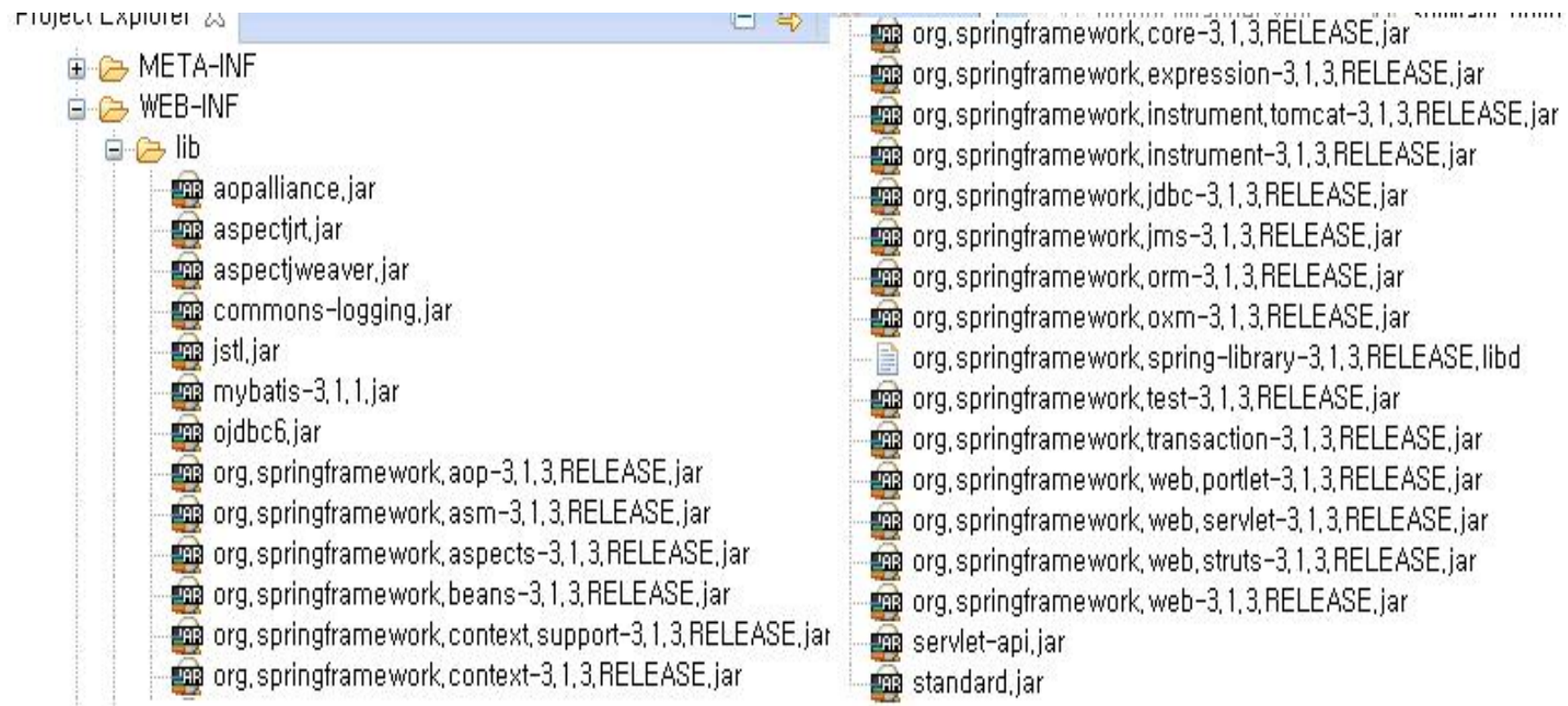


# mybatis의 사용



# mybatis의 사용

```
ProductController.java ProductDao.java
1 package kosta.product.dao;
2
3 import java.util.List;
4
5
6
7
8 public interface ProductDao {
9     List<ProductVO> select();
10 }
11

ProductDaoImpl.java
1 package kosta.product.dao;
2
3 import java.util.List;
4
5
6
7
8
9 public class ProductDaoImpl implements ProductDao {
10
11     @Override
12     public List<ProductVO> select() {
13         // TODO Auto-generated method stub
14         return ProductManager.select();
15     }
16 }
17
```

# mybatis의 사용

```
ProductVO.java ✖
1 package kosta.product.dto;
2
3 public class ProductVO {
4     private String p_code;
5     private String p_name;
6     private int p_price;
7     private int p_qty;
8     private String p_detail;
9
10    public String getP_code() {
11        return p_code;
12    }
```

# mybatis의 사용

```
ProductController.java
4+ import java.util.HashMap;
18
19 @Controller
20 public class ProductController {
21
22     @Autowired
23     private ProductDao productDao;
24
25     @RequestMapping(value="{url}.do") //등록, 수정
26     public void url(@ModelAttribute("vo") ProductVO vo){
27         //void는 요청이름과 동일한 WEB-INF/view/productForm.jsp이동
28
29     }
30
31
32     @RequestMapping("/select.do")
33     public ModelAndView select(String keyField, String keyWord, String alignTarget){
34         ModelAndView mv = new ModelAndView();
35         List<ProductVO> list = productDao.select();
36         mv.addObject("list", list);
37         mv.setViewName("productList");
38         return mv;
39     }
40
```

# mybatis의 사용

```
ProductManager.java
1 package kosta.product.org.data;
2
3 import java.io.IOException;
4 import java.io.Reader;
5 import java.util.List;
6 import kosta.product.dto.ProductVO;
7 import org.apache.ibatis.io.Resources;
8 import org.apache.ibatis.session.SqlSession;
9 import org.apache.ibatis.session.SqlSessionFactory;
10 import org.apache.ibatis.session.SqlSessionFactoryBuilder;
11
12 public class ProductManager {
13     private static SqlSessionFactory sqlMapper;
14     static{
15         try{
16             Reader reader =
17                 Resources.getResourceAsReader("kosta/product/org/data/SqlMapConfig.xml");
18             sqlMapper = new SqlSessionFactoryBuilder().build(reader);
19             reader.close();
20         } catch (IOException e) {
21             System.out.println(e);
22         }
23     }
24
25     public static List<ProductVO> select(){
26         SqlSession session = sqlMapper.openSession();
27         List<ProductVO> list = session.selectList("product.selectProduct");
28         session.close();
29         return list;
30     }
31 }
```



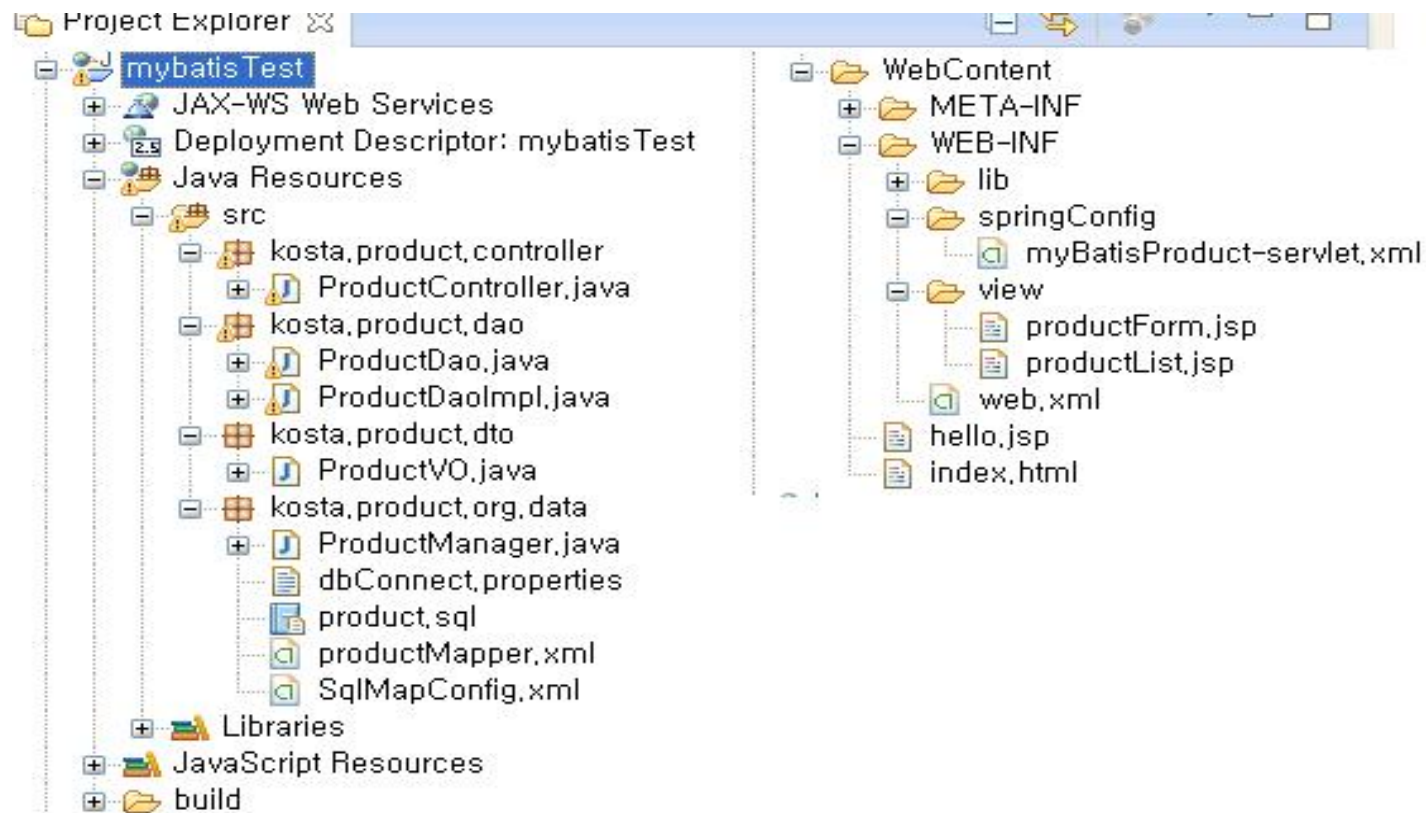
# mybatis의 사용

```
SqlMapConfig.xml
2 <!DOCTYPE configuration
3 PUBLIC "-//mybatis.org//DTD Config 3.0//EN"
4 "http://mybatis.org/dtd/mybatis-3-config.dtd">
5
6 <configuration>
7     <!-- 외부 db연결파일 가져오기 -->
8     <properties resource="kosta/product/org/data/dbConnect.properties"/>
9
10    <!-- 클래스들의 전체 경로와 이름에 별칭 만들기 -->
11    <typeAliases>
12        <typeAlias type="kosta.product.dto.ProductVO" alias="productVo"/>
13    </typeAliases>
14
15    <environments default="development">
16        <environment id="development">
17            <transactionManager type="JDBC" />
18            <dataSource type="POOLED">
19                <property name="driver" value="${driver}" />
20                <property name="url" value="${url}" />
21                <property name="username" value="${username}" />
22                <property name="password" value="${userpass}" />
23            </dataSource>
24        </environment>
25    </environments>
26
27    <mappers>
28        <mapper resource="kosta/product/org/data/productMapper.xml"/>
29    </mappers>
30 </configuration>
```

# mybatis의 사용

```
jdbc.properties  SqlMapConfig.xml  productMapper.xml  productMapper.xml  productMapper.xml  productMapper.xml  ✖
1 <?xml version="1.0" encoding="UTF-8" ?>
2 <!DOCTYPE mapper
3 PUBLIC "-//mybatis.org//DTD Mapper 3.0//EN"
4 "http://mybatis.org/dtd/mybatis-3-mapper.dtd">
5
6 <mapper namespace="product">
7   <select id="selectProduct" resultType="productVo" >
8     SELECT * FROM productList
9   </select>
10 </mapper>
```

# mybatis의 사용





# mybatis의 사용

```
myBatisProduct-servlet.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       xmlns:context="http://www.springframework.org/schema/context"
5       xsi:schemaLocation="http://www.springframework.org/schema/beans
6       http://www.springframework.org/schema/beans/spring-beans-3.1.xsd
7       http://www.springframework.org/schema/context
8       http://www.springframework.org/schema/context/spring-context-3.1.xsd">
9
10    <!-- ViewResolver를 등록 -->
11    <bean class="org.springframework.web.servlet.view.InternalResourceViewResolver">
12        <property name="prefix" value="/WEB-INF/view/" /> <!-- view에 해당하는 폴더 경로지정 -->
13        <property name="suffix" value=".jsp" /> <!-- view문서의 확장자지정 -->
14    </bean>
15
16    <context:component-scan base-package="kosta.product.controller" />
17
18    <bean class="kosta.product.dao.ProductDaoImpl" id="productDao" />
19
20 </beans>
```

# mybatis의 사용

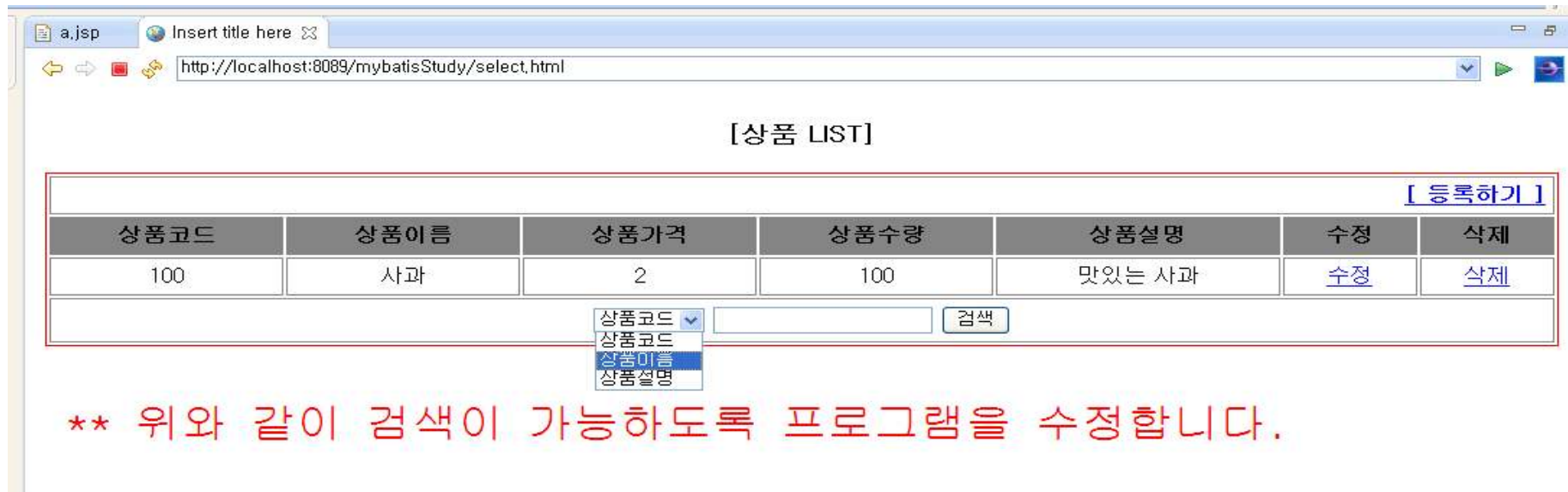
```
16<table cellpadding="0">
17 <caption><h3> [상품 LIST]</h3></caption>
18<tr bgcolor="gray">
19   <th>상품코드</th>
20   <th>상품명</th>
21   <th>상품가격</th>
22   <th>상품수량</th>
23   <th>상품설명</th>
24   <th>수정</th>
25   <th>삭제</th>
26 </tr>
27
28<:forEach items="${list}" var="i" >
29   <tr>
30     <th>${i.p_code} </th>
31     <th>${i.p_name} </th>
32     <th>${i.p_price} </th>
33     <th>${i.p_qty} </th>
34     <th>${i.p_detail} </th>
35     <th><a href="productForm.do?p_code=${i.p_code}">수정</a> </th>
36     <th><a href="productDel.do?p_code=${i.p_code}">삭제</a> </th>
37   </tr>
38 </:forEach>
39 </table>
40 </body>
41 </html>
```

# mybatis의 사용

\*\* 레코드의 추가, 수정, 삭제, 검색이 가능하도록  
다음과 같이 프로그램을 수정합니다.

# mybatis의 사용

\*\* 레코드의 추가, 수정, 삭제, 검색이 가능하도록  
다음과 같이 프로그램을 수정합니다.



a.jsp Insert title here

http://localhost:8089/mybatisStudy/select.html

[상품 LIST]

[\[ 등록하기 \]](#)

상품코드	상품명	상품가격	상품수량	상품설명	수정	삭제
100	사과	2	100	맛있는 사과	<a href="#">수정</a>	<a href="#">삭제</a>

상품코드 상품명 상품가격 상품수량 상품설명

상품명

검색

\*\* 위와 같이 검색이 가능하도록 프로그램을 수정합니다.

# mybatis의 사용

```
productMapper.xml
1 <?xml version="1.0" encoding="UTF-8" ?>
2 <!DOCTYPE mapper
3 PUBLIC "-//mybatis.org//DTD Mapper 3.0//EN"
4 "http://mybatis.org/dtd/mybatis-3-mapper.dtd">
5
6 <mapper namespace="product">
7     <!-- 레코드 삽입 -->
8     <insert id="insertProduct" parameterType="productVo" >
9         INSERT INTO productList( p_code, p_name, p_qty, p_price, p_detail)
10         VALUES(#{p_code}, #{p_name},#{p_qty}, #{p_price}, #{p_detail})
11     </insert>
12
13     <!-- 레코드 삭제 -->
14     <delete id="productDelete" parameterType="String">
15         delete productList where p_code = #{p_code}
16     </delete>
17
```



# mybatis의 사용

```
ProductManager.java ✖
1 package kosta.product.org.data;
2
3 import java.io.IOException;
18
19 public class ProductManager {
20     private static SqlSessionFactory sqlMapper;
21
22     public static int insert(ProductVO productVo) {
23         SqlSession session = sqlMapper.openSession();
24         int result = session.insert("product.insertProduct", productVo);
25         session.commit();
26         session.close();
27         return result;
28     }
29     public static List<ProductVO> select(Map<String, String> map) {
30         SqlSession session = sqlMapper.openSession();
31         List<ProductVO> list = session.selectList("product.selectProduct",
32             map);
33         session.close();
34         return list;
35     }
}
```

# mybatis의 사용

```
ProductDao.java ProductDaoImpl.java
1 package kostas.product.dao;
2
3 import java.util.List;
4
5
6
7
8 public interface ProductDao {
9     |
10    int insert(ProductVO productVo);
11
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```

# mybatis의 사용

```
13 @Controller
14 public class ProductController {
15
16     @Autowired
17     private ProductDao productDao;
18
19     @RequestMapping("/select.html")
20     public ModelAndView select() {
21         f
22     }
23 }
24
```

```
9 @Repository
10 public interface ProductDao {
11     List<ProductVo> select();
12 }
13
```

main.xml

```
15
16 <context:component-scan
17     base-package="com.product.controller"/>
18 <context:component-scan
19     base-package="com.product.dao"/>
20
```

# mybatis의 사용

```
13 @Controller
14 public class ProductController {
15
16     @Autowired
17     private ProductDao productDao;
18
19     @RequestMapping("/select.html")
20     public ModelAndView select() {
21         // ...
22     }
23 }

9 @Repository
10 public interface ProductDao {
11     List<ProductVo> select();
12 }
13

main.xml
15
16 <context:component-scan
17     base-package="com.product.controller"/>
18 <context:component-scan
19     base-package="com.product.dao"/>
20
```

# mybatis의 사용

\*\* 레코드의 추가, 수정, 삭제, 검색이 가능하도록  
다음과 같이 프로그램을 수정합니다.

Insert title here

http://localhost:8089/mybatisTest2/select.do

[상품 LIST]

[등록하기] [새로고침]

상품코드	상품명	상품가격	상품수량	상품설명	수정	삭제
100	사과	100	2	맛있는 사과	<a href="#">수정</a>	<a href="#">삭제</a>
총 레코드 수:					1 개	
<div>상품코드 <input type="text"/> <input type="button" value="검색"/></div>						
정렬대상 : <input type="radio"/> 상품코드 <input type="radio"/> 상품명 <input type="radio"/> 상품수량 <input type="radio"/> 상품설명 <input type="button" value="정렬하기"/>						
선택 : <input type="checkbox"/> 100 <input type="button" value="가져오기"/>						
레코드제한 : 시작 : <input type="text"/> ~ 개수 : <input type="text"/> <input type="button" value="가져오기"/>						



# mybatis의 사용

```
insert title here  productList.jsp ✕  
<form action="search.html" method="post">  
  <select name="keyField">  
    <option value="p_code">상품코드</option>  
    <option value="p_name">상품명</option>  
    <option value="p_detail">상품설명</option>  
  </select> |  
  <input type="text" name="keyWord" />  
  <input type="submit" value="검색" />  
</form>
```

# mybatis의 사용

```
@Controller
public class ProductController {

    @RequestMapping("/search.html")
    public ModelAndView searchProduct(String keyField, String keyWord)
    {
        Map<String, String> map = new HashMap<String,String>();

        map.put("keyField", keyField);
        map.put("keyWord", keyWord);

        ModelAndView mv = new ModelAndView();
        List<ProductVo> list = productDao.searchProduct(map);
        mv.addObject("list", list);
        mv.setViewName("productList");
        return mv;
    }
}
```

# mybatis의 사용

```
productMapper.xml
26
27 <select id="selectProduct" resultType="productVo" >
28     SELECT * FROM productList
29     <if test="keyWord!=null and keyWord!=''">
30         where ${keyField} like '%' || #{keyWord} || '%'
31     </if>
32
33     <if test="alignTarget!=null">
34         order by ${alignTarget}
35     </if>
36 </select>
37
```

# mybatis의 사용

```
productMapper.xml ProductDaoImpl.java
8
9 public class ProductDaoImpl implements ProductDao {
10
11     @Override
12     public int insert(ProductVO productVo) {
13         // TODO Auto-generated method stub
14         return ProductManager.insert(productVo);
15     }
16
17     @Override
18     public List<ProductVO> select(Map<String, String> map) {
19         // TODO Auto-generated method stub
20         return ProductManager.select(map);
21     }
22
```

# mybatis의 사용

ProductManager.java

```
19 public class ProductManager {
20     private static SqlSessionFactory sqlMapper;
21
22     public static int insert(ProductVO productVo) {
23         SqlSession session = sqlMapper.openSession();
24         int result = session.insert("product.insertProduct", productVo);
25         session.commit();
26         session.close();
27         return result;
28     }
29     public static List<ProductVO> select(Map<String, String> map) {
30         SqlSession session = sqlMapper.openSession();
31         List<ProductVO> list =
32             session.selectList("product.selectProduct", map);
33         session.close();
34         return list;
35     }
36 }
```