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/maven-v4\_0\_0.xsd">

<modelVersion>4.0.0</modelVersion>

<groupId>SpringHibernateWeb</groupId>

<artifactId>SpringHibernateWeb</artifactId>

<packaging>war</packaging>

<version>0.0.1-SNAPSHOT</version>

<name>SpringHibernateWeb Maven Webapp</name>

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

Code –

**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;}

}

EProduct.Dao –

**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>

productList.jsp –

<%@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>

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 **–**

<!DOCTYPE web-app PUBLIC

"-//Sun Microsystems, Inc.//DTD Web Application 2.3//EN"

"http://java.sun.com/dtd/web-app\_2\_3.dtd" >

<web-app>

<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>