Client-side Technologies

Eng. Niveen Nasr El-Den

iTi

Day 2

HTML cont.

The Mother Tongue of The Browser

<iframe>

- Inline or “floating” frames allow opening new pages inside main page.
- It provides a window that could be placed anywhere within an existing, non frame-based page.

```
<iframe src=“http://www.gamingegypt.com"
                height="200" width="200"
                frameborder="1">
              <p>Your browser does not support iframes</p>
</iframe>
```

Example!

Links Within Frames

Jump to the <a href="analysis.html" target="main"> Analysis</a> of the project

- **The target can be a name of a frame that you specified in the <iframe> tag or one of the following Values:**
  - "_blank“ →Loads the link into a new blank window.
  - "_parent“ →Loads the link into the immediate parent of the document the link is in.
  - "_self“ → Loads the link into the same window. (default)
  - "_top“ →Loads the link into the full body of the current window.
  - “framename”

Using <base> Element

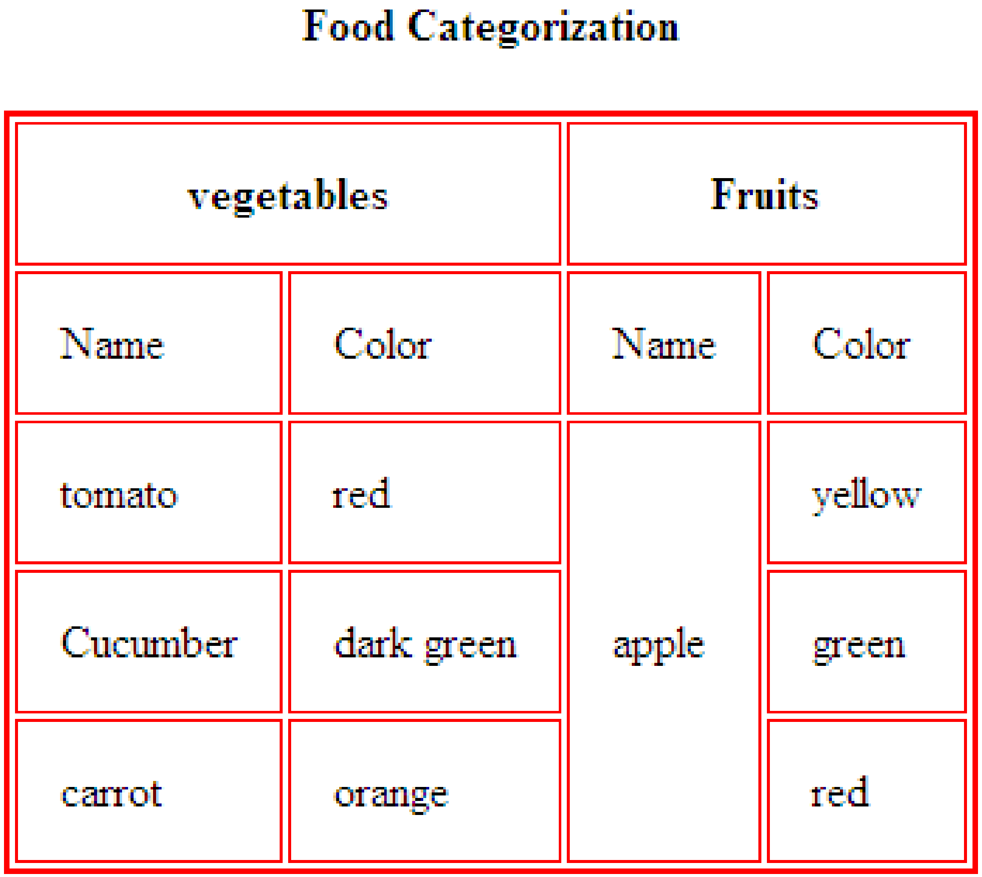
- **<base>** is child for <head> in .html that has **href** and **target** attributes.

- Use the **target** attribute with the **<base> element** to specify a default target for all links in a document.
  - When you are using the same target window or frame for a long list of hyperlinks, it is easier to use the target attribute in the **<base>** element instead of repeating the **target** attribute within each hyperlink.

- Use the **href** attribute with the **<base> element** to specify a default URI for any undeclared link in a document.

Tables

Table



Food Categorization

vegetables		Fruits	
Name	Color	Name	Color
tomato	red	apple	yellow
Cucumber	dark green		green
carrot	orange		red

HTML Tables

- Tables represent tabular data
  - A table consists of one or several rows
  - Each row has one or more columns
- Table rows split into three semantic sections: header, body and footer
  - `<thead>` denotes table header and contains `<th>` elements, instead of `<td>` elements
  - `<tfoot>` denotes table footer but comes before the `<tbody>` tag
  - Last comes the body data `<tbody>` denotes collection of table rows that contain the very data
- Sematic tags are meaningful and helpful for search engines and screen readers

Table Tags

Tag	Description
<table>	Defines a table.
<caption>	Defines a table caption. Provides a means for labeling the table’s content. Used once per table and must immediately follow the table start tag.
<th>	Defines a header cell in a table
<tr>	Defines a row in a table
<td>	Defines a cell in a table
<thead>	Groups the header content in a table. By default, a thead will not affect the display of the table in any way.
<tbody>	Groups the body content in a table
<tfoot>	Groups the footer content in a table

Using of <table>,<tr> & <td> Tags

- Graphical tables are enclosed within a two-sided **`<table>`** tag that identifies the start and ending of the table structure.

- Each row of the table is indicated using a two-sided **`<tr>`** (for table row).

- Within each table row, a two-sided **`<td>`** (for table data) tag indicates the presence of individual table cells.

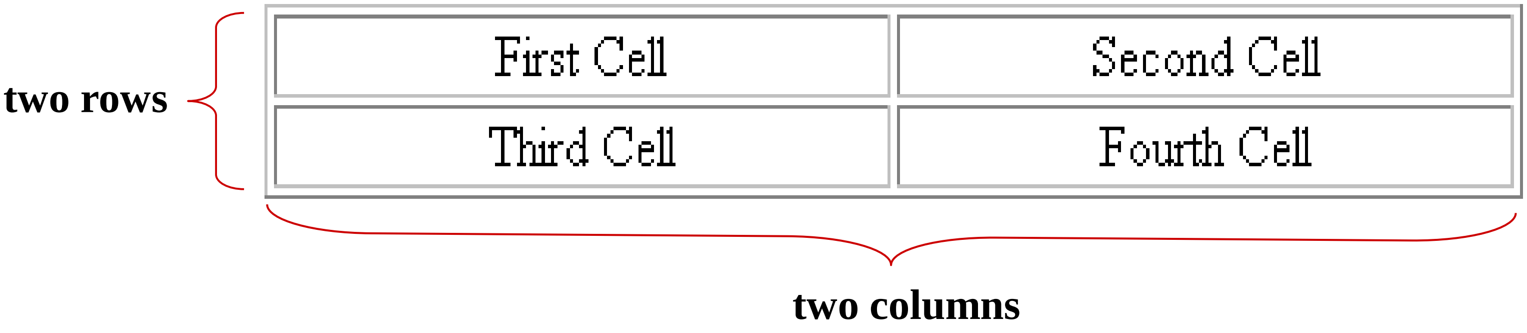
- **`<td>`** can contain nested tables (tables within tables)

Columns Within a Table

- HTML does not provide a tag for table columns.
- In the original HTML specifications, the number of columns is determined by how many cells are inserted within each row.
    - i.e. if a table have four `<td>` tags in each row, then it has four columns.

The Table Syntax

- This creates a table with two rows and two columns.



First Cell	Second Cell
Third Cell	Fourth Cell

two rows

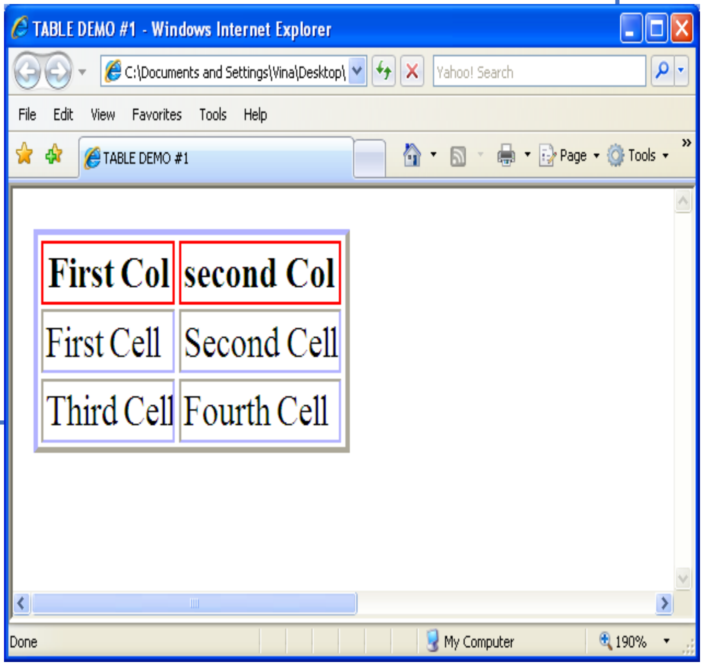
two columns

```
<table>
     <tr>
               <td> First Cell </td>
               <td> Second Cell </td>
      </tr>
      <tr>
               <td> Third Cell </td>
               <td> Fourth Cell </td>
      </tr>
<table>
```

Example!

Adding Headings to Table

```
<table border="2"  bordercolor="#b2b2ff">
      <tr bordercolor="red">
                  <th>First Col</th>
                  <th>second Col</th>
      </tr>
      <tr>
                  <td> First Cell </td>
                  <td> Second Cell </td>
       </tr>
       <tr>
                  <td> Third Cell </td>
                  <td> Fourth Cell </td>
       </tr>
</table>
```



First Col	second Col
First Cell	Second Cell
Third Cell	Fourth Cell

Adding <caption> to Table

```
<table  border="2"  bordercolor=“yellow” cellpadding=10 >
      <caption>Demonstrating Table with header & caption</caption>
    <tr bordercolor="red">
         <th>First Col</th>
         <th>second Col</th>
    </tr>
    <tr>
         <td> First Cell </td>
         <td> Second Cell </td>
     </tr>
     <tr>
         <td> Third Cell </td>
         <td> Fourth Cell </td>
     </tr>
</table>
```

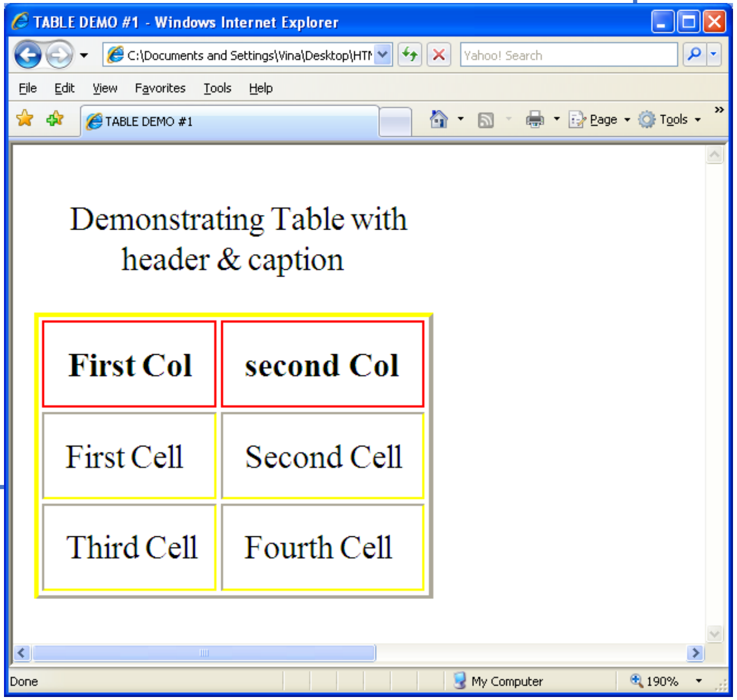


TABLE DEMO #1 - Windows Internet Explorer
C:\Documents and Settings\Vina\Desktop\HTM
Yahoo! Search
File Edit View Favorites Tools Help
TABLE DEMO #1
Page
Tools
Done
My Computer
190%

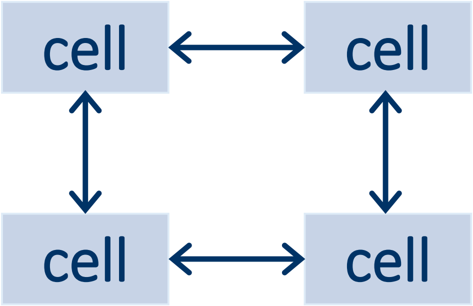
Demonstrating Table with header & caption

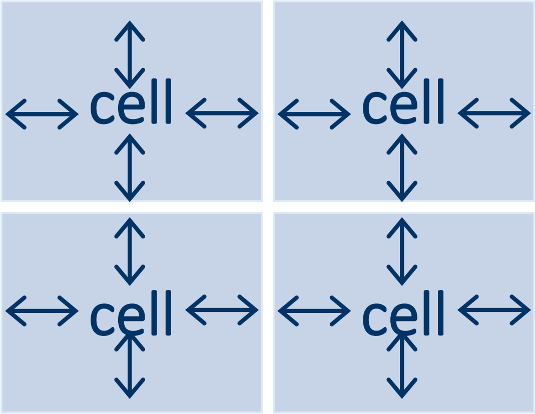
First Col	second Col
First Cell	Second Cell
Third Cell	Fourth Cell

Cell Spacing Vs. Cell Padding

- **Cell Spacing**
  Defines empty spaces between cells

- **Cell Padding**
  Defines empty spaces around cell content





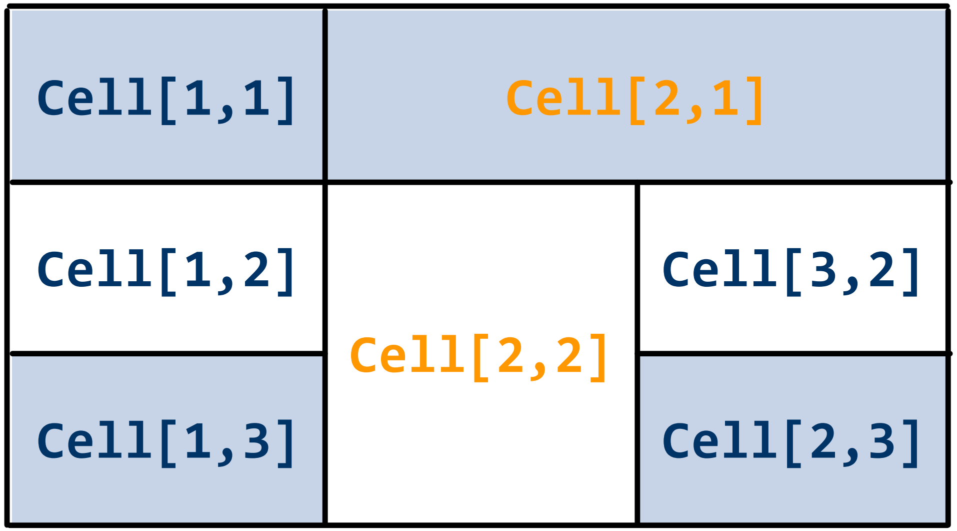
Example!

Spanning Rows & Columns

- To merge several cells into one, you need to create a **spanning cell**.
- A spanning cell is a cell that occupies more than one row or column in a table.
- Spanning cells are created by inserting the **rowspan** and **colspan** attribute in a **<td>** or **<th>** tag.
- The syntax for these attributes is: **rowspan="value" colspan="value"**
  - ***value*** is the number of rows or columns that the cell spans in the table

Column and Row Span

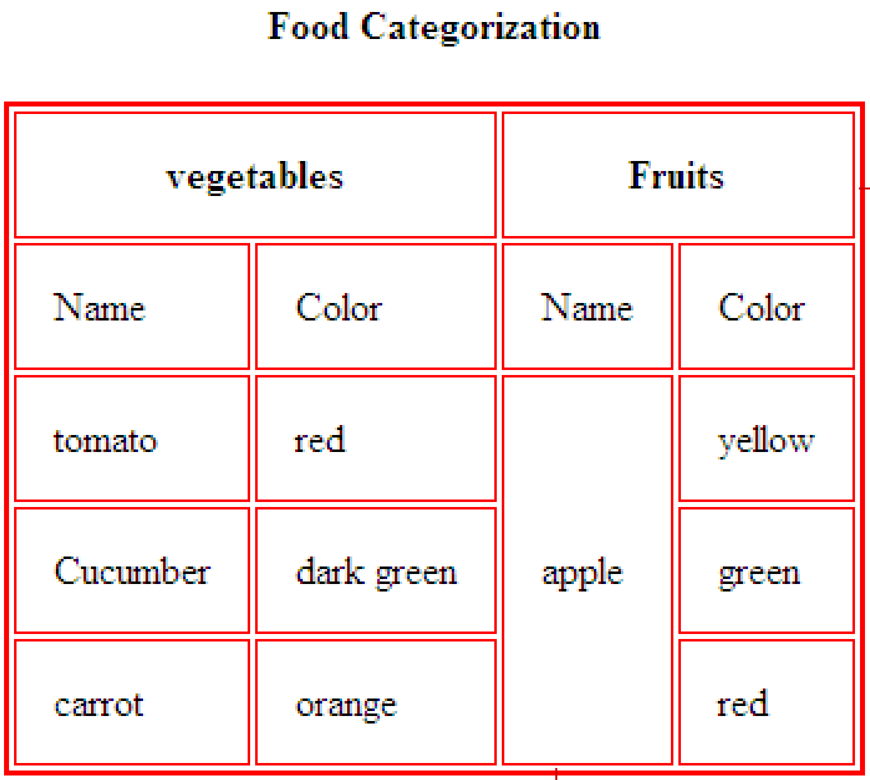
- colspan defines how many columns the cell occupies
- rowspan defines how many rows the cell occupies



<table>
<tr><td>Cell[1,1]</td><td colspan="2">Cell[2,1]</td></tr>
<tr><td>Cell[1,2]</td><td rowspan="2">Cell[2,2]</td><td>Cell[3,2]</td></tr>
<tr><td>Cell[1,3]</td><td>Cell[2,3]</td></tr>
</table>

```
<table>
  <tr>
    <td>Cell[1,1]</td>
    <td colspan="2">Cell[2,1]</td>
  </tr>
  <tr>
    <td>Cell[1,2]</td>
    <td rowspan="2">Cell[2,2]</td>
    <td>Cell[3,2]</td>
  </tr>
  <tr>
    <td>Cell[1,3]</td>
    <td>Cell[2,3]</td>
  </tr>
</table>
```

Example of Spanning Cells



Food Categorization

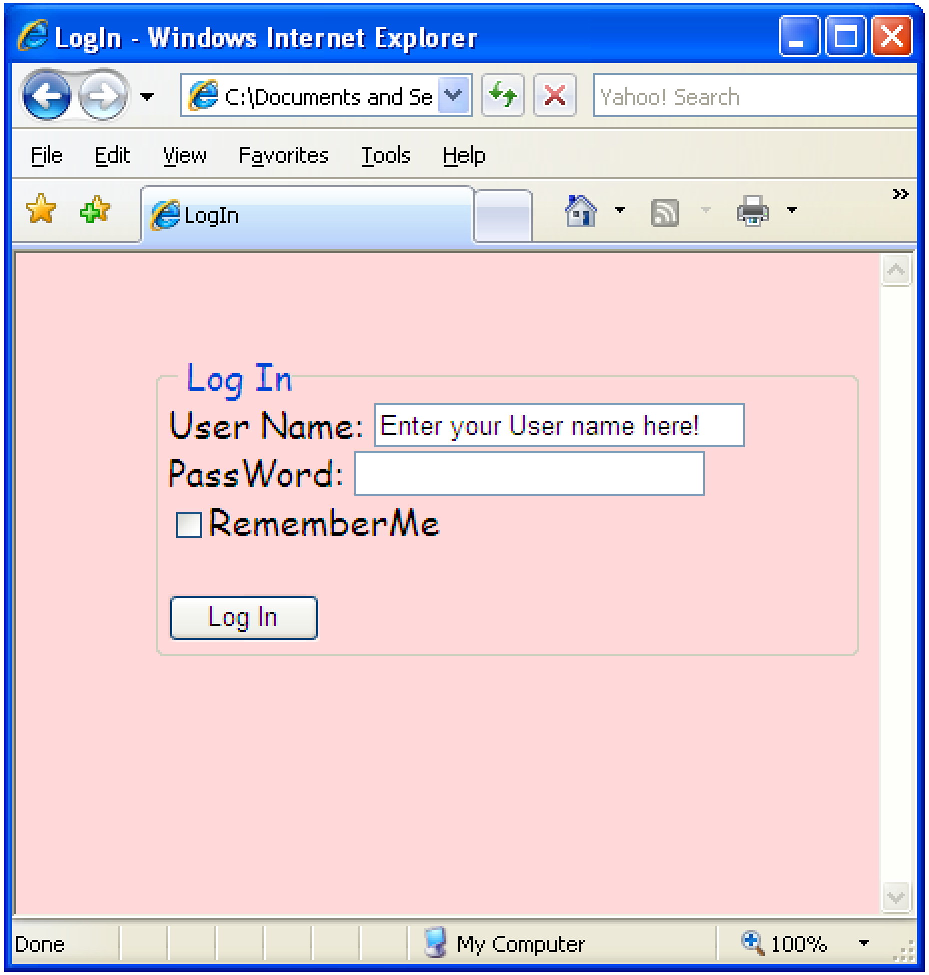
vegetables		Fruits	
Name	Color	Name	Color
tomato	red	apple	yellow
Cucumber	dark green		green
carrot	orange		red

this cell spans two columns

This cell spans three rows

Forms

Sample Form Design



Log In

User Name: Enter your User name here!

PassWord:

□ RememberMe

HTML Forms

- Forms are the primary method for gathering data from site visitors
- **<form>** Main Attributes
    - **action=address**
        - Specifies the URL to which the form submission is sent to.
    - **method=post** or **method=get**
        - Specifies how to send form-data.

```
<form>
        <!-- Here goes form fields and HTML -->
</form>
```

Form Fields

- A **<form>** can contain **<input>** elements presenting the following controls:
  - Text field
  - Password field
  - Hidden field
  - Check box
  - File
  - Submit button
  - Reset button
  - Ordinary button
  - Image button
  - Radio button
  - etc..

- Other controls:
  - Multi-line textarea
  - Drop-down menu

Form Fieldset

- <fieldset> is used to enclose a group of related form fields together.
- The <legend> is the fieldset's title.
- Example:

```
<form method="post" action=“main.html">
  <fieldset>
    <legend>Client Details</legend>
    Name:<input type="text" id="Name" />
    Password:<input type=“password" id=“Pswd" />
  </fieldset>
</form>
```

Form Labels

- Form labels are used to associate an explanatory text to a form field using the field's ID.
- Clicking on a label focuses its associated field (checkboxes are toggled, radio buttons are checked)
- Example

```
<form>
    <label for="fn">First Name</label>
    <input type="text" id="fn" />
</form>
```

Navigation Fields

- tabindex attribute define a sequence that users follow when they use the Tab key to navigate through a page.

- *access keys* allow easier navigation by assigning a *keyboard shortcut* to a link. It can be used on **any** HTML element

Navigation Fields
(accesskey attribute)

- if more than one element has the same access key differs:
    - IE, Firefox: The next element with the pressed access key will be activated
    - Chrome, Safari: The last element with the pressed access key will be activated
    - Opera: The first element with the pressed access key will be activated

Browser	Shortcut
Internet Explorer	[Alt] + *accesskey*
Chrome	
Safari	
Firefox	[Alt] [Shift] + *accesskey*
Opera 15 or newer Opera 12.1 or older	[Alt] + *accesskey* [Shift] [Esc] + *accesskey*

<input> Field Attributes

- type
- size
- maxlength
- name
- id
- value
- tabindex: Specifies the tab order of an element.
- etc.

```
<input type="text" size="25" value="Enter your name!"/>
```

- Note:
  - Image buttons have the same effect as submit buttons with src, width, height attributes

<textarea> Field Attributes

- rows
- cols
- name
- tabindex
- etc..

```
<textarea cols="40" rows="5" name="myname">
        Now we are inside the area - which is nice.
</textarea>
```

Drop-Down Menu Tags

- <select> Attributes
  - name
  - size
  - multiple
- <option> Attributes
  - selected
  - value

```
<select>
     <option>Milk</option>
     <option>Coffee</option>
     <option>Tea</option>
</select>
```

- <optgroup> Attributes
  - label
  - disabled

```
<select>
       <optgroup label="Africa">
            <option>Egypt</option>
            <option>Sudan</option>
       </optgroup>
       <optgroup label="Europe">
            <option>France</option>
            <option>Russia</option>
       </optgroup>
</select>
```

Other Form’s Controls

- HTML 4 controls are too limited
- Several new types added
- New Input type:

  - color
  - date
  - datetime
  - datetime-local
  - time
  - month
  - week
  - datalist
  - email
  - number
  - range
  - search
  - tel
  - url

<!doctype html>

- It is not an HTML tag
- It is an instruction to tell the web browser about what version of HTML the page is written in.
- It should always be the first item at the top of all your HTML files.
- It has no end tag.
- Browsers use a DOCTYPE in the beginning of the document to decide whether to handle it in
  - quirks mode or
  - standards mode.
- To ensure that your page uses full standards mode, make sure that your page has a DOCTYPE

documents must be marked up correctly
&
"well-formed"

https://validator.w3.org/

Cascading Style Sheets cont.

the sister technology to HTML that
is used to style your web pages

Cascading Order

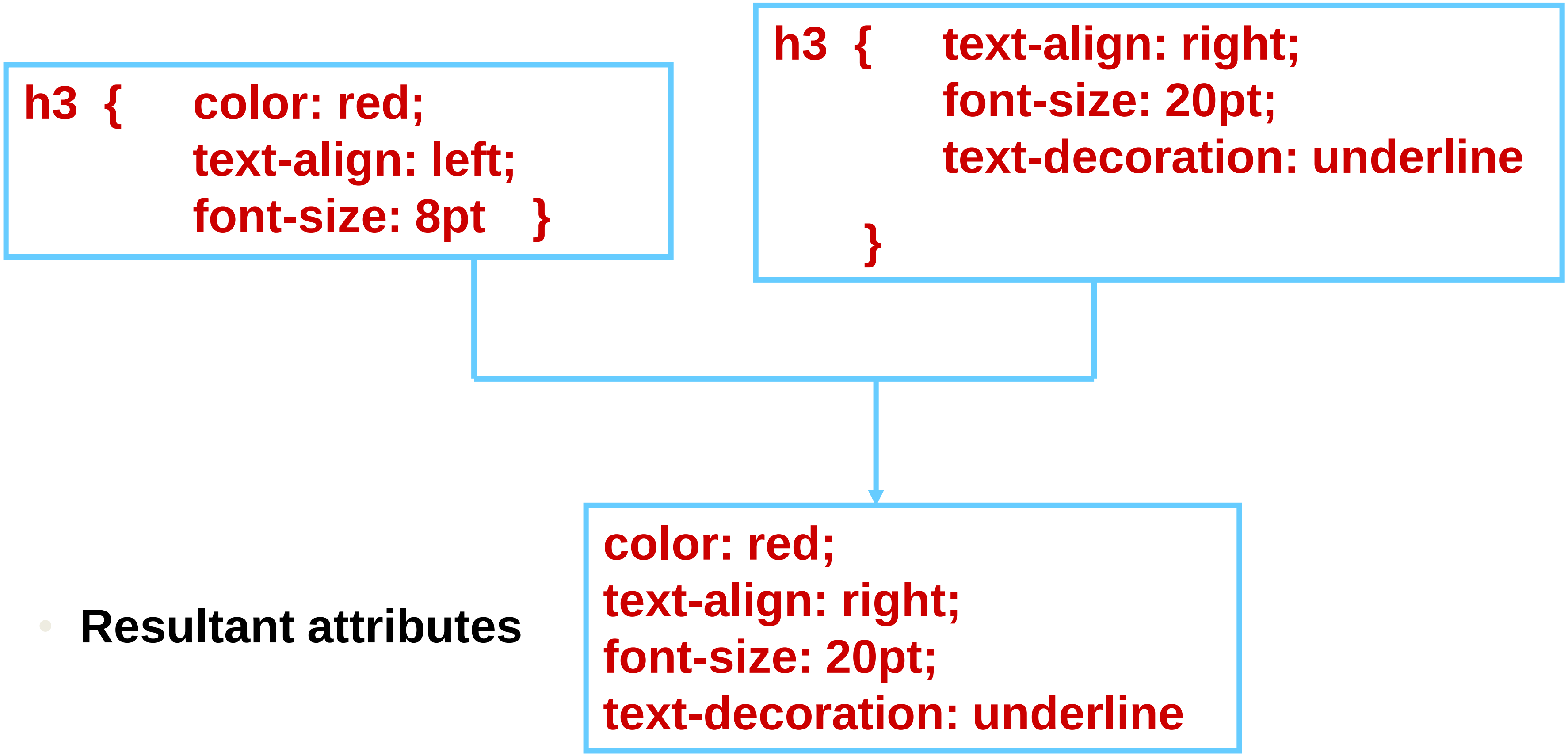
- “Cascading ” reflects the way styles are applied to the elements in a document, because style declarations cascade down to elements from many origins.

- Styles will be applied to HTML in the following order:
    1. Browser default
    2. External style sheet
    3. Internal style sheet (in head)
    4. Inline style

- When styles conflict, the “nearest” (most recently applied) style wins.

Example of Cascading Order

- External Style sheet
- Internal Style sheet



```
h3  {     color: red;
          text-align: left;
          font-size: 8pt    }
```

```
h3  {     text-align: right;
          font-size: 20pt;
          text-decoration: underline

     }
```

- Resultant attributes

```
color: red;
text-align: right;
font-size: 20pt;
text-decoration: underline
```

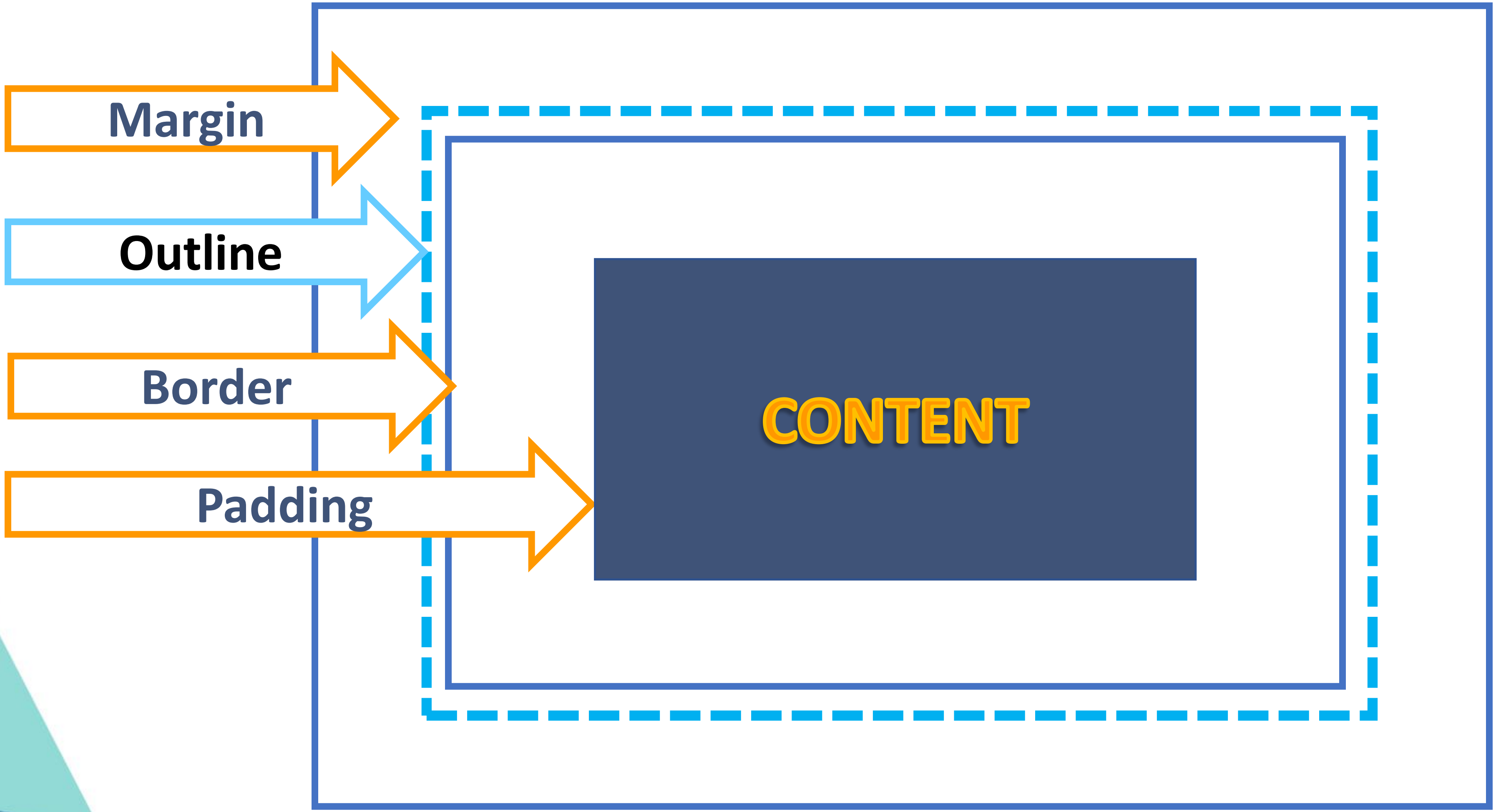
Example!

Box Model

- All HTML elements can be considered as boxes.
- The Box Model allows us to place a border around elements and space elements in relation to other elements.

- The Box Model consists of:
  - margins,
  - borders,
  - padding, and
  - the actual content.

Box Model



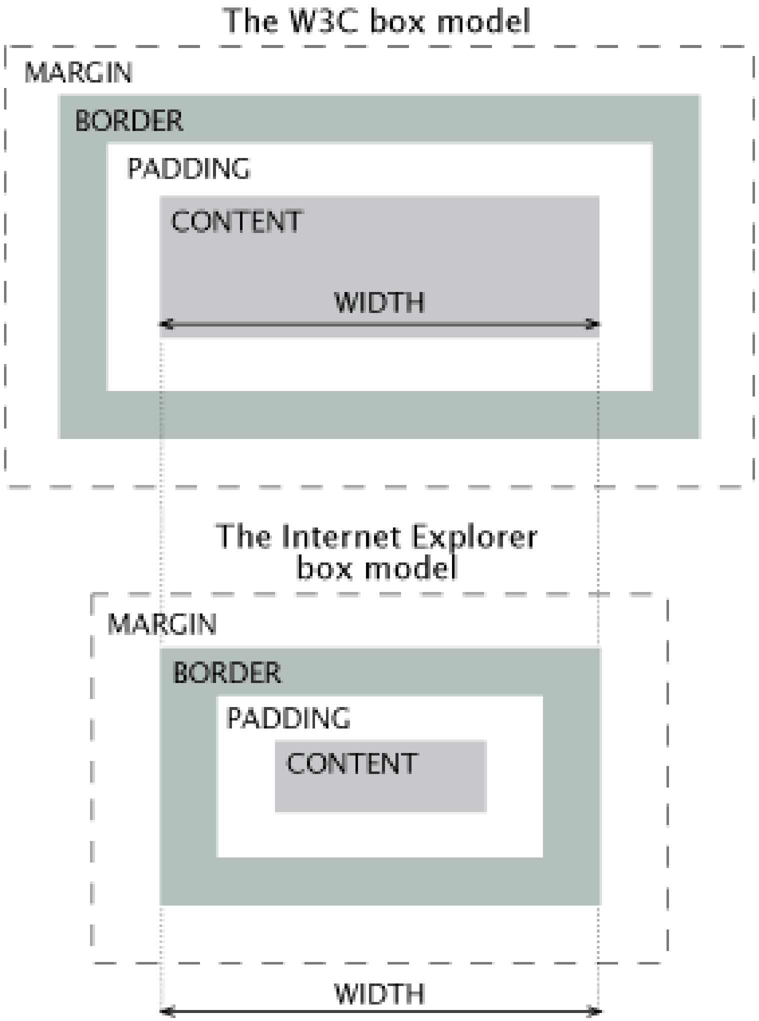
Quirks mode vs. Standards mode

- quirks mode
  - layout emulates nonstandard behavior in Navigator 4 and Internet Explorer 5 for Windows that is required not to break existing content on the Web.

- standards mode.
  - the behavior is (hopefully) the behavior described by the HTML and CSS specifications.

IE Quirks Mode

- When using quirks mode, Internet Explorer violates the box model standard



Borders, Padding, and Margins

CSS Property	Values
border-style:style border-top-style:style border-right-style:style border-bottom-style:style border-left-style:style	Sets the *style* of a border surrounding a page element. It must be used if using any border property The *style* can be applied to all borders (border-style, borderStyle) or to selected borders. Style types can be dashed dotted double groove inset none outset ridge solid

Borders, Padding, and Margins

CSS Property	Values
border-width:*width* border-top-width:*width* border-right-width:*width* border-bottom-width:*width* border-left-width:*width*	Sets the *width* of a border surrounding a page element. The *width* can be applied to all borders (border-width, borderWidth) or to selected borders. Widths can be thin medium thick *n*px

Borders, Padding, and Margins

CSS Property	Values
border-color:*color* border-top-color:*color* border-right-color:*color* border-bottom-color:*color* border-left-color:*color*	Sets the *color* of a border surrounding a page element. The *color* can be applied all borders (border-color, borderColor) or to selected borders. The *color* is specified as a color name, hexadecimal value, or RGB value.

Borders, Padding, and Margins

CSS Property	Values
border-radius : px **border-radius : px px px px**	Used for displaying round corners surrounding the element

border-top-left-radius: px;
border-top-right-radius: px;
border-bottom-right-radius: px;
border-bottom-left-radius: px;
	Sets the round corners for either the top left or top right, or bottom right, or bottom left corner of an element.
	Use the shorthand property border-radius to set the radius for the four corners

Borders, Padding, and Margins

CSS Property	Values
border:*style width color*	Border styles, widths, and colors can be set with the single border specification by coding these values separated by a blank space: border:solid 1px red border="solid 1px red"

Borders, Padding, and Margins

CSS Property	Values
padding: px padding-top : px padding-right: px padding-bottom : px padding-left : px	Properties that control box’s padding. (the area between its content and its border.) Sets the padding for either the top or right, or bottom, or left side of an element. Use the shorthand property padding to set the padding for the four sides px, pt, em

Borders, Padding, and Margins

CSS Property	Values
margin: px margin-top : px margin-right: px margin-bottom : px margin-left : px	Properties that control box’s margin. (the area outside its border.) Sets the margins for either the top or right, or bottom, or left side of an element. Use the shorthand property margin to set the margins for the four sides px, pt, em

Assignments