## Integration of Hibernate with Spring

Pom.xml:

```
<?xml version="1.0" encoding="UTF-8"?>
project xmIns="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>SpringHibernateWeb/groupId>
<artifactId>SpringHibernateWeb</artifactId>
<version>0.0.1-SNAPSHOT</version>
<packaging>war</packaging>
<name>SpringHibernateWeb Maven Webapp</name>
<!-- FIXME change it to the project's website -->
<url>http://www.example.com</url>
cproperties>
project.build.sourceEncoding>UTF-8/project.build.sourceEncoding>
<maven.compiler.source>1.7</maven.compiler.source>
<maven.compiler.target>1.7</maven.compiler.target>
<org.springframework.version>3.0.5.RELEASE</org.springframework.version>
</properties>
<repositories>
<repository>
<id>JBoss repository</id>
<url>http://repository.jboss.org/nexus/content/groups/public/</url>
</repository>
</repositories>
<dependencies>
<dependency>
```

```
<groupId>junit
<artifactId>junit</artifactId>
<version>4.11</version>
<scope>test</scope>
</dependency>
<dependency>
<groupId>org.hibernate.javax.persistence/groupId>
<artifactId>hibernate-jpa-2.1-api</artifactId>
<version>1.0.0.Final</version>
</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
<artifactId>log4j</artifactId>
<version>1.2.16</version>
<scope>runtime</scope>
</dependency>
<dependency>
```

```
<groupId>org.hibernate
<artifactId>hibernate-core</artifactId>
<version>3.6.3.Final</version>
</dependency>
<dependency>
<groupId>javassist
<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
<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>commons-configuration/groupId>
<artifactId>commons-configuration</artifactId>
<version>1.9</version>
</dependency>
</dependencies>
```

```
<build>
<finalName>SpringHibernateWeb</finalName>
<pluginManagement><!-- lock down plugins versions to avoid using Maven defaults (may be</pre>
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/defaultbindings.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>
Web.xml:
<web-app
xmlns="http://java.sun.com/xml/ns/javaee"
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_3_0.xsd"
version="3.0">
<display-name>Archetype Created Web Application</display-name>
<display-name>Archetype Created Web Application</display-name>
<welcome-file-list>
<welcome-file>index.jsp</welcome-file>
</welcome-file-list>
<servlet>
<servlet-name>eproduct</servlet-name>
<servlet-class>
org.spring framework.web.servlet. Dispatcher Servlet\\
</servlet-class>
<load-on-startup>1</load-on-startup>
</servlet>
<servlet-mapping>
<servlet-name>eproduct</servlet-name>
<url-pattern>/</url-pattern>
```

```
</servlet-mapping>
<context-param>
<param-name>contextConfigLocation</param-name>
<param-value>/WEB-INF/eproduct-servlet.xml</param-value>
</context-param>
stener>
clistener-class>org.springframework.web.context.ContextLoaderListener/listener-class>
</listener>
</web-app>
eproduct-servlet.xml
<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="http://www.springframework.org/schema/beans"</pre>
xmlns:context="http://www.springframework.org/schema/context"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:p="http://www.springframework.org/schema/p"
xmlns:tx="http://www.springframework.org/schema/tx"
xsi:schemaLocation="
http://www.springframework.org/schema/beans
http://www.springframework.org/schema/beans/spring-beans-4.0.xsd
http://www.springframework.org/schema/context
http://www.springframework.org/schema/context/spring-context-4.0.xsd
http://www.springframework.org/schema/tx
http://www.springframework.org/schema/tx/spring-tx-4.0.xsd
http://www.springframework.org/schema/aop
http://www.springframework.org/schema/aop/spring-aop-4.0.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">
cproperty name="defaultEncoding" value="UTF-8">
</bean>
<bean id="propertyConfigurer"</pre>
class="org.springframework.beans.factory.config.PropertyPlaceholderConfigurer"
p:location="/WEB-INF/jdbc.properties"></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="sessionFactory"</pre>
class="org.springframework.orm.hibernate3.LocalSessionFactoryBean">
cproperty name="dataSource" ref="dataSource">/property>
configLocation">
<value>classpath:hibernate.cfg.xml</value>
</property>
cproperty name="configurationClass">
<value>org.hibernate.cfg.AnnotationConfiguration</value>
</property>
property name="hibernateProperties">
ops>
prop key="hibernate.dialect">${jdbc.dialect}
prop key="hibernate.show_sql">true
</props>
```

```
</property>
</bean>
<bean id="eproductDAO" class="com.ecommerce.dao.EProductDAO"></bean>
<tx:annotation-driven />
<bean id="transactionManager"</pre>
class="org.springframework.orm.hibernate3.HibernateTransactionManager">
cproperty name="sessionFactory" ref="sessionFactory">
</bean>
</beans>
jdbc.properties:
jdbc.driverClassName=com.mysql.jdbc.Driver
jdbc.dialect=org.hibernate.dialect.MySQLDialect
jdbc.databaseurl=jdbc:mysql://127.0.0.1:3306/ecommerce
jdbc.username=root
jdbc.password=Nithanya@1
Index.jsp:
<html>
<body>
<h2>Spring With Hibernate</h2>
<a href="productList.jsp">Product List</a>
</body>
</html>
ProductList.jsp:
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
pageEncoding="ISO-8859-1"%>
<%@taglib uri="http://www.springframework.org/tags" prefix="spring"%>
<%@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>
<title>Spring With Hibernate</title>
</head>
<body>
<h3>Product List </h3>
<c:if test="${!empty productList}">
Name
Price
Date Added
<c:forEach items="${productList}" var="product">
${product.name} 
${product.price}
${product.date_added}
</c:forEach>
</c:if>
</body>
</html>
Hibernate.cfg.xml:
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE hibernate-configuration PUBLIC</p>
"-//Hibernate/Hibernate Configuration DTD//EN"
"http://hibernate.sourceforge.net/hibernate-configuration-3.0.dtd">
<hibernate-configuration>
<session-factory>
<mapping class="com.ecommerce.entity.EProductEntity"></mapping>
```

```
</session-factory>
</hibernate-configuration>
EProductEntity.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;
@Entity
@Table(name= "eproduct")
public class EProductEntity {
@Id @GeneratedValue
@Column(name = "ID")
private long ID;
@Column(name = "name")
private String name;
@Column(name = "price")
private BigDecimal price;
@Column(name = "date_added")
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.java:
package com.ecommerce.dao;
import java.util.List;
import org.hibernate.SessionFactory;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Repository;
import com.ecommerce.entity.EProductEntity;
@Repository
public class EProductDAO {
@Autowired
private SessionFactory sessionFactory;
@SuppressWarnings("unchecked")
public List<EProductEntity> getAllProducts() {
return this.sessionFactory.getCurrentSession().createQuery("from EProducts").list();
}
}
EProductController.java:
package com.ecommerce.Controller;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.ui.ModelMap;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
```

```
import com.ecommerce.dao.EProductDAO;
import com.ecommerce.entity.EProductEntity;
@Controller
public class EProductController {
@Autowired
private EProductDAO eproductService;
@RequestMapping(value = "/productList", method = RequestMethod.GET)
public String listProducts(ModelMap map)
{
map.addAttribute("eproduct", new EProductEntity());
map.addAttribute("productList", eproductService.getAllProducts());
return "productList";
}
}
                          (i) localhost:8084/SpringHibernateWeb/ind... A<sup>N</sup>
  Import favorites | MatsApp | YouTube | Mail
 Spring With Hibernate
```

Product List