SLF4J Logging – Exercise 1

(Week 2)

# Introduction

This document presents a structured Java application setup using SLF4J for logging. It covers Exercise 1: Logging error messages and warning levels using SLF4J with Maven-based configuration. The application uses Logback as the backend implementation for SLF4J.

# Project Structure

LoggingExampleProject/  
├── pom.xml  
└── src/  
 └── main/  
 └── java/  
 └── LoggingExample.java

# Java Code

## LoggingExample.java

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");

}

}

# Maven Configuration (pom.xml)

Add the following dependencies to your pom.xml file:

<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>

# Build and Run Commands

Use the following commands to compile and run the application:

# Compile the project  
mvn compile  
  
# Run the application (ensure exec plugin is configured or run via IDE)  
mvn exec:java -Dexec.mainClass="LoggingExample"

# Output

[main] ERROR LoggingExample - This is an error message  
[main] WARN LoggingExample - This is a warning message