

KEY IN-CLASS STUDENT ACTIVITY 2.5: CHOOSE AND CONFIGURE HTML5 TAGS FOR INPUT AND VALIDATION

Lesson Objective 2.5:

Choose and configure HTML5 tags for input and validation.

Resources, software, and additional files needed for this lesson:

1. Microsoft® Expression® Web 4 (preferred), Visual Studio®, or Notepad.

Guiding questions:

1. **What do the new form elements (progress, meter, datalist, keygen, and output) add to a web page?** Progress is a control that shows the status of a task being completed, such as a file being uploaded. Meter is used for scalar measurement within a known range, such as temperature or weight measurement. Datalist is used to show a list of options; it is used with the new list attribute for the input element. Keygen is a control for key-pair generation. The output control displays the result of a calculation; an example would be the sum of the values of two input elements. (Note: these are not supported in Internet Explorer®9.)
2. **HTML5 introduces 13 new input types and several new input attributes. How are these new types used to make user interaction easier?** The new types of input include autocomplete, autofocus, required, list, max, and min. HTML5 also includes validation for input type fields such as url, email, color, and date. The new attributes add value by providing input validation, placeholder text, identification of required fields, autofocus, search, and more.
3. **How does the use of semantic tags make creating forms easier?** The semantic tags allow the developer to organize the information on the page and understand the expected form input based on the tag name. Using semantic tags also helps when additional scripting is needed to validate form fields and to provide a connection to CSS.

Student activity:

Directions to the student:

Read the following scenario and make the changes specified in the Content section. Verify your answers with the instructor.

Scenario:

Stuart Glasson is a web developer for a small company in Australia. He has been assigned the task of converting the contact page on the company website to use the new HTML5 elements that provide the option of using placeholder text, the ability to easily identify required fields, and instant validation of entered data.

Content:

1. Modify the code below to use the new HTML5 input types: email, url, date, and number where possible:

```
<form>
<p>Name:<br>
<input type="text" id="name">
<p>Email: <br>
<input type="text" id="email">
<p>Tel:<br>
<input type="text" id="tel">
<p>URL:<br>
<input type="text" id="URL">
<p>Job Description:<br>
<textarea id="jobDescription"></textarea>
<p>Hire date:<br>
<input type="text" id="hireDate">
<p>
<input type="submit" value="Submit Info">
</form>
```

Answers are in bold text. Each set of answer code below shows the accumulative progress from question 1 through 3.

```
<form>
<p>Name:<br>
<input type="text" id="name">
<p>Email: <br>
<input type="email" name="email">
<p>Tel:<br>
<input type="text" id="tel">
<p>URL:<br>
<input type="URL" name="URL">
<p>Job Description:<br>
<textarea id="jobDescription"></textarea>
<p>Hire date:<br>
<input type="date" name="hireDate">
<p>
<input type="submit" value="Submit Info">
</form>
```

2. Update the required fields: name, email address, and telephone number.

Answers are in bold text.

```
<form>
<p>Name:<br>
<input type="text" id="name" required>
<p>Email: <br>
<input type="email" name="email" required >
<p>Tel:<br>
<input type="text" id="tel" required >
<p>URL:<br>
```

```
<input type="URL" name="URL">
<p>Job Description:<br>
<textarea id="jobDescription"></textarea>
<p>Hire date:<br>
<input type="date" name="hireDate">
<p>
<input type="submit" value="Submit Info">
</form>
```

3. Add placeholder text for name, email address, and telephone number.

Answers are in bold text.

```
<form>
<p>Name:<br>
<input type="text" id="name" required placeholder="First and Last Name">
<p>Email: <br>
<input type="email" name="email" required placeholder="Email is required">
<p>Telephone:<br>
<input type="text" id="tel" required placeholder="Enter Phone Number">
<p>URL:<br>
<input type="URL" name="URL">
<p>Job Description:<br>
<textarea id="jobDescription"></textarea>
<p>Hire date:<br>
<input type="date" name="hireDate">
<p>
<input type="submit" value="Submit Info">
</form>
```