PROMINEO TECH

Intro to Java Week 5 Coding Assignment

URL to GitHub Repository: https://github.com/kymzaidi/Week-5-Coding-Assignment

URL to Public Link of your Video: https://youtu.be/yoAJX3kXdP4

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.

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

```
package Week5CodingAssignment;

public interface Logger {

public void log(String log);

public void error(String 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)

```
package Week5CodingAssignment;

public class AsteriskLogger implements Logger {

@Override

public void log(String log) {

// TODO Auto-generated method stub

System.out.println("*** " + log + " ***");

}

@Override

public void error(String error) {

// TODO Auto-generated method stub

int boxLength = error.length() + 10;

System.out.println("*".repeat(boxLength));

System.out.println("*** ERROR: " + error + " ***");

System.out.println("*".repeat(boxLength));

}

}
```

```
package Week5CodingAssignment;

public class SpacedLogger implements Logger {

@Override

public void log(String log) {

// TODO Auto-generated method stub

StringBuilder sb = new StringBuilder();
```

```
for (int i = 0; i < log.length(); i++) {
sb.append(log.charAt(i)).append(" ");
}
System.out.println(sb.toString().trim());
}
@Override
public void error(String error) {
StringBuilder sb = new StringBuilder();
for (int i = 0; i < error.length(); i++) {
sb.append(error.charAt(i)).append(" ");
}
System.out.println("ERROR: " + sb.toString().trim());
}
}
```

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.

```
package Week5CodingAssignment;
public class App {
public static void main(String[] args) {
// TODO Auto-generated method stub
Logger logger1 = new AsteriskLogger();
logger1.log("Hello");
```

```
logger1.error("Hello");

Logger logger2 = new SpacedLogger();

logger2.log("Hello");

logger2.error("Hello");

}

}
```

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

```
*** Hello ***

***************

*** ERROR: Hello ***

***************

H e l l o

ERROR: H e l l o
```