**LECTURE 2** **HTML FORMATTING ELEMENTS**

HTML also defines special **elements** for defining text with a special **meaning**.

HTML uses elements like <b> and <i> for formatting output, like **bold** or *italic* text.

Formatting elements were designed to display special types of text:

* <b> - Bold text
* <strong> - Important text
* <i> - Italic text
* <em> - Emphasized text
* <mark> - Marked text
* <small> - Small text
* <del> - Deleted text
* <ins> - Inserted text
* <sub> - Subscript text
* <sup> - Superscript text

**COLORS**

<html>

<body>

<p>I am normal</p>

<p style="color:red;">I am red</p>

<p style="color:blue;">I am blue</p>

<p style="font-size:50px;">I am big</p>

</body>

</html>

**HTML Background Color**

The background-color property defines the background color for an HTML element.

This example sets the background color for a page to powderblue:

<html>

<body style="background-color:powderblue;">  
<h1>This is a heading</h1>  
<p>This is a paragraph.</p>  
</body>

</html>

## HTML Text Color

The color property defines the text color for an HTML element:

### Example

<h1 style="color:blue;">This is a heading</h1>  
<p style="color:red;">This is a paragraph.</p>

## HTML Fonts

The font-family property defines the font to be used for an HTML element:

### Example

<h1 style="font-family:verdana;">This is a heading</h1>  
<p style="font-family:courier;">This is a paragraph.</p>

## HTML Text Size

The font-size property defines the text size for an HTML element:

### Example

<h1 style="font-size:300%;">This is a heading</h1>  
<p style="font-size:160%;">This is a paragraph.</p>

## HTML Text Alignment

The text-align property defines the horizontal text alignment for an HTML element:

### Example

<h1 style="text-align:center;">Centered Heading</h1>  
<p style="text-align:center;">Centered paragraph.</p>

**HTML Quotation and Citation Elements**

HTML <blockquote> for Quotations

The HTML <blockquote> element defines a section that is quoted from another source.

Browsers usually indent <blockquote> elements.

Example

<p>Here is a quote from WWF's website:</p>  
<blockquote cite="http://www.worldwildlife.org/who/index.html">  
For 50 years, WWF has been protecting the future of nature.  
The world's leading conservation organization, WWF works in 100 countries and is supported by 1.2 million members in the United States and close to 5 million globally.  
</blockquote>

## HTML <address> for Contact Information

The HTML <address> element defines contact information (author/owner) of a document or an article.

The <address> element is usually displayed in italic. Most browsers will add a line break before and after the element.

### Example

<address>  
Written by John Doe.<br>   
Visit us at:<br>  
Example.com<br>  
Box 3900, Eldoret <br>  
Kenya  
</address>

## Background Color

You can set the background color for HTML elements:

<h1 style="background-color:DodgerBlue;">Hello World</h1>  
<p style="background-color:Tomato;">Lorem ipsum...</p>

## Text Color

You can set the color of text:

<h1 style="color:Tomato;">Hello World</h1>  
<p style="color:DodgerBlue;">Lorem ipsum...</p>  
<p style="color:MediumSeaGreen;">Ut wisi enim...</p>

## Border Color

You can set the color of borders:

<h1 style="border:2px solid Tomato;">Hello World</h1>  
<h1 style="border:2px solid DodgerBlue;">Hello World</h1>  
<h1 style="border:2px solid Violet;">Hello World</h1>

## Color Values

In HTML, colors can also be specified using RGB values, HEX values, HSL values, RGBA values, and HSLA values:

## RGB Value

In HTML, a color can be specified as an RGB value, using this formula:

**rgb(red, green, blue)**

Each parameter (red, green, and blue) defines the intensity of the color between 0 and 255.

For example, rgb(255, 0, 0) is displayed as red, because red is set to its highest value (255) and the others are set to 0.

To display the color black, all color parameters must be set to 0, like this: rgb(0, 0, 0).

To display the color white, all color parameters must be set to 255, like this: rgb(255, 255, 255).

<h1 style="background-color:rgb(255, 99, 71);">...</h1>  
<h1 style="background-color:#ff6347;">...</h1>  
<h1 style="background-color:hsl(9, 100%, 64%);">...</h1>  
<h1 style="background-color:rgba(255, 99, 71, 0.5);">...</h1>  
<h1 style="background-color:hsla(9, 100%, 64%, 0.5);">...</h1>

## HEX Value

In HTML, a color can be specified using a hexadecimal value in the form: **#*rrggbb***

Where rr (red), gg (green) and bb (blue) are hexadecimal values between 00 and ff (same as decimal 0-255).

For example, #ff0000 is displayed as red, because red is set to its highest value (ff) and the others are set to the lowest value (00).

## HSL Value

In HTML, a color can be specified using hue, saturation, and lightness (HSL) in the form:

**hsl(hue, saturation, lightness)**

Hue is a degree on the color wheel from 0 to 360. 0 is red, 120 is green, and 240 is blue.

Saturation is a percentage value, 0% means a shade of gray, and 100% is the full color.

Lightness is also a percentage, 0% is black, 50% is neither light or dark, 100% is white

## RGBA Value

RGBA color values are an extension of RGB color values with an alpha channel - which specifies the opacity for a color.

An RGBA color value is specified with:

**rgba(red, green, blue, alpha)**

The alpha parameter is a number between 0.0 (fully transparent) and 1.0 (not transparent at all):

## HSLA Value

HSLA color values are an extension of HSL color values with an alpha channel - which specifies the opacity for a color. An HSLA color value is specified with:

**hsla(hue, saturation, lightness, alpha)**

The alpha parameter is a number between 0.0 (fully transparent) and 1.0 (not transparent at all):

## HTML Links

Links are found in nearly all web pages. Links allow users to click their way from page to page.

## HTML Links - Hyperlinks

HTML links are hyperlinks.

You can click on a link and jump to another document.

When you move the mouse over a link, the mouse arrow will turn into a little hand.

Note: A link does not have to be text. It can be an image or any other HTML element.

**HTML Links - Syntax**

In HTML, links are defined with the <a> tag:

<a href="*url*">*link text*</a>

Example

<a href="https://www.w3schools.com/html/">Visit our HTML tutorial</a>

The **link text** is the visible part (Visit our HTML tutorial).

Clicking on the link text will send you to the specified address.

## Local Links

The example above used an absolute URL (a full web address).

A local link (link to the same web site) is specified with a relative URL (without https://www....).

### Example

<a href="html\_images.asp">HTML Images</a>

**HTML Link Colors**

By default, a link will appear like this (in all browsers):

* An unvisited link is underlined and blue
* A visited link is underlined and purple
* An active link is underlined and red

## HTML Links - Image as Link

It is common to use images as links:

### Example

<a href="default.asp">  
  <img src="smiley.gif" alt="HTML tutorial" style="width:42px;height:42px;border:0;">  
</a>

# HTML Images

Images can improve the design and the appearance of a web page.

<img src="pic\_trulli.jpg" alt="Italian Trulli">

# HTML Images Syntax

In HTML, im ages are defined with the <img> tag.

The <img> tag is empty, it contains attributes only, and does not have a closing tag.

The src attribute specifies the URL (web address) of the image:

<img src="*url*">

## The alt Attribute

The **alt** attribute provides an alternate text for an image, if the user for some reason cannot view it (because of slow connection, an error in the src attribute, or if the user uses a screen reader).

## Image Size - Width and Height

You can use the style attribute to specify the width and height of an image.

## Example

<img src="img\_girl.jpg" alt="Girl in a Jacket" style="width:500px; height: 600px;">

## Width and Height, or Style

The width, height, and style attributes are valid in HTML5.

However, we suggest using the style attribute. It prevents styles sheets from changing the size of images:

## Example

<!DOCTYPE html>  
<html>  
<head>  
<style>  
img {   
    width: 100%;   
}  
</style>  
</head>  
<body>  
<img src="html5.gif" alt="HTML5 Icon" width="128" height="128">  
<img src="html5.gif" alt="HTML5 Icon" style="width:128px;height:128px;">  
</body>  
</html>

## Animated Images

HTML allows animated GIFs:

### Example

<img src="programming.gif" alt="Computer Man" style="width:48px;height:48px;">

## Background Image

To add a background image on an HTML element, use the CSS property  background-image:

## Example

To add a background image on a web page, specify the background-image property on the BODY element:

<body style="background-image:url('clouds.jpg')">  
<h2>Background Image</h2>  
</body>