Ajax And Form

1. Text Box
  [echo.jsp]
```jsp
<%@ page language="java" contentType="text/html; charset=utf-8" pageEncoding="utf-8"%>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<c:set var="data" value="${param.data}" />
<c:out value="서버는 지금 -- ${data}-- 을 수신했습니다" />
```

  [ajaxdemo.html]
```html
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
    <title>Insert title here</title>
    <script src="js/jquery-3.2.1.min.js"></script>
    <script>
       var xmlObj;
       $(document).ready(function(){
          $('#mybtn').click(function(){
             xmlObj = new XMLHttpRequest();
             xmlObj.open("GET", "echo.jsp?data=" + $('#data').val(), true);
             xmlObj.onreadystatechange = callback;
             xmlObj.send(null);
          });
       });

       function callback(){
          if(xmlObj.readyState ==4 && xmlObj.status == 200){
             $('#output1').text(xmlObj.responseText);
          }
       }
    </script>
  </head>
  <body>
    <form>
       <input type="text" name="data" id="data">
       <input type="button" value="Ajax로 송신합니다" id="mybtn">
    </form>
    <!-- 여기에 출력합니다 -->
    <div id="output1"></div>
  </body>
</html>
```

  [ajaxdemo1.html]
```html
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
    <title>Insert title here</title>
    <script src="js/jquery-3.2.1.min.js"></script>
    <script>
       var xmlObj;
       $(document).ready(function(){
          $('#mybtn').click(function(){
             xmlObj = new XMLHttpRequest();
             xmlObj.open("GET", "echo.jsp?data=" + $('#data').val(), true);
             xmlObj.onreadystatechange = callback;
             xmlObj.send(null);
          });
       });

       function callback(){
          if(xmlObj.readyState ==4 && xmlObj.status == 200){
             document.forms[0].output.value = xmlObj.responseText;
          }
       }
```

```
68          </script>
69        </head>
70        <body>
71          <form>
72            <input type="text" name="data" id="data" size="40"><br>
73            <input type="button" value="Ajax로 송신합니다" id="mybtn"><br>
74            <input type="text" name="output" size="60">
75          </form>
76        </body>
77      </html>
78
79    [validation.jsp]
80      <jsp:directive.page language="java" contentType="text/html; charset=UTF-8"
        pageEncoding="UTF-8" />
81      <jsp:directive.page import="java.util.regex.Pattern" />
82      <jsp:declaration>
83        boolean validate(String str){
84          boolean flag = true;
85          flag =
          Pattern.matches("^[a-zA-Z0-9][-a-zA-Z0-9._]+@[-a-zA-Z0-9]+(\\.[-a-zA-Z0-9]+)*\\.(com
          |gov|edu|int|mil|net|org|biz|info|name|museum|coop|aero|[a-zA-Z][a-zA-Z])$", str);
86          return flag;
87        }
88      </jsp:declaration>
89      <%
90        String userdate = request.getParameter("email");
91        boolean flag = validate(userdate);
92        String msg = "You have entered a invalid date.";
93        if(flag) msg = "You have entered a valid date";
94        response.setContentType("text/xml");
95        out.println("<response>");
96        out.println("<passed>" + Boolean.toString(flag) + "</passed>");
97        out.println("<message>" + msg + "</message>");
98        out.println("</response>");
99      %>
100
101   [ajaxdemo2.html]
102     <!DOCTYPE html>
103     <html>
104       <head>
105         <meta charset="UTF-8">
106         <title>Insert title here</title>
107         <script src="js/jquery-3.2.1.min.js"></script>
108         <script>
109           $(document).ready(function(){
110             $('#email').bind('change', function(){
111               var xmlObj = new XMLHttpRequest();
112               xmlObj.open("POST", "validation.jsp");
113
                  xmlObj.setRequestHeader("Content-Type","application/x-www-form-urlencoded;cha
                  rset=utf-8");
114               xmlObj.onreadystatechange = function(){
115                 if(xmlObj.readyState == 4 && xmlObj.status == 200){
116                   var xmlDoc = xmlObj.responseXML;
117                   var passed =
                      xmlDoc.getElementsByTagName("passed")[0].firstChild.nodeValue;
118                   var message =
                      xmlDoc.getElementsByTagName("message")[0].firstChild.nodeValue;
119                   if(passed == 'true'){
120                     $('#rcvMsg').text(message).css('color', 'green');
121                   }else{
122                     $('#rcvMsg').text(message).css('color', 'red');
123                   }
124                 }
125               }
126               xmlObj.send("email=" + $('#email').val());
127             });
```

```
128              });
129
130          </script>
131        </head>
132        <body>
133          <h2>Ajax Validation Example</h2>
134          Email : <input type="text" id="email" style="font-size:30pt:width:100px;border:solid red
             1px" />(예:2012-11-30)<br />
135          <div id="rcvMsg"></div>
136        </body>
137      </html>
138
139    [validation1.jsp]
140      <%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>
141      <%
142        String key = request.getParameter("key").trim();
143        String value = request.getParameter("value").trim();
144        boolean flag = false;
145        if(key.equals("zipcode")){
146          flag = java.util.regex.Pattern.matches("^\\d{3}-?\\d{3}$", value);
147        }else if(key.equals("handphone")){
148          flag = java.util.regex.Pattern.matches("^(010|011|016|017|018|019)-\\d{3,4}-\\d{4}$",
             value);
149        }else if(key.equals("email")){
150          flag =
             java.util.regex.Pattern.matches("^[a-zA-Z0-9][-a-zA-Z0-9._]+@[-a-zA-Z0-9]+(\\.[-a-zA-Z0
             -9]+)*\\.(com|gov|edu|int|mil|net|org|biz|info|name|museum|coop|aero|[a-zA-Z][a-zA-Z]
             )$", value);
151        }
152        response.setContentType("text/xml");
153        response.setHeader("cache-control", "no-cache");
154        response.setHeader("pragma", "no-cache");
155        response.setDateHeader("Expires", 0);
156        String msg = "You have entered a invalid " + key + ".";
157        if(flag) msg = "You have entered a valid " + key + ".";
158        out.println("<response>");
159        out.println("<passed>" + Boolean.toString(flag) + "</passed>");
160        out.println("<message>" + msg + "</message>");
161        out.println("</response>");
162      %>
163
164    [ajaxdemo3.html]
165      <!DOCTYPE html>
166      <html lang="ko">
167      <head>
168      <meta charset="UTF-8">
169      <title>Insert title here</title>
170      <style>
171        input {font-size:20pt; border:1px solid red; width:400px}
172      </style>
173      <script type="text/javascript" src="js/httpRequest.js"></script>
174      <script type="text/javascript">
175        var keyword = null;
176        function check(key, obj){
177          keyword = key;
178          var param = "key=" + key + "&value=" + obj.value;
179          sendRequest("validation1.jsp", param, callback, "get");
180        }
181        function callback(){
182          if(httpRequest.readyState == 4 && httpRequest.status == 200){
183            var xmlDoc = httpRequest.responseXML;
184            var root = xmlDoc.firstChild;
185            var color = "red";
186            var flag = root.childNodes[1].firstChild.nodeValue;
187            var msg = root.childNodes[3].firstChild.nodeValue;
188            if(flag == "true") color = "blue";
189            if(keyword == "zipcode"){
```

```
190         document.getElementById("zipMsg").innerHTML =
191             "<font size='4' color=" + color + ">" + msg + "</font>";
192     }else if(keyword == "handphone"){
193         document.getElementById("hpMsg").innerHTML =
194             "<font size='4' color=" + color + ">" + msg + "</font>";
195     }else if(keyword == "email"){
196         document.getElementById("emailMsg").innerHTML =
197             "<font size='4' color=" + color + ">" + msg + "</font>";
198     }
199   }
200 }
201 </script>
202 </head>
203 <body>
204 <h2>Ajax Validation Example1 </h2>
205     우편번호 : <input type="text" id="zipcode" onchange="check('zipcode', this)" /><div
        id="zipMsg"></div><br />
206     핸드폰번호 : <input type="text" id="hp" onchange="check('handphone', this)" /><div
        id="hpMsg"></div><br />
207     Email : <input type="text" id="email" onchange="check('email', this)" /><div
        id="emailMsg"></div><br />
208 </body>
209 </html>
210
211
212 2. Radio Button
213   [radio.jsp]
214     <%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>
215     <%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
216
217     <c:set var="data" value="${param.data}" />
218     <c:choose>
219       <c:when test="${data eq 1}">
220         <c:set var="outMsg" value="1분 코스가 선택되었습니다" />
221       </c:when>
222       <c:when test="${data eq 5}">
223         <c:set var="outMsg" value="5분 코스가 선택되었습니다" />
224       </c:when>
225       <c:when test="${data eq 10}">
226         <c:set var="outMsg" value="10분 코스가 선택되었습니다" />
227       </c:when>
228     </c:choose>
229     <c:out value="${outMsg}" />
230
231   [sampleRadio.htm]
232     <!DOCTYPE html>
233     <html>
234       <head>
235         <meta charset="UTF-8">
236         <title>Insert title here</title>
237         <script src="js/jquery-3.2.1.min.js"></script>
238         <script>
239           $(document).ready(function(){
240             $('input:radio[name="minutes"]').click(function(){
241               var data = $('input:radio[name="minutes"]:checked').val();
242               var xmlObj = new XMLHttpRequest();
243               xmlObj.open("GET", "radio.jsp?data=" + data, true);
244               xmlObj.onreadystatechange = function(){
245                 if(xmlObj.readyState ==4 && xmlObj.status == 200){
246                   $('#output1').val(xmlObj.responseText.trim());
247                 }
248               }
249               xmlObj.send(null);
250             });
251           });
252         </script>
253       </head>
```

```
254      <body>
255         <form name="test1">
256            <input type="radio" name="minutes" value="1" id="rdo1">1분  
257            <input type="radio" name="minutes" value="5" id="rdo2">5분  
258            <input type="radio" name="minutes" value="10" id="rdo3">10분<P>
259            출력 : <input type="text" id="output1" size="40">
260         </form>
261      </body>
262   </html>
263
264   [radio1.jsp]
265      <%@ page language="java" contentType="text/html; charset=utf-8" pageEncoding="utf-8"%>
266      <%
267         String msg = "그러면, 입력해주세요 <input type=\"text\" name=\"ok\" value=\"\">";
268         out.println(msg);
269      %>
270
271   [sampleRadio1.html]
272      <!DOCTYPE html>
273      <html lang="ko">
274      <head>
275      <meta charset="utf-8" />
276      <title>Ajax Test using Radio Button</title>
277      <script src="js/httpRequest.js"></script>
278      <script>
279         window.addEventListener("load", setup, false);
280         function setup(){
281            document.getElementById('yes').addEventListener("click", Click, false);
282         }
283         function Click(evt){
284            if(evt.target.value == "yes"){
285               sendRequest("msg1.jsp", '', getMsg, "post");
286            }
287         }
288         function getMsg(evt){
289            if(httpRequest.readyState == 4 && httpRequest.status == 200){
290                  var msg = httpRequest.responseText;
291                  msg = msg.split('&lt;input type="text" name="ok" value=""&gt;');
292                  msg = msg.join('<input type="text" name="ok" value="">');
293                  document.getElementById("output1").innerHTML = msg;
294            }
295            }
296      </script>
297      </head>
298      <body>
299      YES 가 체크될 때만 처리
300         <form>
301            <input type="radio" name="yesno" value="yes" id="yes"> YES  
302            <input type="radio" name="yesno" value="no" id="no" checked> NO
303         </form>
304         <!-- 여기에 출력  -->
305         <div id="output1"></div>
306      </body>
307      </html>
308
309
310   3. Link
311      [msg1.xml]
312         <?xml version="1.0" encoding="utf-8"?>
313         <root>test1입니다.</root>
314
315      [msg2.xml]
316         <?xml version="1.0" encoding="utf-8"?>
317         <root>test2입니다.</root>
318
319      [msg3.xml]
320         <?xml version="1.0" encoding="utf-8"?>
```

```
321        <root>test3입니다.</root>
322
323    [sampleLink.html]
324        <!DOCTYPE html>
325        <html lang="ko">
326        <head>
327        <meta charset="utf-8" />
328        <title>Ajax Test using Radio Button</title>
329        <script src="js/httpRequest.js"></script>
330        <script>
331           function loadMsg(val){
332              var url = "msg"+val+".xml";
333              sendRequest(url, '', callback, "post");
334           }
335           function callback(){
336              if(httpRequest.readyState == 4 && httpRequest.status == 200){
337                    var xmlDoc = httpRequest.responseXML;
338                    var root = xmlDoc.firstChild;
339                  var msg = root.firstChild.nodeValue;
340                    document.getElementById("output1").innerHTML = msg;
341              }
342              }
343        </script>
344        </head>
345        <body>
346           <A href="javascript:loadMsg(1)">test1 입니다</A><br>
347           <A href="javascript:loadMsg(2)">test2 입니다</A><br>
348           <A href="javascript:loadMsg(3)">test3 입니다</A><br>
349
350           <!-- 여기에 출력 -->
351           <div id="output1" style="font-size:24px"></div>
352        </body>
353        </html>
354
355    [menu1.html]
356        <a href="http://www.naver.com">Naver</a>
357
358    [menu2.html]
359        <a href="http://www.daum.net">DAUM</a><br>
360        <a href="http://www.empas.com">EMPAS</a>
361
362    [sampleOnMouse.html]
363        <!DOCTYPE html>
364        <html lang="ko">
365        <head>
366        <meta charset="utf-8" />
367        <title>Ajax Test using Radio Button</title>
368        <script src="js/httpRequest.js"></script>
369        <script>
370           var margin;
371           function loadMenu(num, m){
372              margin = m;
373              var url = "menu"+num+".html";
374              sendRequest(url, '', callback, "post");
375           }
376           function callback(){
377              if(httpRequest.readyState == 4 && httpRequest.status == 200){
378                    var msg = httpRequest.responseText;
379                    document.getElementById("menuA").innerHTML = msg;
380                    document.getElementById("menuA").style.marginLeft = margin + "px";
381              }
382              }
383        </script>
384        </head>
385        <body>
386           | <a href="javascript:void()" onMouseOver="loadMenu(1,5)">Menu1을 읽어들입니다</a>
387           | <a href="javascript:void()" onMouseOver="loadMenu(2,190)">Menu2을 읽어들입니다</a> |
```

```
388
389            <!--  여기로 출력 -->
390            <div id="menuA" class="menu"></div>
391        </body>
392        </html>
393
394
395  4. Select & Option
396     [coffee.xml]
397        <?xml version="1.0" encoding="utf-8"?>
398        <lists>
399           <items>
400              <text>Americano</text>
401              <value>3000</value>
402           </items>
403           <items>
404              <text>Cafe Mocha</text>
405              <value>5000</value>
406           </items>
407           <items>
408              <text>Cafe Latte</text>
409              <value>3500</value>
410           </items>
411           <items>
412              <text>Capuccino</text>
413              <value>6000</value>
414           </items>
415        </lists>
416
417     [fruit.xml]
418        <?xml version="1.0" encoding="utf-8"?>
419        <lists>
420           <items>
421              <text>Banana</text>
422              <value>1000</value>
423           </items>
424           <items>
425              <text>Orange</text>
426              <value>2000</value>
427           </items>
428           <items>
429              <text>Apple</text>
430              <value>3000</value>
431           </items>
432           <items>
433              <text>Grape</text>
434              <value>4000</value>
435           </items>
436           <items>
437              <text>Plums</text>
438              <value>5000</value>
439           </items>
440           <items>
441              <text>Nuts</text>
442              <value>6000</value>
443           </items>
444        </lists>
445
446     [sampleOption.html]
447        <!DOCTYPE html>
448        <html>
449           <head>
450              <meta charset="UTF-8">
451              <title>Insert title here</title>
452              <script src="js/jquery-3.2.1.min.js"></script>
453              <script>
454                 var xmlObj;
```

```
455        $(document).ready(function(){
456            xmlObj = new XMLHttpRequest();
457            $('#coffee').click(function(){
458                xmlObj.open("GET", "coffee.xml");
459                xmlObj.onreadystatechange = callback;
460                xmlObj.send(null);
461            });
462            $('#fruit').click(function(){
463                xmlObj.open("GET", "fruit.xml");
464                xmlObj.onreadystatechange = callback;
465                xmlObj.send(null);
466            });
467            $('#lists').change(function(){
468                var obj = document.getElementById("lists");
469                var idx = obj.selectedIndex;
470                alert(obj.options[idx].text + " : " + obj.options[idx].value);
471            });
472        });
473        function callback(){
474            if(xmlObj.readyState == 4 && xmlObj.status == 200){
475                xmlDoc = xmlObj.responseXML;
476                deleteAll(document.getElementById('lists'));
477                setItems(document.getElementById('lists'), xmlDoc);
478            }
479        }
480        function deleteAll(obj){
481            for(var i = 0 ; i < obj.options.length ; i++){
482                obj.options[i] = null;
483            }
484        }
485        function setItems(obj, xdoc){
486            var root = xdoc.firstChild;
487            var count = 1;
488            obj.options[0] = new Option("-----선택-----", '');
489            for(var i = 0 ; i < root.childNodes.length ; i++){
490                if(root.childNodes[i].tagName == "items"){
491                    var node = root.childNodes[i];
492                    var text = node.childNodes[1].firstChild.nodeValue;
493                    var value = node.childNodes[3].firstChild.nodeValue;
494                    obj.options[count] = new Option(text,value);
495                    count++;
496                }
497            }
498            obj.options[0].selected = "true";
499        }
500    </script>
501  </head>
502  <body>
503    <form name="test1">
504        <input type="button" id="coffee" value="커피 목록">
505        <input type="button" id="fruit" value="과일 목록"><br>
506        <select name="sel" size="10" id="lists" style="width:100px">
507            <option selected>-----선택-----</option>
508        </select>
509    </form>
510  </body>
511 </html>
```