

HTML 5 Forms

HTML



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<form>



- Is used to create an HTML form for user input.
- Differences Between HTML 4.01 and HTML5
 - HTML5 has added two new attributes:
 - **autocomplete** and **novalidate**
 - Removed the **accept** attribute.

<form> (Cont.)

■ Attributes

- **accept-charset**

- Specifies the character encodings that are to be used for the form submission.



```
1 <form action="demo_form.asp" accept-charset="ISO-8859-1">
2   First name: <input type="text" name="fname"><br>
3   Last name: <input type="text" name="lname"><br>
4   <input type="submit" value="Submit">
5 </form>
```

- **action**



- Specifies where to send the form-data when a form is submitted.

<form> (Cont.)

■ Attributes

- **autocomplete**

- Specifies whether a form should have autocomplete on or off.
- **on | off**



```
1  <form action="demo_form.asp" method="get" autocomplete="on">
2    First name:<input type="text" name="fname"><br>
3    E-mail: <input type="email" name="email"><br>
4    <input type="submit">
5  </form>
```

<form> (Cont.)

■ Attributes

- **enctype**



- Specifies how the form-data should be encoded when submitting it to the server (only for method="post").
- **application/x-www-form-urlencoded | multipart/form-data | text/plain**

```
1 <form action="demo_post_enctype.asp"
2   method="post" enctype="multipart/form-data">
3     First name: <input type="text" name="fname"><br>
4     Last name: <input type="text" name="lname"><br>
5     <input type="submit" value="Submit">
6   </form>
```

<form> (Cont.)

■ Attributes

- **method**



- Specifies the HTTP method to use when sending form-data.
- **get | post**

```
1 <form action="demo_post_enctype.asp"
2   method="post" enctype="multipart/form-data">
3     First name: <input type="text" name="fname"><br>
4     Last name: <input type="text" name="lname"><br>
5     <input type="submit" value="Submit">
6   </form>
```

<form> (Cont.)

■ Attributes

- **name**



- Specifies the name of a form.

```
1  <form action="form_action.asp" method="get" name="myForm">
2    First name: <input type="text" name="fname"><br>
3    Last name: <input type="text" name="lname"><br>
4    <input type="button" onclick="formSubmit()" value="Send form data!">
5  </form>
```

<form> (Cont.)

■ Attributes

- **novalidate**



- Specifies that the form should not be validated when submitted.

```
1  <form action="demo_form.asp" novalidate>
2  E-mail: <input type="email" name="user_email">
3  <input type="submit">
4  </form>
```

<form> (Cont.)

■ Attributes

- **target**



- Specifies where to display the response that is received after submitting the form.

- **_blank | _self | _parent | _top**

```
1  <form action="demo_form.asp" method="get" target="_blank">
2    First name: <input type="text" name="fname"><br>
3    Last name: <input type="text" name="lname"><br>
4    <input type="submit" value="Submit">
5  </form>
```

<fieldset>



- Is used to group related elements in a form.
- Draws a box around the related elements.
- The <legend> tag defines a caption for the <fieldset> element.

```
1 <form>
2   <fieldset>
3     <legend>Personalia:</legend>
4     Name: <input type="text"><br>
5     Email: <input type="text"><br>
6     Date of birth: <input type="text">
7   </fieldset>
8 </form>
```

Personalia:

Name:

Email:

Date of birth:

<fieldset> (Cont.)

■ Attributes

- **disabled**



- Specifies that a group of related form elements should be disabled.

```
1 <form>
2   <fieldset disabled>
3     <legend>Personalia:</legend>
4     Name: <input type="text"><br>
5     Email: <input type="text"><br>
6     Date of birth: <input type="text">
7   </fieldset>
8 </form>
```

A screenshot of a web browser displaying a form. The form contains a legend labeled "Personalia". Below the legend are three input fields: "Name", "Email", and "Date of birth". All three input fields are currently disabled, as indicated by the greyed-out appearance of the text and the lack of a cursor or selection.

<fieldset> (Cont.)

■ Attributes

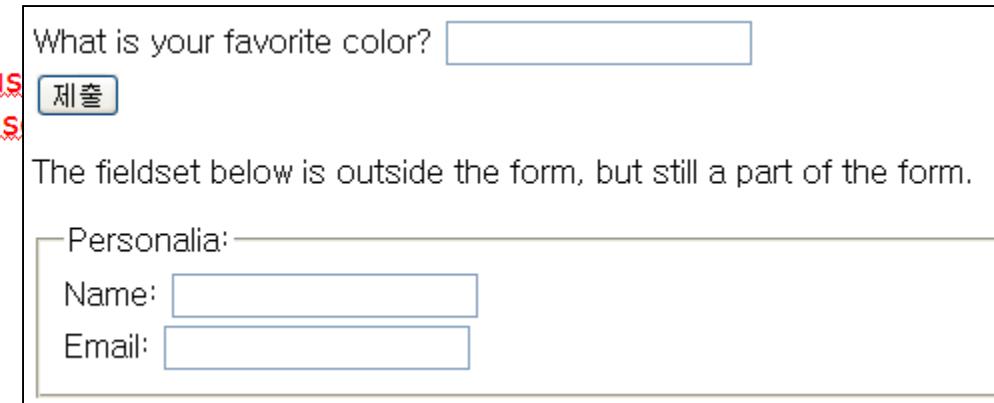
- **form**



0

- Specifies one or more forms the fieldset belongs to.

```
1  <form action="demo_form.asp" method="get" id="form1">
2  | What is your favorite color? <input type="text" name="fav_color"><br>
3  | <input type="submit">
4  |</form>
5
6  <p>The fieldset below is outside the form, but still a part of the form.</p>
7
8  <fieldset form="form1">
9  | <legend>Personalia:</legend>
10 | Name: <input type="text" name="us<input type="text" name="us<input type="text" name="us
11 | Email: <input type="text" name="us<input type="text" name="us<input type="text" name="us
12 |</fieldset>
```



The screenshot shows a web page with the following content:

What is your favorite color?

The fieldset below is outside the form, but still a part of the form.

Personalia:

Name:

Email:

<fieldset> (Cont.)

■ Attributes

- **name**



- Specifies a name for the fieldset.

```
1 <form action="demo_form.asp" method="get">
2 <fieldset name="personalia">
3   Name: <input type="text" name="username"><br>
4   Email: <input type="text" name="usermail"><br>
5 </fieldset>
6 <button type="button" onclick="form.personalia.style.backgroundColor='yellow'">
7   Change background color of fieldset</button>
8 <input type="submit">
9 </form>
```

A screenshot of a web page showing a form. Inside the form, there is a **fieldset** element with the attribute `name="personalia"`. The entire **fieldset** has a yellow background color. Inside the **fieldset**, there are two **input** fields for "Name" and "Email", and a **button** labeled "Change background color of fieldset". Below the **fieldset**, there is a **submit** button.

<legend>



- Defines a caption for the <fieldset> element.

```
1  <form>
2  <fieldset>
3  <legend>Personalia:</legend>
4  Name: <input type="text"><br>
5  Email: <input type="text"><br>
6  Date of birth: <input type="text">
7  </fieldset>
8  </form>
```

Personalia:

Name:

Email:

Date of birth:

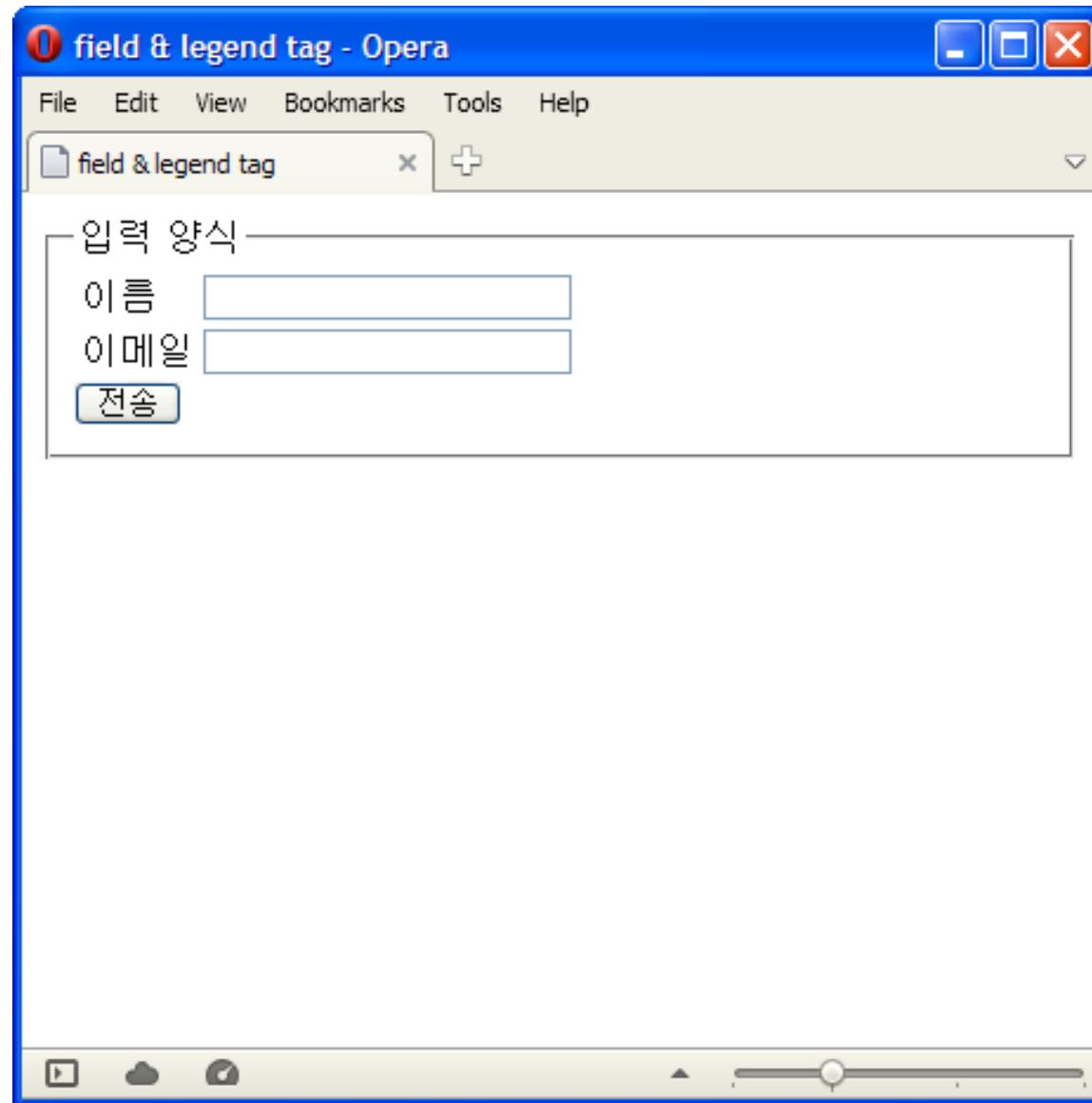
Lab1 : fieldset & legend Tag

- Web Browsers
 - IE10, Firefox, Google Chrome, Opera, Safari
- Text Editors
 - Notepad++, Editplus, etc...
- Files
 - legend.html

Lab1 : legend.html

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <title>field & legend tag</title>
5  </head>
6  <body>
7      <form>
8          <fieldset>
9              <legend>입력 양식</legend>
10             <table>
11                 <tr>
12                     <td><label for="name">이름</label></td>
13                     <td><input id="name" type="text" /></td>
14                 </tr>
15                 <tr>
16                     <td><label for="mail">이메일</label></td>
17                     <td><input id="mail" type="email" /></td>
18                 </tr>
19             </table>
20             <input type="submit" value="전송" />
21         </fieldset>
22     </form>
23 </body>
24 </html>
```

Lab1 : Result



<label>



- Defines a label for an <input> element.
- Provides a usability improvement for mouse users, because if the user clicks on the text within the <label> element, it toggles the control.
- Attributes

- **for**



- Specifies which form element a label is bound to.

<label> (Cont.)

```
1 <p>Click on one of the text labels to toggle the related control:</p>
2
3 <form action="demo_form.asp">
4   <label for="male">Male</label>
5   <input type="radio" name="sex" id="male" value="male"><br>
6   <label for="female">Female</label>
7   <input type="radio" name="sex" id="female" value="female"><br><br>
8   <input type="submit" value="Submit">
9 </form>
```

Click on one of the text labels to toggle the related control:

Male

Female

<label> (Cont.)

■ Attributes

- **form**



- Specifies one or more forms the label belongs to.

```
1 1 <p>The label for the first radio button is outside the form,  
2 2 but still a part of the form.  
3 3 Try clicking the text label to toggle the male radio button.</p>  
4  
5 5 <form action="demo_form.asp" id="form1">  
6 6   <input type="radio" name="sex" id="male" value="male"><br>  
7 7   <label for="female">Female</label>  
8 8   <input type="radio" name="sex" id="female" value="female"><br><br>  
9 9   <input type="submit" value="Submit">  
10 10 </form>  
11 11  
12 12 <label for="male" form="form1">Male</label>
```

The label for the first radio button is outside the form, but still radio button.

Female

Male

Submit

Lab2 : Label Tag

■ Web Browsers

- IE10, Firefox, Google Chrome, Opera, Safari

■ Text Editors

- Notepad++, Editplus, etc...

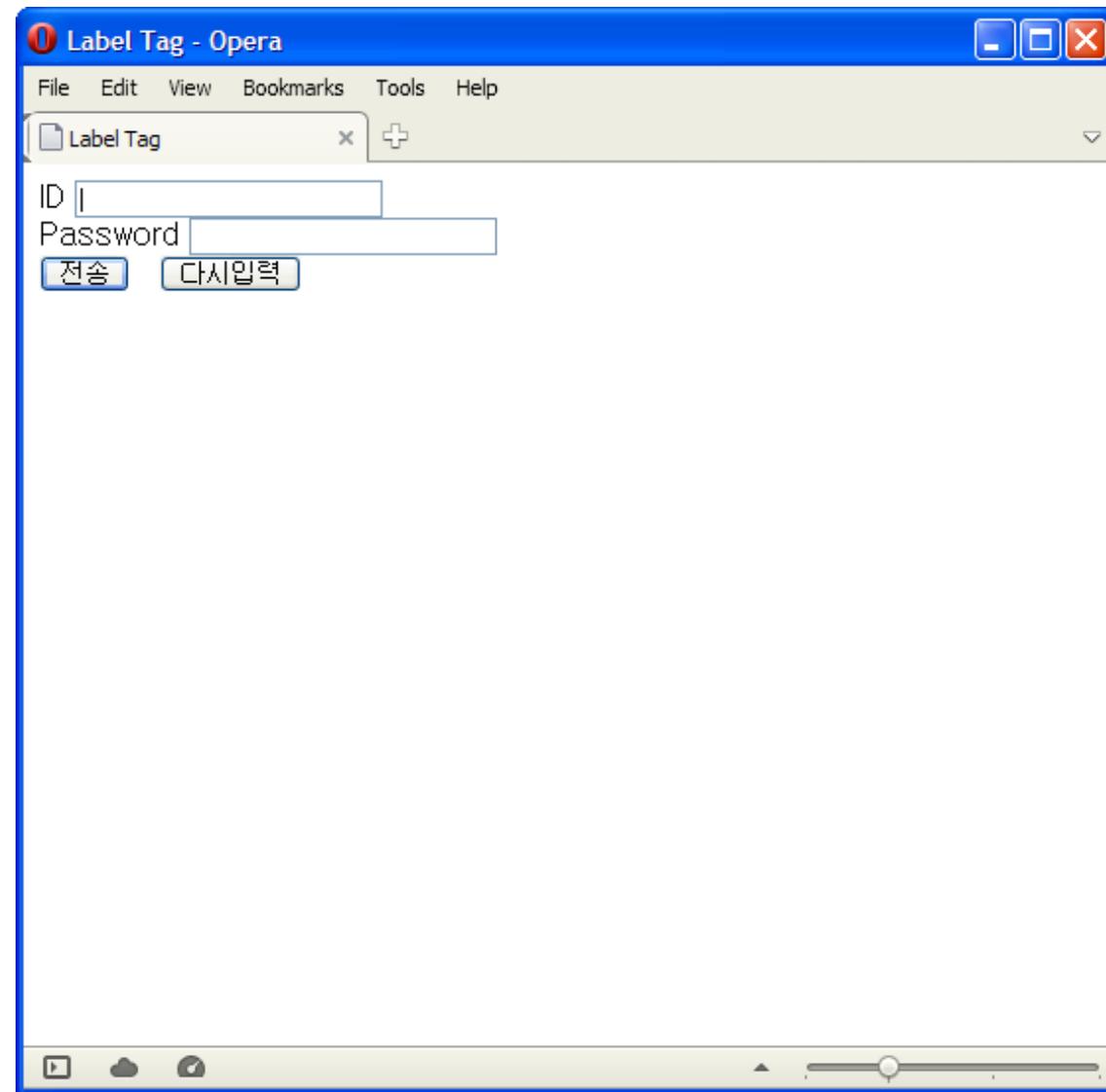
■ Files

- label.html

Lab2 : label.html

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <title>Label Tag</title>
5  </head>
6  <body>
7      <form>
8          <label for="id">ID</label>
9          <input type="text" id="id" /><br />
10         <label for="passwd">Password</label>
11         <input type="password" id="passwd" /><br />
12         <input type="submit" value="전송" />&nbsp;&nbsp;
13         <input type="reset" value="다시입력" />
14     </form>
15 </body>
16 </html>
```

Lab2 : Result



<input>



- Specifies an input field where the user can enter data.
- Attributes

- **accept**



- Specifies the types of files that the server accepts (only for type="file").
- **Audio/* | video/* | image/* | MIME_Type**

```
1  <form action="demo_form.asp">
2    <input type="file" name="pic" accept="image/*">
3    <input type="submit">
4  </form>
```

- **name**



- Specifies the name of an <input> element.

<input> (Cont.)

■ Attributes

- **alt**



- Specifies an alternate text for images (only for type="image")

```
1 <form action="demo_form.asp">
2   First name: <input type="text" name="fname"><br>
3   <input type="image" src="submit.gif" alt="Submit" width="48" height="48">
4 </form>
```

- **autocomplete**



- Specifies whether an <input> element should have autocomplete enabled.

- **on | off**

```
1 <form action="demo_form.asp" autocomplete="on">
2   First name:<input type="text" name="fname"><br>
3   Last name:<input type="text" name="lname"><br>
4   E-mail:<input type="email" name="email" autocomplete="off"><br>
5   <input type="submit">
6 </form>
```

<input> (Cont.)

■ Attributes

- **autofocus**



- Specifies that an <input> element should automatically get focus when the page loads.

```
1  <form action="demo_form.asp">
2  First name: <input type="text" name="fname" autofocus><br>
3  Last name: <input type="text" name="lname"><br>
4  <input type="submit">
5  </form>
```

First name:

Last name:

A screenshot of a web browser showing a form with two text input fields labeled "First name:" and "Last name:". Below the inputs is a blue rectangular button labeled "제출".

<input> (Cont.)

■ Attributes

- **checked**



- Specifies that an <input> element should be pre-selected when the page loads (for type="checkbox" or type="radio")

```
1  <form action="demo_form.asp" method="get">
2    <input type="checkbox" name="vehicle" value="Bike"> I have a bike<br>
3    <input type="checkbox" name="vehicle" value="Car" checked> I have a car<br>
4    <input type="submit" value="Submit">
5  </form>
```

I have a bike

I have a car

Submit

<input> (Cont.)

■ Attributes

- **disabled**

- Specifies that an <input> element should be disabled.



```
1  <form action="demo_form.asp">
2  First name: <input type="text" name="fname"><br>
3  Last name: <input type="text" name="lname" disabled><br>
4  <input type="submit" value="Submit">
5  </form>
```

First name:

Last name:

A screenshot of a web browser showing a form. The first input field is labeled "First name" and is active, indicated by a blue border. The second input field is labeled "Last name" and has a gray background, indicating it is disabled. Below the fields is a blue "Submit" button.

<input> (Cont.)

■ Attributes

- **form**



- Specifies one or more forms the <input> element belongs to.

```
1  <form action="demo_form.asp" id="form1">
2  First name: <input type="text" name="fname"><br>
3  <input type="submit" value="Submit">
4  </form>
5
6  <p>The "Last name" field below is outside the form element, but still part of the form.</p>
7
8  Last name: <input type="text" name="lname" form="form1">
```

First name:

The "Last name" field below is outside the form element, but still part of the form.

Last name:

<input> (Cont.)

■ Attributes

- **formaction**



- Specifies the URL of the file that will process the input control when the form is submitted (for type="submit" and type="image").

```
1  <form action="demo_form.asp">
2    First name: <input type="text" name="fname"><br>
3    Last name: <input type="text" name="lname"><br>
4    <input type="submit" value="Submit"><br>
5    <input type="submit" formaction="demo_admin.asp" value="Submit as admin">
6  </form>
```

First name:

Last name:

A screenshot of a web browser showing a form with two text input fields for 'First name' and 'Last name', and two submit buttons: 'Submit' and 'Submit as admin'. The 'Submit as admin' button is highlighted with a blue border.

<input> (Cont.)

■ Attributes

- **formenctype**



- Specifies how the form-data should be encoded when submitting it to the server (for type="submit" and type="image")

- **application/x-www-form-urlencoded | multipart/form-data | text/plain**

```
1 <form action="demo_post_enctype.asp" method="post">
2   First name: <input type="text" name="fname"><br>
3   <input type="submit" value="Submit">
4   <input type="submit" formenctype="multipart/form-data" value="Submit as Multipart/form-data">
5 </form>
```

First name:

<input> (Cont.)

■ Attributes

- **formmethod**



- Defines the HTTP method for sending data to the action URL
(for type="submit" and type="image")

- **get | post**

```
1  <form action="demo_form.asp" method="get">
2    First name: <input type="text" name="fname"><br>
3    Last name: <input type="text" name="lname"><br>
4    <input type="submit" value="Submit">
5    <input type="submit" formmethod="post" formaction="demo_post.asp" value="Submit using POST">
6  </form>
```

First name:

Last name:

<input> (Cont.)

■ Attributes

- **formnovalidate**

- Defines that form elements should not be validated when submitted.

```
1  <form action="demo_form.asp">
2    E-mail: <input type="email" name="userid"><br>
3    <input type="submit" value="Submit"><br>
4    <input type="submit" formnovalidate="formnovalidate" value="Submit without validation">
5  </form>
```



E-mail:

A screenshot of a web browser showing a form. The form has a label "E-mail:" followed by an empty input field. Below the input field are two buttons: one labeled "Submit" and another labeled "Submit without validation". The "Submit without validation" button is highlighted with a blue border.

<input> (Cont.)

■ Attributes

- **formtarget**



- Specifies where to display the response that is received after submitting the form (for type="submit" and type="image").

- **_blank | _self | _parent | _top | framename**

```
1 <form action="demo_form.asp">
2     

3     

4   <input type="submit" value="Submit as normal">
5   <input type="submit" formtarget="_blank" value="Submit to a new window/tab">
6 </form>
```

First name:

Last name:

<input> (Cont.)

■ Attributes

- **height**



- Specifies the height of an <input> element (only for type="image").

- **width**

- Specifies the width of an <input> element (only for type="image").

```
1  <form action="demo_form.asp">
2    First name: <input type="text" name="fname"><br>
3    Last name: <input type="text" name="lname"><br>
4    <input type="image" src="img_submit.gif" alt="Submit" width="48" height="48">
5  </form>
```

First name:

Last name:



A screenshot of a web form showing two text input fields labeled "First name:" and "Last name:", and a green circular submit button with a white arrow pointing right.

<input> (Cont.)

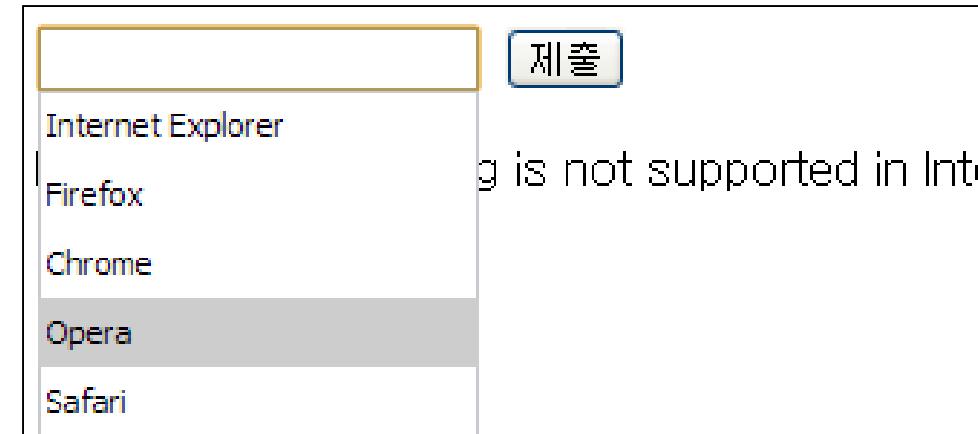
■ Attributes

- **list**



- Refers to a <**datalist**> element that contains pre-defined options for an <**input**> element.

```
1 <form action="demo_form.asp" method="get">
2   <input list="browsers" name="browser">
3   <datalist id="browsers">
4     <option value="Internet Explorer">
5     <option value="Firefox">
6     <option value="Chrome">
7     <option value="Opera">
8     <option value="Safari">
9   </datalist>
10  <input type="submit">
11 </form>
```



<input> (Cont.)

■ Attributes

- **maxlength**



- Specifies the maximum number of characters allowed in an <input> element.

```
1  <form action="demo_form.asp">
2  Username: <input type="text" name="username" maxlength="10"><br>
3  <input type="submit" value="Submit">
4  </form>
```

<input> (Cont.)

■ Attributes

- **multiple**



- Specifies that a user can enter more than one value in an <input> element.

```
1 <form action="demo_form.asp">
2   Select images: <input type="file" name="img" multiple>
3   <input type="submit">
4 </form>
```

Select images: 선택된 파일 없음

<input> (Cont.)

■ Attributes

- **pattern**



- Specifies a regular expression that an <input> element's value is checked against.

```
1 <form action="demo_form.asp">
2   Country code: <input type="text" name="country_code" pattern="[A-Za-z]{3}"
3     title="Three letter country code">
4   <input type="submit">
5 </form>
```

Country code: 제출

<input> (Cont.)

■ Attributes

- **placeholder**

- Specifies a short hint that describes the expected value of an <input> element.



```
1  <form action="demo_form.asp">
2    <input type="text" name="fname" placeholder="First name"><br>
3    <input type="text" name="lname" placeholder="Last name"><br>
4    <input type="submit" value="Submit">
5  </form>
```

A screenshot of a web page showing a form with two text input fields and one submit button. The first input field is labeled 'First name' and the second is 'Last name'. The submit button is labeled 'Submit'.

<input> (Cont.)

■ Attributes

- **readonly**



- Specifies that an input field is read-only.

```
1 <form action="demo_form.asp">
2   Email: <input type="text" name="email"><br>
3   Country: <input type="text" name="country" value="Norway" readonly><br>
4   <input type="submit" value="Submit">
5 </form>
```

Email:

Country:

<input> (Cont.)

■ Attributes

- **required**



- Specifies that an input field must be filled out before submitting the form.

```
1 <form action="demo_form.asp">
2 Username: <input type="text" name="username" required>
3 <input type="submit">
4 </form>
```

Username: 제출

Note: The required 이 입력란을 작성하세요. su

<input> (Cont.)

■ Attributes

- **size**



- Specifies the width, in characters, of an <input> element.

```
1  <form action="demo_form.asp">
2    Email: <input type="text" name="email" size="35"><br>
3    PIN: <input type="text" name="pin" maxlength="4" size="4"><br>
4    <input type="submit" value="Submit">
5  </form>
```

Email:

PIN:

<input> (Cont.)

■ Attributes

- **src**



- Specifies the URL of the image to use as a submit button (only for type="image").

```
1  <form action="demo_form.asp">
2  First name: <input type="text" name="fname"><br>
3  Last name: <input type="text" name="lname"><br>
4  <input type="image" src="img_submit.gif" alt="Submit" width="48" height="48">
5  </form>
```

First name:

Last name:



A screenshot of a web form. It contains two text input fields labeled "First name:" and "Last name:". Below the last name field is a green circular button with a white right-pointing arrow, serving as a submit button.

<input> (Cont.)

■ Attributes

- **value**



- Specifies the value of an <input> element.

```
1 <form action="demo_form.asp">
2   First name: <input type="text" name="fname" value="John"><br>
3   Last name: <input type="text" name="lname" value="Doe"><br>
4   <input type="submit" value="Submit form">
5 </form>
```

First name:

Last name:

<input> (Cont.)

■ Attributes

- **step**



- Specifies the legal number intervals for an input field.

```
1 <form action="demo_form.asp">
2   <input type="number" name="points" step="3">
3   <input type="submit">
4 </form>
```

A screenshot of a web browser window. Inside, there is a form containing a number input field with the value '6'. To the right of the input field are two small blue buttons with white symbols: an upward arrow and a downward arrow. To the right of those buttons is a blue rectangular button with the Korean text '제출' (Submit).

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **button**



```
1  <form>
2  <input type="button" value="Click me" onclick="msg()">
3  </form>
```

Click me

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **checkbox**



```
1  <form action="demo_form.asp">
2    <input type="checkbox" name="vehicle" value="Bike"> I have a bike<br>
3    <input type="checkbox" name="vehicle" value="Car"> I have a car<br>
4    <input type="checkbox" name="vehicle" value="Boat"> I have a boat<br>
5    <input type="submit" value="Submit">
6  </form>
```

I have a bike
 I have a car
 I have a boat

<input> (Cont.)

■ Attributes

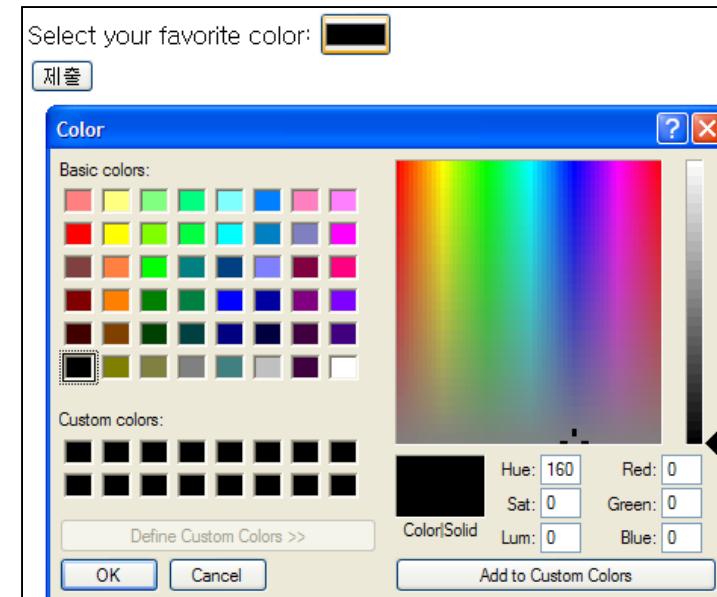
- **type**

- Specifies the type <input> element to display.

- **color**

new 0 
1 <form action="demo_form.asp">
2 Select your favorite color: <input type="color" name="favcolor">

3 <input type="submit">
4 </form>



<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **date**



```
1  <form action="demo_form.asp">
2    Birthday: <input type="date" name="bday">
3    <input type="submit">
4  </form>
```

A screenshot of a date picker interface. At the top, it says "Birthday: 2013-월-일" with a clear button and a "제출" (Submit) button. Below is a month selection dropdown set to "2013년 10월". A calendar grid shows the days of the week from Sunday to Saturday. The dates 29, 30, 1, 2, 3, 4, and 5 are in the previous month. The dates 6, 7, 8, 9, 10, 11, and 12 are in the current month. The dates 13, 14, 15, 16, 17, 18, and 19 are in the next month. The date "20" is highlighted with a blue border. The date "24" is also highlighted with a blue border. The dates 25, 26, 27, 28, 29, 30, 31, and 1 are in the following month. The date "2" is at the end of the month.

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **datetime**



```
1 <form action="demo_form.asp">
2   Birthday (date and time): <input type="datetime" name="bdaytime">
3   <input type="submit">
4 </form>
```

Birthday (date and time):

23:59 UTC

October							2013	18
Mon	Tue	Wed	Thu	Fri	Sat	Sun		
30	1	2	3	4	5	6		
7	8	9	10	11	12	13		
14	15	16	17	18	19	20		
21	22	23	24	25	26	27		
28	29	30	31	1	2	3		
4	5	6	7	8	9	10		

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **datetime-local**



```
1 <form action="demo_form.asp">
2   Birthday (date and time): <input type="datetime-local" name="bdytime">
3   <input type="submit">
4 </form>
```

Birthday (date and time):

The screenshot shows a date and time picker interface. At the top, there is a text input field with the placeholder "연도-월-일 -- --:--" and a small calendar icon. Below the input field is a month selection dropdown set to "2013년 10월". A calendar grid for October 2013 is displayed, with the days of the week labeled from Monday (일) to Sunday (토). The date "13" is highlighted in blue, indicating it is selected. The date "24" is also highlighted with a red border, likely indicating it is the current date or a specific date of interest.

일	월	화	수	목	금	토
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **email**



```
1  <form action="demo_form.asp">
2    E-mail: <input type="email" name="usremail">
3    <input type="submit">
4  </form>
```

E-mail:

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **file**



```
1  <form action="demo_form.asp">
2    Select a file: <input type="file" name="img">
3    <input type="submit">
4  </form>
```

Select a file: 선택된 파일 없음

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **hidden**



```
1 <form action="demo_form.asp">
2   First name: <input type="text" name="fname"><br>
3   <input type="hidden" name="country" value="Norway">
4   <input type="submit" value="Submit">
5 </form>
```

First name:

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **image**



```
1  <form action="demo_form.asp">
2  First name: <input type="text" name="fname"><br>
3  Last name: <input type="text" name="lname"><br>
4  <input type="image" src="img_submit.gif" alt="Submit" width="48" height="48">
5  </form>
```

First name:

Last name:

 A green circular button with a white right-pointing arrow.

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **month**



```
1 <form action="demo_form.asp">
2   Birthday (month and year): <input type="month" name="bdaymonth">
3   <input type="submit">
4 </form>
```

Birthday (month and year):

2013년 10월

일	월	화	수	목	금	토
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **number**



```
1  <form action="demo_form.asp">
2    Quantity (between 1 and 5): <input type="number" name="quantity" min="1" max="5">
3    <input type="submit">
4  </form>
```

Quantity (between 1 and 5):

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **password**



```
1  <form action="demo_form.asp">
2    Email: <input type="text" name="email"><br>
3    Password: <input type="password" name="pwd" maxlength="8"><br>
4    <input type="submit">
5  </form>
```

A screenshot of a web page showing a form. The form has two input fields: one for email with the value 'aaa' and one for password with the value '.....'. Below the inputs is a blue rectangular button with the Korean text '제출' (Submit) in white.

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **radio**



```
1  <form action="demo_form.asp">
2    <input type="radio" name="gender" value="male"> Male<br>
3    <input type="radio" name="gender" value="female"> Female<br>
4    <input type="submit" value="Submit">
5  </form>
```

A screenshot of a web browser displaying a form. The form contains two radio buttons: one labeled "Male" and another labeled "Female". Below the radio buttons is a "Submit" button. The code for this form is shown above the screenshot.

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **range**



```
1  <form action="demo_form.asp" method="get">
2  Points: <input type="range" name="points" min="1" max="10">
3  <input type="submit">
4  </form>
```

A screenshot of a web page with a form. The form has a label "Points:" followed by a range input element with a value of 5. To the right of the input is a blue rectangular button with the Korean text "제출" (Submit).

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **reset**



```
1  <form action="demo_form.asp">
2    Email: <input type="text" name="email"><br>
3    Pin: <input type="text" name="pin" maxlength="4"><br>
4    <input type="reset" value="Reset">
5    <input type="submit" value="Submit">
6  </form>
```

A screenshot of a web page showing a form. The form contains two text input fields, one for 'Email' and one for 'Pin'. Below each field is a label ('Email:' and 'Pin:'). At the bottom of the form are two buttons: 'Reset' on the left and 'Submit' on the right.

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **search**



```
1  <form action="demo_form.asp">
2  Search Google: <input type="search" name="googlesearch"><br>
3  <input type="submit">
4  </form>
```

Search Google: apple



<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **submit**



```
1  <form action="demo_form.asp">
2  First name: <input type="text" name="fname"><br>
3  Last name: <input type="text" name="lname"><br>
4  <input type="submit">
5  </form>
```

First name:

Last name:

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **tel**



```
1  <form action="demo_form.asp">
2  Telephone: <input type="tel" name="usrtel"><br>
3  <input type="submit">
4  </form>
```

Telephone:

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **text**



```
1  <form action="demo_form.asp">
2  First name: <input type="text" name="fname"><br>
3  Last name: <input type="text" name="lname"><br>
4  <input type="submit">
5  </form>
```

First name:

Last name:

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **time**



```
1  <form action="demo_form.asp">
2  Select a time: <input type="time" name="usr_time">
3  <input type="submit">
4  </form>
```

Select a time: 오후 03:26 제출

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **url**



```
1 <form action="demo_form.asp">
2   Add your homepage: <input type="url" name="homepage"><br>
3   <input type="submit">
4 </form>
```

Add your homepage:

<input> (Cont.)

■ Attributes

- **type**

- Specifies the type <input> element to display.

- **week**



```
1  <form action="demo_form.asp">
2  Select a week: <input type="week" name="year_week">
3  <input type="submit">
4  </form>
```

Select a week: 2013, --번째 주

2013년 10월 ▾

주	일	월	화	수	목	금	토
40	29	30	1	2	3	4	5
41	6	7	8	9	10	11	12
42	13	14	15	16	17	18	19
43	20	21	22	23	24	25	26
44	27	28	29	30	31	1	2

<input> (Cont.)

■ Attributes

- **max**



- Specifies the maximum value for an <input> element.

- **number | date**

```
1  <form action="demo_form.asp">
2
3  Enter a date before 1980-01-01:
4  <input type="date" name="bday" max="1979-12-31"><br>
5
6  Enter a date after 2000-01-01:
7  <input type="date" name="bday" min="2000-01-02"><br>
8
9  Quantity (between 1 and 5):
10 <input type="number" name="quantity" min="1" max="5"><br>
11
12 <input type="submit">
13 </form>
```

Enter a date before 1980-01-01: 연도 - 월 - 일 ▲ ▼

Enter a date after 2000-01-01: 연도 - 월 - 일 ▲ ▼

Quantity (between 1 and 5): ▲ ▼

제출

<input> (Cont.)

■ Attributes

- **min**



- Specifies the minimum value for an <input> element.

- **number | date**

```
1  <form action="demo_form.asp">
2
3  Enter a date before 1980-01-01:
4  <input type="date" name="bday" max="1979-12-31"><br>
5
6  Enter a date after 2000-01-01:
7  <input type="date" name="bday" min="2000-01-02"><br>
8
9  Quantity (between 1 and 5):
10 <input type="number" name="quantity" min="1" max="5"><br>
11
12 <input type="submit">
13 </form>
```

Enter a date before 1980-01-01: 연도 - 월 - 일

Enter a date after 2000-01-01: 연도 - 월 - 일

Quantity (between 1 and 5):

제출

Lab3 : Basic Input Tag

- Web Browsers

- IE10, Firefox, Google Chrome, Opera, Safari

- Text Editors

- Notepad++, Editplus, etc...

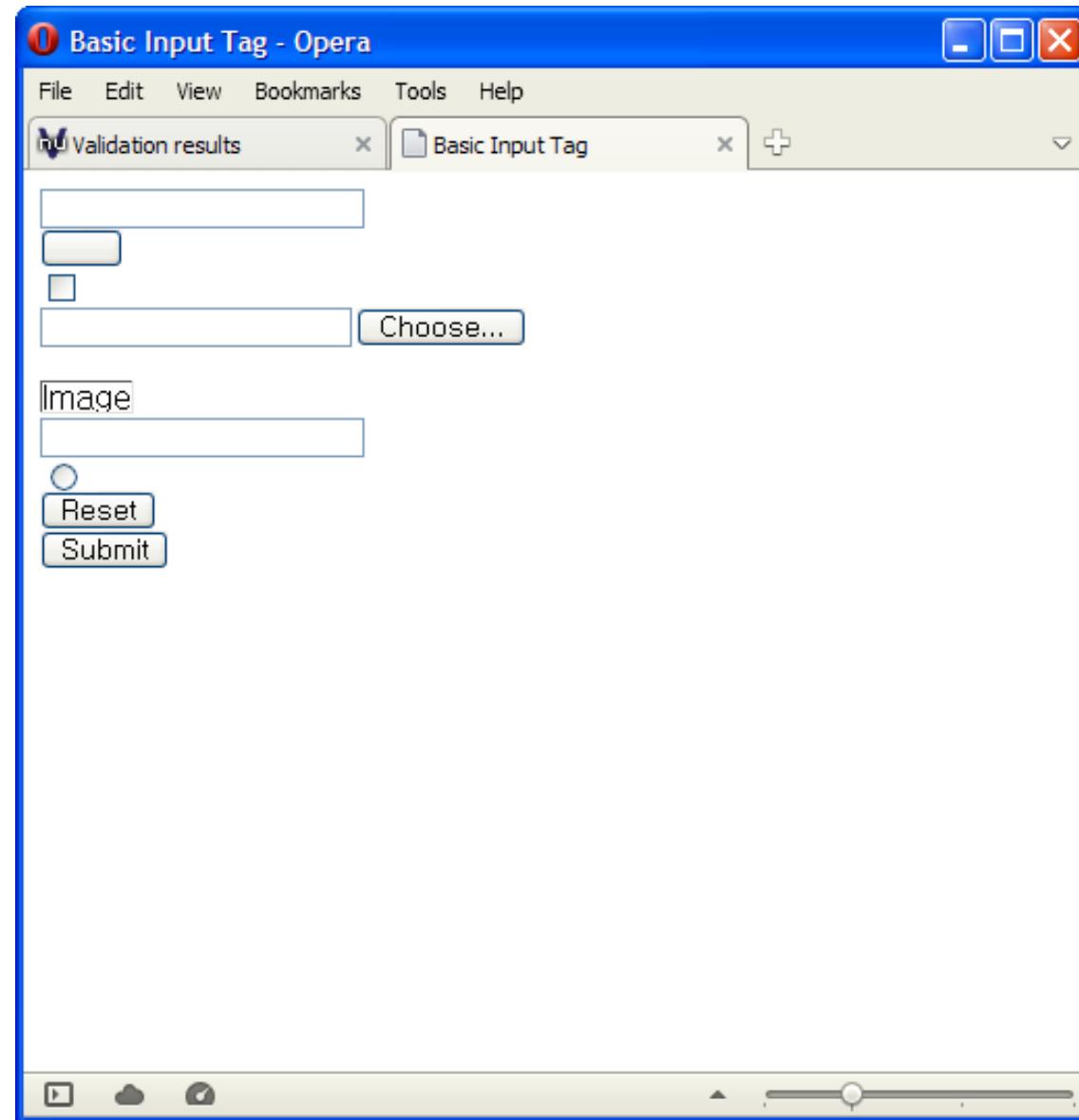
- Files

- input.html

Lab3 : input.html

```
1  <!DOCTYPE html>
2  
3  
4      <title>Basic Input Tag</title>
5  
6  
7      <form>
8          <input type="text" /><br />
9          <input type="button" /><br />
10         <input type="checkbox" /><br />
11         <input type="file" /><br />
12         <input type="hidden" /><br />
13         <input type="image" /><br />
14         <input type="password" /><br />
15         <input type="radio" /><br />
16         <input type="reset" /><br />
17         <input type="submit" />
18     </form>
19   </body>
20 </html>
```

Lab3 : Result



Lab4 : Basic Input Tag

- Web Browsers

- IE10, Firefox, Google Chrome, Opera, Safari

- Text Editors

- Notepad++, Editplus, etc...

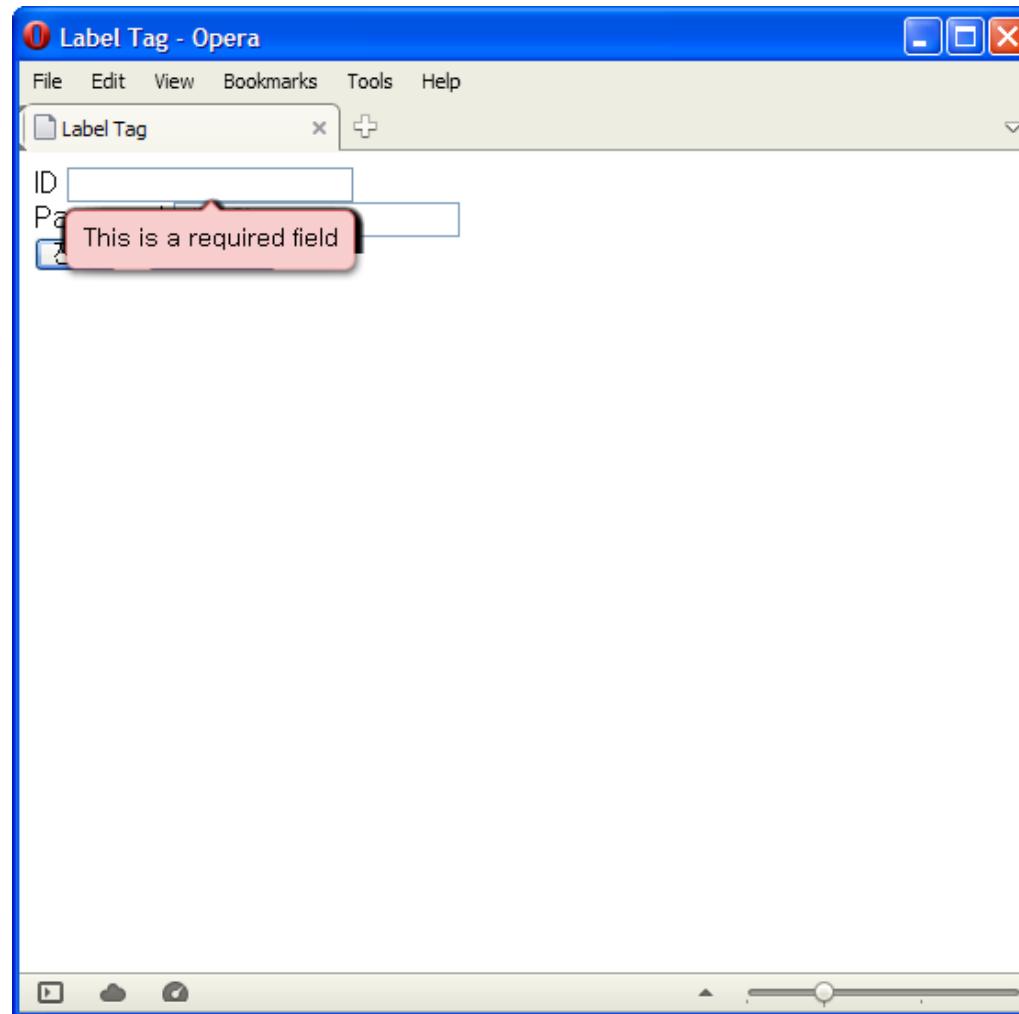
- Files

- input1.html

Lab4 : input1.html

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <title>Label Tag</title>
5  </head>
6  <body>
7      <form>
8          <label for="id">ID</label>
9          <input type="text" id="id" placeholder="아이디"
10         required="required" /><br />
11
12          <label for="passwd">Password</label>
13          <input type="password" id="passwd" placeholder="패스워드"
14         required="required" /><br />
15
16          <input type="submit" value="전송" />&nbsp;&nbsp;;
17          <input type="reset" value="다시입력" />
18      </form>
19  </body>
20 </html>
```

Lab4 : Result



Lab5 : Advanced Input Tag

- Web Browsers

- IE10, Firefox, Google Chrome, Opera, Safari

- Text Editors

- Notepad++, Editplus, etc...

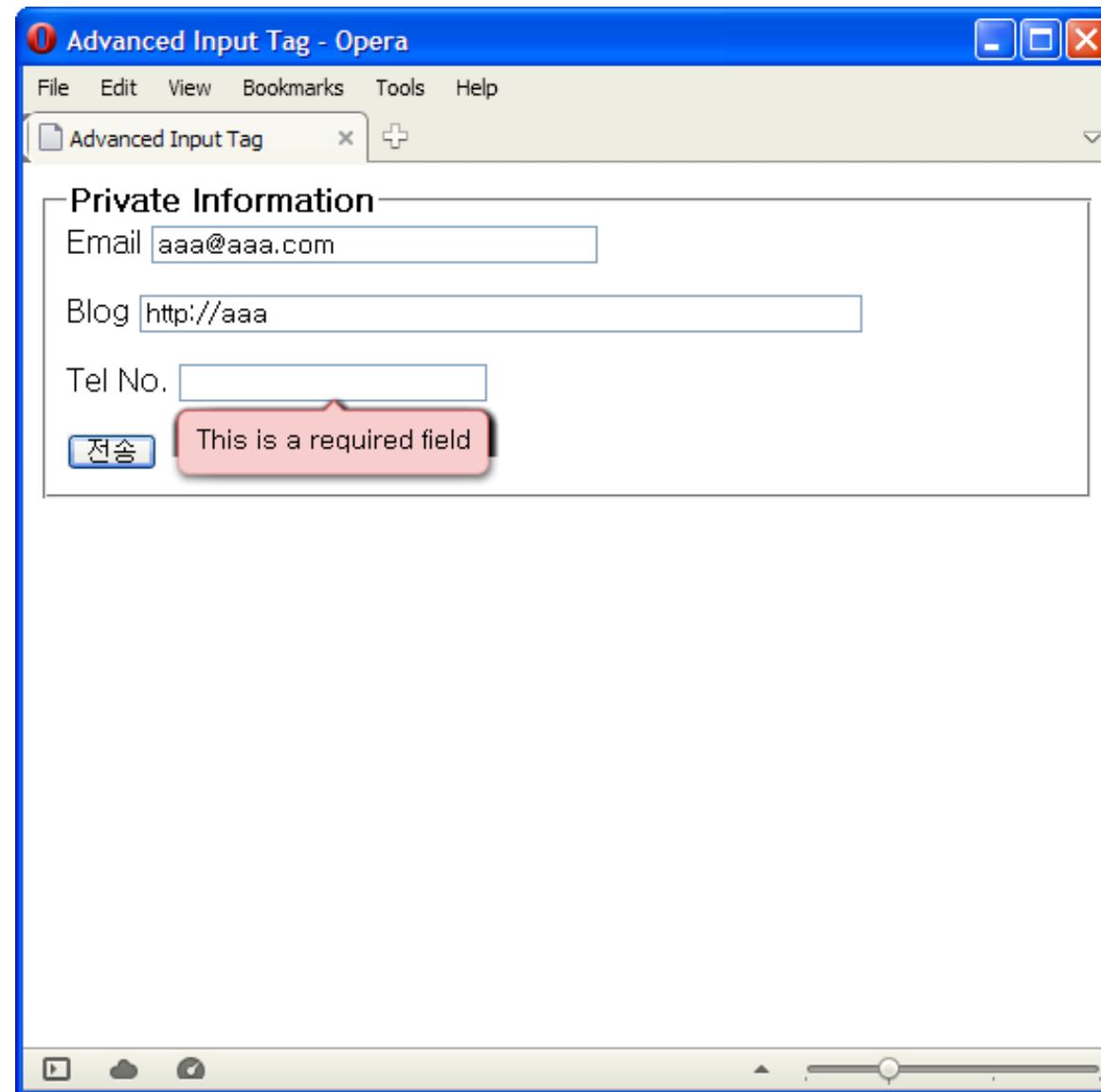
- Files

- input2.html

Lab5 : input2.html

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>Advanced Input Tag</title>
5 </head>
6 <body>
7   <form>
8     <fieldset>
9       <legend><b>Private Information</b></legend>
10      <label for="myemail">Email</label>
11      <input type="email" id="myemail" placeholder="이메일"
12        required="required" size="30" /><br /><br />
13
14      <label for="myblog">Blog</label>
15      <input type="url" id="myblog" placeholder="블로그주소"
16        required="required" size="50"/><br /><br />
17
18      <label for="mytel">Tel No.</label>
19      <input type="tel" id="mytel" placeholder="전화번호"
20        required="required" size="20"/><br /><br />
21      <input type="submit" value="전송" />&nbsp;&nbsp;
22      <input type="reset" value="다시입력" />
23    </form>
24  </body>
25 </html>
```

Lab5 : Result



Lab6 : Advanced Input Tag

■ Web Browsers

- IE10, Firefox, Google Chrome, Opera, Safari

■ Text Editors

- Notepad++, Editplus, etc...

■ Files

- input3.html

Lab6 : input3.html

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <title>Advanced Input Tag</title>
5  </head>
6  <body>
7      <form>
8          <fieldset>
9              <legend><b>Date, Datetime, Month, Week, Time</b></legend>
10             datetime <input type="datetime" /><br /><br />
11             datetime-local <input type="datetime-local" /><br /><br />
12             date <input type="date" /><br /><br />
13             month <input type="month" /><br /><br />
14             week <input type="week" /><br /><br />
15             time <input type="time" min="07:00" max="12:00"
16                 required="required" /><br /><br />
17         </fieldset>
18         <input type="submit" value="전송" />&nbsp;&nbsp;
19         <input type="reset" value="다시입력" />
20     </form>
21 </body>
22 </html>
```

Lab6 : Result

Advanced Input Tag - Opera

Date, Datetime, Month, Week, Time

datetime 2013-10-28 11:25 UTC

datetime-local :

date 2013-10-10

month 2013-10

week 2013-W42

time 00:00

October 2013

Mon	Tue	Wed	Thu	Fri	Sat	Sun
30	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10

Today

전송 다시입력

Advanced Input Tag

Date, Datetime, Month, Week, Time

datetime

datetime-local 2013-10-10 오전 11:00

date 2013-10-10

month 2013년 10월

week 2013, 41번째 주

time --:--

! 이 입력란을 작성하세요.

전송 다시입력

Lab7 : Advanced Input Tag

- Web Browsers

- IE10, Firefox, Google Chrome, Opera, Safari

- Text Editors

- Notepad++, Editplus, etc...

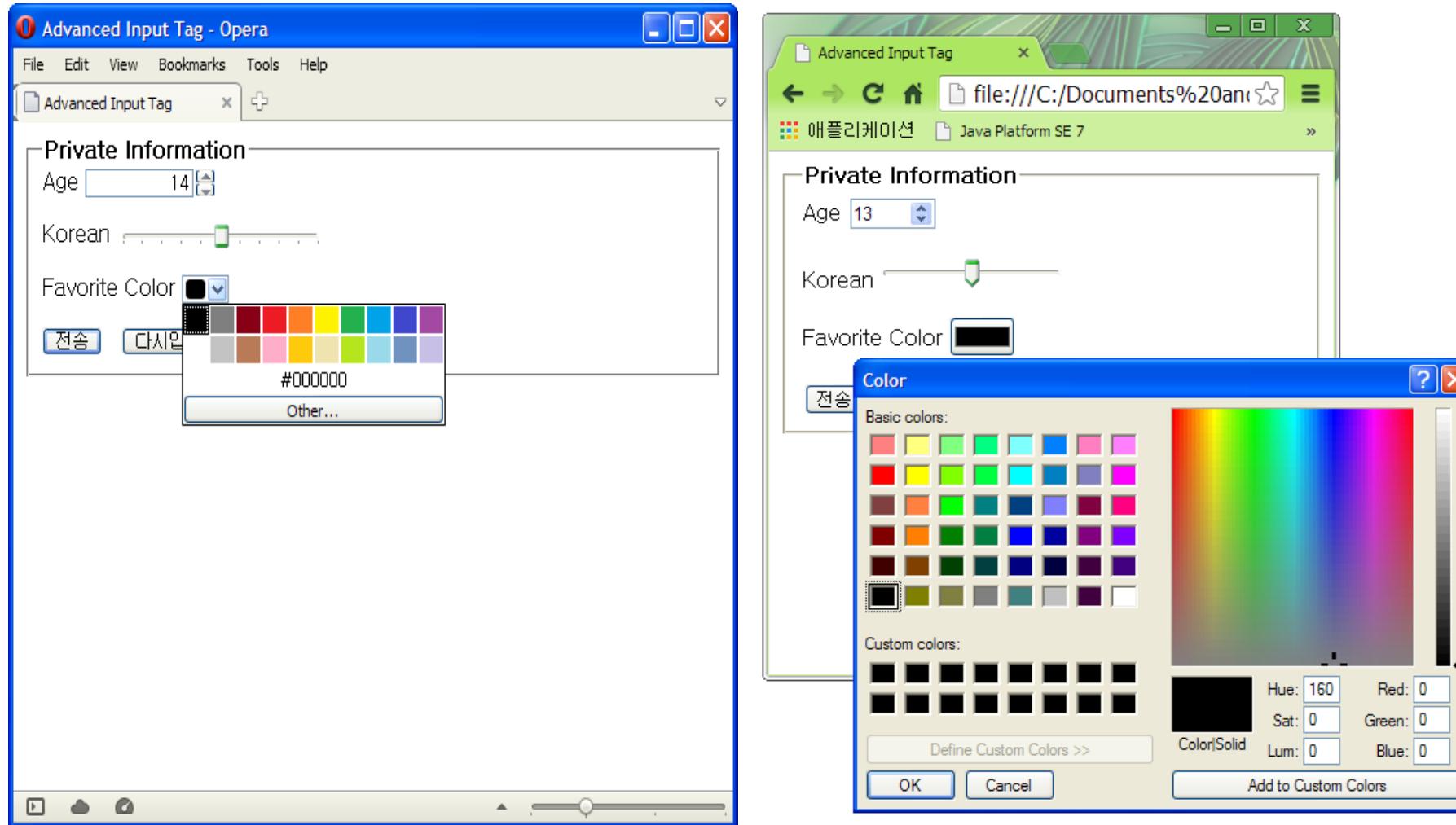
- Files

- input4.html

Lab7 : input4.html

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <title>Advanced Input Tag</title>
5  </head>
6  <body>
7      <form>
8          <fieldset>
9              <legend><b>Private Information</b></legend>
10             <label for="myage">Age</label>
11             <input type="number" id="myage" placeholder="나이"
12               required="required" min="10" max="80"/><br /><br />
13
14             <label for="mykorean">Korean</label>
15             <input type="range" id="mykorean" placeholder="국어점수"
16               required="required" min="0" max="100"/><br /><br />
17
18             <label for="mycolor">Favorite Color</label>
19             <input type="color" id="mycolor" required="required" /><br /><br />
20
21             <input type="submit" value="전송" />&nbsp;&nbsp;
22             <input type="reset" value="다시입력" />
23         </form>
24     </body>
25 </html>
```

Lab7 : Result



<button>



- Defines a clickable button.

```
1 <button type="button" onclick="alert('Hello world!')>Click Me!</button>
```



<button> (Cont.)

■ Attributes

- **autofocus**



- Specifies that a button should automatically get focus when the page loads.

```
1 <button type="button" autofocus onclick="alert('Hello world!')>Click Me!</button>
```



<button> (Cont.)

■ Attributes

- **disabled**



- Specifies that a button should be disabled.

```
1 <button type="button" disabled>Click Me!</button>
```



<button> (Cont.)

■ Attributes

- **form**



- Specifies one or more forms the button belongs to.

```
1 <form action="demo_form.asp" method="get" id="nameform">
2   First name: <input type="text" name="fname" /><br>
3   Last name: <input type="text" name="lname" /><br>
4 </form>
5
6 <p>The button below is outside the form element, but still part of the form.</p>
7
8 <button type="submit" form="nameform" value="Submit">Submit</button>
```

First name:

Last name:

The button below is outside the form element, but still part of the form.

<button> (Cont.)

■ Attributes

- **formaction**



- Specifies where to send the form-data when a form is submitted.
- Only for type="submit".

```
1 <form action="demo_form.asp" method="get">
2 First name: <input type="text" name="fname" /><br>
3 Last name: <input type="text" name="lname" /><br>
4 <button type="submit">Submit</button><br>
5 <button type="submit" formaction="demo_admin.asp">Submit as admin</button>
6 </form>
```

First name:

Last name:

A screenshot of a web browser showing a form with two text input fields for "First name" and "Last name", each followed by a line break. Below the first text field is a "Submit" button. Below the second text field is another "Submit" button with the text "Submit as admin" inside it.

<button> (Cont.)

■ Attributes

- **formenctype**



- Specifies how form-data should be encoded before sending it to a server.
- Only for type="submit".
- **application/x-www-form-urlencoded | multipart/form-data | text/plain**

```
1  <form action="demo_post_enctype.asp" method="post">
2  Name: <input type="text" name="fname" value="Støe Refsnes" /><br>
3  <button type="submit" >Submit with character encoding</button>
4  <button type="submit" formenctype="text/plain">Submit without character encoding</button>
5  </form>
```

Name: Støe Refsnes

Submit with character encoding

Submit without character encoding

<button> (Cont.)

■ Attributes

- **formmethod**



- Specifies how to send the form-data (which HTTP method to use).
- Only for type="submit"
- **get | post**

```
1 <form action="demo_form.asp" method="get">
2 First name: <input type="text" name="fname" /><br>
3 Last name: <input type="text" name="lname" /><br>
4 <button type="submit" >Submit</button>
5 <button type="submit" formmethod="post" formaction="demo_post.asp">Submit using POST</button>
6 </form>
```

First name:

Last name:

<button> (Cont.)

■ Attributes

- **formnovalidate**

- Specifies that the form-data should not be validated on submission.
- Only for type="submit".



```
1 <form action="demo_form.asp" method="get">
2 E-mail: <input type="email" name="userid" /><br>
3 <button type="submit" >Submit</button><br>
4 <button type="submit" formnovalidate>Submit without validation</button>
5 </form>
```

E-mail:

A screenshot of a web browser showing a form. The form contains a label "E-mail:" followed by an empty input field. Below the input field are two buttons: a standard blue-outlined "Submit" button and a second button with a yellow border and blue text labeled "Submit without validation".

<button> (Cont.)

■ Attributes

- **formtarget**



- Specifies where to display the response after submitting the form.
- Only for type="submit".
- **_blank | _self | _parent | _top | framename**

```
1  <form action="demo_form.asp" method="get">
2   First name: <input type="text" name="lname"/> Last name:<br>
3  <button type="submit" >Submit</button>
4  <button type="submit" formtarget="_blank">Submit to a new window/tab</button>
5
6  </form>
```

◆ First name:	<input type="text"/>
◆ Last name:	<input type="text"/>
<input type="button" value="Submit"/>	<input type="button" value="Submit to a new window/tab"/>

<button> (Cont.)

■ Attributes

- **name**



- Specifies a name for the button.

- **type**



- Specifies the type of button.

- **button | reset | submit**

- **value**



- Specifies an initial value for the button

```
1  <form action="demo_form.asp" method="get">
2  Choose your favorite subject:
3  <button name="subject" type="submit" value="HTML">HTML</button>
4  <button name="subject" type="submit" value="CSS">CSS</button>
5  </form>
```

Choose your favorite subject:

[HTML](#) [CSS](#)

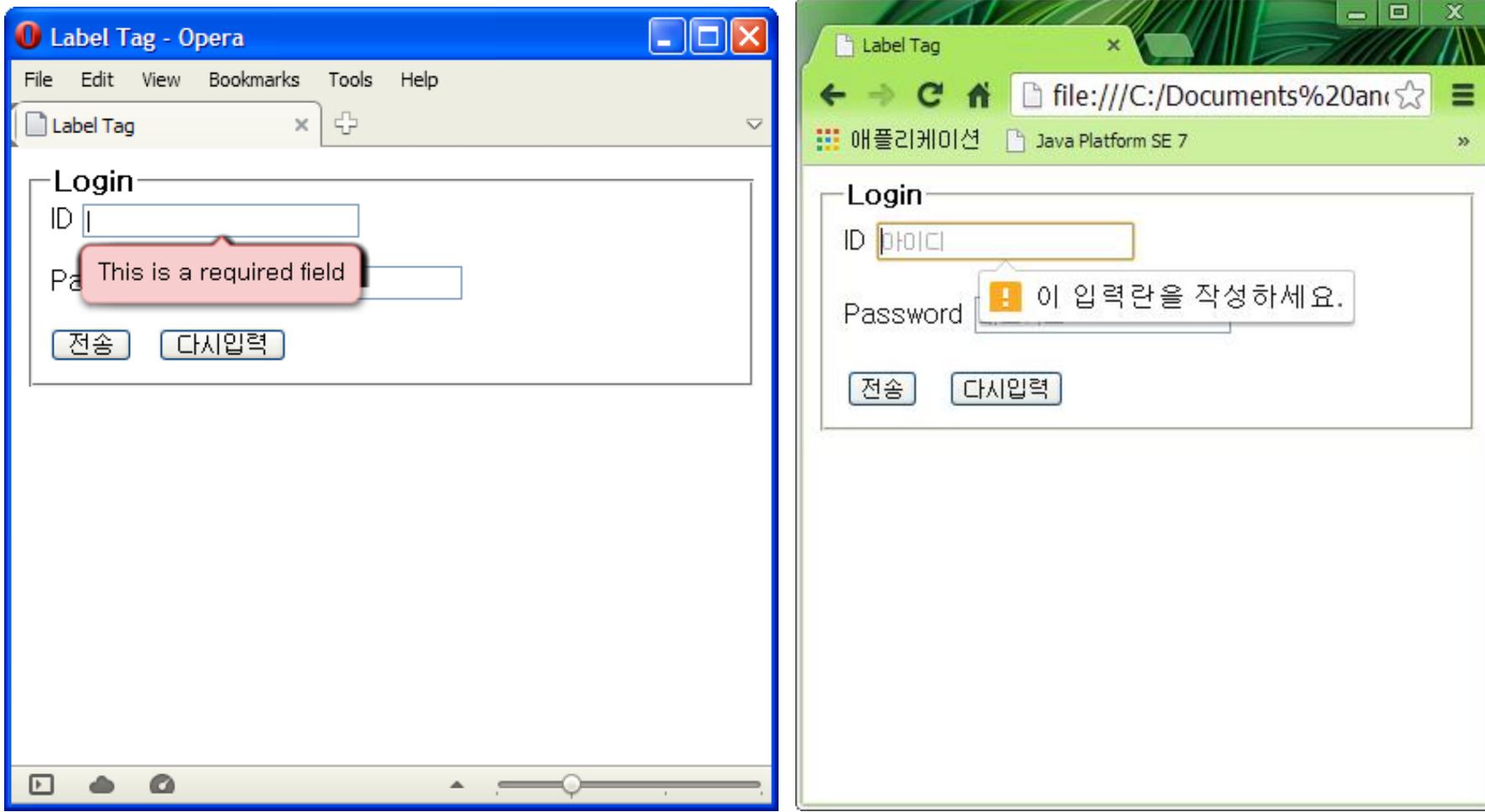
Lab8 : Button Tag

- Web Browsers
 - IE10, Firefox, Google Chrome, Opera, Safari
- Text Editors
 - Notepad++, Editplus, etc...
- Files
 - button.html

Lab8 : button.html

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <title>Label Tag</title>
5  </head>
6  <body>
7      <form>
8          <fieldset>
9              <legend><b>Login</b></legend>
10             <label for="id">ID</label>
11             <input type="text" id="id" placeholder="아이디"
12               required="required" /><br /><br />
13
14             <label for="passwd">Password</label>
15             <input type="password" id="passwd" placeholder="패스워드"
16               required="required" /><br /><br />
17
18             <button type="submit">전송</button>&nbsp;&nbsp;
19             <button type="reset">다시입력 </b>
20         </fieldset>
21     </form>
22 </body>
23 </html>
```

Lab8 : Result



<select>



- Is used to create a drop-down list.
- Attributes

- **multiple**



- Specifies that multiple options can be selected at once.

```
1 <form action="form_action.asp">
2   <select name="cars" multiple>
3     <option value="volvo">Volvo</option>
4     <option value="saab">Saab</option>
5     <option value="opel">Opel</option>
6     <option value="audi">Audi</option>
7   </select>
8   <input type="submit">
9 </form>
```



<select> (Cont.)

■ Attributes

- **name**



- Defines a name for the drop-down list.

```
1 <form action="demo_form.asp">
2 <select name="cars">
3   <option value="volvo">Volvo</option>
4   <option value="saab">Saab</option>
5   <option value="opel">Opel</option>
6   <option value="audi">Audi</option>
7 </select>
8 <input type="submit">
9 </form>
```

A screenshot of a web browser window. On the left is a dropdown menu with the word "Volvo" selected. To its right is a blue "Submit" button with the Korean characters "제출" (Jeju) on it. The background shows a light gray grid pattern.

<select> (Cont.)

■ Attributes

- **size**



- Defines the number of visible options in a drop-down list.

```
1 <select size="3">
2   <option value="volvo">Volvo</option>
3   <option value="saab">Saab</option>
4   <option value="opel">Opel</option>
5   <option value="audi">Audi</option>
6 </select>
```



<select> (Cont.)

■ Attributes

- **autofocus**



- Specifies that the drop-down list should automatically get focus when the page loads.

```
1  <select autofocus>
2  <option value="volvo">Volvo</option>
3  <option value="saab">Saab</option>
4  <option value="opel">Opel</option>
5  <option value="audi">Audi</option>
6  </select>
```

<select> (Cont.)

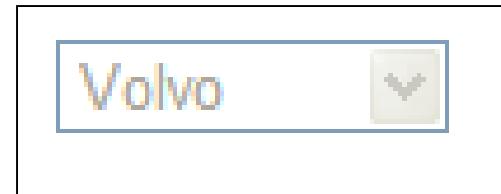
■ Attributes

- **disabled**



- Specifies that a drop-down list should be disabled.

```
1 <select disabled>
2   <option value="volvo">Volvo</option>
3   <option value="saab">Saab</option>
4   <option value="mercedes">Mercedes</option>
5   <option value="audi">Audi</option>
6 </select>
```



<select> (Cont.)

■ Attributes

- **form**



- Defines one or more forms the select field belongs to.

```
1 <form action="demo_form.asp" id="carform">
2   Firstname:<input type="text" name="fname">
3   <input type="submit">
4 </form>
5 <br>
6 <select name="carlist" form="carform">
7   <option value="volvo">Volvo</option>
8   <option value="saab">Saab</option>
9   <option value="opel">Opel</option>
10  <option value="audi">Audi</option>
11 </select>
```

Firstname:

Volvo

<select> (Cont.)

■ Attributes

- **required**



- Specifies that the user is required to select a value before submitting the form.

```
1 <form action="demo_form.asp">
2 <select required>
3   <option value="volvo">Volvo</option>
4   <option value="saab">Saab</option>
5   <option value="mercedes">Mercedes</option>
6   <option value="audi">Audi</option>
7 </select>
8 <input type="submit">
9 </form>
```

A screenshot of a web browser showing a dropdown menu. The menu has a light gray background and a thin black border. It contains four items: "Volvo" (selected), "Saab", "Mercedes", and "Audi". The "Volvo" item is highlighted with a blue border and has a small downward-pointing arrow icon to its right. To the right of the menu is a blue rectangular button with the Korean characters "제출" (Submit) in white.

Lab9 : Select Tag

- Web Browsers

- IE10, Firefox, Google Chrome, Opera, Safari

- Text Editors

- Notepad++, Editplus, etc...

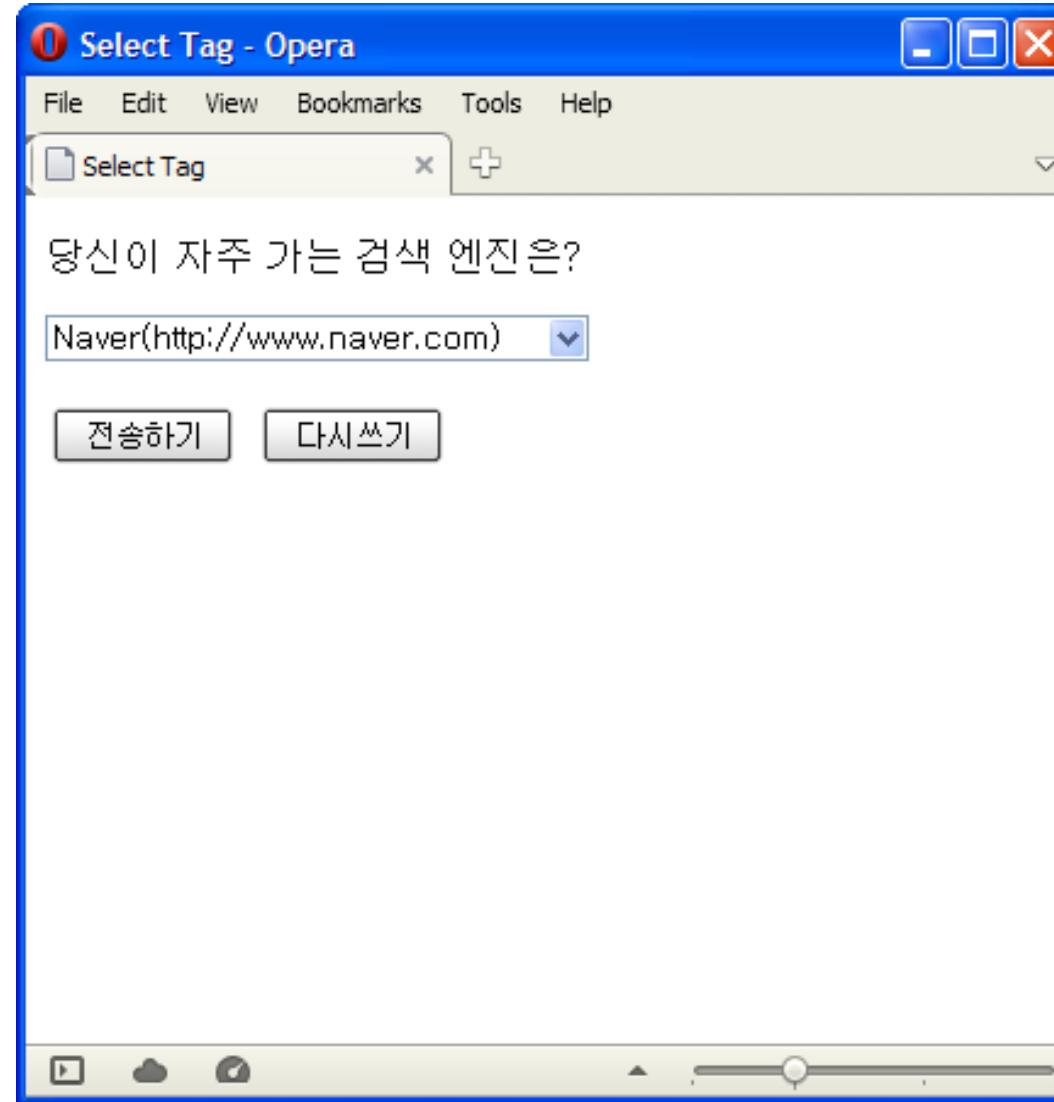
- Files

- select.html
 - images/submit.gif
 - images/reset.gif

Lab9 : select.html

```
1  <!DOCTYPE html>
2  <html lang="ko">
3  <head>
4      <title>Select Tag</title>
5  </head>
6  <body>
7      <form>
8          <p>당신이 자주 가는 검색 엔진은?</p>
9          <select name="search">
10         <option value="naver">Naver(http://www.naver.com)
11         <option value="daum">Daum(http://www.daum.net)
12         <option value="google">Google(http://www.google.com)
13         <option value="nate">Nate(http://www.nate.com)
14         <option value="yahoo">Yahoo(http://www.yahoo.com)
15         <option value="zum">zum(http://www.zum.co.kr)
16     </select>
17     <br /><br />
18     <input type="image" src="images/submit.gif" border="0">
19     <input type="image" src="images/reset.gif" border="0">
20 </form>
21 </body>
22 </html>
```

Lab9 : Result



Lab10 : Select Tag

■ Web Browsers

- IE10, Firefox, Google Chrome, Opera, Safari

■ Text Editors

- Notepad++, Editplus, etc...

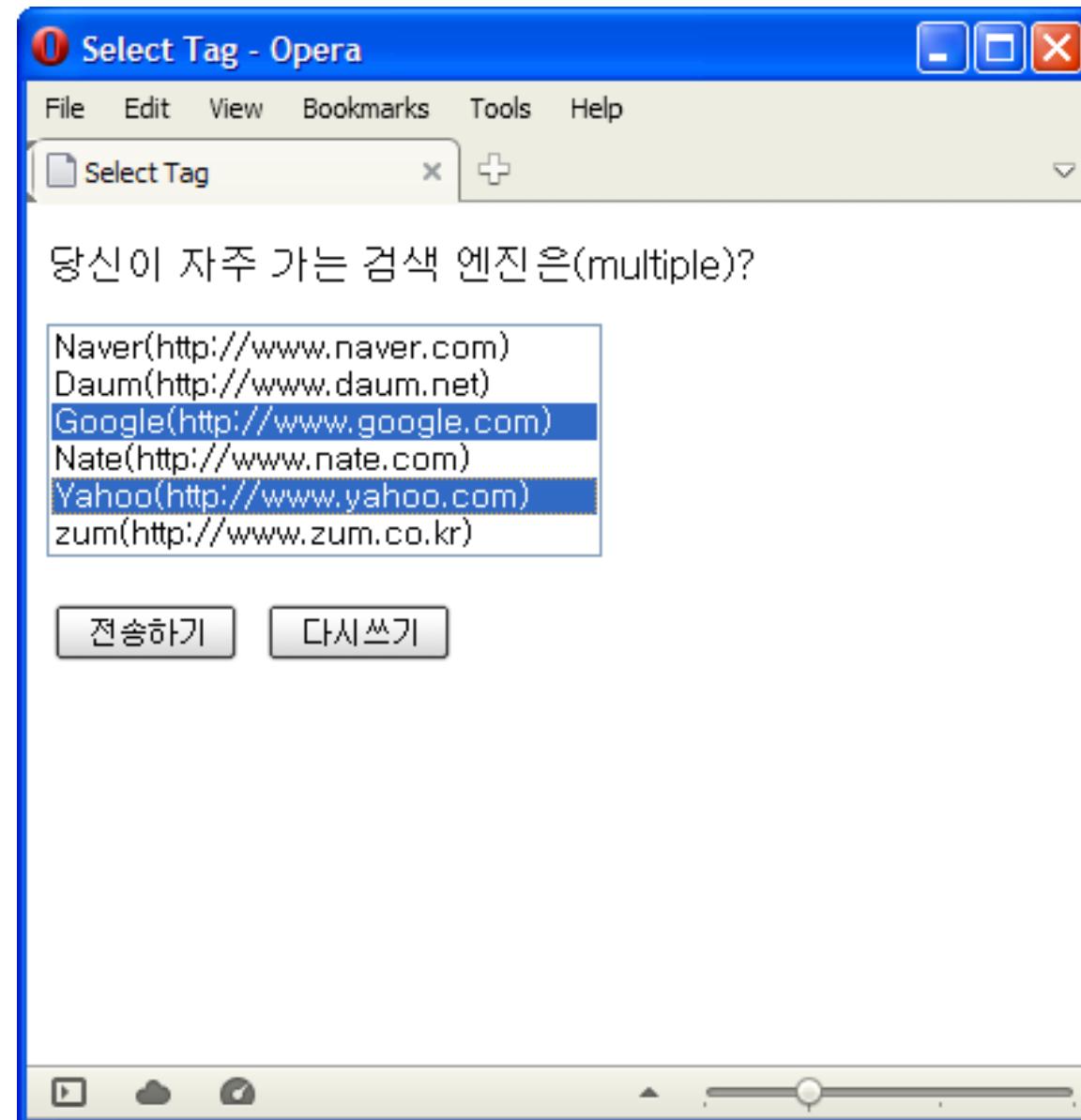
■ Files

- select1.html
- images/submit.gif
- images/reset.gif

Lab10 : select1.html

```
1  <!DOCTYPE html>
2  <html lang="ko">
3  <head>
4      <title>Select Tag</title>
5  </head>
6  <body>
7      <form>
8          <p>당신이 자주 가는 검색 엔진은(multiple)?</p>
9          <select name="search" size="6" multiple>
10         <option value="naver">Naver(http://www.naver.com)
11         <option value="daum">Daum(http://www.daum.net)
12         <option value="google">Google(http://www.google.com)
13         <option value="nate">Nate(http://www.nate.com)
14         <option value="yahoo">Yahoo(http://www.yahoo.com)
15         <option value="zum">zum(http://www.zum.co.kr)
16     </select>
17     <br /><br />
18     <input type="image" src="images/submit.gif" border="0">
19     <input type="image" src="images/reset.gif" border="0">
20 </form>
21 </body>
22 </html>
```

Lab10 : Result

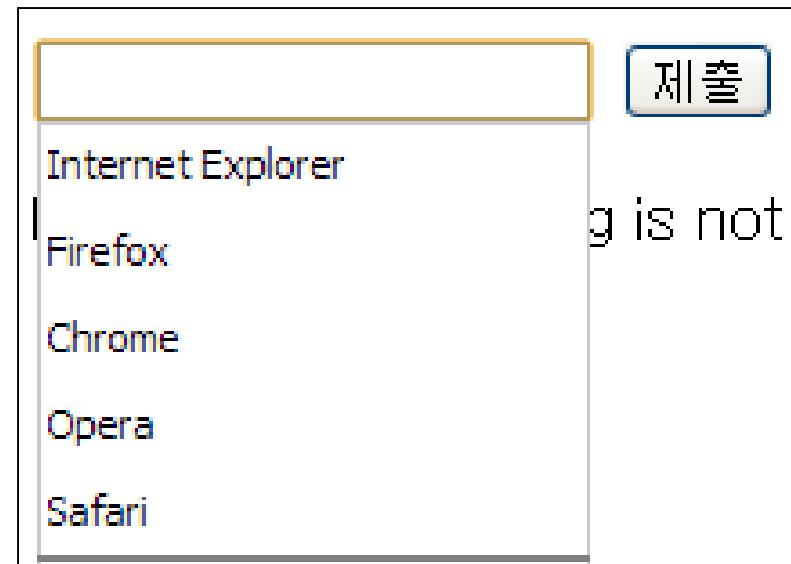


<datalist>



- Specifies a list of pre-defined options for an <input> element.

```
1  <form action="demo_form.asp" method="get">
2    <input list="browsers" name="browser">
3    <datalist id="browsers">
4      <option value="Internet Explorer">
5      <option value="Firefox">
6      <option value="Chrome">
7      <option value="Opera">
8      <option value="Safari">
9    </datalist>
10   <input type="submit">
11 </form>
```



Lab11 : Data List Tag

■ Web Browsers

- IE10, Firefox, Google Chrome, Opera, Safari

■ Text Editors

- Notepad++, Editplus, etc...

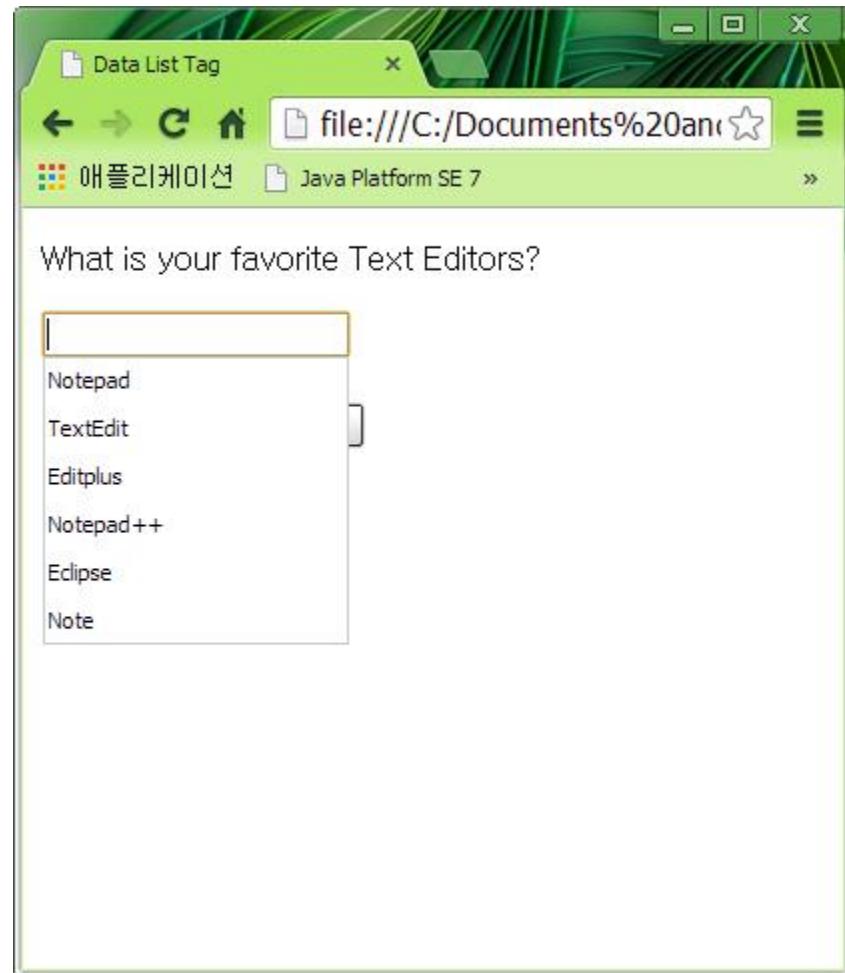
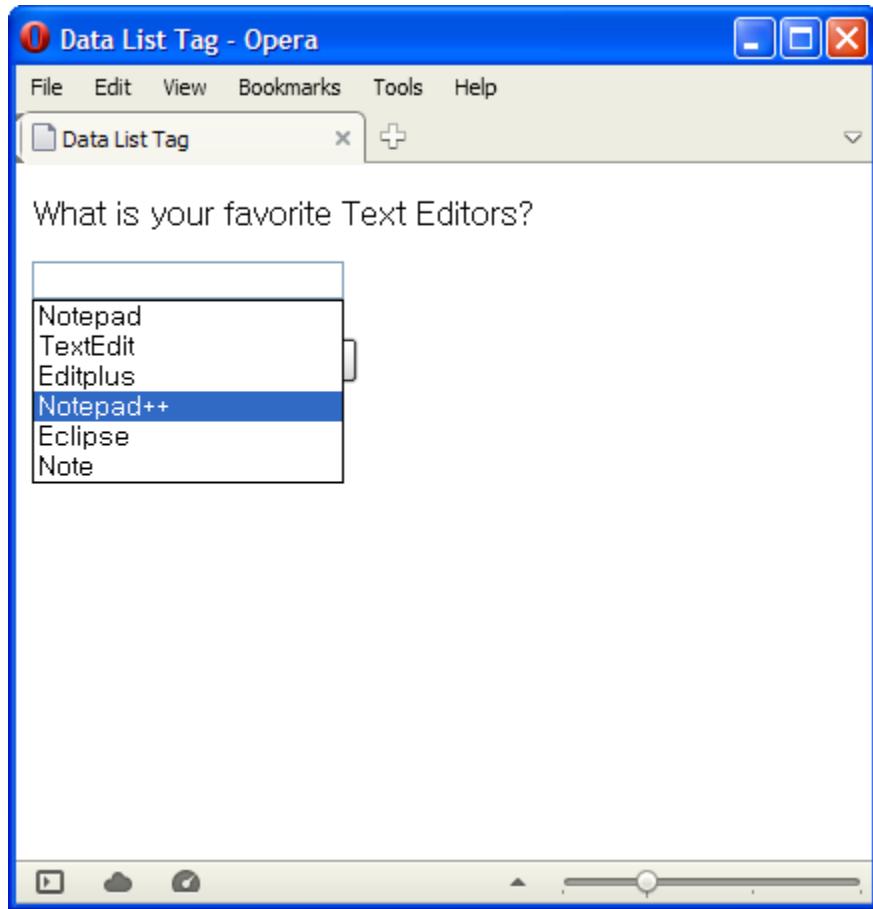
■ Files

- datalist.html
- images/submit.gif
- images/reset.gif

Lab11 : datalist.html

```
1  <!DOCTYPE html>
2  <html lang="ko">
3  <head>
4      <title>Data List Tag</title>
5  </head>
6  <body>
7      <form>
8          <p>What is your favorite Text Editors?</p>
9          <input type="text" name="editor" list="texteditors" />
10         <datalist id="texteditors">
11             <option value="Notepad" />
12             <option value="TextEdit" />
13             <option value="Editplus" />
14             <option value="Notepad++" />
15             <option value="Eclipse" />
16             <option value="Note" />
17         </datalist>
18         <br /><br />
19         <input type="image" src="images/submit.gif" border="0">
20         <input type="image" src="images/reset.gif" border="0">
21     </form>
22 </body>
23 </html>
```

Lab11 : Result



<option>



- Defines an option in a select list.
- Attributes

- **disabled**



- Specifies that an option should be disabled.

```
1 <select>
2   <option value="volvo" disabled>Volvo</option>
3   <option value="saab">Saab</option>
4   <option value="vw">VW</option>
5   <option value="audi">Audi</option>
6 </select>
```

Saab	▼
Volvo	
Saab	
VW	
Audi	

<option> (Cont.)

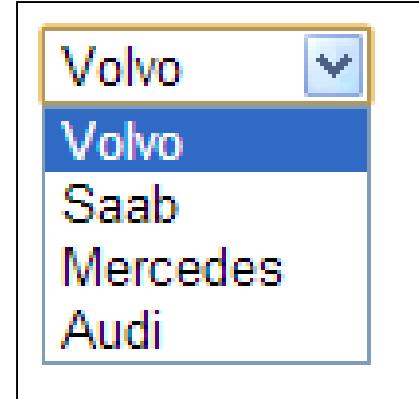
■ Attributes

- **label**



- Specifies a shorter label for an option.

```
1 <select>
2   <option label="Volvo">Volvo (Latin for "I roll")</option>
3   <option label="Saab">Saab (Swedish Aeroplane AB)</option>
4   <option label="Mercedes">Mercedes (Mercedes-Benz)</option>
5   <option label="Audi">Audi (Auto Union Deutschland Ingolstadt)</option>
6 </select>
```



<option> (Cont.)

■ Attributes

- **selected**



- Specifies that an option should be pre-selected when the page loads.

```
1 <select>
2   <option value="volvo">Volvo</option>
3   <option value="saab">Saab</option>
4   <option value="vw">VW</option>
5   <option value="audi" selected>Audi</option>
6 </select>
```



<option> (Cont.)

■ Attributes

- **value**



- Specifies the value to be sent to a server.

```
1 <form action="demo_form.asp">
2   <select name="cars">
3     <option value="volvo">Volvo XC90</option>
4     <option value="saab">Saab 95</option>
5     <option value="mercedes">Mercedes SLK</option>
6     <option value="audi">Audi TT</option>
7   </select>
8   <input type="submit" value="Submit">
9 
10 
11 <p>Choose a car, and click the "Submit" button to send input to the server.</p>
```

A screenshot of a web browser window. On the left, there is a dropdown menu with the following options: Volvo XC90 (selected), Saab 95, Mercedes SLK, and Audi TT. To the right of the dropdown is a blue rectangular button labeled "Submit". Below the browser window, there is a text box containing the instruction: "and click the "Submit" button to send input to the server."

<optgroup>



- Is used to group related options in a drop-down list.

```
1  <select>
2  <optgroup label="Swedish Cars">
3  <option value="volvo">Volvo</option>
4  <option value="saab">Saab</option>
5  </optgroup>
6  <optgroup label="German Cars">
7  <option value="mercedes">Mercedes</option>
8  <option value="audi">Audi</option>
9  </optgroup>
10 </select>
```



<optgroup> (Cont.)

■ Attributes

- **disabled**



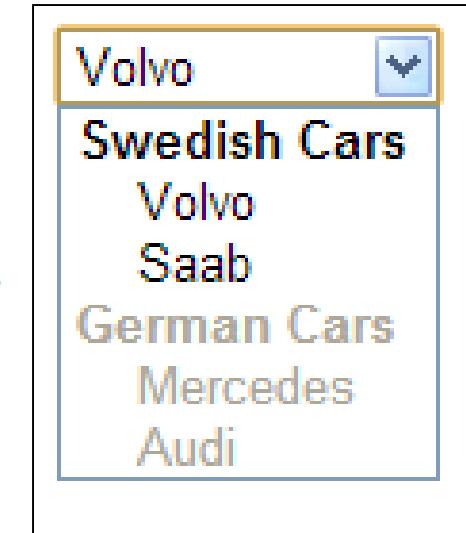
- Specifies that an option-group should be disabled.

- **label**



- Specifies a label for an option-group

```
1 <select>
2   <optgroup label="Swedish Cars">
3     <option value="volvo">Volvo</option>
4     <option value="saab">Saab</option>
5   </optgroup>
6   <optgroup label="German Cars" disabled>
7     <option value="mercedes">Mercedes</option>
8     <option value="audi">Audi</option>
9   </optgroup>
10 </select>
```



Lab12 : Option & OptGroup Tag

■ Web Browsers

- IE10, Firefox, Google Chrome, Opera, Safari

■ Text Editors

- Notepad++, Editplus, etc...

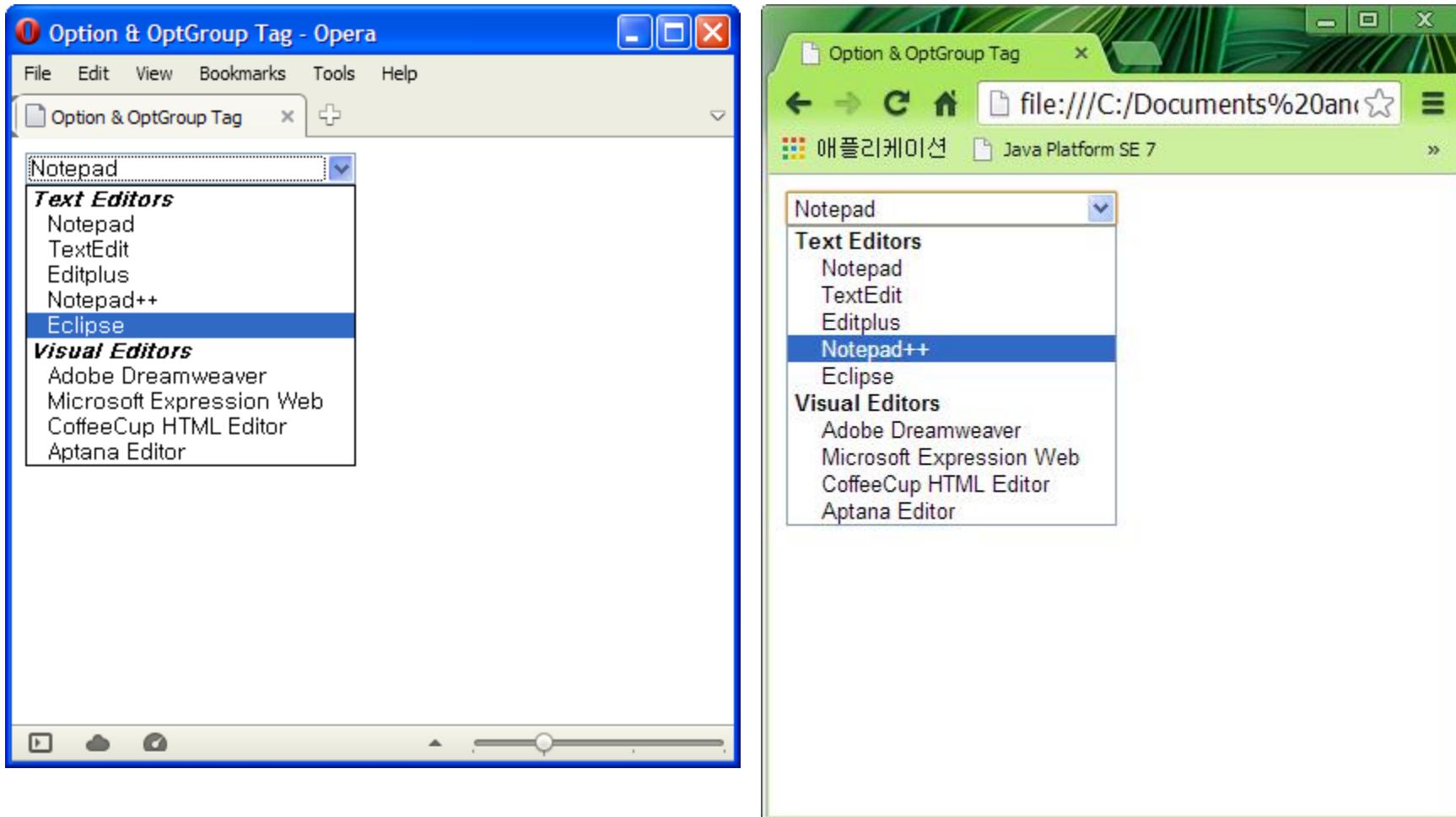
■ Files

- optgroup.html

Lab12 : optgroup.html

```
1  <!DOCTYPE html>
2  <html lang="ko">
3  <head>
4      <title>Option & OptGroup Tag</title>
5  </head>
6  <body>
7      <form>
8          <select>
9              <optgroup label="Text Editors">
10                 <option value="Notepad">Notepad
11                 </option>
12                 <option value="TextEdit">TextEdit
13                 </option>
14                 <option value="Editplus">Editplus
15                 </option>
16                 <option value="Notepad++">Notepad++
17                 </option>
18                 <option value="Eclipse">Eclipse
19                 </option>
20             </optgroup>
21             <optgroup label="Visual Editors">
22                 <option value="Adobe Dreamweaver">
23                     Adobe Dreamweaver</option>
24                 <option value="Microsoft Expression Web">
25                     Microsoft Expression Web</option>
26                 <option value="CoffeeCup HTML Editor">
27                     CoffeeCup HTML Editor</option>
28                 <option value="Aptana Editor">
29                     Aptana Editor</option>
30             </optgroup>
31         </select>
32     </form>
33 </body>
34 </html>
```

Lab12 : Result



<textarea>



- Defines a multi-line text input control.
- A text area can hold an unlimited number of characters, and the text renders in a fixed-width font (usually *Courier*).
- Attributes

- **cols**



- Specifies the visible width of a text area.

- **rows**



- Specifies the visible number of lines in a text area.

<textarea> (Cont.)

```
1 <textarea rows="4" cols="50">
2 At w3schools.com you will learn how to make a website.
3 We offer free tutorials in all web development technologies.
4 </textarea>
```

At w3schools.com you will learn how to make a website. We offer free tutorials in all web development technologies.

<textarea> (Cont.)

■ Attributes

- **name**



- Specifies a name for a text area.

- **readonly**



- Specifies that a text area should be read-only

```
1 <textarea rows="4" cols="50" readonly>
2 At w3schools.com you will learn how to make a website.
3 We offer free tutorials in all web development technologies.
4 </textarea>
```

At w3schools.com you will learn how to make a website. We offer free tutorials in all web development technologies.

<textarea> (Cont.)

■ Attributes

- **autofocus**



- Specifies that a text area should automatically get focus when the page loads.

```
1 <textarea rows="4" cols="50" autofocus>
2 At w3schools.com you will learn how to make a website.
3 We offer free tutorials in all web development technologies.
4 </textarea>
```

At w3schools.com you will learn how to make a website. We offer free tutorials in all web development technologies.

|

<textarea> (Cont.)

■ Attributes

- **form**



- Specifies one or more forms the text area belongs to.

```
1  <form action="demo_form.asp" id="usrform">
2    Name: <input type="text" name="username">
3    <input type="submit">
4  </form>
5  <br>
6  <textarea rows="4" cols="50" name="comment" form="usrform">
7    Enter text here...</textarea>
```

A screenshot of a web page. At the top, there is a text input field labeled "Name:" with a "제출" (Submit) button next to it. Below it is a large text area with the placeholder text "Enter text here...".

<textarea> (Cont.)

■ Attributes

- **maxlength**



- Specifies the maximum number of characters allowed in the text area.

```
1 <input type="text" rows="4" cols="50" maxlength="50">
2 Enter text here...</input>
```

Enter text here...

<textarea> (Cont.)

■ Attributes

- **placeholder**



- Specifies a short hint that describes the expected value of a text area.

```
1 Who are you?  
2 <textarea rows="4" cols="50" placeholder="Describe yourself here...">  
3 </textarea>
```

Who are you?

Describe yourself here...

<textarea> (Cont.)

■ Attributes

- **required**



- Specifies that a text area is required/must be filled out.

```
1 <form action="demo_form.asp">
2 <textarea rows="4" cols="50" name="comment" required>
3 </textarea>
4 <input type="submit">
5 </form>
```

The screenshot shows a web page with a form containing a text area and a submit button. The text area is highlighted with a yellow border, indicating it is a required field. A tooltip message in Korean, "이 입력란을 작성하세요.", is displayed near the bottom right of the text area. The browser interface includes a status bar at the bottom with the text "Note: The required attribute is not supported in Safari."

<textarea> (Cont.)

■ Attributes

- **wrap**



- Specifies how the text in a text area is to be wrapped when submitted in a form.

```
1 <form action="demo_form.asp">
2   <textarea rows="2" cols="20" name="usrtxt" wrap="hard">
3     At W3Schools you will find free Web-building tutorials.
4   </textarea>
5   <input type="submit">
6 </form>
```

A screenshot of a web browser window. Inside the window, there is a text area containing the text "At W3Schools you will find free Web-". To the right of the text area is a vertical scroll bar. Below the text area is a blue rectangular button with the Korean characters "제출" (Submit) written on it.

Lab13 : TextArea Tag

■ Web Browsers

- IE10, Firefox, Google Chrome, Opera, Safari

■ Text Editors

- Notepad++, Editplus, etc...

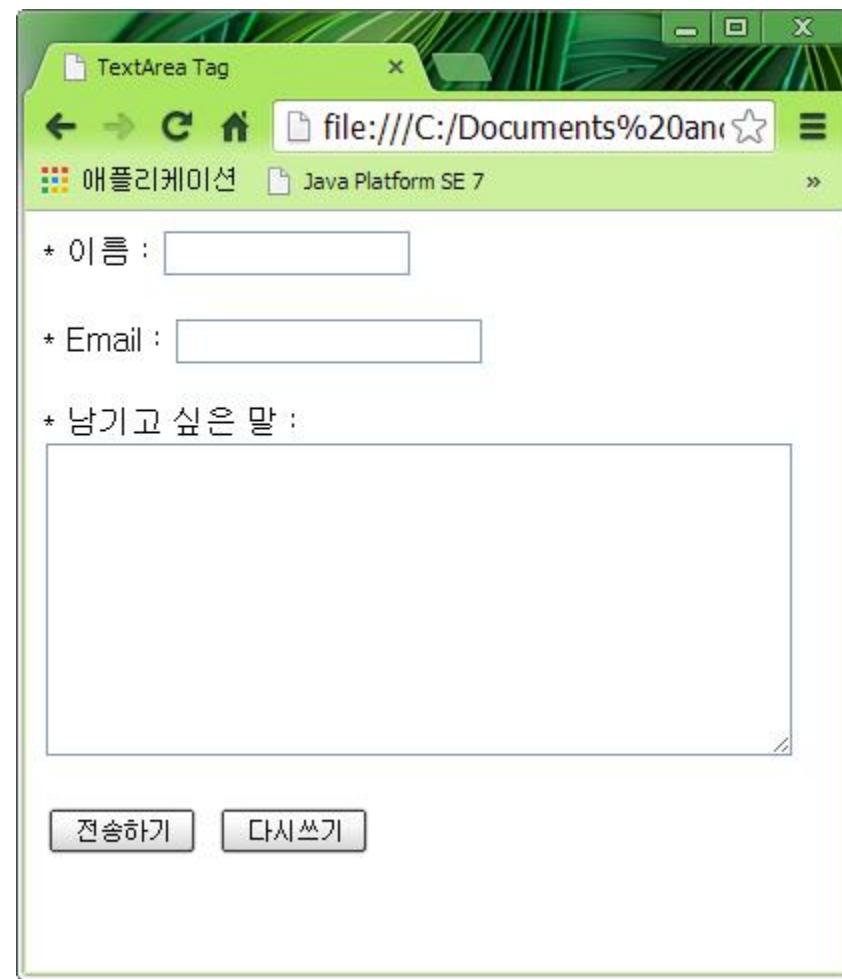
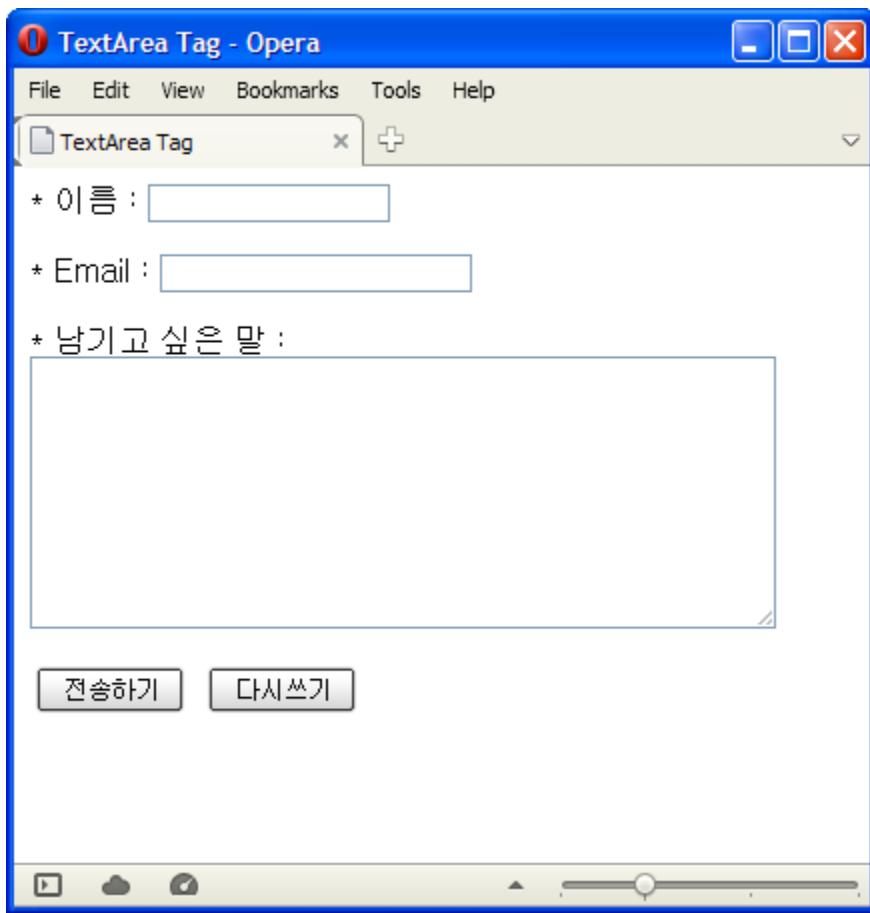
■ Files

- textarea.html

Lab13 : textarea.html

```
1  <!DOCTYPE html>
2  <html>
3      <head>
4          <title>TextArea Tag</title>
5      </head>
6      <body>
7          <form>
8              * 이름 : <input type="text" name="name" size="15" maxlength="8" />
9              <br /><br />
10             * Email : <input type="email" name="mail" size="15" maxlength="20" />
11             <br /><br />
12             * 남기고 싶은 말 :<br />
13             <textarea name="field" cols="50" rows="10"></textarea>
14             <br /><br />
15             <input type="image" src="images/submit.gif" border="0">
16             <input type="image" src="images/reset.gif" border="0">
17         </form>
18     </body>
19 </html>
```

Lab13 : Result



<keygen>



- Specifies a key-pair generator field used for forms.
- When the form is submitted, the private key is stored locally, and the public key is sent to the server.

<keygen> (Cont.)

■ Attributes

- **autofocus**



- Specifies that a <keygen> element should automatically get focus when the page loads.

```
1 <form action="demo_keygen.asp" method="get">
2 Username: <input type="text" name="usr_name">
3 Encryption: <keygen name="security" autofocus>
4 <input type="submit">
5 </form>
```

Username:	<input type="text"/>	Encryption:	2048(높은 등급) ▾	<input type="button" value="제출"/>
-----------	----------------------	-------------	---------------	-----------------------------------

<keygen> (Cont.)

■ Attributes

- **challenge**



- Specifies that the value of the <keygen> element should be challenged when submitted.

<keygen> (Cont.)

■ Attributes

- **disabled**



- Specifies that a <keygen> element should be disabled.

```
1 <form action="demo_keygen.asp" method="get">
2   Username: <input type="text" name="usr_name">
3   Encryption: <keygen name="security" disabled>
4   <input type="submit">
5 </form>
```

Username:	<input type="text"/>	Encryption:	<input type="button" value="2048(높은 등급)"/>	<input type="button" value="제출"/>
-----------	----------------------	-------------	--	-----------------------------------

<keygen> (Cont.)

■ Attributes

- **form**



- Specifies one or more forms the <keygen> element belongs to.

```
1  1<form action="demo_keygen.asp" method="get" id="secureform">
2  2  Username: <input type="text" name="usr_name">
3  3  <input type="submit">
4  4  </form>
5
6  6<p>The keygen field below is outside the form element, but still part of the form.</p>
7  7  Encryption: <keygen name="security" form="secureform">
```

Username: 제출

The keygen field below is outside the form element, but still part of the form.

Encryption:

<keygen> (Cont.)

■ Attributes

- **keytype**



- Specifies the security algorithm of the key.

- **rsa | dsa | ec**

```
1 <form action="demo_keygen.asp" method="get">
2   Username: <input type="text" name="usr_name">
3   Encryption: <keygen name="security" keytype="rsa">
4     <input type="submit">
5   </form>
```

Username: Encryption:

2048(높은 등급)

2048(높은 등급)

1024(중간 등급)

Note: The keygen tag is not supported in Inte

<keygen> (Cont.)

■ Attributes

- **name**



- Defines a name for the <keygen> element.

```
1  <form action="demo_keygen.asp" method="get">
2    Username: <input type="text" name="usr_name">
3    Encryption: <keygen name="security" keytype="rsa">
4      <input type="submit">
5  </form>
```

Username: Encryption:

<output>



- Represents the result of a calculation (like one performed by a script).
- Attributes

- **for**



- Specifies the relationship between the result of the calculation, and the elements used in the calculation

```
1 <form oninput="x.value=parseInt(a.value)+parseInt(b.value)">0
2   <input type="range" id="a" value="50">100
3   + <input type="number" id="b" value="50">
4   = <output name="x" for="a b"></output>
5 </form>
```

A screenshot of a web page demonstrating the use of the <output> element. It shows a <input type="range"> slider set to 100, a <input type="number"> input box containing 50, and an <output name="x" for="a b"> element displaying the value 120. The number input box is highlighted with a yellow border.

<output> (Cont.)

■ Attributes

- **form**



- Specifies one or more forms the output element belongs to.

```
1  <form action="demo_form.asp" id="numform" oninput="x.value=parseInt(a.value)+parseInt(b.value)">0
2    <input type="range" id="a" name="a" value="50">100
3    +<input type="number" id="b" name="b" value="50">
4    <br><br>
5    <input type="submit">
6  </form>
7
8  <p>The output element below is outside the form, but still a part of it.</p>
9  <output form="numform" name="x" for="a b"></output>
```

The output element below is outside the form, but still a part of it.

<output> (Cont.)

■ Attributes

- **name**



- Specifies a name for the output element.

```
1 <form oninput="x.value=parseInt(a.value)+parseInt(b.value)">0
2   <input type="range" id="a" value="50">100
3   +<input type="number" id="b" value="50">
4   =<output name="x" for="a b"></output>
5 </form>
```

A screenshot of a web browser displaying a simple form. The form contains a range input with a value of 0, a text input with the value "100", and a text input with the value "50". The text input with "50" is highlighted with a yellow border. To the right of the inputs is the text "=120".

Lab14 : Output Tag

- Web Browsers

- IE10, Firefox, Google Chrome, Opera, Safari

- Text Editors

- Notepad++, Editplus, etc...

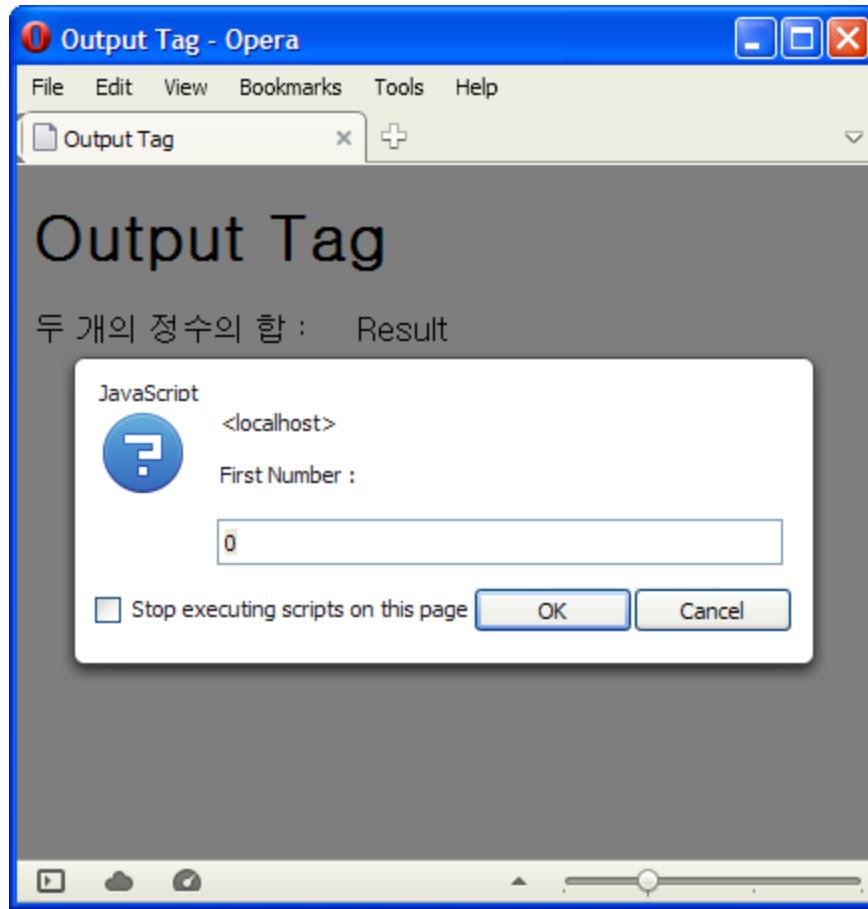
- Files

- output.html

Lab14 : output.html

```
1  <!DOCTYPE html>
2  <html>
3  | <head>
4  | | <title> Output Tag </title>
5  | | <meta charset="utf-8">
6  | | <script type="text/javascript">
7  | | | function add(){
8  | | | | var a = parseInt(prompt("First Number : ", 0));
9  | | | | var b = parseInt(prompt("Second Number : ", 0));
10 | | | | document.forms[0].result.value = a + b;
11 | | | }
12 | | </script>
13 | </head>
14 | <body onload="add()">
15 | | <h1>Output Tag</h1>
16 | | <form>
17 | | | <label>두 개의 정수의 합 : </label>
18 | | | &nbsp;&nbsp;&nbsp;
19 | | | <output name="result">Result</output>
20 | | </form>
21 | </body>
22 </html>
```

Lab14 : Result



<progress>



- Represents the progress of a task.
- Attributes

- **max**



- Specifies how much work the task requires in total.

- **value**

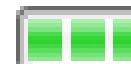


- Specifies how much of the task has been completed.

```
1  Downloading progress:
```

```
2  <progress value="22" max="100">
3  </progress>
```

Downloading progress:



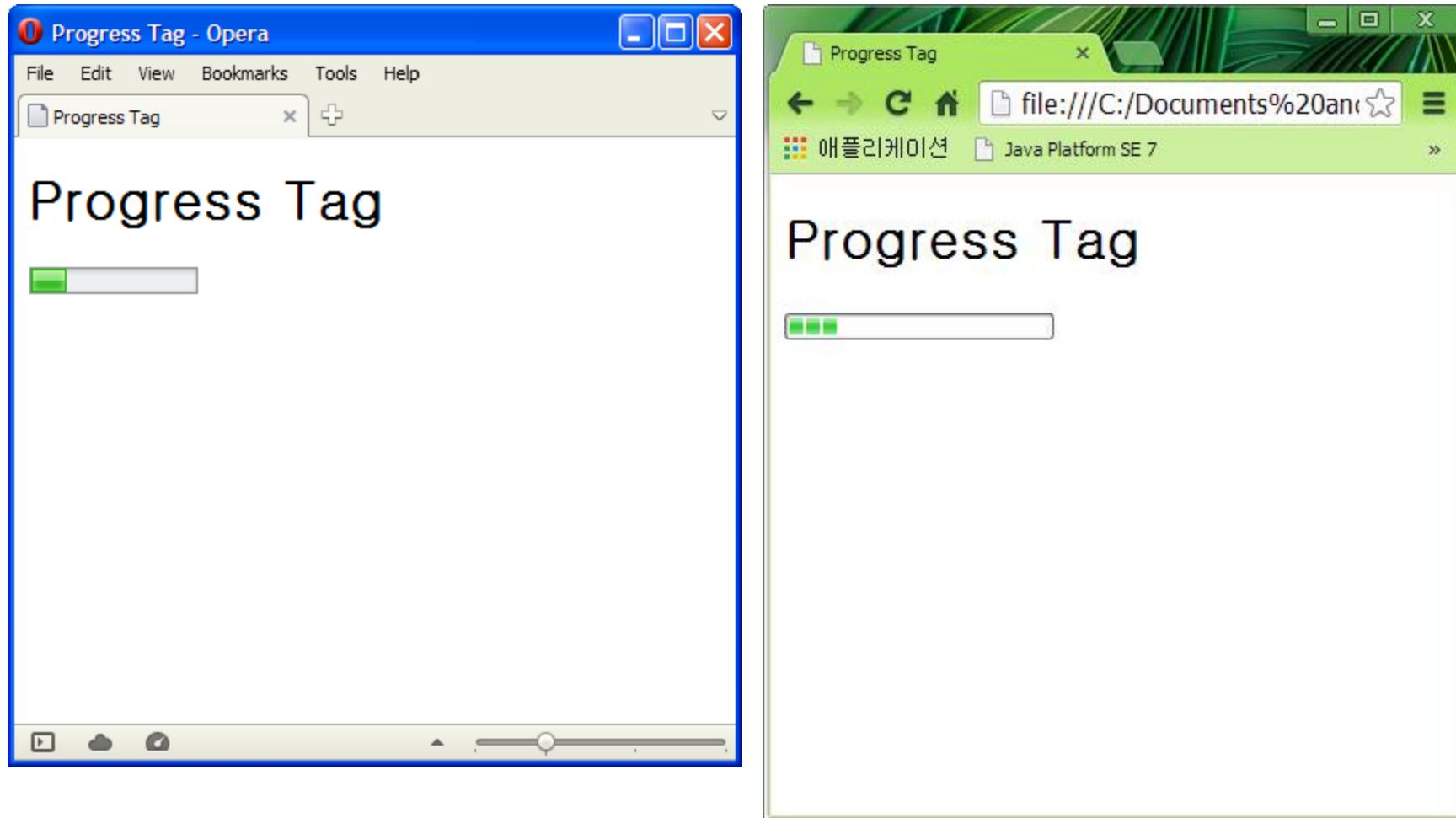
Lab15 : Progress Tag

- Web Browsers
 - IE10, Firefox, Google Chrome, Opera, Safari
- Text Editors
 - Notepad++, Editplus, etc...
- Files
 - progress.html

Lab15 : progress.html

```
1  <!DOCTYPE html>
2  <html>
3      <head>
4          <title> Progress Tag </title>
5          <meta charset="utf-8">
6      </head>
7      <body>
8          <h1>Progress Tag</h1>
9          <progress value="22" max="100">
10         </progress>
11     </body>
12 </html>
```

Lab15 : Result



<meter>



- Defines a scalar measurement within a known range, or a fractional value.
- This is also known as a gauge.
- Examples: Disk usage, the relevance of a query result, etc.

<meter> (Cont.)

■ Attributes

- **form**



- Specifies one or more forms the <meter> element belongs to.

```
1  <form action="demo_form.asp" method="get" id="form1">
2    First name: <input type="text" name="fname"><br>
3    <input type="submit" value="Submit">
4  </form>
5
6  <p>Display a gauge:</p>
7  <p>Anna's score:</p>
8    <meter form="form1" name="anna" min="0" low="40" high="90" max="100" value="95">
9    </meter>
10 </p>
```

The screenshot shows a web page with the following content:

First name:

Display a gauge:

Anna's score:

<meter> (Cont.)

■ Attributes

- **high**

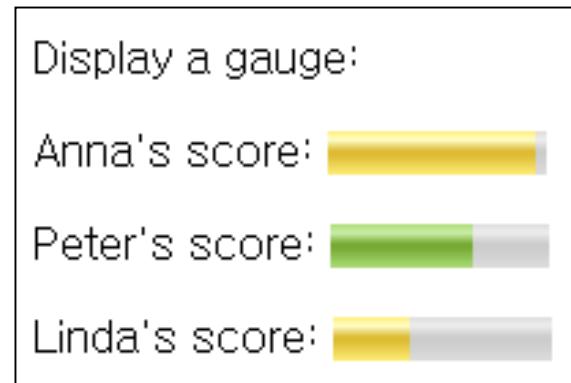
• new

- Specifies the range that is considered to be a high value.

- **low**

- Specifies the range that is considered to be a low value.

```
1 <p>Display a gauge:</p>
2 <p>Anna's score: <meter min="0" low="40" high="90" max="100" value="95"></meter></p>
3 <p>Peter's score: <meter min="0" low="40" high="90" max="100" value="65"></meter></p>
4 <p>Linda's score: <meter min="0" low="40" high="90" max="100" value="35"></meter></p>
```



<meter> (Cont.)

■ Attributes

- **max**



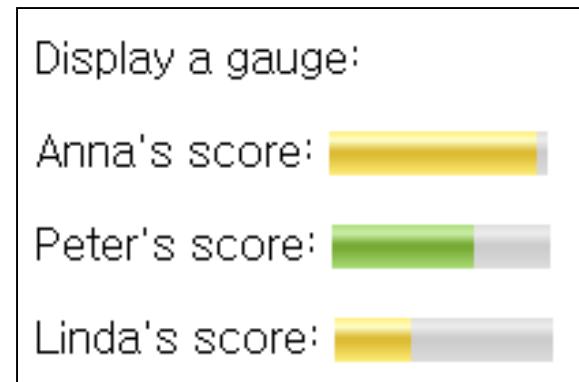
- Specifies the maximum value of the range.

- **min**



- Specifies the minimum value of the range.

```
1 <p>Display a gauge:</p>
2 <p>Anna's score: <meter min="0" low="40" high="90" max="100" value="95"></meter></p>
3 <p>Peter's score: <meter min="0" low="40" high="90" max="100" value="65"></meter></p>
4 <p>Linda's score: <meter min="0" low="40" high="90" max="100" value="35"></meter></p>
```



<meter> (Cont.)

■ Attributes

- **optimum**



- Specifies what value is the optimal value for the gauge.

```
1 <p>Display a gauge:</p>
2 <p><meter value="0.3" high="0.9" low="0.1" optimum="0.5"></meter></p>
```

Display a gauge:



<meter> (Cont.)

■ Attributes

- **value**



- Required.
- Specifies the current value of the gauge.

```
1 <p>Display a gauge:</p>
2 <p>Anna's score: <meter min="0" low="40" high="90" max="100" value="95"></meter></p>
3 <p>Peter's score: <meter min="0" low="40" high="90" max="100" value="65"></meter></p>
4 <p>Linda's score: <meter min="0" low="40" high="90" max="100" value="35"></meter></p>
```



Lab16 : Meter Tag

- Web Browsers

- IE10, Firefox, Google Chrome, Opera, Safari

- Text Editors

- Notepad++, Editplus, etc...

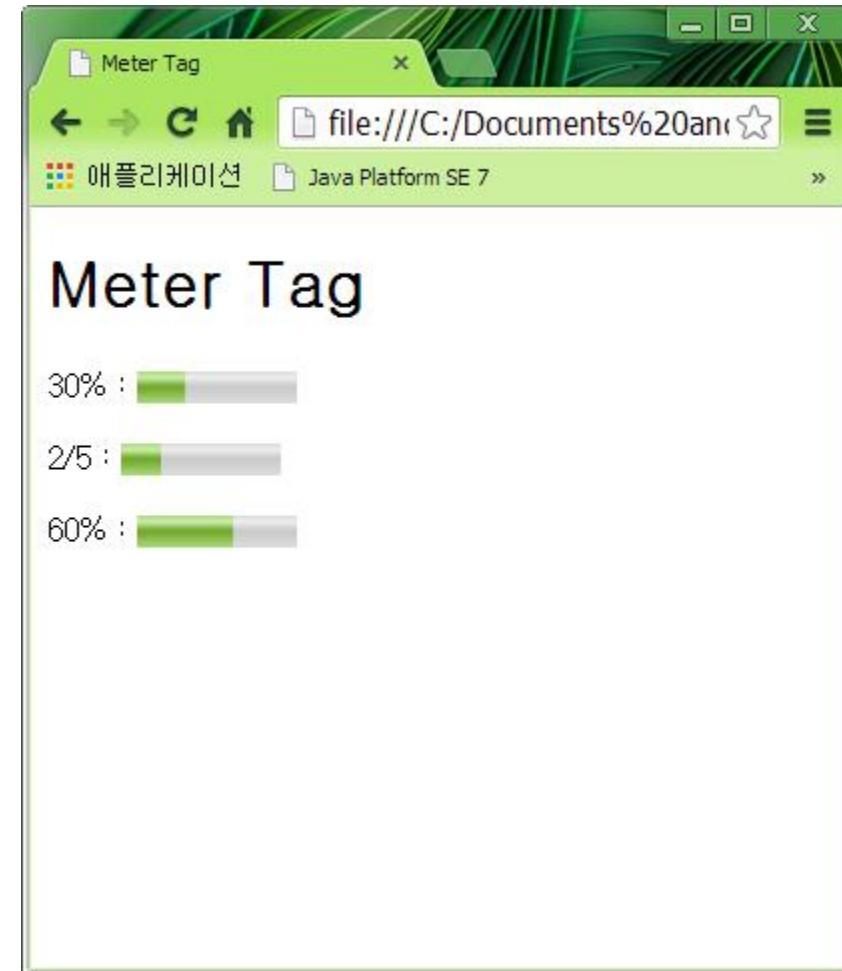
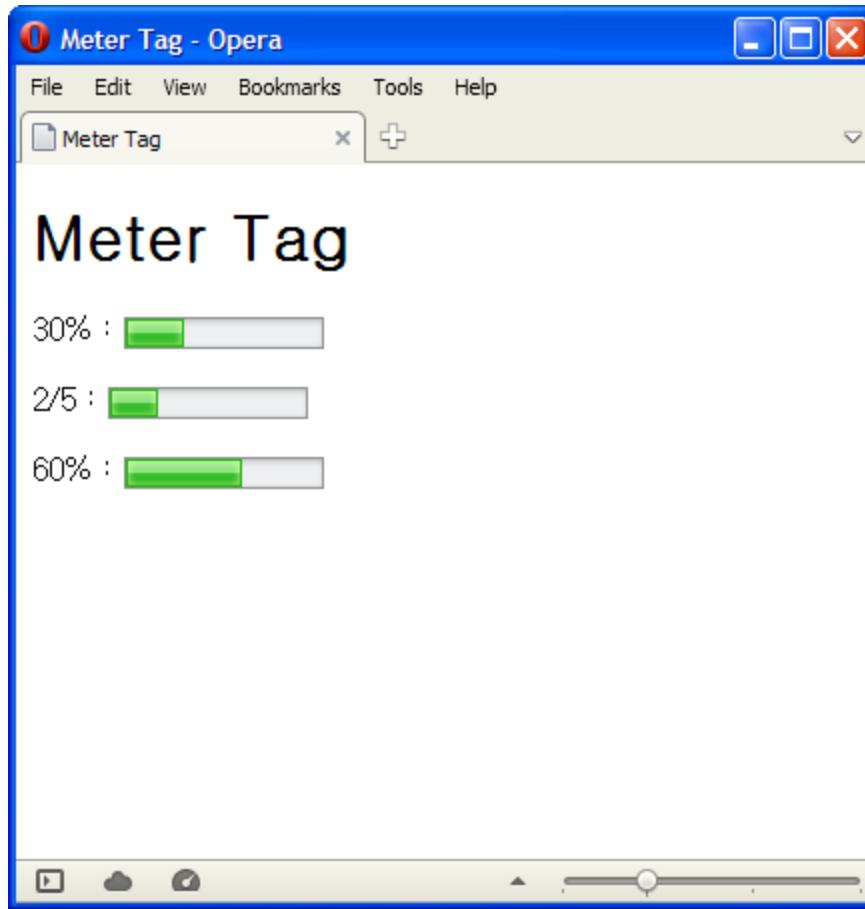
- Files

- meter.html

Lab16 : meter.html

```
1  <!DOCTYPE html>
2  <html>
3  |  <head>
4  |  |  <title> Meter Tag </title>
5  |  |  <meta charset="utf-8">
6  |  </head>
7  <body>
8  |  <h1>Meter Tag</h1>
9  |  <b>30% : <meter value="0.3">30%</meter><br /><br /><b>2/5 : <meter value="2" min="1" max="5">2/5</meter><br /><br /><b>60% : <meter value="0.6" high="0.9" low="0.1" optimum="0.5">60%</meter><br /><br /></b></b></b>
10 |  |
11 |  |
12 |  |
13 |  |
14 |  |
15 |  |
16 |  </body>
17 </html>
```

Lab16 : Result



Lab17 : Form Review

■ Web Browsers

- IE10, Firefox, Google Chrome, Opera, Safari

■ Text Editors

- Notepad++, Editplus, etc...

■ Files

- form.html

Lab17 : form

```
1  <!DOCTYPE html>
2  <html lang="ko">
3  <head>
4      <title> 추가된 폼커트를 요소들 </title>
5      <meta charset="utf-8">
6      <style type="text/css">
7          body{line-height: 2em; }
8      </style>
9  </head>
10
11 <body>
12 <form method="post" action="">
13     <label for="email">이메일 : </label>
14     <input type="email" id="email" name="email"
15         placeholder="example@domain.com" required /><br />
16     URL : <input type="url" autofocus autocomplete="off" /><br />
17     숫자 : <input type="number" min="1" max="10" step="2" value="5" />
18     <br />
19     range(범위) : <input type="range" min="1" max="5" step="1" />
20     <br />
21     date(년도-월-일) : <input type="date" min="2012-04-05" max="2012-04-20" />
22     <br />
23     month(년도-월) : <input type="month" /><br />
24     week(년도-주) : <input type="week" /><br />
25     time(시-분) : <input type="time" /><br />
26     datetime(날짜-시간) : <input type="datetime" /><br />
27     datetime-local(날짜-시간) : <input type="datetime-local" /><br />
28     color(색상을 적으면 16진수값으로 반환) : <input type="color" /><br />
29     search(검색상자) : <input type="search" />
30     <input type="submit" value="검색">
31 </form>
32 </body>
33 </html>
```

Lab17 : Result

0 추가된 폼컨트롤 요소들 - Opera

File Edit View Bookmarks Tools Help

추가된 폼컨트롤 요소들

이메일 : example@domain.com

URL :

숫자 : 5

range(범위) :

date(년도-월-일) :

month(년도-월) :

week(년도-주) :

time(시-분) :

datetime(날짜-시간) : UTC

datetime-local(날짜-시간) :

color(색상을 적으면 16진수값으로 반환) :

search(검색상자) : 검색

추가된 폼컨트롤 요소들

file:///C:/Documents%20and%20S

애플리케이션 Java Platform SE 7 “배우고 익히는 즐... OLC

이메일 : example@domain.com

URL :

숫자 : 5

range(범위) :

date(년도-월-일) : 2012-04-일

month(년도-월) : ----년 --월

week(년도-주) : ----, --번째 주

time(시-분) : -- --:--

datetime(날짜-시간) :

datetime-local(날짜-시간) : 연도-월-일 -- --:--

color(색상을 적으면 16진수값으로 반환) :

search(검색상자) : 검색

Lab18 : Form Review

■ Web Browsers

- IE10, Firefox, Google Chrome, Opera, Safari

■ Text Editors

- Notepad++, Editplus, etc...

■ Files

- form1.html
- css/form.css

Lab18 : form1.html (1/4)

```
1  <!DOCTYPE html>
2  
3  
4      <title> html5에 추가된 폼컨트롤들 </title>
5      <meta charset="utf-8">
6      <link rel="stylesheet" href="css/form.css" />
7  
8
9  <body>
10 <form id="payment">
11 <fieldset>
12     <legend>로그인 정보</legend>
13     <ul>
14         <li><label for="id">아이디</label>
15         <input type="text" id="id" name="id" required autofocus /></li>
16         <li><label for="pwd">비밀번호</label>
17         <input type="password" id="pwd" name="pwd" required /></li>
18         <li><label for="pwd2">비밀번호 확인</label>
19         <input type="password" id="pwd2" name="pwd2" required /></li>
20     </ul>
21 </fieldset>
22
```

Lab18 : form1.html (2/4)

```
23 <fieldset>
24   <legend>개인 정보 입력</legend>
25   <ul>
26     <li><label for="name">이름</label>
27     <input type="text" id="name" name="name" placeholder="5자 미만 공백없이" /></li>
28     <li><label for="mail">메일주소</label>
29     <input type="email" id="mail" name="mail" placeholder="example@domain.com" /></li>
30     <li><label for="homeP">홈페이지</label>
31     <input type="url" id="homeP" name="homeP" placeholder="http://www.abcd.com" /></li>
32     <li><label for="telNum">전화번호</label>
33     <input type="tel" id="telNum" name="telNum" placeholder="02)1111-1111" /></li>
34     <li><label for="skill">코딩 숙련도(상, 중, 하)</label>
35     <input type="range" id="skill" name="skill" min="1" max="3" step="1" /></li>
36   </ul>
37 </fieldset>
38
```

Lab18 : form1.html (3/4)

```
39 <fieldset>
40   <legend>주문 내용</legend>
41   <ul>
42     <li><label for="pName">상품명</label>
43     <input type="text" id="pName" name="pName" readonly value="셔츠" /></li>
44     <li><label for="pColor">색상</label>
45     <input type="text" id="pColor" name="pColor" list="myColor" />
46     <datalist id="myColor">
47       <option value="black" label="검정색" />
48       <option value="white" label="회색" />
49       <option value="skyblue" label="하늘색" />
50     </datalist>
51   </li>
52   <li><label for="pNum">주문개수</label>
53     <input type="number" id="pNum" name="pNum" min="1" max="10" step="1" value="1" /></li>
54   </ul>
55 </fieldset>
56
```

Lab18 : form1.html (4/4)

```
57 <fieldset>
58   <legend>배송일</legend>
59   <ul>
60     <li>최소 배송일은 주말 및 공휴일을 제외하고 주문일 이후 3일입니다.</li>
61     <li><label for="pDate">원하는 배송일</label>
62       <input type="date" id="pDate" name="pDate" /></li>
63   </ul>
64 </fieldset>
65 <div>
66   <button type="submit">구매하기</button>
67 </div>
68 </form>
69 </body>
70 </html>
```

Lab18 : Result

html5에 추가된 품컨트롤들 - Opera

File Edit View Bookmarks Tools Help

html5에 추가된 품컨트롤들...

Step1 : 로그인 정보

아이디

비밀번호

비밀번호 확인

Step2 : 개인 정보 입력

이름 5자 미만 금지

메일주소 example@domain.com

홈페이지 http://www.abcd.com

전화번호 02)1111-1111

코딩속도(상,중,하)

Step3 : 주문 내용

상품명 셔츠

색상

주문개수 1 [▲▼]

Step4 : 배송일

최소 배송일은 주말 및 공휴일을 제외하고 주문일 이후 3일입니다.

원하는 배송일

구매하기

html5에 추가된 품컨트롤들

file:///C:/Documents%20and%20Settings/Re

애플리케이션 Java Platform SE 7 배우고 익히는 데...

Step1 : 로그인 정보

아이디

비밀번호

비밀번호 확인

Step2 : 개인 정보 입력

이름 5자 미만 금지

메일주소 example@domain.com

홈페이지 http://www.abcd.com

전화번호 02)1111-1111

코딩속도(상,중,하)

Step3 : 주문 내용

상품명 셔츠

색상

주문개수 1 [▲▼]

Step4 : 배송일

최소 배송일은 주말 및 공휴일을 제외하고 주문일 이후 3일입니다.

원하는 배송일 연도-월-일

구매하기