



CS3220 Web and Internet Programming

HTML Tables and Forms

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A Simple Table ...

Item	Quantity	Price
Lamp	1	\$15
Book	2	\$10

... A Simple Table

◆ `<table>`, `<tr>`, `<th>`, and `<td>`

`<table>`

`<tr>`

`<th>Item</th>` **`<th>`**Quantity**`</th>`** `<th>Price</th>`

`</tr>`

`<tr>`

`<td>Lamp</td>` **`<td>`**1**`</td>`** `<td>$15</td>`

`</tr>`

`<tr>`

`<td>Book</td>` `<td>2</td>` `<td>$10</td>`

`</tr>`

`</table>`

<table> Attributes

- ◆ Almost all <table> attributes, including the following, are *deprecated* in HTML5
- ◆ `border`: border width in pixels
- ◆ `cellpadding`: space between cell content and cell border in pixels
- ◆ `cellspacing`: space between cell in pixels

Other Table Tags

- ◆ The following elements, if specified, must appear in order and no more than once inside a table
 - `<caption>`
 - `<thead>`: group one or more rows into a table header
 - `<tbody>`: group one or more rows into a table body
 - `<tfoot>`: group one or more rows into a table footer

Merged Cells

rowspan=2

colspan=3

- ◆ colspan and rowspan are attributes of <td> and <th>

Nested Tables

		<table><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>				

◆ Simply put `<table>` inside a `<td>`

A Simple Form

<form action="https://www.google.com/search"
method="get">

Google: **<input** type="text" name="q"
value="" />

<input type="submit" name="search"
value="Search" />

</form>

Form Submission

- ◆ The browser takes the data entered in the form and send it to a server-side program to be processed

Request Parameters



- ◆ Parameter name, e.g. `q` and `search`
- ◆ Parameter value, e.g. `java` and `Search`

Attributes of <form>

- ◆ `action`: the URL of the server-side program that will process the data submitted from the form
- ◆ `method`: the "method" of the HTTP request used to send the data
 - `get` (or GET)
 - `post` (or POST)

Attributes of <input>

- ◆ `type`: type of the *form control*, e.g. text boxes, radio buttons, and check boxes
- ◆ `name`: name of the request parameter
- ◆ `value`: value of the request parameter

Type of <input>

◆ Input fields

- text
- password
- checkbox
- radio
- file
- hidden

◆ Buttons

- submit
- reset
- image

And many more added in HTML5. See

<https://www.w3.org/TR/html5/forms.html#attr-input-type>

Additional Attributes of `<input>`

- ◆ placeholder
- ◆ size, minlength, maxlength
- ◆ required
- ◆ checked
- ◆ disabled

About Boolean Attributes in HTML5

- ◆ False: the absence of the attribute
- ◆ True: the presence of the attribute, and the attribute value must be either empty string or the attribute name

`<input name="a" type="checkbox" checked>` ✓

`<input name="a" type="checkbox" checked="">` ✓

`<input name="a" type="checkbox" checked="checked">` ✓

`<input name="a" type="checkbox" checked="true">` ✗

`<input name="a" type="checkbox" checked="yes">` ✗

About Checkboxes and Radio Buttons

- ◆ Multiple `<input>` elements have the same name but different values
 - Can check multiple checkboxes but only one radio button
- ◆ Only the checked elements are submitted as requested parameters to the server
 - There could be multiple request parameters with the same name but different values

A General-Purposed <button>

<button>Click Me!</button>

◆ The `type` attribute of <button>

- `submit`: submit the form (default)
- `reset`: reset the form
- `button`: does nothing

Text Area with <textarea>

◆ Basically a multi-line version of <input type="text" />

◆ Attributes

- `rows`: number of rows
- `cols`: number of columns

<select> and <option>

- ◆ Create lists and dropdown lists
- ◆ *Name* of <select> is submitted as the request parameter name
- ◆ *Value* of <option> is submitted as the request parameter value

```
<select name="grade">  
  <option value="A">Great</option>  
  <option value="B">Good</option>  
  <option value="C">Passed</option>  
  <option value="NC">No Credit</option>  
</select>
```

Attributes of <select>

- ◆ `size`: number of items to be displayed
 - 1 (default) → dropdown list
 - More than one → list
- ◆ `multiple`: whether more than one option can be selected

More about <option>

Omit value
attribute

```
<option>A</option>
```

Default
selection

```
<option selected>B</option>
```

Option
Group

```
<optgroup label="Passing Grades">  
  <option>A</option>  
  <option>B</option>  
  <option>C</option>  
</optgroup>
```

Using <label>

- ◆ Clicking on a <label> element has the same effect as clicking on the form control the label is "for"

<label for="f1">Name:</label>

<input id="f1" type="text" name="name" />

<label>CIN: <input type="text" name="cin" /></label>

<label for="f2">Vegetarian:</label>

<input id="f2" type="checkbox" name="vegetarian" />

<fieldset> and <legend>

- ◆ Group form controls together (like grouping <option> with <optgroup>)

<fieldset>

<legend>Address**</legend>**

Street: <input type="text" name="street" />

City: <input type="text" name="city" />

Zip: <input type="text" name="street" />

</fieldset>