**Practice project assisted**

Integration of Hibernate with Spring

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/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>A custom project</name>

<url>http://www.haoxuer.com</url>

<!-- JBoss repository for Hibernate -->

<repositories>

<repository>

<id>JBoss repository</id>

<url>http://repository.jboss.org/nexus/content/groups/public/</url>

</repository>

</repositories>

<properties>

<org.springframework.version>3.0.5.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.hibernate.javax.persistence</groupId>

<artifactId>hibernate-jpa-2.1-api</artifactId>

<version>1.0.0.Final</version>

</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>org.hibernate</groupId>

<artifactId>hibernate-core</artifactId>

<version>3.6.3.Final</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>

<dependency>

<groupId>mysql</groupId>

<artifactId>mysql-connector-java</artifactId>

<version>5.1.9</version>

</dependency>

</dependencies>

<build>

<finalName>SpringHibernateWeb</finalName>

</build>

</project>

EProductEntity

**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;

@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

**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** org.springframework.stereotype.Service;

**import** org.springframework.transaction.annotation.Transactional;

**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

**package** com.ecommerce.Controller;

**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** com.ecommerce.entity.EProductEntity;

**import** com.ecommerce.service.EProductService;

@Controller

**public** **class** EProductController {

@Autowired

**private** EProductService eproductService;

@RequestMapping(value = "/productList", method = RequestMethod.***GET***)

**public** String listProducts(ModelMap map)

{

map.addAttribute("eproduct", **new** EProductEntity());

map.addAttribute("productList", eproductService.getAllProducts());

**return** "productList";

}

}

eproduct-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.xsd*

*http://www.springframework.org/schema/aop/ http://www.springframework.org/schema/aop/spring-aop.xsd*

*http://www.springframework.org/schema/context/ http://www.springframework.org/schema/context/spring-context.xsd*

*http://www.springframework.org/schema/jee/ http://www.springframework.org/schema/jee/spring-jee.xsd*

*http://www.springframework.org/schema/lang/ http://www.springframework.org/schema/lang/spring-lang.xsd*

*http://www.springframework.org/schema/tx/ http://www.springframework.org/schema/tx/spring-tx.xsd*

*http://www.springframework.org/schema/util/ http://www.springframework.org/schema/util/spring-util.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=*"propertyConfigurer"*

class=*"org.springframework.beans.factory.config.PropertyPlaceholderConfigurer"*

p:location=*"/WEB-INF/jdbc.properties"*></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=*"sessionFactory"*

class=*"org.springframework.orm.hibernate3.LocalSessionFactoryBean"*>

<property name=*"dataSource"* ref=*"dataSource"*></property>

<property name=*"configLocation"*>

<value>classpath:hibernate.cfg.xml</value>

</property>

<property name=*"configurationClass"*>

<value>org.hibernate.cfg.AnnotationConfiguration</value>

</property>

<property name=*"hibernateProperties"*>

<props>

<prop key=*"hibernate.dialect"*>${jdbc.dialect}</prop>

<prop key=*"hibernate.show\_sql"*>true</prop>

</props>

</property>

</bean>

<bean id=*"eproductDAO"* class=*"com.ecommerce.dao.EProductDAO"*></bean>

<bean id=*"eproductService"* class=*"com.ecommerce.service.EProductService"*></bean>

<tx:annotation-driven />

<bean id=*"transactionManager"*

class=*"org.springframework.orm.hibernate3.HibernateTransactionManager"*>

<property name=*"sessionFactory"* ref=*"sessionFactory"*></property>

</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=Work

jdbc.password=Simplilearn@123

productList.xml

<%@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"*%>

<html>

<head>

<title>Spring With Hibernate</title>

</head>

<body>

<h3>Product List </h3>

<c:if test=*"*${!**empty** productList}*"*>

<table class=*"data"*>

<tr>

<th>Name</th>

<th>Price</th>

<th>Date Added</th>

</tr>

<c:forEach items=*"*${productList}*"* var=*"product"*>

<tr>

<td>${product.name} </td>

<td>${product.price}</td>

<td>${product.date\_added}</td>

</tr>

</c:forEach>

</table>

</c:if>

</body>

</html>

index.jsp

<html>

<body>

<h2>Spring With Hibernate</h2>

<a href=*"/productList"*>Product List</a>

</body>

</html>

hibernate.cfg.xml

<?xml version=*'1.0'* encoding=*'utf-8'*?>

<!DOCTYPE hibernate-configuration PUBLIC

"-//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>

web.xml

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<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"* metadata-complete=*"true"*>

<display-name>Archetype Created Web Application</display-name>

<welcome-file-list>

<welcome-file>/WEB-INF/view/index.jsp</welcome-file>

</welcome-file-list>

<servlet>

<servlet-name>eproduct</servlet-name>

<servlet-class>

org.springframework.web.servlet.DispatcherServlet

</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>

<listener>

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

</listener>

</web-app>