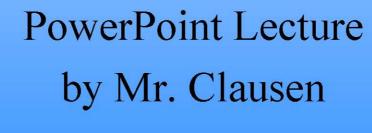
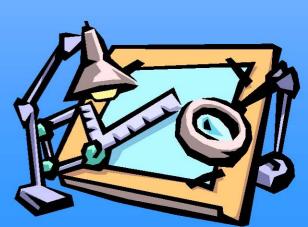
# Unit 4 Lesson 3 HTML Power Techniques

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### The Exciting Web

- The Web is full of pictures, sounds, and movies that add interest to Web pages.
- There are two main types of pictures, graphics, or images on the Internet.
  - .jpg (.jpeg) or Joint Photographic Expert Group
  - gif or Graphics Interchange Format
- Fonts can be changed by using the <font> tag and attributes and values.
  - The font tag was deprecated in HTML 4.01.
- Tables allow a web page to be divided up into parts, creating special spaces for each new element or piece of information.
- Tables, fonts, and pictures add power to web pages.

### Tags to Emphasize Text

- Here are a few more tags that can enclose words or phrases to help them stand out:
- <b>Bold Text</b>
- <strong>Strong Text</strong>
- <em>Emphasized Text</em>
- <i>Italics</i>
- <strong> vs. <b> Part 1
- <strong> vs. <b> Part 2

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# Using the <font> Tag

- The <font> tag allows you to specify the color, the size, and the font to be used for text on a Web page.
- The syntax for the <font> tag is:
  - <fort size="size" color="color" face="face"> your text here </fort>
  - The size attribute allows you to specify the font size of the text
  - The color attribute allows you to change the color of individual characters or words
  - The face attribute specifies a particular font for a section of text

#### Font Attributes and Values

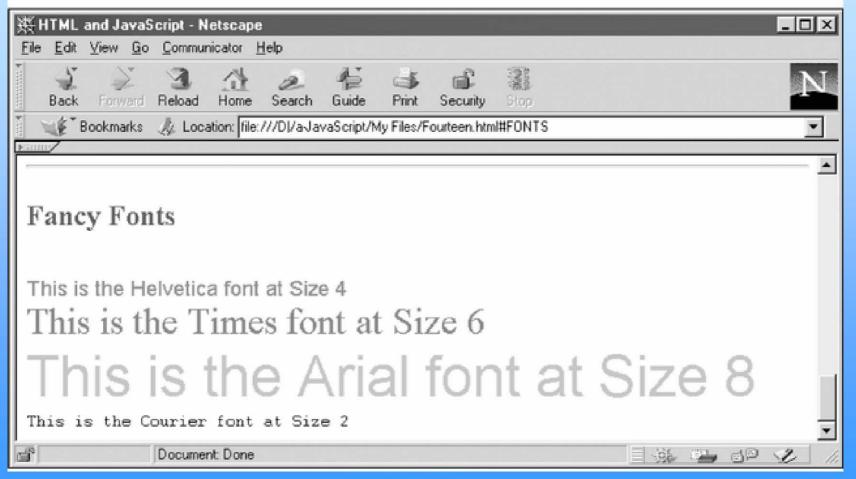
- It is possible to change the size, color, or style of the font for a word, sentence, paragraph, or even the entire page.
- The <font> tag's attributes control size, style and color:
- Size: < font size=#>Text Here</font >
- Style: < font face=#> Text Here</font >
- Color: < font color=#> Text Here</font >
- The font tag was deprecated in HTML 4.01.

#### Fourteen.html

# Figure 3-2

#### FIGURE 3-2

Various font styles, sizes, and colors are displayed.



#### Net Fun

- To open a link in a new window use the *target* attribute with "blank" as the value:
- <a href="http://www.google.com" target="\_blank">Google</a>
- Using \_blank for a target will open the content in a new window every time.
- Email links launch your default email program, and include a specified address
- Email link syntax: <a href="mailto:anyone@anywhere.com">Send Email</a>

### Graphics

- Pictures can be added to your web page.
- Pictures can be acquired from clip art, scanned images, or from digital cameras.
- Two common formats for pictures are .gif and .jpg
- The Graphics Interchange Format is abbreviated as GIF.
- GIF files incorporate a compression scheme to keep file sizes low, but they are limited to 8-bit (256 or fewer colors do not use for photographs).
- "GIFs" can include animated pictures or pictures with a transparent background.

### Graphics 2

- .jpg or .jpeg is short for Joint Photographic Expert Group.
- This format includes compression that allow file sizes to be smaller and load faster on a web page.
- Unlike GIF graphics, JPEG images are full-color images (24 bit, or "true color").
- Once an image is compressed using JPEG compression, data is lost and you cannot recover it from that image file.
- Therefore, it is recommended that you save an uncompressed original file of your graphics or photographs as backup.

### **Graphics Formats**

#### Which is the best graphics format to use?

format	best for	notes	
GIF	Line art and animations; also supports 1-bit transparency, which sets a single color as the transparent color	arency, viewing, or selling GIF images; companies producing software programs that <i>create</i> olor as GIF images must pay licensing fees to CompuServ/Unisys	
JPG (or JPEG)	Photographs and other images with gradient color	Variable compression allows a trade-off between better image quality and smaller file size	
PNG	Line art and photographs, also supports 32-bit (gradient) transparency	Recently developed format; browser support not as widespread; in many browsers 32-bit transparency does not appear as expected; file size might be significantly larger or smaller depending upon image content—test image in more than one format	

### The Image Tag

- HTML images are defined with the <img> tag.
- To display an image on a page, you need to use the **src** (source) *attribute*.
- The *value* of the **src** attribute is the URL of the image you want to display on your page.
- IMG SRC is short for IMaGe SouRCe.

```
<img src="url">
<img src="images/mypicture.jpg">
```

<img src="levy.gif">

<img src = "http://www.domain.com/folder/picture.jpg>

### The Image Tag Alt Attribute

- The alt attribute is used to define an "alternate text" for an image.
- The value of the alt attribute is defined by the web page creator.
- <img src="MyPicture.jpg" alt="Short Description of my Picture">
- The "alt" attribute tells the viewer what is missing from the web page if the browser can't load the picture.
- The browser will then display the alternate text instead of the image, for example:
- <img src="FenderStrat.jpg" alt="Fender Stratocaster Guitar">
- <img src="images/mypicture.jpg" height="100" width="200"
  alt="My Picture">
- It is considered a good practice to include an "alt" attribute for each image on your web page.

Fifteen.html Fifteen-2.html

### Pictures of All Sizes

- Pictures can be aligned in the center, left or right side of a web page.
- By using the *height* and *width* attributes you can change the size of the picture.
- Controlling the exact size of a picture can be very helpful in making a page look the way that you want it to look.
- To make a picture become the background of your web page, use the background attribute of the *body* tag.
- For example: <body background = "levy.gif">
  Sixteen.html

### Image Tag Attributes

- Using the *align* attribute, we can align the image to the right, center, left, top, or middle.
- The *width* tag will tell the browser how wide to display the image in pixels or percentages.
  - This is useful to set a placeholder for the image as it loads.
- The *height* tag tells the browser how tall to display the image in pixels.
- Try experimenting with W3Schools TryIt Editor:

Align Width and Height

### Image Tag Attributes 2

• Here is a summary of image tag attributes:

attribute	specifies	possible values	examples
src	Name and location of image file	Name, including extension and path of image file	<pre>src="filename.jpg" or src="filepath/filename.jpg"</pre>
alt	Alternate text for users who don't use graphics	Almost any text, including spacing and punctuation—but not double quotation marks	alt="Guests enjoy resort activities"
align	Image's alignment in relation to page text, not in relation to page margins	Left, right, top, texttop, middle, absmiddle, baseline, bottom, absbottom, and center	align="right"
height	Image's display height in pixels	Whole number representing image height—do not use to resize image	height="200"
width	Image's display width in pixels	Whole number representing image width—not for use in resizing image	width="275"
border	Image border size	Whole number representing border width in pixels	border="2"

### Image Hyperlinks

- Your pictures can also be used as hyperlinks.
- If you wish, you can add a border around the picture to make it obvious that it is a link.
- <img border="2" src="YourPic.jpg">
- To make the image a link, precede your picture with an anchor tag, for example:
- <a href="YourPage.html">
- <img src="YourPic.jpg "border="0" > </a>

Try it out at W3Schools

#### **Tables**

- Tables create little boxes in which you can place things to keep them organized.
- To create a table use the tag
- Cells can have a border by adding a *border* attribute and a number value
- You can make cells appear larger around pictures and text with the *cell padding* attribute.
- You can align pictures and text to the center, left, or right in a table's cell.

#### Basic Table Tag Attributes

# Using Table Tags

- Tables are enclosed within the two-sided tags that identify the start and ending of the table.
- Each row of the table is created using a two-sided tag(for table row).
- Within each table row, a two-sided 

   /td> (for table data) tag creates individual table cells.

### Table Syntax

• The general syntax of a graphical table is:

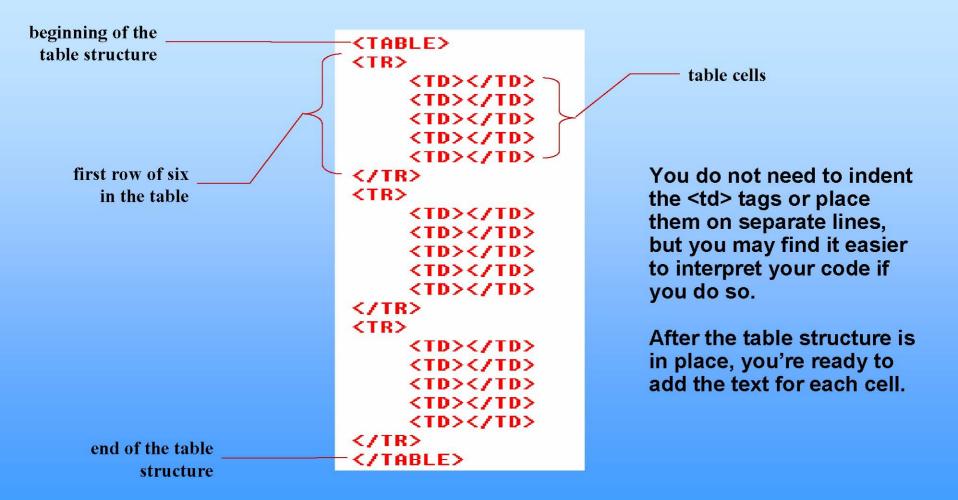
```
>
 First Cell 
 Second Cell 
>
 Third Cell 
 Fourth Cell
```

This creates a table with two rows and two columns.

#### Basic table structure

```
Row 1, Column 1
  Row 1, Column 2
  Row 2, Column 1
  Row 2, Column 2
  Row 1, Column 1 Row 1, Column 2
        |Row 2, Column 1|Row 2, Column 2
```

### HTML Structure of a Table



### Table Headings

- HTML provides a tag for table headings.
- Text using the tag is centered in the cell and displayed in bold.
- The tag is used for column headings, but you can use it for any cell that you want to contain centered boldfaced text.

### Table Caption

- HTML allows you to specify a caption for a table.
- The syntax for creating the caption is: <aption align="alignment">caption text</caption>
- This tag immediately follows the tag.
  - alignment indicates the caption placement
    - a value of "bottom" centers the caption below the table
    - a value of "top" or "center" centers the caption above the table
    - a value of "left" or "right" place the caption above the table to the left or right

#### Table Attributes

- By default, browsers display tables without table borders.
- •
- The cell spacing attribute controls the amount of space inserted between table cells.
- •
- Cell padding refers to the space within the cells.
- •
- All of the above values are measured in pixels.

CellPaddingTryIt CellSpacingTryIt

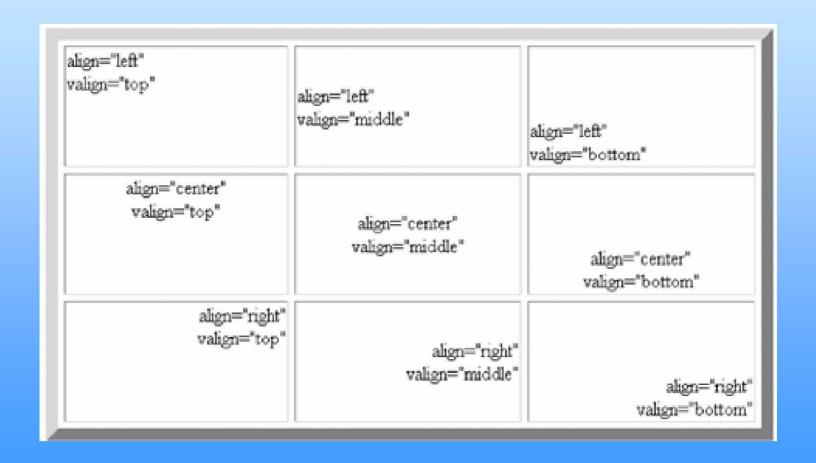
#### Table & Cell Sizes

- The way to specify a table size is:
  - Size refers to the width and height of the table as measured in pixels or as a percentage of the display area.
- To set the width of an individual cell, add the width attribute to either the or tags.
- The syntax is: width="value"
  - value can be expressed either in pixels or as a percentage of the table width.

### Aligning the Contents of a Table

- By default, cell text is placed in the middle of the cell, aligned with the cell's left edge.
- By using the *align* and *valign* attributes, you can specify the text's horizontal and vertical position.
- To align the text for a single column, you must apply the align attribute to every cell in that column.

### Text Alignment Example



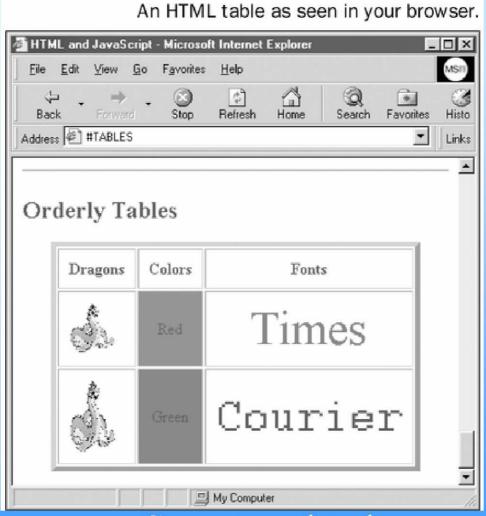
### Table Backgrounds

- Table elements support the *bgcolor* attribute.
- To specify a background color for all of the cells in a table, all of the cells in a row, or for individual cells, by adding the bgcolor attribute to either the , , , or tags as follows:

• You can replace the color in each of the above with a graphic, for example:

# Figure 3-10

FIGURE 3-10



Seventeen.html

### Extraordinary Extras

- There are data input, or <form> tag, options added to HTML.
- These options give various ways to ask questions to visitors of the web page.
- These tags not only give extra functionality to your web page, they also make your page more exciting and extraordinary.
- Four basic input tags are: Text boxes, Drop down lists, Radio buttons, and Check boxes.

### Creating Forms

• Forms are created using the form element, structured as follows:

```
<form attributes>
elements
</form>
```

- Attributes control how the form is processed.
- Elements are placed within the form.

### Form Attributes

- Form attributes tell the browser the location of the server-based program to be applied to the form's data.
- Two attributes are available to identify the form: *id* and *name*.

<form name="name" id="id">... </form>

### Input Boxes

- The general syntax of an input element is as follows: <input type="type" name="name" id="id" />
- Input types: type="button"
- This displays a button that can be clicked to perform an action from a script.
  - type="checkbox"
- This displays a check box.
   type="radio"
- This displays a radio button.
   type="text"
- This displays an input box for text entered by the user.

### Selection List & Check Boxes

- A selection list is a drop down box where a user selects a particular value.
  - A selection list is useful when there is a predetermined set of choices.
- To create a selection list, use the <select> tag.
- List each selection using the <option> tag.
- To create a check box, use:

```
<input type="checkbox" name="name" id="id"
value="value"/>
```

#### Eighteen.html

### Forms And HTML

- While HTML supports the creation of forms, it does not include tools to process the information.
- The information can be processed through a program running on a Web server.

### Programs To Process Data in Forms

- Server-based programs are written in many languages.
- The earliest and most commonly used are Common Gateway Interface (CGI) scripts that are written in **perl**.
- Some popular languages include:

- AppleScript

- PHP

- ASP

- Perl

- C/C++/C#

- Visual Basic

# Client-side Programs

- Server-side programs can be slow.
- Client-side programs were developed to run programs and scripts on the client side of a Web browser.
- Languages like JavaScript can be used to validate the information contained in the user's response to a form before sending the information to a server side program.