

Spring + Hibernate

```
package com.softserve.edu.entity;
import java.io.Serializable;
import javax.persistence.Column;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.Id;
import org.hibernate.annotations.GenericGenerator;
@Entity
public class MyEntity implements Serializable {
    private static final long serialVersionUID = 382157955767771714L;
    @Id
    @Column(name = "uuid")
    @GeneratedValue(generator = "system-uuid")
    @GenericGenerator(name = "system-uuid", strategy = "uuid")
    private String id;
    @Column(name = "name")
    private String name;
    public MyEntity() {
    }
    public MyEntity(String id, String name) {
        this.id = id;
        this.name = name;
    }
    public String getId() {
        return id;
    }
    public void setId(String id) {
        this.id = id;
    }
    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
    }
}
```

```
package com.softserve.edu.dao;
import com.softserve.edu.entity.MyEntity;
public interface IEntityDao {
    public void save(MyEntity entity);
}
```

```
package com.softserve.edu.dao;
import org.springframework.orm.hibernate3.support.HibernateDaoSupport;
import com.softserve.edu.entity.MyEntity;
public class EntityDao extends HibernateDaoSupport implements IEntityDao {
    @Override
    public void save(MyEntity entity) {
        getHibernateTemplate().save(entity);
    }
}
```

```
package com.softserve.edu.services;
import com.softserve.edu.entity.MyEntity;
public interface IMyEntityService {
    public void saveEntity(MyEntity entity);
}
```

```

package com.softserve.edu.services;
import org.springframework.transaction.annotation.Propagation;
import org.springframework.transaction.annotation.Transactional;
import com.softserve.edu.dao.IEntityDao;
import com.softserve.edu.entity.MyEntity;
    @Transactional(readOnly = true)
    public class MyEntityService implements IMyEntityService {
        private IEntityDao dao;
        public void setDao(IEntityDao dao) {
            this.dao = dao;
        }
        @Override
        @Transactional(readOnly = false, propagation = Propagation.REQUIRED)
        public void saveEntity(MyEntity entity) {
            dao.save(entity);
        }
    }
}

```

applicationContext.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:tx="http://www.springframework.org/schema/tx"
xsi:schemaLocation="http://www.springframework.org/schema/beans
http://www.springframework.org/schema/beans/spring-beans-2.0.xsd
http://www.springframework.org/schema/tx
http://www.springframework.org/schema/tx/spring-tx-2.0.xsd">
</beans>

<bean id="propertyConfigurer"
    class="org.springframework.beans.factory.config.PropertyPlaceholderConfigurer">
    <property name="location" value="jdbc.properties" />
</bean>

<bean id="dataSource" class="org.apache.commons.dbcp.BasicDataSource" destroyMethod="
close">
    <property name="driverClassName" value="${jdbc.driverClassName}" />
    <property name="url" value="${jdbc.url}" />
    <property name="username" value="${jdbc.username}" />
    <property name="password" value="${jdbc.password}" />
</bean>

<bean id="sessionFactory"
    class="org.springframework.orm.hibernate3.LocalSessionFactoryBean">
    <property name="dataSource" ref="dataSource" />
    <property name="configLocation" value="classpath:/hibernate.cfg.xml" />
    <property name="configurationClass"
        value="org.hibernate.cfg.AnnotationConfiguration" />
    <property name="hibernateProperties">
        <props>
            <prop key="hibernate.dialect">${hibernate.dialect}</prop>
        </props>
    </property>
</bean>

<tx:annotation-driven transaction-manager="txManager" />
<bean id="txManager"
    class="org.springframework.orm.hibernate3.HibernateTransactionManager">
    <property name="sessionFactory" ref="sessionFactory" />
</bean>

```

```
<bean id="entityDAO" class="com.softserve.edu.dao.EntityDao">
  <property name="sessionFactory" ref="sessionFactory" />
</bean>
<bean id="entityService" class="com.softserve.edu.services.MyEntityService">
  <property name="dao" ref="entityDAO" />
</bean>
```

```
package com.softserve.edu;
import org.springframework.context.support.ClassPathXmlApplicationContext;
import com.softserve.edu.entity.MyEntity;
import com.softserve.edu.services.IMyEntityService;
```

```
public class Main {
  public static void main(String[] args) {
    ClassPathXmlApplicationContext ctx = new
    ClassPathXmlApplicationContext("applicationContext.xml");
    IMyEntityService service = (IMyEntityService) ctx.getBean("entityService");
    MyEntity entity = new MyEntity();
    entity.setName("Hello");
    service.saveEntity(entity);
  }
}
```

Spring WEB

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
java.sun.com/xml/ns/javaee/web-app_2_5.xsd"
version="2.5">
<context-param>
  <param-name>contextConfigLocation</param-name>
  <param-value>/WEB-INF/dispatcher-servlet.xml</param-value>
</context-param>
<listener-class>org.springframework.web.context.ContextLoaderListener</listener-
class>
<servlet-name>dispatcher</servlet-name>
<servlet-class>org.springframework.web.servlet.DispatcherServlet</servlet-class>
<load-on-startup>1</load-on-startup>
<servlet-mapping>
  <servlet-name>dispatcher</servlet-name>
  <url-pattern>*.form</url-pattern>
</servlet-mapping>
<welcome-file-list>
  <welcome-file>/WEB-INF/pages/index.jsp</welcome-file>
</welcome-file-list>
</web-app>
```

dispatcher-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:context="http://www.springframework.org/schema/context"
xmlns:mvc="http://www.springframework.org/schema/tx"
xsi:schemaLocation="http://www.springframework.org/schema/beans
http://www.springframework.org/schema/beans/spring-beans.xsd
http://www.springframework.org/schema/context
http://www.springframework.org/schema/context/spring-context.xsd
http://www.springframework.org/schema/tx
http://www.springframework.org/schema/tx/springtx-
2.5.xsd">
<context:component-scan base-package="com.softserve.edu"/>
<bean
class="org.springframework.web.servlet.mvc.annotation.DefaultAnnotationHandlerMap
ping"/>
<bean
class="org.springframework.web.servlet.mvc.annotation.AnnotationMethodHandlerAdap
ter"/>
<bean id="viewResolver"
class="org.springframework.web.servlet.view.InternalResourceViewResolver">
  <property name="viewClass"
value="org.springframework.web.servlet.view.JstlView"/>
  <property name="prefix" value="/WEB-INF/pages/" />
  <property name="suffix" value=".jsp"/>
</bean>
```

```
</bean>
</beans>
```

index.jsp

```
<%@ page contentType="text/html; charset=UTF-8" language="java" %>
<html>
<head><title>Simple jsp page</title></head>
<body>
  <form action="test.form" method="get">
    <input type="text" name="name">
    <input type="submit">
  </form>
</body>
</html>
```

HelloController.java

```
package com.softserve.edu;
import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
import org.springframework.web.bind.annotation.RequestParam;
@Controller
public class HelloController {
  @RequestMapping(value = "/test.form", method = RequestMethod.GET)
  public String test(@RequestParam("name") String param, Model model){
    model.addAttribute("name", param);
    return "hello";
  }
}
```

```
model.addAttribute("name", param);
request.setAttribute("name", param);
```

hello.jsp

```
<%@ page contentType="text/html; charset=UTF-8" language="java" %>
<html>
<head><title>Simple jsp page</title></head>
<body>
  Hello <%= request.getAttribute("name")%>
</body>
</html>
```