myBatis spring설정(mvc2)
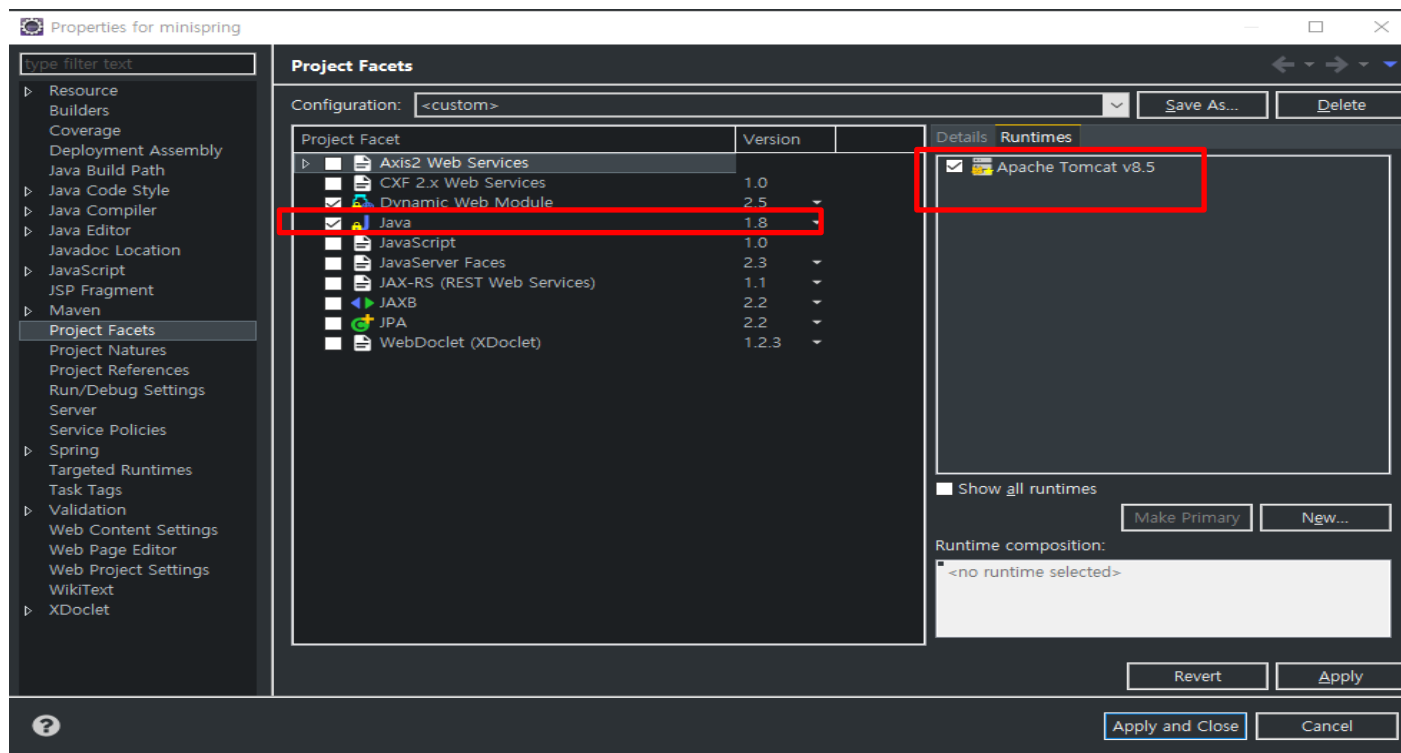
----

1. project facets : jdk, tomcat
2. pom.xml

       1)jdk, fwork

       2)repository

       3)mvn dependency 5개 설정

       - driver, dbcp

       - mybatis, mybatis-spring, spring-jdbc

3. context파일에 빈 설정

       1) dbcp: driver, url, user, pw설정

           (db.properties) => ns: context설정

       2) mybatis: 설정된 객체의 주소만 넣어서 객체 생성

       3) mybatis factory: dbcp설정, mybatis설정 파일 지정

4. myBatis설정파일

       1) mapper파일: 테이블당 보통 하나씩 만든다.

       2) config파일: mapper파일 관리, 별명 설정

5. mvc에 맞게 구현

       1)입력화면

       2)컨트롤러

       3)dao객체 사용: dao내에 mybatis주입

       4)views화면

```xml
1  <?xml version="1.0" encoding="UTF-8"?>
2  <project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
3      xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/maven-v4_0_0.xsd">
4      <modelVersion>4.0.0</modelVersion>
5      <groupId>com.mega</groupId>
6      <artifactId>mini</artifactId>
7      <name>minispring</name>
8      <packaging>war</packaging>
9      <version>1.0.0-BUILD-SNAPSHOT</version>
10     <properties>
11         <java-version>1.8</java-version>
12         <org.springframework-version>5.0.1.RELEASE</org.springframework-version>
13         <org.aspectj-version>1.6.10</org.aspectj-version>
14         <org.slf4j-version>1.6.6</org.slf4j-version>
15     </properties>
16     <dependencies>
```


Properties for minispring

Project Facets

Configuration: <custom>   Save As...   Delete

Project Facet	Version
▷ ☐ Axis2 Web Services	
☐ CXF 2.x Web Services	1.0
☑ Dynamic Web Module	2.5
☑ Java	1.8
☐ JavaScript	1.0
☐ JavaServer Faces	2.3
☐ JAX-RS (REST Web Services)	1.1
☐ JAXB	2.2
☐ JPA	2.2
☐ WebDoclet (XDoclet)	1.2.3

Details Runtimes

☑ Apache Tomcat v8.5

☐ Show all runtimes

Make Primary   New...

Runtime composition:
<no runtime selected>

Revert   Apply

Apply and Close   Cancel

Resource
Builders
Coverage
Deployment Assembly
Java Build Path
▷ Java Code Style
▷ Java Compiler
▷ Java Editor
Javadoc Location
▷ JavaScript
JSP Fragment
▷ Maven
Project Facets
Project Natures
Project References
Run/Debug Settings
Server
Service Policies
▷ Spring
Targeted Runtimes
Task Tags
▷ Validation
Web Content Settings
Web Page Editor
Web Project Settings
WikiText
▷ XDoclet

```xml
<!-- https://mvnrepository.com/artifact/org.mybatis/mybatis -->
<!-- 구글의 mybatis 라이브러리 : dbcp + jdbc3~4단계를 해줌 -->
<dependency>
    <groupId>org.mybatis</groupId>
    <artifactId>mybatis</artifactId>
    <version>3.4.0</version>
</dependency>


<!-- https://mvnrepository.com/artifact/commons-dbcp/commons-dbcp -->
<!-- jdbc1-2단계까지 해주는 dbcp 라이브러리 기능 추가 -->
<dependency>
    <groupId>commons-dbcp</groupId>
    <artifactId>commons-dbcp</artifactId>
    <version>1.4</version>
</dependency>


<!-- https://mvnrepository.com/artifact/mysql/mysql-connector-java -->
<!-- mysql 연결 커넥터 -->
<dependency>
    <groupId>mysql</groupId>
    <artifactId>mysql-connector-java</artifactId>
    <version>5.1.46</version>
</dependency>

<!-- https://mvnrepository.com/artifact/org.springframework/spring-jdbc -->
<!-- spring 확장 기능 추가 -->
<dependency>
    <groupId>org.springframework</groupId>
    <artifactId>spring-jdbc</artifactId>
    <version>5.0.1.RELEASE</version>
</dependency>

<!-- https://mvnrepository.com/artifact/org.mybatis/mybatis-spring -->
<!-- spring + mybatis 연결 라이브러리 -->
<dependency>
    <groupId>org.mybatis</groupId>
    <artifactId>mybatis-spring</artifactId>
    <version>1.3.2</version>
```
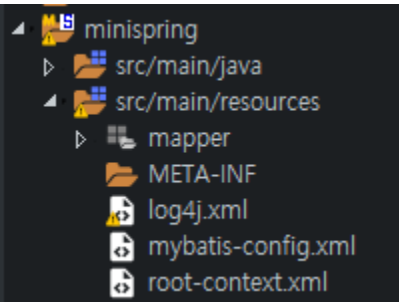
Pom.xml

web.xml

```xml
1  <?xml version="1.0" encoding="UTF-8"?>
2  <web-app version="2.5" xmlns="http://java.sun.com/xml/ns/javaee"
3      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4      xsi:schemaLocation="http://java.sun.com/xml/ns/javaee https://java.sun.com/xml/ns/javaee/web-app_2_5.xsd">
5
6      <!-- The definition of the Root Spring Container shared by all Servlets and Filters -->
7      <context-param>
8          <param-name>contextConfigLocation</param-name>
9          <param-value>classpath:root-context.xml</param-value>
10     </context-param>
11
12     <!-- Creates the Spring Container shared by all Servlets and Filters -->
13     <listener>
14         <listener-class>org.springframework.web.context.ContextLoaderListener</listener-class>
15     </listener>
16
17     <!-- Processes application requests -->
18     <servlet>
19         <servlet-name>appServlet</servlet-name>
20         <servlet-class>org.springframework.web.servlet.DispatcherServlet</servlet-class>
21         <init-param>
22             <param-name>contextConfigLocation</param-name>
23             <param-value>/WEB-INF/spring/appServlet/servlet-context.xml</param-value>
24         </init-param>
25         <load-on-startup>1</load-on-startup>
26     </servlet>
27
28     <servlet-mapping>
29         <servlet-name>appServlet</servlet-name>
30         <url-pattern>/</url-pattern>
31     </servlet-mapping>
32
33 </web-app>
34
```

Root-context.xml

```
minispring
  src/main/java
  src/main/resources
    mapper
    META-INF
    log4j.xml
    mybatis-config.xml
    root-context.xml
```

```
web.xml    mybatis-config.xml    root-context.xml

 1  <?xml version="1.0" encoding="UTF-8"?>
 2  <beans xmlns="http://www.springframework.org/schema/beans"
 3      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 4      xsi:schemaLocation="http://www.springframework.org/schema/beans http://www.springframework.org/schema/beans/spring-beans.xsd">
 5
 6
 7  <bean id="mybatis" class="org.mybatis.spring.SqlSessionTemplate">
 8      <constructor-arg ref="config"></constructor-arg>
 9  </bean>
10
11  <!-- mybatis설정만 담당하는 라이브러리: sql객체 생성-->
12  <bean id="config" class="org.mybatis.spring.SqlSessionFactoryBean">
13      <property name="configLocation" value="classpath:mybatis-config.xml"></property>
14      <property name="dataSource" ref="dbcp"></property>
15  </bean>
16
17  <!--  DBCP dbcp = new DBCP(); -->
18  <bean id="dbcp" class="org.apache.commons.dbcp.BasicDataSource">
19      <property name="driverClassName" value="com.mysql.jdbc.Driver"></property>
20      <property name="url" value="jdbc:mysql://localhost:3366/shop"></property>
21      <property name="username" value="root"></property>
22      <property name="password" value="1234"></property>
23  </bean>
24
25  </beans>
26
```

Mybatis-config.xml

```xml
1 <?xml version="1.0" encoding="UTF-8" ?>
2 <!DOCTYPE configuration
3   PUBLIC "-//mybatis.org//DTD Config 3.0//EN"
4   "http://mybatis.org/dtd/mybatis-3-config.dtd">
5 <configuration>
6   <typeAliases>
7     <typeAlias type="com.mega.mini.MemberVO" alias="memberVO"></typeAlias>
8   </typeAliases>
9   <mappers>
10    <mapper resource="mapper/memberMapper.xml" />
11  </mappers>
12 </configuration>
```

web.xml | mybatis-config.xml | root-context.xml | memberMapper.xml ✕

src/main/resources
▲ mapper
  memberMapper.xml

```xml
1 <?xml version="1.0" encoding="UTF-8" ?>
2 <!DOCTYPE mapper PUBLIC "-//mybatis.org//DTD Mapper 3.0//EN"
3   "http://mybatis.org/dtd/mybatis-3-mapper.dtd">
4
5 <mapper namespace="member">
6   <insert id="insert" parameterType="memberVO">
7     insert into MEMBER values (#{id}, #{pw}, #{name}, #{tel})
8   </insert>
9   <delete id="delete" parameterType="memberVO">
10    delete from MEMBER where id = #{id}
11  </delete>
12  <update id="update" parameterType="memberVO">
13    update MEMBER set tel = #{tel} where id = #{id}
14  </update>
15  <select id="select" parameterType="memberVO">
16    select * from MEMBER where id = #{id}
17  </select>
18 </mapper>
19
```