

Logging using SLF4J

Exercise 1: Logging Error Messages and Warning Levels

Task: Write a Java application that demonstrates logging error messages and warning levels using SLF4J.

Step-by-Step Solution:

1. Add SLF4J and Logback dependencies to your `pom.xml` file:

```
<dependency>
  <groupId>org.slf4j</groupId>
  <artifactId>slf4j-api</artifactId>
  <version>1.7.30</version>
</dependency>
<dependency>
  <groupId>ch.qos.logback</groupId>
  <artifactId>logback-classic</artifactId>
  <version>1.2.3</version> </dependency>

16
17  <dependencies>
18    <dependency>
19      <groupId>org.slf4j</groupId>
20      <artifactId>slf4j-api</artifactId>
21      <version>1.7.30</version>
22    </dependency>
23
24    <!-- Logback (SLF4J Implementation) -->
25    <dependency>
26      <groupId>ch.qos.logback</groupId>
27      <artifactId>logback-classic</artifactId>
28      <version>1.2.3</version>
29    </dependency>
30  </dependencies>
31
32 </project>
33
```

2. Create a Java class that uses SLF4J for logging:

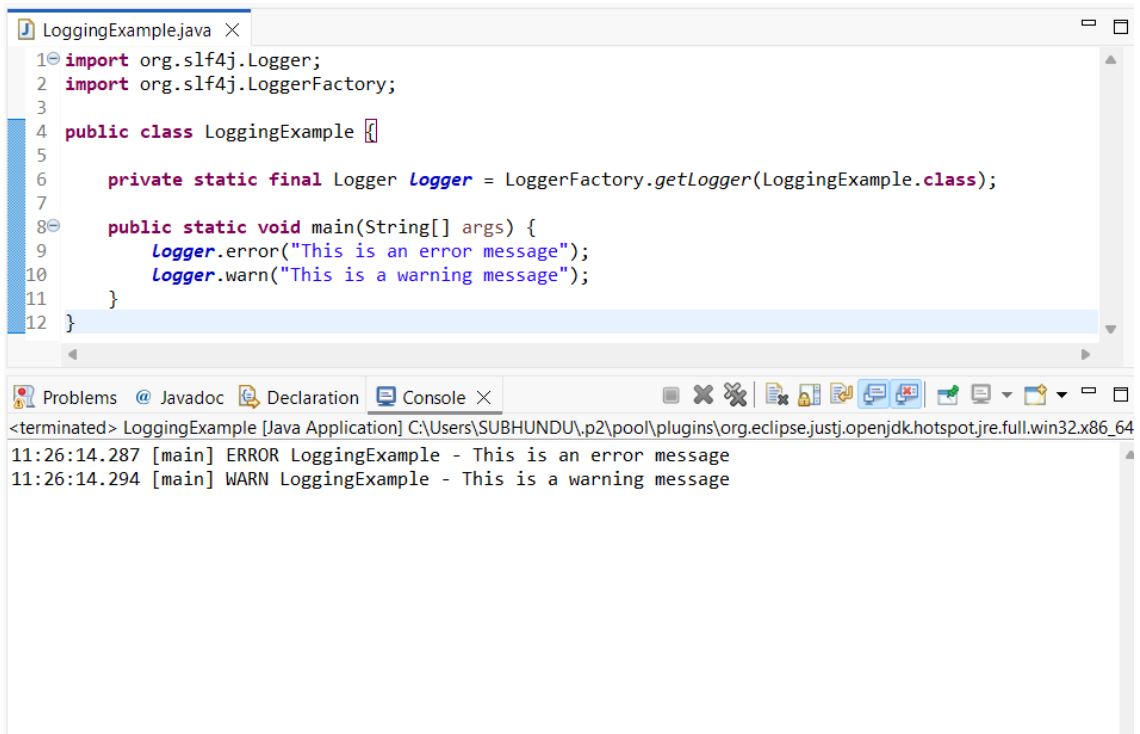
```
import org.slf4j.Logger;
import org.slf4j.LoggerFactory;

public class LoggingExample {

    private static final Logger logger =
LoggerFactory.getLogger(LoggingExample.class);

    public static void main(String[] args) {
        logger.error("This is an error message");
        logger.warn("This is a warning message");
    }
}
```

```
}  
}
```



The screenshot shows the Eclipse IDE interface. The top editor window displays the source code for `LoggingExample.java`. The code imports `org.slf4j.Logger` and `org.slf4j.LoggerFactory`, defines a `public class LoggingExample`, and includes a `main` method that uses the `logger` to print an error and a warning message. Below the editor, the `Console` tab is active, showing the output of the application. The output indicates that the application terminated successfully and printed the expected error and warning messages.

```
LoggingExample.java ×  
1 import org.slf4j.Logger;  
2 import org.slf4j.LoggerFactory;  
3  
4 public class LoggingExample {  
5  
6     private static final Logger logger = LoggerFactory.getLogger(LoggingExample.class);  
7  
8     public static void main(String[] args) {  
9         logger.error("This is an error message");  
10        logger.warn("This is a warning message");  
11    }  
12 }  
  
Problems Javadoc Declaration Console ×  
<terminated> LoggingExample [Java Application] C:\Users\SUBHUNDU\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64  
11:26:14.287 [main] ERROR LoggingExample - This is an error message  
11:26:14.294 [main] WARN LoggingExample - This is a warning message
```