

SL4J Logging Exercises

WEEK 2

Exercise 1: Logging Error Messages and Warning Levels

pom.xml (Dependencies)

```
<dependencies>
  <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>
</dependencies>
```

LoggingExample.java

```
package com.logdemo;
```

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

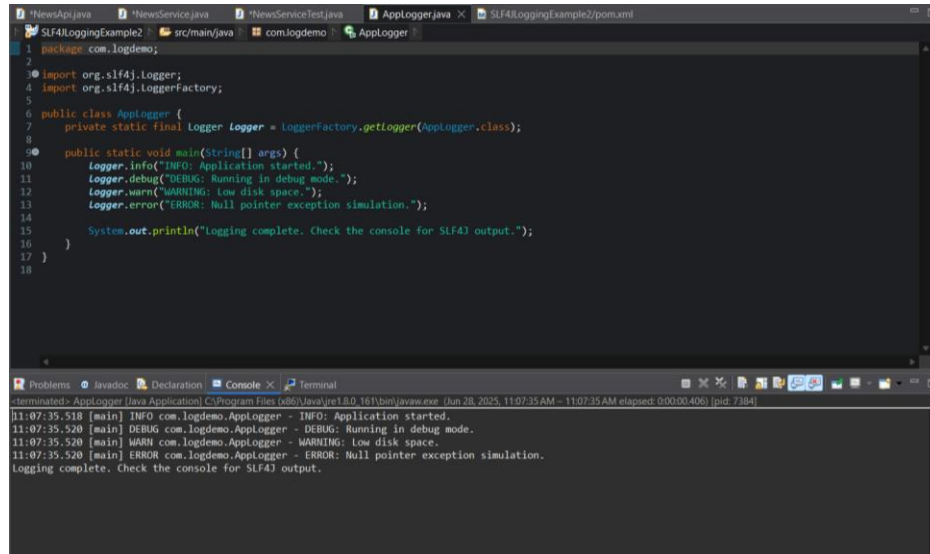
public class LoggingExample {

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

    public static void main(String[] args) {
        logger.error("Error message using SL4J Logger");
        logger.warn("Warning message using SL4J Logger");

        System.out.println("Log messages sent. Check console.");
    }
}
```

Output:



The screenshot shows an IDE with a Java file named `AppLogger.java` and a console window displaying the output of the application. The code defines a package `com.logdemo` and a class `AppLogger` that uses SLF4J for logging. The `main` method demonstrates various log levels: `INFO`, `DEBUG`, `WARN`, and `ERROR`.

```
1 package com.logdemo;
2
3 import org.slf4j.Logger;
4 import org.slf4j.LoggerFactory;
5
6 public class AppLogger {
7     private static final Logger logger = LoggerFactory.getLogger(AppLogger.class);
8
9     public static void main(String[] args) {
10         logger.info("INFO: Application started.");
11         logger.debug("DEBUG: Running in debug mode.");
12         logger.warn("WARNING: Low disk space.");
13         logger.error("ERROR: Null pointer exception simulation.");
14
15         System.out.println("Logging complete. Check the console for SLF4J output.");
16     }
17 }
18
```

The console output shows the following log messages:

```
<terminated> AppLogger [Java Application] C:\Program Files (x86)\Java\jre1.8.0_161\bin\javaw.exe (Jun 28, 2025, 11:07:35 AM - 11:07:35 AM elapsed: 00:00:40) [pid: 7384]
11:07:35.518 [main] INFO com.logdemo.AppLogger - INFO: Application started.
11:07:35.520 [main] DEBUG com.logdemo.AppLogger - DEBUG: Running in debug mode.
11:07:35.520 [main] WARN com.logdemo.AppLogger - WARNING: Low disk space.
11:07:35.520 [main] ERROR com.logdemo.AppLogger - ERROR: Null pointer exception simulation.
Logging complete. Check the console for SLF4J output.
```