

SOURCE CODE

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</version>
  <packaging>war</packaging>

  <name>ecommerce Maven Webapp</name>
  <!-- FIXME change it to the project's website -->
  <url>http://www.example.com</url>

  <properties>
    <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
    <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>org.springframework</groupId>
      <artifactId>spring-core</artifactId>
      <version>${org.springframework.version}</version>
    </dependency>
    <dependency>
      <groupId>org.springframework</groupId>
      <artifactId>spring-expression</artifactId>
      <version>${org.springframework.version}</version>
    </dependency>
    <dependency>
      <groupId>org.springframework</groupId>
      <artifactId>spring-beans</artifactId>
      <version>${org.springframework.version}</version>
    </dependency>
    <dependency>
      <groupId>org.springframework</groupId>
      <artifactId>spring-context</artifactId>
      <version>${org.springframework.version}</version>
    </dependency>
    <dependency>
      <groupId>org.springframework</groupId>
      <artifactId>spring-context-support</artifactId>
      <version>${org.springframework.version}</version>
    </dependency>

  </dependencies>

</project>
```

```

<dependency>
  <groupId>org.springframework</groupId>
  <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>${org.springframework.version}</version>
</dependency>
<dependency>
  <groupId>org.springframework</groupId>
  <artifactId>spring-webmvc</artifactId>
  <version>${org.springframework.version}</version>
</dependency>
<dependency>
  <groupId>javassist</groupId>
  <artifactId>javassist</artifactId>
  <version>3.12.1.GA</version>
</dependency>
<dependency>
  <groupId>>taglibs</groupId>
  <artifactId>standard</artifactId>
  <version>1.1.2</version>
  <scope>runtime</scope>
</dependency>
<dependency>
  <groupId>commons-dbcp</groupId>
  <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</groupId>
    <artifactId>jakarta.servlet-api</artifactId>
    <version>6.0.0</version>
  </dependency>-->
  <!--

  https://mvnrepository.com/artifact/javax.servlet/javax.servlet-api -->
  <dependency>
    <groupId>javax.servlet</groupId>
    <artifactId>javax.servlet-api</artifactId>
    <version>3.0.1</version>
    <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</version>

```

```

        </dependency>

        <dependency>
            <groupId>mysql</groupId>
            <artifactId>mysql-connector-java</artifactId>
            <version>8.0.32</version>
        </dependency>

        <dependency>
            <groupId>javax.persistence</groupId>
            <artifactId>persistence-api</artifactId>
            <version>1.0.2</version>
            <scope>provided</scope>
        </dependency>

        <dependency>
            <groupId>junit</groupId>
            <artifactId>junit</artifactId>
            <version>4.11</version>
            <scope>test</scope>
        </dependency>
    </dependencies>
    <build>
        <finalName>ecommerce</finalName>
        <pluginManagement><!-- lock down plugins versions to avoid using Maven
defaults (may be moved to parent pom) -->
            <plugins>
                <plugin>
                    <artifactId>maven-clean-plugin</artifactId>
                    <version>3.1.0</version>
                </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</version>
                </plugin>
                <plugin>
                    <artifactId>maven-compiler-plugin</artifactId>
                    <version>3.8.0</version>
                </plugin>
                <plugin>
                    <artifactId>maven-surefire-plugin</artifactId>
                    <version>2.22.1</version>
                </plugin>
                <plugin>
                    <artifactId>maven-war-plugin</artifactId>
                    <version>3.2.2</version>
                </plugin>
                <plugin>
                    <artifactId>maven-install-plugin</artifactId>
                    <version>2.5.2</version>
                </plugin>
                <plugin>
                    <artifactId>maven-deploy-plugin</artifactId>
                    <version>2.8.2</version>
                </plugin>
            </plugins>
        </pluginManagement>
    </build>

```

</project>

com.ecommerce.EProduct.java

```
package com.ecommerce;
import java.math.BigDecimal;
import java.util.Date;
public class EProduct {

    private long ID;
    private String name;
    private BigDecimal price;
    private Date dateAdded;

    public long getID() {return this.ID; }
    public String getName() { return this.name;}
    public BigDecimal getPrice() { return this.price;}
    public Date getDateAdded() { return this.dateAdded;}

    public void setID(long id) { this.ID = id;}
    public void setName(String name) { this.name = name;}
    public void setPrice(BigDecimal price) { this.price = price;}
    public void setDateAdded(Date date) { this.dateAdded = date;}

}
```

com.ecommerce.controller.ProductController.java

```
package com.ecommerce.controller;
```

```
import java.util.List;
```

```
import org.springframework.beans.factory.annotation.Autowired;
```

```
import org.springframework.stereotype.Controller;
```

```
import org.springframework.ui.ModelMap;
```

```
import org.springframework.web.bind.annotation.*;
```

```
import com.ecommerce.EProduct;
```

```
import com.ecommerce.dao.EProductDAO;
```

```
@Controller
```

```
public class ProductController {
```

```
    @Autowired
```

```
    EProductDAO eproductDAO;
```

```
    @RequestMapping(value = "/listProducts", method = RequestMethod.GET)
```

```
    public String listProducts(ModelMap map) {
```

```
        List<EProduct> list = eproductDAO.getProducts();
```

```
        map.addAttribute("listOfProducts", list);
```

```
        return "list-products"; // go to "list-products.jsp"
```

```
    }
```

```
}
```

com.ecommerce.dao.EProductDAO.java

```
package com.ecommerce.dao;
```

```
import java.sql.*;
```

```
import java.util.List;
```

```
import org.springframework.jdbc.core.*;
```

```
import com.ecommerce.EProduct;
```

```
public class EProductDAO {
```

```
    JdbcTemplate template;
```

```
    public void setTemplate(JdbcTemplate template) {
```

```
        this.template = template;
```

```
    }
```

```
    // Business methods
```

```
    public List<EProduct> getProducts() {
```

```
        return template.query("select * from eproduct", new  
        RowMapper<EProduct>() {
```

```
            public EProduct mapRow(ResultSet rs, int row) throws SQLException {
```

```
                EProduct e = new EProduct();
```

```
                e.setID(rs.getInt(1));
```

```

        e.setName(rs.getString(2));

        e.setPrice(rs.getBigDecimal(3));

        e.setDateAdded(rs.getDate(4));

        return e;
    }

    });

}

}

```

main-servlet.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="http://www.springframework.org/schema/beans"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:aop="http://www.springframework.org/schema/aop"
    xmlns:context="http://www.springframework.org/schema/context"
    xmlns:jee="http://www.springframework.org/schema/jee"
    xmlns:lang="http://www.springframework.org/schema/lang"
    xmlns:p="http://www.springframework.org/schema/p"
    xmlns:tx="http://www.springframework.org/schema/tx"
    xmlns:util="http://www.springframework.org/schema/util"
    xsi:schemaLocation="http://www.springframework.org/schema/beans
http://www.springframework.org/schema/beans/spring-beans-2.5.xsd
http://www.springframework.org/schema/aop
http://www.springframework.org/schema/aop/spring-aop-2.5.xsd
http://www.springframework.org/schema/context
http://www.springframework.org/schema/context/spring-context-2.5.xsd
http://www.springframework.org/schema/tx
http://www.springframework.org/schema/tx/spring-tx-2.5.xsd">

    <bean id="jspViewResolver"

        class="org.springframework.web.servlet.view.InternalResourceViewResol
ver">
        <property name="viewClass"

            value="org.springframework.web.servlet.view.JstlView"></property>
            <property name="prefix" value="/WEB-INF/view/"></property>
            <property name="suffix" value=".jsp"></property>
        </bean>

```

```

    <bean id="messageSource"
        class="org.springframework.context.support.ReloadableResourceBundleMe
ssageSource">
        <property name="basename"
value="classpath:messages"></property>
        <property name="defaultEncoding" value="UTF-8"></property>
    </bean>

    <context:annotation-config />

    <context:component-scan
        base-package="com.ecommerce" />
    <context:component-scan
        base-package="com.ecommerce.dao" />

    <bean id="dataSource"
        class="org.apache.commons.dbcp.BasicDataSource" destroy-
method="close"
        p:driverClassName="${jdbc.driverClassName}"
        p:url="${jdbc.databaseurl}" p:username="${jdbc.username}"
        p:password="${jdbc.password}"></bean>

    <bean id="ds"

        class="org.springframework.jdbc.datasource.DriverManagerDataSource">
        <property name="driverClassName"
            value="com.mysql.jdbc.Driver"></property>
        <property name="url"
            value="jdbc:mysql://localhost:3306/ecommerce"></property>
        <property name="username" value="root"></property>
        <property name="password" value="root123"></property>
    </bean>

    <bean id="jt" class="org.springframework.jdbc.core.JdbcTemplate">
        <property name="dataSource" ref="ds"></property>
    </bean>

    <bean id="dao" class="com.ecommerce.dao.EProductDAO">
        <property name="template" ref="jt"></property>
    </bean>

    <tx:annotation-driven />

</beans>

```

web.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns="http://java.sun.com/xml/ns/javaee" version="2.5"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd">
    <display-name>Archetype Created Web Application</display-name>

```



```

        <welcome-file-list>
            <welcome-file>/WEB-INF/view/index.jsp</welcome-file>
        </welcome-file-list>
        <context-param>
            <param-name>contextConfigLocation</param-name>
            <param-value>/WEB-INF/main-servlet.xml</param-value>
        </context-param>
        <servlet>
            <servlet-name>main</servlet-name>
            <servlet-
class>org.springframework.web.servlet.DispatcherServlet</servlet-class>
            <load-on-startup>1</load-on-startup>
        </servlet>
        <servlet-mapping>
            <servlet-name>main</servlet-name>
            <url-pattern>/</url-pattern>
        </servlet-mapping>

        <listener>
            <listener-
class>org.springframework.web.context.ContextLoaderListener</listener-
class>
            </listener>
    </web-app>

```

view.index.jsp

```
<h3><a href="listProducts">List Products</a></h3>
```

view.list-products.jsp

```

<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<%@ taglib uri="http://www.springframework.org/tags/form"
    prefix="form"%>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>

<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>List Products</title>
</head>

<body>
    <c:forEach var="product" items="${listOfProducts}">
        ${product.name}, ${product.price}, ${product.dateAdded}<br>
    </c:forEach>
</body>

```

</html>