

□ 수행평가 - 빅데이터 분석시스템 구축 과정

1. 공공 데이터 또는 서울시 데이터 선택

- 시군구 지역코드

	A	B	C
1	상위 시도지역코드	시군구지역코드	시군구명
2		11	11110 종로구
3		11	11140 중구
4		11	11170 용산구
5		11	11200 성동구
6		11	11215 광진구
7		11	11230 동대문구

- 시도 지역코드

	A	B
1	시도 지역코드	지역명
2		11 서울
3		26 부산
4		27 대구
5		28 인천

- 실제진료정보_감기_시군구

	A	B	C
1	날짜	시군구지역코드	발생건수(건)
2	20140101	11110	53
3	20140101	11140	55
4	20140101	11170	120

2. 데이터를 빅데이터 시스템에 저장

- 시군구 지역코드/시도 지역코드/실제진료정보_감기_시군구 table 추가

- 시군구 지역코드 -> SiGunGu_LocalCode

```
hive> create table SiGunGu_LocalCode(HighSiDoLocalCode INT, SiGunGuLocalCode INT, SiGunGuName String)
> row format delimited fields terminated by ',' stored as textfile;
```

- 시도 지역코드 -> SiDo_LocalCode

```
hive> create table SiDo_LocalCode(SiDoLocalCode INT, LocalName String)
> row format delimited fields terminated by ' ' stored as textfile;
```

- 실제진료정보_감기_시군구 -> RealInfo_Cold_SiGunGu

```
hive> create table RealInfo_Cold_SiGunGu(Date INT, SiGunGuLocalCode INT, Cnt INT)
> row format delimited fields terminated by ' ' lines terminated by '\n' stored as textfile
```

- Data load

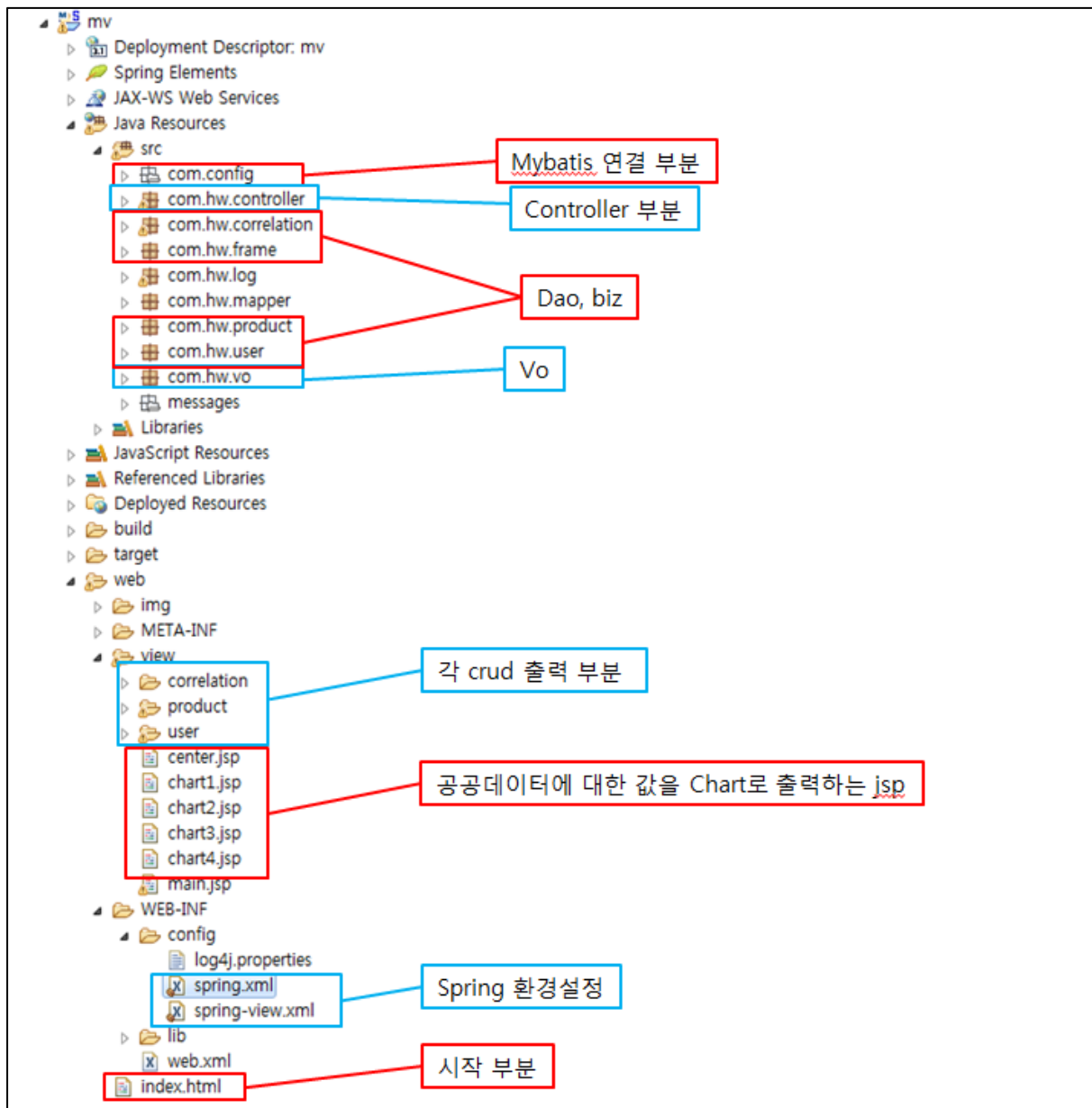
```
hive> load data local inpath '/root/질병/SiGunGu_LocalCode.txt' overwrite into table SiGunGu_LocalCode
```

```
hive> load data local inpath '/root/질병/SiDo_LocalCode.txt' overwrite into table SiDo_LocalCode
```

```
hive> load data local inpath '/root/질병/RealInfo_Cold_SiGunGu.txt' overwrite into table RealInfo_Cold_SiGunGu
```

3. 데이터 분석 화면을 구현 한다.

- eclipse 구성도



- 주요 소스(=chart3.jsp 결과 값이 chart로 출력되는 부분)

```

1 <? page language="java" contentType="text/html; charset=EUC-KR"
2 pageEncoding="EUC-KR"%>
3 <style>
4 #main_center{
5     margin:0 20px;
6     width:760px;
7     height:480px;
8     background:white;
9 }
10 </style>
11 <script>
12 function display(input){
13     Highcharts.chart('container', {
14         chart: {
15             type: 'variablepie'
16         },
17         title: {
18             text: 'Countries compared by population density and total area.'
19         },
20         tooltip: {
21             headerFormat: '',
22             pointFormat: '<span style="color:{point.color}">\u25CF</span> <b> {point.name}</b><br/>' +
23                 'Area (square km): <b>{point.y}</b><br/>' +
24                 'Population density (people per square km): <b>{point.z}</b><br/>'
25         },
26         series: [{
27             minPointSize: 10,
28             innerSize: '80%',
29             zMin: 0,
30             name: 'countries',
31             data: input
32         }]
33     });
34 }
35
36 $(document).ready(function(){
37     // Server에 데이터를 요청한다.
38     // AJAX로
39     $.ajax({

```

- 주요 소스(= spring.xml, spring-view.xml 스프링 환경 설정)

```

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     xmlns:aop="http://www.springframework.org/schema/aop"
6     xmlns:tx="http://www.springframework.org/schema/tx"
7     xsi:schemaLocation="
8         http://www.springframework.org/schema/beans
9         http://www.springframework.org/schema/beans/spring-beans-3.0.xsd
10        http://www.springframework.org/schema/context
11        http://www.springframework.org/schema/context/spring-context-3.0.xsd
12        http://www.springframework.org/schema/aop
13        http://www.springframework.org/schema/aop/spring-aop-3.0.xsd
14        http://www.springframework.org/schema/tx
15        http://www.springframework.org/schema/tx/spring-tx-3.0.xsd
16    ">
17
18
19 <bean id="expectionResolver"
20     class="org.springframework.web.servlet.handler.SimpleMappingExceptionResolver">
21     <property name="exceptionMappings">
22         <props>
23             <prop key="org.springframework.dao.DuplicateKeyException">
24                 error
25             </prop>
26         </props>
27     </property>
28 </bean>
29
30
31
32
33 </beans>

```

```

<!-- ViewResolver -->
<bean id="viewResolver"
class="org.springframework.web.servlet.view.InternalResourceViewResolver">
    <property name="prefix" value="/view/" />
    <property name="suffix" value=".jsp" />
    <property name="order" value="0" />
</bean>
<!-- 다국어 처리 -->

<bean id="messageSource"
class="org.springframework.context.support.ResourceBundleMessageSource">
    <property name="basenames">
        <list>
            <value>messages/messages</value>
        </list>
    </property>
</bean>
<!-- File Upload -->
<bean id="multipartResolver"
class="org.springframework.web.multipart.commons.CommonsMultipartResolver">
    <property name="maxUploadSize" value="50000000" />
</bean>

<!-- 1. Database Setting -->
<bean id="dataSource" class="org.springframework.jdbc.datasource.DriverManagerDataSource">
    <property name="driverClassName" value="oracle.jdbc.driver.OracleDriver" />
    <property name="url" value="jdbc:oracle:thin:@192.168.111.100:1521:xe" /> <!-- 192.168.111.100
    <property name="username" value="shop" />
    <property name="password" value="111111" />
</bean>

<!-- 2. Transaction Setting -->
<bean id="txManager" class="org.springframework.jdbc.datasource.DataSourceTransactionManager">
    <property name="dataSource" ref="dataSource" />
</bean>

```

- 주요 소스(= com.config.mybatis.xml mapper 연결)

```

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.hw.vo.User" alias="user" />
8         <typeAlias type="com.hw.vo.Product" alias="product" />
9         <typeAlias type="com.hw.vo.Correlation" alias="correlation" />
10    </typeAliases>
11
12    <mappers>
13        <mapper resource="com/config/usermapper.xml" />
14        <mapper resource="com/config/productmapper.xml" />
15        <mapper resource="com/config/correlationmapper.xml" />
16    </mappers>
17 </configuration>
18
19
20
21
22
23
24

```

- 주요 소스(= com.config.mybatis.xml mapper 연결)

- 결과화면 (시도 별 감기 집계)

