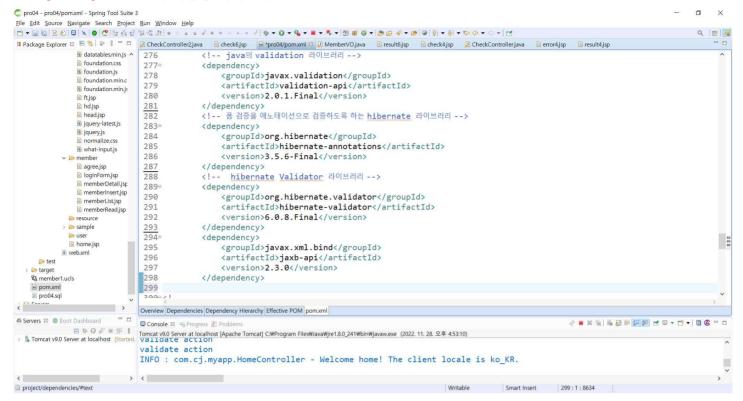
1-1. pro04/pom.xml 에 의존성 라이브러리 추가



1-2. 폼 컨트롤의 pattern 속성과 required로 폼 검증하기

pro04/src/main/webapp/WEB-INF/views/check/check1.jsp를 작성

```
pro04 - pro04/src/main/webapp/WEB-INF/views/check/check1.jsp - Spring Tool Suite 3
| Proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proof-proo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q 10 14
                                                                                                  6 <! DOCTYPE html>
                                                         ■ boardL
                                                                                                 7⊕<html>
                                             v 🕞 check
                                                                                                8e <head>
                                                        check1 check2
                                                                                                                            <meta charset="UTF-8">
                                                                                                                           <meta thtp-equiv="X-UA-Compatible" content="IE=edge">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
                                                                                             10
                                                         check3
                                                         check4
                                                                                             11
                                                          check5
                                                                                                                            <title>폼 유효성 검사1</title>
                                                                                             12
                                                         deck6
                                                                                              13 </head>
                                                         error1.j
                                                                                            140 <body>
                                                                                            15
                                                                                                                            ,
<h2>FORM 유효성 검사1</h2>
                                                         error4.j
                                                                                                                            <form action="./check1" method="post">
                                                                                                                                           id : <input type="text" name="id" id="id" pattern="^[a-z0-9]{5,12}" maxlength="12" required /><br>
bw : <input type="password" name="pw" id="pw" pattern="^[a-zA-Z0-9]{8,12}$" maxlength="12" required /><br>
cbutton class="btn" type="submit"> 전송</button>
                                                         error5.i
                                                         error6.j
                                                                                            17
                                                                                            18
                                                         form.js
                                                                                             19
                                                         result1
                                                                                             20
                                                                                                                           </form>
                                                          result2
                                                                                            21 </body>
                                                         result3
                                                                                         22 </html>
                                                         result4
```

1-3. 결과 페이지인 pro04/src/main/webapp/WEB-INF/views/check/result1.jsp 작성

```
Jsp - Spring Tool Suite 3
Window Help

$\text{$\delta$ \cdot 0 \times \frac{\alpha}{\alpha} \times 
        a check1.jsp  

servlet-con...  

check2.jsp  

result1.jsp  

» □ □
                   1 (%@ page language="java" contentType="text/html; charset=UTF-8"
2  pageEncoding="UTF-8"%)
3 <%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
4 <%@ taglib prefix="fmt" uri="http://java.sun.com/jsp/jstl/fmt" %>
5 <%@ taglib prefix="fn" uri = "http://java.sun.com/jsp/jstl/functions"%>
6 Chocype=html
                    6 <!DOCTYPE html>
                   70<html>
                   89 (head)
                                               <meta charset="UTF-8">
                                               10
                 11
                                               <title>결과1</title>
                 12
                 13 </head>
                149 <body>
                                                  <h2>결과1</h2>
                15
                16
                                                <div>
                                                   ${id }
                17
                18
                                                                   ${pw }
                                                </div>
                19
                 20 </body>
                21 </html>
```

1-4. 에러 페이지인 pro04/src/main/webapp/WEB-INF/views/check/error1.jsp 작성

```
jsp - Spring Tool Suite 3
Window Help

$\times 0 \cdot 
□ ② CheckControl... □ check6.jsp ☑ pro04/pom.xml ② MemberVO.java ② CheckControl... □ check1.jsp
                                                                                                                                                                                                                                                                                                                         1 (%0 page language="java" contentType="text/html; charset=UTF-8"
2 pageEncoding="UTF-8"%>
3 (%0 taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
4 (%0 taglib prefix="fmt" uri="http://java.sun.com/jsp/jstl/fmt" %>
5 (%0 taglib prefix="fm" uri= "http://java.sun.com/jsp/jstl/functions"%>
                  6 <! DOCTYPE html>
                   7⊕<html>
                   80 < head>
                  q
                                               <meta charset="UTF-8">
                                               <meta http-equiv="X-UA-Compatible" content="IE=edge">
                10
                 11
                                               <meta name="viewport" content="width=device-width, initial-scale=1.0">
                 12
                                              <title>에러 페이지</title>
                 13 (/head)
               14° <body>
                                                 <h2>에러페이지1</h2>
               169
                                               <div>
                                                                  >아이디 또는 비밀번호를 입력하지 않으셨거나 비밀번호 형식이 잘못되었습니다.
               17
                                             </div>
               18
           19 </body>
20 </html>
```

1-5. pro04/src/main/webapp/WEB-INF/spring/appServlet/servlet-context.xml 에 check 디렉토리 내용이 접근 가능하도록 자원 추가하기

```
pro04 - pro04/src/main/webapp/WEB-INF/spring/appServlet/servlet-context.xml - Spring Tool Suite 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   o
  File Edit Source Refactor Navigate Search Project Run Window Help
                                                                                                                                                                                                                             E 8 8
                                                                                                                                                                                       □ Package Explorer □
                 Maven Dependencies
                                                                                                                                                                                                                                <annotation-driven />
                                                                                                                                                                                             13
                 JRE System Library [JavaSE-1.8]
                                                                                                                                                                                                                                                              접근 자원에 대한 권한 설정 -->
                 JUnit 4
                                                                                                                                                                                                                               <!-- Handles HTTP GET requests for /resources/** by efficiently serving up static resources in the $
<resources mapping="/resources/**" location="/resources/" />
<resources mapping="/data/**" location="/data/" />
                                                                                                                                                                                              15
                                                                                                                                                                                              16
                 v 😂 main
                                                                                                                                                                                              17
                          y € webapp
                                                                                                                                                                                              18
                                                                                                                                                                                                                              <resources mapping="/include/**" location="/WEB-INF/views/include" />
<resources mapping="/board/**" location="/WEB-INF/views/board" />
<resources mapping="/member/**" location="/WEB-INF/views/member" />
<resources mapping="/reservate/**" location="/WEB-INF/views/reservate" />
<resources mapping="/databank/**" location="/WEB-INF/views/databank" />
<resources mapping="/databank/**" location="/WEB-INF/views/databank" />
<resources mapping="/sample/**" location="/WEB-INF/views/sample" />
</resources mapping="/sample/**" location="/WEB-INF/views/sample" />
</resources mapping="/check/**" location="/WEB-INF/views/sample" />
</resources mapping="/check/**" location="/WEB-INF/views/sample" />
</re>
                                       resources
                                                                                                                                                                                              19

✓ Ø WFR-INF

                                                                                                                                                                                              20
                                        ✓ 🐸 spring
                                                                                                                                                                                              22

y 

S appServlet

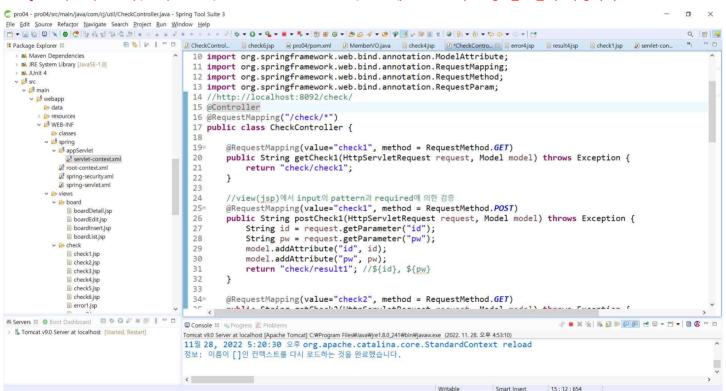
A popServlet

A popSe
                                                        servlet-context.xml
                                                                                                                                                                                              23
                                                        58 spring-security.xml
                                                                                                                                                                                             25
                                                        spring-servlet.xml
                                                                                                                                                                                             26
                                                                                                                                                                                                                                 resources mapping="/check/**" location="/WEB-INF/views/check" />
<resources mapping="/user/**" location="/WEB-INF/views/user" />
<resources mapping="/free/**" location="/WEB-INF/views/free" />
                                                                                                                                                                                             27
                                                v 🗁 board
                                                                                                                                                                                             28

    boardDetail.jsp

                                                                boardEdit.jsp
                                                                                                                                                                                             29
                                                                                                                                                                                             30
                                                                boardinsert.jsp
                                                                boardList.isc
                                                                                                                                                                                                                                  <!-- 리졸버에 대한 접두사와 접미사 설정 -->
                                                 32
                                                                                                                                                                                                                                 <!-- Resolves views selected for rendering by @Controllers to .jsp resources in the /WEB-INF/views d
                                                                                                                                                                                             33
                                                                                                                                                                                                                                 <beans:bean class="org.springframework.web.servlet.view.InternalResourceViewResolver">
                                                                check2.isp
                                                                                                                                                                                                                                                     <br/>
<
                                                                check3.is
                                                                  check4.jsp
                                                                                                                                                                                           35
                                                                check5.jsp
                                                                                                                                                                                             36
                                                                                                                                                                                                                                 </beans:bean>
                                                                check6 is
                                                                                                                                                                                       Source Namespaces Overview beans context mvc Beans Graph
```

1.6 pro04/src/main/java/com.cj.util.CheckController.java 에 check1의 요청 컨트롤러 작성하기



2-1. 자바스크립트로 폼 검증하기

pro04/src/main/webapp/WEB-INF/views/check/check2.jsp를 작성

```
σ
Window Help
                       □ ☑ CheckControl... ☐ check6.jsp ☑ pro04/pom.xml ☑ MemberVO.java ☑ CheckControl... ☐ error4.jsp
                                                                                                                                                                                                         result4.jsp 🙃 check1.jsp 🔊 servlet-con... 🙃 check2.jsp 🗯 🐾
            1 (%@ page language="java" contentType="text/html; charset=UTF-8"
2 pageEncoding="UTF-8"%>
3 (%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
4 (%@ taglib prefix="fmt" uri="http://java.sun.com/jsp/jstl/fmt" %>
5 (%@ taglib prefix="fm" uri= "http://java.sun.com/jsp/jstl/functions"%>
            6 <!DOCTYPE html>
            7⊕<html>
            8=<head>
                               <meta charset="UTF-8">
                              <meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
          10
          11
                               <title>폼 유효성 검사2</title>
          12
          13 </head>
         14 < body>
                               <h2>FORM 유효성 검사2</h2>
         15
                              17
          18
          19
          20
                               (/form)
         21
                               <script>
                               function loginCheck(f){
                                         refine Togricheck(구){
var id = f.id.value;
var pw = f.pw.value;
if(id=="" || pw==""){
    alert("아이디 또는 비밀번호 압력 칸이 비어 있습니다.");
          23
          24
           27
                                                       return false;
          28
                                          if(id.length<5 || id.length>12) {
    alert("아이디의 글자수가 맞지 않습니다.");
           29
           30
           31
                                                       return false;
           32
           33
                                           if(pw.length<5 || pw.length>12) {
                                                       alert("비밀번호의 글자수가 맞지 않습니다.");
return false;
           34
           35
           36
           37
           38
                                          var idReg = /^[a-z0-9]{5,12}$/g; //아이디 정규표현식
                                          if(!idReg.test(id)){
    alert("아이디 입력 형식이 아닙니다.");
          39
           40
          41
          42
          43
           44
                                            var pwReg = /^[a-zA-Z0-9]{8,12}$/g; //비밀번호 정규표현식
                                          if(!pwReg.test(pw)){
alert("비밀번호 입력 형식이 아닙니다.");
          45
          46
           47
          48
           49
                              }
</script>
           50
           51 </body>
          52 </html>
                                                                                                                                                                                                                                               Tomcat 1930 Server at localhost (Apache Tomcat) C.\(\mathre{C}\)Program Files\(\mathre{C}\)Pava\(\mathre{C}\)Program Files\(\mathre{C}\)Program Files\(\mat
                                                                                                                                                                   Writable Smart Insert 14 : 7 : 538
```

2-2. 결과 페이지인 pro04/src/main/webapp/WEB-INF/views/check/result2.jsp 작성

```
pro04 - pro04/src/main/webapp/WEB-INF/views/check/result2.isp - Spring Tool Suite 3
                                                                                                                                                                                                                                                                                                                                                                                                                                  0
 File Edit Source Refactor Navigate Search Project Run Window Help
                                                                                                                               Q 100 |
🖰 😘 🔐 🖁 🗂 🗓 CheckControl... 🗋 check6jsp 🔛 pro04/pom.xml 🔑 MemberVO java 📄 check4jsp 🗘 CheckControl... 🝵 error4jsp 📑 result4jsp 🗎 check1jsp 🛅 result4jsp 📜 check1jsp 🛅 result4jsp 💮 result4jsp resul
 Package Explorer ⋈
                                      n boardDetail.isp
                                                                                                                    1 <‰ page language="java" contentType="text/html; charset=UTF-8"
                                      boardEdit.jsp
                                                                                                                                      pageEncoding="UTF-8"%>
                                                                                                                    3 3 3 40 taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core
                                      boardinsert.jsp
                                      boardList.jsp
                                                                                                                   4 (%) taglib prefix="fmt" uni="http://java.sun.com/jsp/jstl/fmt" %>
5 (%) taglib prefix="fm" uri = "http://java.sun.com/jsp/jstl/functions"%>
                             ∨ ⊘ check

☐ check1.jsp
                                                                                                                    6 <! DOCTYPE html>
                                      check2.isp
                                      check3.jsp
                                                                                                                    70<html>
                                                                                                                   8e <head>
                                      check5.isp
                                                                                                                                      <meta charset="UTF-8">
                                      check6.jsr
                                                                                                                                      <meta http-equiv="X-UA-Compatible" content="IE=edge";</pre>
                                                                                                                 10
                                        error1.jsp
                                                                                                                 11
                                                                                                                                      <meta name="viewport" content="width=device-width, initial-scale=1.0">
                                      error2.jsp
                                      error4.jsp
                                                                                                                 12
                                                                                                                                     <title>결과2</title>
                                      error5.jsp
                                                                                                                 13 </head>
                                       error6.jsp
                                                                                                                 149 (body)
                                      errorform.isp
                                                                                                                15
                                                                                                                                      <h2>결과2</h2>
                                      form.jsp
result1.jsp
                                                                                                                 16
                                                                                                                                      <div>
                                                                                                                                                ${id }
                                      result2.isp
                                      result3.jsp
                                                                                                                 18
                                                                                                                                                  ${pw }
                                                                                                                                     </div>
                                                                                                                 19
                                      result5.jsp
                                                                                                                 20 </body>
                                      result6.isr
                                                                                                                 21 </html>
                                       resultform.jsp
```

2-3. 에러 페이지인 pro04/src/main/webapp/WEB-INF/views/check/error2.jsp 작성

```
pro04 - pro04/src/main/webapp/WEB-INF/views/check/error2.jsp - Spring Tool Suite 3
                                                                                                                                                                                                        0
Q 181 4

☑ CheckControl... 
☐ check6.jsp ☐ pro04/pom.xml ☑ MemberVO.java ☐ check4.jsp ☑ CheckControl...

                                                                                                                                                   error4.jsp error2.jsp check1.jsp error2.jsp 🗅 *1
☐ Package Explorer □
                                                       1 <% page language="java" contentType="text/html; charset=UTF-8"
                                                      age Inguage= java content/ype= text/ntml; charset=ufr-a
pageEncoding="UTF-8"%

3 <%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
4 <%@ taglib prefix="fmt" uri="http://java.sun.com/jsp/jstl/fmt" %>
5 <%@ taglib prefix="fn" uri = "http://java.sun.com/jsp/jstl/functions"%>
                  boardEdit.jsp
                  boardinsert.jsp
                  boardList.jsp
              v 🕒 check
                  check1.isp
                  check2.jsp
                                                       6 <! DOCTYPE html>
                                                       70<html>
                  check4.isp
                                                       8ª <head>
                  check5.jsp
                                                               <meta charset="UTF-8">
                                                               <meta cnarse= UTF-0 >

/meta http-equiv="X-UA-Compatible" content="IE=edge">

/meta name="viewport" content="width=device-width, initial-scale=1.0">
                                                      10
                  error1.jsp
                                                      11
                  error2.jsp
                                                                <title>에러 페이지</title>
                  error5.jsp
                                                      13 (/head)
                  error6.isp
                                                      149 <body>
                  errorform.jsp
form.jsp
                                                      15
                                                                 .
<h2>에러페이지2</h2>
                                                      16
                                                                <div>
                  result1.isp
                                                                      < 이미 또는 비밀번호를 입력하지 않으셨거나 비밀번호 형식이 잘못되었습니다.</p>
                  result2.jsp
                                                      17
                                                      18
                                                      19 </body>
                  result4.jsp
                  result5.isp
                                                      20 (/html)
                  result6.jsp
```

2-4. pro04/src/main/java/com.cj.util.CheckController.java 에 check2의 요청 컨트롤러 작성하기

```
pro04 - pro04/src/main/java/com/cj/util/CheckController.java - Spring Tool Suite 3
                                                                                                                                                                                    п
File Edit Source Refactor Navigate Search Project Run Window Help
                                                        CheckControl...

    □ check6jsp
    ☑ pro04/pomxml
    ☑ MemberVOjava
    □ check4jsp
    ☑ CheckControl...
    ☑ □ error4jsp
    ⊡ result4jsp
    ☑ check1jsp
    ☑ servlet-con...

☐ Package Explorer □
                                                 33
           v 🐸 spring
                                                           @RequestMapping(value="check2", method = RequestMethod.GET)
                                                  34
            public String getCheck2(HttpServletRequest request, Model model) throws Exception {
    return "check/check2";
                                                 35
              serviet-context.xml
                                                 36
              spring-security.xml
                                                 38
                                                          //view(jsp)에서 javascript에 의한 검증
@RequestMapping(value="check2", method = RequestMethod.POST)
                                                 39

✓ 
➢ board

                                                 40
                B boardDetail.jspB boardEdit.jsp
                                                 41
                                                          public String postCheck2(@RequestParam("id") String id, @RequestParam("pw") String pw, Model model)
                                                               model.addAttribute("id", id);
model.addAttribute("pw", pw);
return "check/result2";
                                                 42
                boardInsert.jsp
                                                 43
                boardList.isr
                                                 44
                check1.jsp
                                                 45
                check2.isp
                                                 46
                check3.jsp
                                                 47
                                                          @RequestMapping(value="check3", method = RequestMethod.GET)
                                                          public String getCheck3(HttpServletRequest request, Model model) throws Exception {
                                                 48
                check5.jsp
                check6.jsp
                                                                return "check/check3";
                                                 49
                                                 50
                error2.jsp
                                                  51
                error4.jsp
                                                 52
                                                           //view(jsp)에서 jQuery에 의한 검증
                 error5.jsp
                                                          @RequestMapping(value="check3.do", method = RequestMethod.GET)
                                                 53
                error6.jsp
                                                  54
                                                          public String postCheck3(@RequestParam("id") String id, @RequestParam("pw") String pw, Model model)
                errorform.isp
                                                                model.addAttribute("id", id);
model.addAttribute("pw", pw);
                form.jsp
result1.jsp
                                                 55
                                                 56
                result2.jsp
                                                                return "check/result3";
                                                  57
                result3.jsp
                                                  58
                                                          }
```

3-1. jQuery로 폼 검증하기

pro04/src/main/webapp/WEB-INF/views/check/check3.jsp를 작성

```
<u>W</u>indow <u>H</u>elp
                         Q : 1
CheckControllerJava CheckGips Drock/pm.ml DemberVOJava CheckGips CheckControllerJava CheckGips C
              6 <! DOCTYPE html>
              7⊕<html>
              8=<head>
                                <meta charset="UTF-8">
                               <meta that = Uni = "X-UA-Compatible" content="IE=edge">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
           10
           11
                                <title>폼 유효성 검사3</title>
           12
           13
                                <script src="https://code.jquery.com/jquery-latest.js"></script>
           14 </head>
           150 <body>
                               ay>

<h2>FORM 유효성 검사3</h2>

id : <input type="text" name="id" id="id" /><br><br>
pw : <input type="password" name="pw" id="pw" /><br><br><button class="button" id="submit_btn"> 전송</button>
           17
           18
           19
           20
                                 <script>
           21
                                $(document).ready(function(){
                                           $("#submit_btn").click(function(){
   var id = $("#id").val();
   var pw = $("#pw").val();
           22
           23
           24
                                                      if(id=="" || pw==""){
    alert("아이디 또는 비밀번호 입력 칸이 비어 있습니다.");
           26
           28
                                                                   return false;
           29
                                                      f(id.length<5 || id.length>12) {
alert("아이디의 글자수가 맞지 않습니다.");
return false;
           30
           33
                                                       if(pw.length<5 || pw.length>12) {
                                                                   alert("비밀번호의 글자수가 맞지 않습니다.");
                                                                   return false:
          37
                                                        var idReg = /^[a-z0-9]{5,12}$/g; //아이디 정규표현식
                                                      if(!idReg.test(id)){
   alert("아이디 입력 형식이 아닙니다.");
           39
           40
          41
                                                        var pwReg = /^[a-zA-Z0-9]{8,12}$/g; //비밀번호 정규표현식
                                                      if(!pwReg.test(pw)){
alert("비밀번호 입력 형식이 아닙니다.");
           45
                                                                   return:
                                                       location.href = "./check3.do?id="+id+"&pw="+pw;
           49
                                          });
           50
                               });
                                </script>
           52 </body>
          53 </html>
                                                                                                                                                                                                                                              Tomcat v9.0 Server at localhost [Apache Tomcat] C:#Program Files#Java#jre1.8.0_241#bin#javaw.exe (2022. 11. 28. 오후 4:53:10)
                                                                                                                                                                                       Smart Insert 37 : 15 : 1240
```

3-2. 결과 페이지인 pro04/src/main/webapp/WEB-INF/views/check/result3.jsp 작성

```
② CheckController2java ③ check6jsp ❷ pro04/pomxml ② Member/Ojava ③ result6jsp ⑤ check4jsp ② CheckControllerjava ⑤ result3jsp ② 1 k‰ page language="java" contentType="text/htmL; charset=UTF-8"
☐ Package Explorer □
                                                                         1 Rim page language= java contentiype= text/ntml; charset=uir-a
2  pageEncoding="UTF-8"%>
3 <%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
4 <%@ taglib prefix="fmt" uri="http://java.sun.com/jsp/jstl/fmt" %>
5 <%@ taglib prefix="fn" uri = "http://java.sun.com/jsp/jstl/functions"%>
                        boardEdit.isp
                        boardInsert.jsp
boardList.jsp
                  v 🗁 check
                       check1.is
                        check2.jsp
                                                                          6 <!DOCTYPE html>
                        check3.jsp
                                                                          70<html>
                        check4.jsp
                                                                         8º <head>
                        check5.jsp
                                                                                     <meta triarset= 011-0 /
cmeta tribr-equire"X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
                        deck6.jsp
                                                                        10
                        error1.jsp
                        error2.jsp
error3.jsp
                                                                        11
                                                                                     <title>결과3</title>
                                                                        12
                        error4.jsp
                                                                        13 </head>
                        error5.jsp
                                                                        14 < body>
                                                                                      <h2>결과3</h2>
                                                                       15
                        errorform.jsp
                        form.jsp
result1.jsp
                                                                        17
                                                                                             ${id }
                        result2.jsp
                                                                        18
                                                                                             ${pw }
                        result3.isp
                                                                                      </div>
                                                                        19
                                                                        20 </body>
                        result5.jsp
                                                                  21 </html>
                        result6.isp
```

3-3. 에러 페이지인 pro04/src/main/webapp/WEB-INF/views/check/error3.jsp 작성

```
pro04 - pro04/src/main/webapp/WEB-INF/views/check/error3.jsp - Spring Tool Suite 3
                                                                                                                                                                О
File Edit Source Refactor Navigate Search Project Run Window Help
                                                .
△ □ ♂ | 株 ▼ Ø ▼ ¼ ▼ ■ ▼ ╄ ▼ | 世 # Ø ▼ | ❷ ☆ Ø ▼ ◎ | ❷ | ⅓ ▼ ﴿ ♥ ۞ ▼ ○ ▼ | 世
Q 1814
                           🖹 😘 🐉 🖰 🗖 🖸 CheckController2java 🕒 check6jsp 🚇 pro04/pom.xml 🔃 MemberVO.java 🔒 result6jsp 🕦 check4jsp
Package Explorer ≅
                                                                                                                       boardDetail.isp
              boardEdit.jsp
              boardinsert.jsp
boardList.jsp
           v 🧀 check
              check1.jsp
check2.jsp
                                            6 <!DOCTYPE html>
              check3.isp
                                            7⊖<html>
              check4.jsp
                                           89 (head)
                                                   <meta charset="UTF-8">
              check6.isp
                                                   <meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
                                           10
              error1.jsp
                                           11
                                                  <title>에러 페이지</title>
              error3.isp
                                           12
              error4.jsp
                                           149 <body>
              error6.jsp
                                                   <h2>에러페이지3</h2>
                                           15
              errorform.jsp
                                           16
                                                  <div>
              form.jsp
result1.jsp
                                           17
                                                        >아이디 또는 비밀번호를 입력하지 않으셨거나 비밀번호 형식이 잘못되었습니다.
                                                  </div>
              result2.isp
                                           18
              result3.jsp
result4.jsp
                                           19 </body>
                                           20 </html>
```

3-4. pro04/src/main/java/com.cj.util.CheckController.java 에 check3의 요청 컨트롤러 작성하기

```
v ⊜ views
                                                               //view(jsp)에서 javascript에 의한 검증
@RequestMapping(value="check2", method = RequestMethod.POST)
public String postCheck2(@RequestParam("id") String id, @RequestParam("pw") String pw, Model model)
                                                    39

✓ ➢ board

                                                   40
        boardDetail.jsp
boardEdit.jsp
                                                   41
                                                                      model.addAttribute("id", id);
model.addAttribute("pw", pw);
return "check/result2";
                                                   42
        boardinsert.isp
                                                   43
        boardList.jsp
   v 💪 check
       check1.isp
                                                   45
       check2.jsp
                                                   46
                                                   47⊜
                                                               @RequestMapping(value="check3", method = RequestMethod.GET)
        check4.jsp
                                                   48
                                                               public String getCheck3(HttpServletRequest request, Model model) throws Exception {
        check5.jsp
                                                   49
                                                                     return "check/check3";
                                                   50
        error1.jsp
        error2.jsp
error4.jsp
error5.jsp
                                                   51
                                                               //view(jsp)에서 jQuery에 의한 검증
@RequestMapping(value="check3.do", method = RequestMethod.GET)
public String postCheck3(@RequestParam("id") String id, @RequestParam("pw") String pw, Model model)
                                                   52
                                                   53
        error6.isp
                                                   54
        errorform.jsp
form.jsp
                                                                     model.addAttribute("id", id);
model.addAttribute("pw", pw);
return "check/result3";
                                                   55
                                                   56
        result1.jsp
        result2.jsp
                                                   57
                                                   58
```

4-1. Validator에 의한 검증

pro04/src/main/webapp/WEB-INF/views/check/check4.jsp를 작성

```
Window Help
                                      Q : 1
DeckControllerJava @checkGipp @pro24/pomxml DMemberVOJava @cesultGipp @checkGipp DeckControllerJava @cesultGipp @checkGipp @checkGip
                      8 <!DOCTYPE html>
                 100 (head)
                                                <meta charset="UTF-8">
                 11
                                                    <meta http-equiv="X-UA-Compatible" content="IE=edge">
                                                  <meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>품 유효성 검사4</title>
                   13
                  14
                 15 </head>
                 16@ <body>
                                                    <h2>FORM 유효성 검사4</h2>
                 17
                                                189
                 20
                 21
                  22
                  23 </body>
                 24 </html>
```

4-2. 결과 페이지인 pro04/src/main/webapp/WEB-INF/views/check/result4.jsp 작성

```
Window Help

$\sigma \cdot \c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q : 1
7 <!DOCTYPE html>
                        8e<html>
                        98 (head)
                   10
                                                        <meta charset="UTF-8">
                                                        <meta thatset= UTF-a>/
cmeta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
                   11
                   13
                                                        <title>결과4</title>
                   14 </head>
                  15⊕ <body>
                                                          <h2>결과4</h2>
                   178
                                                         <div>
                                                           ${member.id }
                  18
                   19
                                                                              ${member.pw }
                  20
                                                      </div>
                   21 </body>
                  22 </html>
```

4-3. 에러 페이지인 pro04/src/main/webapp/WEB-INF/views/check/error4.jsp를 작성

```
Lisp - Spring Tool Suite 3
              -
△ □ ∅ ☆ ▼ ② ▼ ◘ ▼ ■ ▼ ▼ ▼ ♥ 巻 ◎ ▼ ◎ ◎ ∮ ▼ ﴿ ● ◎ ∮ ▼ ﴿ ● □ ▼ ○ ▼ □ ▼
    ② CheckController2java ③ check6jsp  pro04/pomxml ② MemberVOjava ⑤ result6jsp ② CheckControllerjava ⑥ result3jsp ⑥ result4jsp ⑥ error4jsp ③ 1 <%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>
       3 (%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
4 (%@ taglib prefix="fmt" uri="http://java.sun.com/jsp/jstl/fmt" %>
5 (%@ taglib prefix="fn" uri = "http://java.sun.com/jsp/jstl/functions"%>
       6 <!DOCTYPE html>
       7⊕<html>
       8º <head>
                 <meta charset="UTF-8">
                 <meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
      11
                 <title>에러 페이지</title>
      12
      13 </head>
      149 <body>
                 <h2>에러페이지4</h2>
      15
      16
                        아이디 또는 비밀번호를 입력하지 않으셨거나 비밀번호 형식이 잘못되었습니다.
                 </div>
      18
      19 </body>
      20 </html>
```

4-4. pro04/src/main/java/com.cj.util.CheckController.java 에 check4의 요청 컨트롤러 작성하기

```
Window Help
         Q : FR | FA
□ D CheckController2.java check6.jsp
               57
               return "check/result3";
    58
    59
    609
           @RequestMapping(value="check4", method = RequestMethod.GET)
    61
           public String getCheck4(Model model) throws Exception {
    62
              return "check/check4";
    64
    65
           //Validator에 의한 검증
           @RequestMapping(value="check4", method = RequestMethod.POST)
    66
           public String postCheck4(@ModelAttribute("member") Member member, Model model, BindingResult result
    String page = "check/result4";
    MemberValidator userValidator = new MemberValidator();
    67
    68
    69
    70
               userValidator.validate(member, result);
    71
    72
               if(result.hasErrors()) {
                  page = "check/error4";
    74
    75
               return page;
    76
          }
    78
           @InitBinder
    79
           protected void initBinder(WebDataBinder binder) {
               binder.setValidator(new MemberValidator());
    80
    81
    82
           @RequestMapping(value="check5", method = RequestMethod.GET)
    8/1
           nublic String getCheck5(HttnServletRequest request Model model) throws Excention (
                                                                               Console 3 - Progress # Proble
  Tomcat v9.0 Server at localhost [Apache Tomcat] C:#Program Files#Java#jre1.8.0_241#bin#javaw.exe (2022. 11. 28. 空亭 4:53:10)
                                                      Writable Smart Insert 64 : 5 : 2448
```

4-5. pro04/src/main/javacom.cj.util.Member 작성

```
^ 1 package com.cj.util;
2
3 import lombok.Data;
4
^ 5 @Data
6 public class Member {
7    private String id;
8    private String pw;
9 }
```

4-6. pro04/src/main/javacom.cj.util.MemberValidator 작성

```
a - Spring Tool Suite 3
                                                                                                                     - п x
Window Help
         🗅 🔑 CheckControl... 🚡 pro04/pom.xml 🔑 Membert/Ojava 🔑 CheckControl... 🔓 result3.jsp 🔒 result4.jsp 🔒 error4.jsp 🚇 Member.java 🛂 "MembertVali... 🕮 "2
     1 package com.cj.util;
     3*import java.util.regex.Pattern;□
    9 public class MemberValidator implements Validator {
   10
           public void validate(Object obj, Errors error) {
                System.out.println("validate action");
   13
                Member member = (Member)obj;
   14
                ValidationUtils.rejectIfEmpty(error, "id", "member.id.empty","아이디를 입력해주세요.");
ValidationUtils.rejectIfEmpty(error, "pw", "member.pw.empty","비밀번호를 입력해주세요");
   15
   16
   17
   18
                Pattern pattern = Pattern.compile("^[a-zA-Z0-9]{8,12}$", Pattern.CASE_INSENSITIVE);
                if (!(pattern.matcher(member.getPw()).matches())) {
    error.rejectValue("pw", "member.pw.invalid");
   19
20
   21
22
   23
   249
           @Override
           public boolean supports(Class<?> clazz) {
   -25
   26
               return Member.class.equals(clazz);
   27
   28 }
```

5-1. Validator에 의한 검증(@Valid+@InitBinder)

pro04/src/main/webapp/WEB-INF/views/check/check5.jsp를 작성

```
<u>W</u>indow <u>H</u>elp
                                            Q 10 4
CheckControllerJava CheckSjsp Pro04/pom.ml DMemberVOJava CresultSjsp D*CheckControllerJava CheckSjsp CheckControllerJava Check
                         6 <! DOCTYPE html>
                        70 < html>
                        8=<head>
                                                          <meta charset="UTF-8">
                                                       <meta http-equiv"X-UA-Compatible" content="IE=edge">
<meta http-equiv"X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
                    10
                    11
                                                          <title>폼 유효성 검사5</title>
                     12
                   13 </head>
                   14 < body>
                   15
                                                          <h2>FORM 유효성 검사5</h2>
                                                          <form action="./check5" method="post">
                                                                          id : <input type="text" name="id" id="id"/><br><br>pw : <input type="password" name="pw" id="pw" /><br><br><button class="btn" type="submit"> 전송 </button>
                    17
                    18
                     19
                    20
                                                     (/form>
                   21 </body>
                   22 </html>
```

5-2. 결과 페이지인 pro04/src/main/webapp/WEB-INF/views/check/result5.jsp 작성

```
i.jsp - Spring Tool Suite 3
Window Help

Wind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q : 1 4
                          1 k%@ page language="java" contentiype= text/ntml; churset=011-0
pageEncoding="UTF-8"%>
3 %%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
4 <%@ taglib prefix="fmt" uri="http://java.sun.com/jsp/jstl/fmt" %>
5 <%@ taglib prefix="fn" uri = "http://java.sun.com/jsp/jstl/functions"%>
                            7⊕<html>
                          8º (head)
                                                                <meta charset="UTF-8";</pre>
                                                               <meta http-equiv"X-UA-Compatible" content="IE=edge">
<meta http-equiv"X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
                        10
                        11
                                                                <title>결과5</title>
                      12
                        13 </head>
                     14° <body>
                                                                   <h2>결과5</h2>
                     15
                     16
                                                                <div>
                                                                        ${member.id }
                      17
                     18
                                                                                          ${member.pw }
                     19
                                                                </div>
                      20 </body>
                    21 </html>
```

5-3. 에러 페이지인 pro04/src/main/webapp/WEB-INF/views/check/error5.jsp를 작성

```
jsp - Spring Tool Suite 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
| Sp-Spring Tool Suite 5 | Spring Tool Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q B
                         3 <%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
4 <%@ taglib prefix="fmt" uri="http://java.sun.com/jsp/jstl/fmt" %>
5 <%@ taglib prefix="fn" uri = "http://java.sun.com/jsp/jstl/functions"%>
                         7⊕ <html>
                         8º <head>
                                                           <meta charset="UTF-8">
                                                          <meta that p-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
                    10
                    11
                                                           <title>에러 페이지</title>
                    12
                    13 </head>
                   14⊖ <body>
                                                           <h2>에러페이지5</h2>
                    15
                    16
                                                           <div>
                                                                                아이디 또는 비밀번호를 입력하지 않으셨거나 비밀번호 형식이 잘못되었습니다.
                    17
                                                           </div>
                    18
                   19 </body>
                   20 </html>
```

5-4. pro04/src/main/java/com.cj.util.CheckController.java 에 check5의 요청 컨트롤러 작성하기

```
- Spring Tool Suite 3
- Spring Tool Sures

Window Help

I a controller/Java a check6jsp pro04/pom.ml D Member/O/Java a result6jsp D*CheckController/Java a check6jsp pro04/pom.ml D Member/O/Java a result6jsp D*CheckController/Java a check6jsp acceptable of the controller/Java a check6jsp acceptable of the checked accept
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q 1814
   70 Che 70 71 72 73 74 75 76 77
                                                                                if(result.hasErrors()) {
   page = "check/error4";
                                                                                return page;
                    78≘
                                                          @InitBinder
                  79
80
                                                         protected void initBinder(WebDataBinder binder) {
   binder.setValidator(new MemberValidator());
                    81
                  82
83⊜
                                                         @RequestMapping(value="check5", method = RequestMethod.GET)
public String getCheck5(HttpServletRequest request, Model model) throws Exception {
                    84
                  85
86
87
88
89<sup>9</sup>
90
91
92
93
94
                                                                           return "check/check5";
                                                         //Validator에 의한 검증(@Valid+@InitBinder)
@RequestMapping(value="check5", method = RequestMethod.POST)
public String postCheck5(@ModelAttribute("member") @Valid Member member, Model model, BindingResult
                                                                              String path = "check/result5";
if(result.hasErrors()) {
   path = "check/error5";
                    95
              96
97
98 }
                                                                                 return path;
```

6-1. Hibernate 와 spring form에 의한 검증 pro04/src/main/webapp/WEB-INF/views/check/check6.jsp를 작성

```
0
<u>W</u>indow <u>H</u>elp
       Q P
9 <!DOCTYPE html>
  100 (html)
  11 < head>
         <meta charset="UTF-8">
  12
         <meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
   13
  14
         <title>폼 유효성 검사6</title>
  15
  16 </head>
  170 <body>
         <h2>FORM 유효성 검사6</h2>
  18
         <form:form action="${path1 }/check/check6.do" method="post" modelAttribute="memberVO">
  19
            <form:input path="id"/>
<form:errors path="id" element="div" delimiter=" "/>
  20
  21
22
23
            <form:password path="pw"/>
            <form:errors path="pw" element="div" delimiter=" "/>
  24
  25
  26
            <button class="btn" type="submit"> 전송 </button>
  27
        </form:form>
   28 </body>
```

6-2. 결과 페이지인 pro04/src/main/webapp/WEB-INF/views/check/result6.jsp 작성

```
.jsp - Spring Tool Suite 3
Q 10 1
  ② CheckController2java ③ check6jsp  pro04/pom.xml ② MemberVOjava ⑤ result6jsp ⊠
1 <‰ page language="java" contentType="text/html; charset=UTF-8"
              pageEncoding="UTF-8"%>
     3 <%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
4 <%@ taglib prefix="fmt" uri="http://java.sun.com/jsp/jstl/fmt" %>
5 <%@ taglib prefix="fn" uri = "http://java.sun.com/jsp/jstl/functions"%>
     6 <!DOCTYPE html>
     70<html>
     8º <head>
              <meta charset="UTF-8">
              <meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
    10
    11
         <title>결과6</title>
   12
    13 </head>
    149 <body>
              <h2>결과6</h2>
    15
              <div>
               ${memberVO.id }
    17
    18
                   ${memberVO.pw }
              </div>
    19
    20 </body>
    21 </html>
```

6-3. 에러 페이지인 pro04/src/main/webapp/WEB-INF/views/check/error6.jsp를 작성

```
jsp - Spring Tool Suite 3
 Window Help
                                              Q 18 4

☐ CheckController2.java  pro04/pom.xml  MemberVO.java  result6.jsp

☐ memberVO.java  result
                     1 (%0 page language="java" contentType="text/html; charset=UTF-8"
2  pageEncoding="UTF-8"%)
3 (%0 taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
4 (%0 taglib prefix="fmt" uri="http://java.sun.com/jsp/jstl/fmt" %>
5 (%0 taglib prefix="fm" uri = "http://java.sun.com/jsp/jstl/functions"%>
                       6 <! DOCTYPE html>
                       78 < html>
                       8=<head>
                                                        <meta charset="UTF-8">
                                                        <meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
                  10
                  11
                                                        <title>에러 페이지6</title>
                    12
                  13 </head>
                  149 (body>
                                                         <h2>에러페이지6</h2>
                  15
                  16
                                                                             아이디 또는 비밀번호를 입력하지 않으셨거나 비밀번호 형식이 잘못되었습니다.
                  17
                                                        </div>
                  18
                  19 </body>
                  20 </html>
```

6-4. pro04/src/main/java/com.cj.util.CheckController2.java 에 check6의 요청 컨트롤러 작성하기

```
- Spring Tool Suite 3
<u>W</u>indow <u>H</u>elp
        Q 10 14
🗓 CheckController2.java 🖾 🖻 pro04/pom.xml 💹 MemberVO.java 🕒 result6.jsp 🕒 error6.jsp
   1 package com.cj.util;
  3*import javax.servlet.http.HttpServletRequest;
  19 //http://localhost:8092/check/
   20 @Controller
   21 @RequestMapping("/check/*")
   22 public class CheckController2 {
   24=
          @RequestMapping(value="check6", method = RequestMethod.GET)
   25
          public String getCheck6(MemberVO memberVO) throws Exception {
   26
             return "check/check6":
   28 |
29
          //Hibernate 와 spring form에 의한 검증
          @RequestMapping(value="check6.do", method = RequestMethod.POST)
   30∈
   31
          public String postCheck6(@Valid MemberVO memberVO, BindingResult result) throws Exception {
   32
              String path = "check/result6";
              if(result.hasErrors()) {
   path = "check/error6";
   35
   36
              return path;
   38
          }
  39 }
```

6-5. pro04/src/main/javacom.cj.util.MemberVO 작성

```
ina Tool Suite 3
                                                                                                             0
                                                                                                                 ×
<u>W</u>indow <u>H</u>elp
       Q 18 4
□ CheckController2.java 🖻 pro04/pom.xml 🕡 *MemberVO.java 🖾 🗈 result6.jsp 🕒 error6.jsp 🔟 CheckController.java
  3*import javax.persistence.Column;☐
  11 public class MemberVO {
   12
                   //primary key인 필드에 지정
          @Size(min=5, max =12, message="아이디는 5~12자로 작성해야함")
   14
   15
          String id;
   16
   17⊜
          @Column
   18
          @NotNull
          @Size(min=6, max =12, message="비밀번호는 8~12자로 작성해야함")
@Pattern(regexp="(^[A-Za-z0-9]{8,12}$)")
   19
   20
           //(^(?=.*[A-Za-z])(?=.*[0-9])(?=.*[$@$!%*#?&])[A-Za-z[0-9]$@$!%*#?&]{8,10}$)
   21
          String pw;
   22
   23
   249
          public String getId() {
   25
            return id;
   26
   27⊜
          public void setId(String id) {
   28
            this.id = id;
   29
   30
          public String getPw() {
   31
            return pw;
   32
          public void setPw(String pw) {
  33
  34
  35
36 }
```