

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"
```

```
    }
```

```
    @RequestMapping(value = "/addProduct", method = RequestMethod.POST)
```

```
    public String addProduct(@RequestParam String name, @RequestParam float price) {
```

```
        eproductDAO.addProduct(name, price);
```

```
        return "add-product-success"; // go to "add-product-success.jsp"
```

```
    }
```

```
    @RequestMapping(value = "/deleteProduct", method = RequestMethod.POST)
```

```
    public String deleteProduct(@RequestParam int id) {
```

```
        eproductDAO.deleteProduct(id);
```

```
        return "delete-product-success"; // go to "delete-product-success.jsp"
```

```

    }

    @RequestMapping(value = "/updateProduct", method = RequestMethod.POST)
    public String updateProduct(@RequestParam int id, @RequestParam float price) {

        eproductDAO.updateProduct(id,price);

        return "update-product-success"; // go to "update-product-success.jsp"
    }

    @RequestMapping(value = "/searchProduct", method = RequestMethod.POST)
    public String searchProduct(ModelMap map, @RequestParam String name) {

        List<EProduct> list = eproductDAO.searchProductsByName(name);

        map.addAttribute("listOfSearchedProducts", list);

        return "list-of-searched-products"; // go to "list-of-searched-products.jsp"
    }

}

}

```

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;
        }

    });

}

public List<EProduct> searchProductsByName(String name) {

    return template.query("select * from eproduct where name like
'%" + name + "%'", 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));

            System.out.println(e);

            return e;
        }

    });

}

// public List<EProduct> searchProductsById(int Id) {
//
//     return template.query("select * from eproduct where
id=?"+Id+"%", 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;
//         }
//     });
//
// }

public void addProduct(String name, float price) {
    String insertSQL = "insert into eproduct(name,price)
values(?,?)";
    template.update(insertSQL, new Object[] {name, price});
}

```

```

    }
    // Delete a product
    public void deleteProduct(int id) {
        String deleteSQL = "delete from eproduct where id=?";
        template.update(deleteSQL, new Object[] { id });
    }
    // Update a product price
    public void updateProduct(int id, float price) {
        String updateSQL = "update eproduct set price=? where
id=?";
        template.update(updateSQL, new Object[] { price, id });
    }
}

```

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;}

}

```

add-product.jsp

```

<%@ page language="java" contentType="text/html; charset=UTF-8"

```

```
        pageEncoding="UTF-8"%>

<h3>Add a product</h3>

<form action="addProduct" method="POST">

    NAME: <input name="name"><br>
    PRICE: <input name="price"><br>

    <input type=submit>

</form>
```

delete-product.jsp

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>

<h3>Delete a product</h3>

<form action="deleteProduct" method="POST">

    ID: <input name="id"><br>

    <input type=submit>

</form>
```

search-product.jsp

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>

<form action="searchProduct" method="POST">

    NAME: <input name="name"><br>

    <input type=submit>

</form>
</html>
```

Update-product.jsp

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>

<h3>update a product</h3>

<form action="updateProduct" method="POST">

    ID: <input name="id"><br>
    PRICE: <input name="price"><br>

    <input type=submit>

</form>
```

add-product-success.jsp

Added a new product successfully

delete-product-success.jsp

deleted successfully

index.jsp

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

<br><br>
<h3><a href="add-product.jsp">Add a Product</a></h3>

<br><br>
<h3><a href="delete-product.jsp">Delete a Product</a></h3>

<br><br>
<h3><a href="update-product.jsp">update a Product</a></h3>

<br><br>
<h3><a href="search-product.jsp">search a Product</a></h3>
```

List-of-searched-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 of Searched Products</title>
</head>

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

</html>
```

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>

```

Update-product-success.jsp

updated successfully

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="ashishashish"></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>
```