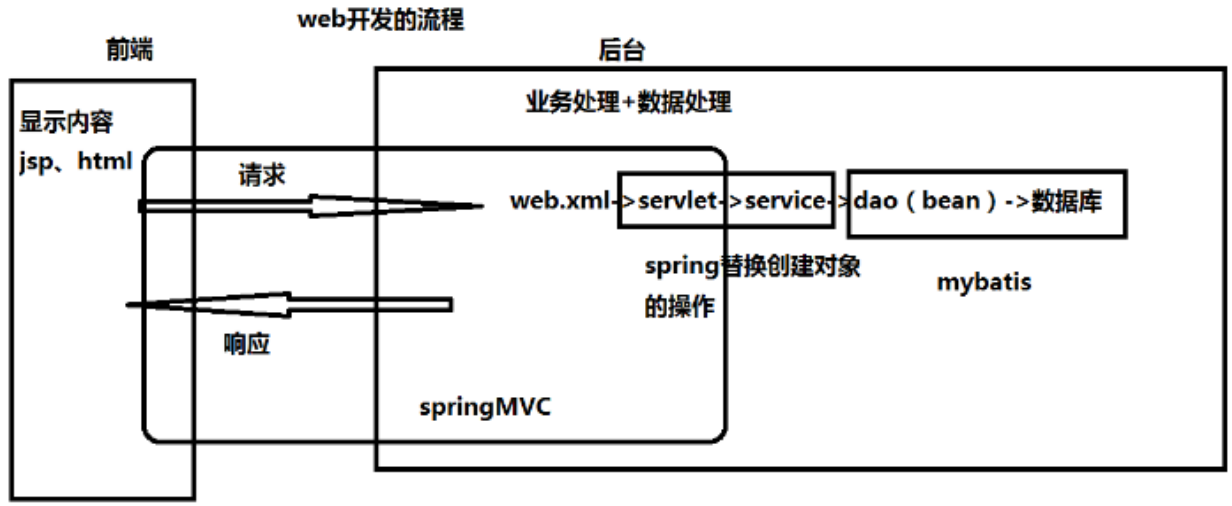
ssm框架整合



1.添加依赖包，可以通过properties统一框架版本

```
<properties>
    <springversion>5.0.8.RELEASE</springversion>
</properties>

 <dependencies>
      <!-- 加入ServletAPI -->
      <dependency>
          <groupId>javax.servlet</groupId>
          <artifactId>javax.servlet-api</artifactId>
          <version>3.1.0</version>
          <scope>provided</scope>
      </dependency>
      <!-- MySQL依赖 start -->
      <dependency>
          <groupId>mysql</groupId>
          <artifactId>mysql-connector-java</artifactId>
          <version>5.1.38</version>
      </dependency>
      <!-- 加入MyBatis 依赖 start -->
      <dependency>
          <groupId>org.mybatis</groupId>
          <artifactId>mybatis</artifactId>
          <version>3.2.8</version>
      </dependency>
      <!-- 引入Spring(包含SpringMVC) 依赖 start -->
      <dependency>
          <groupId>org.springframework</groupId>
          <artifactId>spring-core</artifactId>
          <version>${springversion}</version>
      </dependency>
```

```
        <dependency>
            <groupId>org.springframework</groupId>
            <artifactId>spring-web</artifactId>
            <version>${springversion}</version>
        </dependency>
        <dependency>
            <groupId>org.springframework</groupId>
            <artifactId>spring-oxm</artifactId>
            <version>${springversion}</version>
        </dependency>
        <dependency>
            <groupId>org.springframework</groupId>
            <artifactId>spring-tx</artifactId>
            <version>${springversion}</version>
        </dependency>
        <dependency>
            <groupId>org.springframework</groupId>
            <artifactId>spring-jdbc</artifactId>
            <version>${springversion}</version>
        </dependency>
        <dependency>
            <groupId>org.springframework</groupId>
            <artifactId>spring-webmvc</artifactId>
            <version>${springversion}</version>
        </dependency>
        <dependency>
            <groupId>org.springframework</groupId>
            <artifactId>spring-aop</artifactId>
            <version>${springversion}</version>
        </dependency>
        <dependency>
            <groupId>org.springframework</groupId>
            <artifactId>spring-context-support</artifactId>
            <version>${springversion}</version>
        </dependency>
        <dependency>
            <groupId>org.springframework</groupId>
            <artifactId>spring-test</artifactId>
            <version>${springversion}</version>
        </dependency>
        <!-- 引用插件依赖：MyBatis整合Spring,如果mybatis版本在3.4及以上版本
           mybatis-spring的版本要在1.3以上     -->
        <dependency>
            <groupId>org.mybatis</groupId>
            <artifactId>mybatis-spring</artifactId>
            <version>1.2.2</version>
        </dependency>
        <!-- JSTL -->
        <dependency>
            <groupId>jstl</groupId>
            <artifactId>jstl</artifactId>
            <version>1.2</version>

        </dependency>
```

```
      <!-- 德鲁伊数据连接池 -->
      <dependency>
          <groupId>com.alibaba</groupId>
          <artifactId>druid</artifactId>
          <version>1.0.9</version>
      </dependency>
      <!-- pagehelper -->
      <dependency>
          <groupId>com.github.pagehelper</groupId>
          <artifactId>pagehelper</artifactId>
          <version>4.1.6</version>
      </dependency>
      <!--处理json-->
      <dependency>
          <groupId>com.fasterxml.jackson.core</groupId>
          <artifactId>jackson-databind</artifactId>
          <version>2.9.5</version>
      </dependency>
      <!--javaee-->
      <dependency>
          <groupId>javax</groupId>
          <artifactId>javaee-api</artifactId>
          <version>7.0</version>
          <scope>provided</scope>
      </dependency>
   <!--文件上传下载-->
      <dependency>
          <groupId>commons-fileupload</groupId>
          <artifactId>commons-fileupload</artifactId>
          <version>1.3.1</version>
      </dependency>
      <dependency>
          <groupId>commons-io</groupId>
          <artifactId>commons-io</artifactId>
          <version>2.4</version>
      </dependency>
  </dependencies>



如果遇到声明式事务报错，需要添加下面的依赖包
<dependency>
    <groupId>org.aspectj</groupId>
    <artifactId>aspectjweaver</artifactId>
    <version>1.9.1</version>
</dependency>
```

2.添加spring配置文件，ssm中可以省略mybatis.xml文件

3.配置web.xml文件，同时加载spring配置文件

```
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://java.sun.com/xml/ns/javaee"
```

```
xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd" version="2.5">


<servlet>
    <servlet-name>mvc</servlet-name>
    <servlet-class>org.springframework.web.servlet.DispatcherServlet</servlet-class>
    <init-param>
      <param-name>contextConfigLocation</param-name>
      <param-value>classpath:applicationContext.xml</param-value>
    </init-param>
  </servlet>

  <servlet-mapping>
        <servlet-name>mvc</servlet-name>
        <url-pattern>/</url-pattern>
  </servlet-mapping>


   <filter>
    <filter-name>aa</filter-name>
    <filter-class>org.springframework.web.filter.CharacterEncodingFilter</filter-class>
    <init-param>
      <param-name>encoding</param-name>
      <param-value>utf-8</param-value>
    </init-param>
   </filter>

   <filter-mapping>
    <filter-name>aa</filter-name>
    <url-pattern>/*</url-pattern>
   </filter-mapping>
```

4.创建数据表,添加项目包结构，包括实体类等

给dao,service,web包下使用注解创建对象，给service,web中的属性注入对象

5.配置文件代码

```
 <!--1.创建数据源,使用spring连接数据库 -->
<context:property-placeholder location="db.properties" system-properties-mode="FALLBACK"/>
<bean id="db" destroy-method="close" class="com.alibaba.druid.pool.DruidDataSource">
       <property name="url" value="${url}"></property>
        <property name="username" value="${username}"></property>
        <property name="password" value="${password}"></property>
        <property name="driverClassName" value="${driver}"></property>
        <property name="maxActive" value="10"/>
        <property name="minIdle" value="5"/>
    </bean>

<!--2.扫描注解包-->
  <context:component-scan base-package="com"></context:component-scan>

<!--3.创建视图解析器-->
```

```
    <bean class="org.springframework.web.servlet.view.InternalResourceViewResolver">
        <property name="prefix" value="/"/>
        <property name="suffix" value=".jsp"/>
    </bean>
<!--4.加载注解驱动-->
    <mvc:annotation-driven></mvc:annotation-driven>

<!--5.创建sqlsession工厂-->
    <bean id="fac" class="org.mybatis.spring.SqlSessionFactoryBean">
        <property name="dataSource" ref="db" ></property>
        <property name="mapperLocations" value="classpath:/mapper/*.xml"></property>
        <property name="configLocation" value="classpath:mybatis.xml"></property>
    </bean>
 <!--6.使用dao层实现类的时候，需要得到sqlSessionTemplate对象
    <bean id="temp" class="org.mybatis.spring.SqlSessionTemplate">
         <constructor-arg index="0" ref="fac"></constructor-arg>
    </bean>-->
 <!--7.配置事务-->
   <bean id="tx" class="org.springframework.jdbc.datasource.DataSourceTransactionManager">
       <property name="dataSource" ref="db"></property>
   </bean>
  <tx:annotation-driven transaction-manager="mytx"></tx:annotation-driven>
    <!--8.配置静态资源-->
    <mvc:resources mapping="/css/**" location="/css/"></mvc:resources>
    <mvc:resources mapping="/dtree/**" location="/dtree/"></mvc:resources>
    <mvc:resources mapping="/Images/**" location="/Images/"></mvc:resources>
    <mvc:resources mapping="/img/**" location="/img/"></mvc:resources>
    <mvc:resources mapping="/Script/**" location="/Script/"></mvc:resources>
    <mvc:resources mapping="/Style/**" location="/Style/"></mvc:resources>
 或者:
  <mvc:default-servlet-handler></mvc:default-servlet-handler>
```

6.配置controller文件

使用的注解：@Controller,@RequestMapping,@AutoWired,@Qualifier("empBiz")

7.添加service,dao层

使用的注解：@Service ， @AutoWired

(1) dao层省略了实现类

(2) dao 层只定义接口,由小树叶创建dao层对象以及扫描mapper文件

注:当添加了spring-jdbc的jar包后，会自动提交事务

补充:

分页插件:

```
    <plugins>
         <!-- PageHelper4.1.6 -->
         <plugin interceptor="com.github.pagehelper.PageHelper">
              <property name="dialect" value="mysql"/>
        </plugin>
     </plugins>
```

(1) 省略dao层实现类(使用MapperScannerConfigurer替代SqlSessionTemplate):

```
<!--省略实现类-->
  <bean class="org.mybatis.spring.mapper.MapperScannerConfigurer">
       <property name="basePackage" value="com.dao"></property>
       <property name="sqlSessionFactoryBeanName" value="fac"></property>
   </bean>
```

注意:此时也可以测试使用属性文件的方式来加载数据源(支持属性文件链接数据源)

(2) maven类型的web项目加载mybatis-generator插件

注意:反向生成后，最好把该指令删除，否则不小心点了之后，又会生成一遍代码，尤其是mapper.xml文件中sql语句又会生成一遍，运行时会报错。