

JDBC Framework

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/maven-v4_0_0.xsd">

    <modelVersion>4.0.0</modelVersion>

    <groupId>SpringSetup</groupId>

    <artifactId>SpringSetup</artifactId>

    <packaging>war</packaging>

    <version>0.0.1-SNAPSHOT</version>

    <name>SpringSetup Maven Webapp</name>

    <url>http://maven.apache.org</url>

    <properties>

        <org.springframework.version>5.1.6.RELEASE</org.springframework.version>

    </properties>

    <dependencies>

        <dependency>

            <groupId>junit</groupId>

            <artifactId>junit</artifactId>

            <version>3.8.1</version>

            <scope>test</scope>

        </dependency>

        <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>
```

```
<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>log4j</groupId>
  <artifactId>log4j</artifactId>
  <version>1.2.16</version>
  <scope>runtime</scope>
</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>
```

```
<dependency>  
  <groupId>mysql</groupId>  
  <artifactId>mysql-connector-java</artifactId>  
  <version>5.1.9</version>  
</dependency>
```

```
<dependency>
```

```
<groupId>javax.servlet</groupId>  
<artifactId>jstl</artifactId>  
<version>1.2</version>  
</dependency>
```

```
<dependency>  
<groupId>javax.servlet</groupId>  
<artifactId>jstl</artifactId>  
<version>1.2</version>  
</dependency>
```

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

```
</dependencies>  
<build>  
  <finalName>SpringSetup</finalName>  
</build>  
</project>
```

EPRODUCT.JAVA:

```
package com.ecommerce.entity;
```

```
import java.math.BigDecimal;
```

```
import java.util.Date;
import javax.persistence.Column;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.Id;
import javax.persistence.Table;
```

```
public class EProductEntity {

    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;}
```

EPRODUCTDAO:

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

```
import java.sql.ResultSet;
```

```
import java.sql.SQLException;
import java.util.List;
import org.springframework.jdbc.core.BeanPropertyRowMapper;
import org.springframework.jdbc.core.JdbcTemplate;
import org.springframework.jdbc.core.RowMapper;
import com.ecommerce.entity.EProduct;

public class EProductDAO {

    JdbcTemplate template;

    public void setTemplate(JdbcTemplate template) {
        this.template = template;
    }

    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;
            }
        });
    }
}
```

MAINCONTROLLER.JAVA:

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

```
import org.apache.log4j.Logger;
```

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

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

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

```
import org.springframework.validation.BindingResult;
```

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

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

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

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

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

```
import org.springframework.context.ApplicationContext;
```

```
import org.springframework.context.support.ClassPathXmlApplicationContext;
```

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

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

```
@Controller
```

```
public class MainController {
```

```
    @Autowired
```

```
    EProductDAO eproductDAO;
```

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



```

public String listProducts(ModelMap map)
{
    List<EProduct> list= eproductDAO.getProducts();
    model.addAttribute("list",list);
    return "listProducts";
}
}

```

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">
    <context:annotation-config />
    <context:component-scan base-package="com.ecommerce.controller" />
    <bean id="jspViewResolver"

```

```
class="org.springframework.web.servlet.view.InternalResourceViewResolver">
  <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.ReloadableResourceBundleMessageSource">
  <property name="basename" value="classpath:messages"></property>
  <property name="defaultEncoding" value="UTF-8"></property>
</bean>
```

```
<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="master"></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 />
```

```
<bean id="transactionManager"
      class="org.springframework.orm.hibernate3.HibernateTransactionManager">
    <property name="sessionFactory" ref="sessionFactory"></property>
</bean>
```

```
</beans>
```

LISTPRODUCT.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="${list}">
```

```
    ${product.name}, ${product.price}, ${product.dateAdded}<br>
```

```
</c:forEach>
```

```
</body>
```

```
</html>
```

INDEX.JSP:

```
<html>
```

```
<body>
```

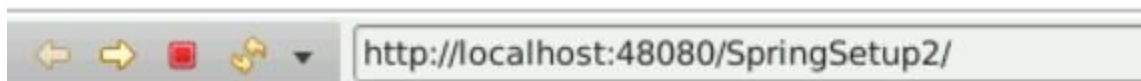
```
<h2>Spring Application</h2>
```

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

```
</body>
```

```
</html>
```

OUTPUT:



Spring Application

List Products

+---+-----+-----+-----+			
ID	name	price	date_added
+---+-----+-----+-----+			
1	HP Laptop ABC	21900.00	2019-06-04 07:18:57
2	Acer Laptop ABC	23300.00	2019-06-04 07:19:07
3	Lenovo Laptop ABC	33322.00	2019-06-04 07:19:19
+---+-----+-----+-----+			