**WEEK: 3**

**Exercise 4: Creating and Configuring a Maven Project**

**Scenario:**

You need to set up a new Maven project for the library management application and add Spring dependencies.

**Steps:**

1. **Create a New Maven Project:**
   * Create a new Maven project named **LibraryManagement**.
2. **Add Spring Dependencies in pom.xml:**
   * Include dependencies for Spring Context, Spring AOP, and Spring WebMVC.
3. **Configure Maven Plugins:**
   * Configure the Maven Compiler Plugin for Java version 1.8 in the pom.xml file.

**POM.XML:**

**<project xmlns="http://maven.apache.org/POM/4.0.0"**

**xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"**

**xsi:schemaLocation="http://maven.apache.org/POM/4.0.0**

**http://maven.apache.org/xsd/maven-4.0.0.xsd">**

**<modelVersion>4.0.0</modelVersion>**

**<groupId>cts</groupId>**

**<artifactId>LibraryManagement</artifactId>**

**<version>0.0.1-SNAPSHOT</version>**

**<packaging>jar</packaging>**

**<name>LibraryManagement</name>**

**<properties>**

**<project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>**

**<maven.compiler.source>1.8</maven.compiler.source>**

**<maven.compiler.target>1.8</maven.compiler.target>**

**</properties>**

**<dependencies>**

**<!-- Spring Context -->**

**<dependency>**

**<groupId>org.springframework</groupId>**

**<artifactId>spring-context</artifactId>**

**<version>5.3.36</version>**

**</dependency>**

**<!-- Spring AOP -->**

**<dependency>**

**<groupId>org.springframework</groupId>**

**<artifactId>spring-aop</artifactId>**

**<version>5.3.36</version>**

**</dependency>**

**<!-- Spring Web MVC -->**

**<dependency>**

**<groupId>org.springframework</groupId>**

**<artifactId>spring-webmvc</artifactId>**

**<version>5.3.36</version>**

**</dependency>**

**<!-- JUnit (optional for tests) -->**

**<dependency>**

**<groupId>junit</groupId>**

**<artifactId>junit</artifactId>**

**<version>3.8.1</version>**

**<scope>test</scope>**

**</dependency>**

**</dependencies>**

**<build>**

**<plugins>**

**<plugin>**

**<groupId>org.apache.maven.plugins</groupId>**

**<artifactId>maven-compiler-plugin</artifactId>**

**<version>3.8.1</version>**

**<configuration>**

**<source>1.8</source>**

**<target>1.8</target>**

**</configuration>**

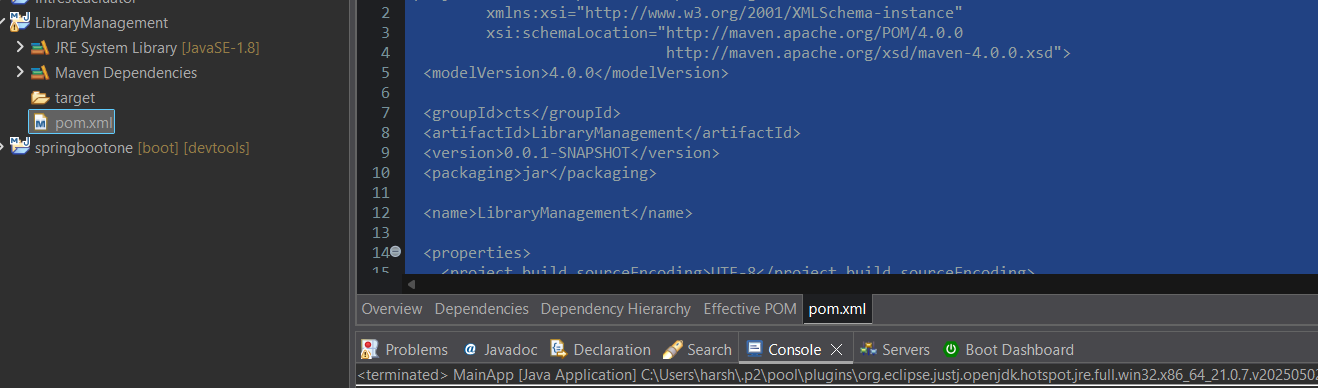
**</plugin>**

**</plugins>**

**</build>**

**</project>**

**Output: project structure**

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