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
<name>SpringSetup Maven Webapp</name>
<url>http://maven.apache.org</url>
 cproperties>
 <org.springframework.version>5.1.6.RELEASE/org.springframework.version>
 </properties>
 <dependencies>
  <dependency>
  <groupId>junit
  <artifactId>junit</artifactId>
  <version>3.8.1</version>
  <scope>test</scope>
  </dependency>
  <dependency>
  <groupId>org.springframework
  <artifactId>spring-core</artifactId>
```

```
<version>${org.springframework.version}</version>
</dependency>
<dependency>
<groupId>org.springframework
<artifactId>spring-expression</artifactId>
<version>${org.springframework.version}</version>
</dependency>
<dependency>
<groupId>org.springframework
<artifactId>spring-beans</artifactId>
<version>${org.springframework.version}</version>
</dependency>
<dependency>
<groupId>org.springframework
<artifactId>spring-context</artifactId>
<version>${org.springframework.version}</version>
</dependency>
<dependency>
<groupId>org.springframework
<artifactId>spring-context-support</artifactId>
<version>${org.springframework.version}</version>
</dependency>
<dependency>
<groupId>org.springframework
```

```
<artifactId>spring-jdbc</artifactId>
<version>${org.springframework.version}</version>
</dependency>
<dependency>
<groupId>org.springframework
<artifactId>spring-orm</artifactId>
<version>${org.springframework.version}</version>
</dependency>
<dependency>
<groupId>org.springframework
<artifactId>spring-web</artifactId>
<version>${org.springframework.version}</version>
</dependency>
<dependency>
<groupId>org.springframework
<artifactId>spring-webmvc</artifactId>
<version>${org.springframework.version}</version>
</dependency>
<dependency>
 <groupId>log4j/groupId>
 <artifactId>log4j</artifactId>
 <version>1.2.16</version>
 <scope>runtime</scope>
</dependency>
```

```
<dependency>
   <groupId>javassist
   <artifactId>javassist</artifactId>
   <version>3.12.1.GA</version>
 </dependency>
 <dependency>
   <groupId>taglibs
   <artifactId>standard</artifactId>
   <version>1.1.2</version>
   <scope>runtime</scope>
 </dependency>
 <dependency>
  <groupId>commons-dbcp
  <artifactId>commons-dbcp</artifactId>
  <version>1.4</version>
 </dependency>
 <dependency>
   <groupId>mysql
   <artifactId>mysql-connector-java</artifactId>
   <version>5.1.9</version>
 </dependency>
<dependency>
```

```
<groupId>javax.servlet
<artifactId>jstl</artifactId>
<version>1.2</version>
</dependency>
<dependency>
<groupId>javax.servlet
<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.ld;
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"</pre>
  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"</pre>
```

```
class="org.springframework.web.servlet.view.InternalResourceViewResolver">
   cproperty name="viewClass"
     value="org.springframework.web.servlet.view.JstlView"></property>
   cproperty name="prefix" value="/WEB-INF/view/">
   cproperty name="suffix" value=".jsp"></property>
 </bean>
 <bean id="messageSource"</pre>
class="org.springframework.context.support.ReloadableResourceBundleMessageSource">
   cproperty name="basename" value="classpath:messages">
   coding" value="UTF-8">
 </bean>
 <bean id="dataSource"</pre>
   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">
       cproperty name="driverClassName" value="com.mysql.jdbc.Driver"></property>
       cproperty name="url"
value="jdbc:mysql://localhost:3306/ecommerce"></property>
       content
       cproperty name="password" value="master"></property>
   </bean>
   <bean id="jt" class="org.springframework.jdbc.core.JdbcTemplate">
```

```
cproperty name="dataSource" ref="ds"></property>
    </bean>
    <bean id="dao" class="com.ecommerce.dao.EProductDAO">
        cproperty name="template" ref="jt"></property>
    </bean>
  <tx:annotation-driven/>
  <bean id="transactionManager"</pre>
    class="org.springframework.orm.hibernate3.HibernateTransactionManager">
    cproperty name="sessionFactory" ref="sessionFactory">
  </bean>
</beans>
LISTPRODUCT.JSP:
<%@ page language="java" contentType="text/html; charset=UTF-8"pageEncoding="UTF-</pre>
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:

http://localhost:48080/SpringSetup2/
```

Spring Application

List Products

