## 1. Set up a Spring framework environment

## Pom.xml

```
<?xml version="1.0" encoding="UTF-8"?>
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>com</groupId>
 <artifactId>ecommerce</artifactId>
 <version>0.0.1-SNAPSHOT
 <packaging>war</packaging>
 <name>ecommerce Maven Webapp</name>
 <!-- FIXME change it to the project's website -->
 <url>http://www.example.com</url>
 properties>
     <org.springframework.version>6.0.4/org.springframework.version>
           <maven.compiler.source>1.8</maven.compiler.source>
           <maven.compiler.target>1.8</maven.compiler.target>
     </properties>
     <dependencies>
           <dependency>
                 <groupId>junit</groupId>
                 <artifactId>junit</artifactId>
                 <version>3.8.1
                 <scope>test</scope>
           </dependency>
           <dependency>
                 <groupId>org.springframework
                 <artifactId>spring-core</artifactId>
                 <version>${org.springframework.version}
           </dependency>
           <dependency>
                 <groupId>org.springframework
                 <artifactId>spring-expression</artifactId>
                 <version>${org.springframework.version}</version>
           </dependency>
           <dependency>
                 <groupId>org.springframework</groupId>
                 <artifactId>spring-beans</artifactId>
                 <version>${org.springframework.version}
           </dependency>
           <dependency>
                 <groupId>org.springframework
                 <artifactId>spring-context</artifactId>
                 <version>${org.springframework.version}
           </dependency>
           <dependency>
                 <groupId>org.springframework
                 <artifactId>spring-context-support</artifactId>
                 <version>${org.springframework.version}
           </dependency>
           <dependency>
                 <groupId>org.springframework
```

```
<artifactId>spring-jdbc</artifactId>
                 <version>${org.springframework.version}</version>
           </dependency>
           <dependency>
                <groupId>org.springframework</groupId>
                <artifactId>spring-orm</artifactId>
                 <version>${org.springframework.version}</version>
           </dependency>
           <dependency>
                <groupId>org.springframework</groupId>
                 <artifactId>spring-web</artifactId>
                <version>${org.springframework.version}
           </dependency>
           <dependency>
                <groupId>org.springframework
                <artifactId>spring-webmvc</artifactId>
                <version>${org.springframework.version}
           </dependency>
           <dependency>
                <groupId>javassist
                 <artifactId>javassist</artifactId>
                <version>3.12.1.GA
           </dependency>
           <dependency>
                <groupId>taglibs
                <artifactId>standard</artifactId>
                <version>1.1.2
                <scope>runtime</scope>
           </dependency>
           <dependency>
                <groupId>commons-dbcp
                <artifactId>commons-dbcp</artifactId>
                <version>1.4</version>
           </dependency>
     https://mvnrepository.com/artifact/jakarta.servlet.jsp/jakarta.servle
t.jsp-api -->
           <!--<dependency>
                <groupId>jakarta.servlet
                <artifactId>jakarta.servlet-api</artifactId>
                <version>6.0.0
           </dependency>-->
           <!--
https://mvnrepository.com/artifact/javax.servlet/javax.servlet-api -->
           <dependency>
                <groupId>javax.servlet
                <artifactId>javax.servlet-api</artifactId>
                <version>3.0.1
                <scope>provided</scope>
           </dependency>
           <!--
     https://mvnrepository.com/artifact/jakarta.servlet.jsp.jstl/jakarta.s
ervlet.jsp.jstl-api -->
           <dependency>
                <groupId>jakarta.servlet.jsp.jstl</groupId>
                <artifactId>jakarta.servlet.jsp.jstl-api</artifactId>
                <version>3.0.0
           </dependency>
```

```
<dependency>
                 <groupId>mysql</groupId>
                 <artifactId>mysql-connector-java</artifactId>
                 <version>8.0.32
           </dependency>
           <dependency>
                 <groupId>javax.persistence</groupId>
                 <artifactId>persistence-api</artifactId>
                 <version>1.0.2
                 <scope>provided</scope>
           </dependency>
     </dependencies>
  <build>
   <finalName>ecommerce</finalName>
   <pluginManagement><!-- lock down plugins versions to avoid using Maven</pre>
defaults (may be moved to parent pom) -->
     <plugins>
       <plugin>
         <artifactId>maven-clean-plugin</artifactId>
         <version>3.1.0
       </plugin>
       <!-- see http://maven.apache.org/ref/current/maven-core/default-
bindings.html#Plugin bindings for war packaging -->
       <plugin>
         <artifactId>maven-resources-plugin</artifactId>
         <version>3.0.2
       </plugin>
       <plugin>
         <artifactId>maven-compiler-plugin</artifactId>
         <version>3.8.0
       </plugin>
       <plugin>
         <artifactId>maven-surefire-plugin</artifactId>
         <version>2.22.1
       </plugin>
       <plugin>
         <artifactId>maven-war-plugin</artifactId>
         <version>3.2.2
       </plugin>
       <plugin>
         <artifactId>maven-install-plugin</artifactId>
         <version>2.5.2
       </plugin>
       <plugin>
         <artifactId>maven-deploy-plugin</artifactId>
         <version>2.8.2
       </plugin>
     </plugins>
   </pluginManagement>
  </build>
</project>
```