogger = new SpacedLogger();
17
18     spacedLogger.log ("Eggs");
19     spacedLogger.error("Bacon"); {
20
21     }
22 }
23 }
```

Console X

<terminated> App [Java Application] C:\Users\jlcu\p2\pool\plugins\org.eclipse.justj.open

Mon May 30 19:39:57 MST 2022

Mello

Mon May 30 19:39:57 MST 2022

ERROR: Jello

Mon May 30 19:39:57 MST 2022

E g g s

Mon May 30 19:39:57 MST 2022

ERROR: B a c o n

URL to GitHub Repository:

<https://github.com/juliecurran3/Week5CodingAssignment>