HTML stands for Hyper Text Markup Language

HTML describes the structure of Web pages using markup

HTML elements are the building blocks of HTML pages

HTML elements are represented by tags

Browsers do not display the HTML tags, but use them to render the content of the page

<!DOCTYPE html>

<html>

<head>

<title>Page Title</title>

</head>

<body>

<h1>My First Heading</h1>

<p>My first paragraph.</p>

</body>

</html>

The <!DOCTYPE html> declaration defines this document to be HTML5

The <html> element is the root element of an HTML page

The <head> element contains meta information about the document

The <title> element specifies a title for the document

The <body> element contains the visible page content

The <h1> element defines a large heading

The <p> element defines a paragraph

HTML Versions

**Version Year**

**HTML 1991**

**HTML 2.0 1995**

**HTML 3.2 1997**

**HTML 4.01 1999**

**XHTML 2000**

**HTML5 2014**

<h1>This is heading 1</h1>

<h2>This is heading 2</h2>

<h3>This is heading 3</h3>

<h4>This is heading 4</h4>

<h5>This is heading 5</h5>

<h6>This is heading 6</h6>

<p>This is a paragraph.</p>

<a href="https://www.goolge.com">This is a link</a>

<img src="abc.jpg" alt="mywebpage.com" width="104" height="142">

**<pre> Element**

<pre>

My Bonnie lies over the ocean.

My Bonnie lies over the sea.

My Bonnie lies over the ocean.

Oh, bring back my Bonnie to me.

</pre>

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

**Background Color**

<body style="background-color:powderblue;">

**Fonts**

<h1 style="font-family:verdana;font-size:300%;">This is a heading</h1>

**Text Alignment**

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

<p><b>This text is bold.</b></p>

<p><strong>This text is strong.</strong></p>

<p><i>This text is italic.</i></p>

<p><em>This text is emphasized.</em></p>

<h2>HTML <mark>Marked</mark>Frmatting</h2>

<p>My favorite color is <del>blue</del> red.</p>

<p>My favorite <ins>color</ins> is red.</p>

<p>This is <sub>subscripted</sub> text.</p>

<p>This is <sup>superscripted</sup> text.</p>

**<q> for Short Quotations:**

Browsers usually insert quotation marks around the <q> element.

<p>WWF's goal is to: <q>Build a future where people live in harmony with nature.</q></p>

**<blockquote> for Quotations:**

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

<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>

**<abbr> for Abbreviations:**

The HTML <abbr> element defines an abbreviation or an acronym.

<p>The <abbr title="World Health Organization">WHO</abbr> was founded in 1948.</p>

**<bdo> for Bi-Directional Override**

<bdo dir="rtl">This line will be written from right to left</bdo>

**HTML with CSS:**

CSS can be added to HTML elements in 3 ways:

Inline - by using the style attribute in HTML elements

Internal - by using a <style> element in the <head> section

External - by using an external CSS file

**Inline CSS:**

<!DOCTYPE html>

<html>

<body>

<h1 style="color:blue;">This is a Blue Heading</h1>

</body>

</html>

**Internal CSS:**

<!DOCTYPE html>

<html>

<head>

<style>

body {background-color: powderblue;}

h1 {color: blue;}

p {color: red;}

</style>

</head>

<body>

<h1>This is a heading</h1>

<p>This is a paragraph.</p>

</body>

</html>

**External CSS**

"styles.css"

body {

background-color: powderblue;

}

h1 {

color: blue;

}

p {

color: red;

}

<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="styles.css">

</head>

<body>

<h1>This is a heading</h1>

<p>This is a paragraph.</p>

</body>

</html>

---------------------------------------------------------------------------------------------------

<!DOCTYPE html>

<html>

<head>

<style>

h1 {

color: blue;

font-family: verdana;

font-size: 300%;

}

p {

color: red;

font-family: courier;

font-size: 160%;

border: 1px solid powderblue;

padding: 30px;

margin: 50px;

}

</style>

</head>

<body>

<h1>This is a heading</h1>

<p>This is a paragraph.</p>

</body>

</html>

<!DOCTYPE html>

<html>

<head>

<style>

#p01 {

color: blue;

}

</style>

</head>

<body>

<p>This is a paragraph.</p>

<p>This is a paragraph.</p>

<p id="p01">I am different.</p>

</body>

</html>

<!DOCTYPE html>

<html>

<head>

<style>

p.error {

color: red;

}

</style>

</head>

<body>

<p>This is a paragraph.</p>

<p>This is a paragraph.</p>

<p class="error">I am different.</p>

<p>This is a paragraph.</p>

<p class="error">I am different too.</p>

</body>

</html>

<!DOCTYPE html>

<html>

<head>

<style>

a:link {

color: green;

background-color: transparent;

text-decoration: none;

}

a:visited {

color: pink;

background-color: transparent;

text-decoration: none;

}

a:hover {

color: red;

background-color: transparent;

text-decoration: underline;

}

a:active {

color: yellow;

background-color: transparent;

text-decoration: underline;

}

</style>

</head>

<body>

<p>You can change the default colors of links</p>

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

</body>

</html>

<!DOCTYPE html>

<html>

<body>

<p>Locked in a frame? <a href="https://www.w3schools.com/html/" target="\_top">Click here!</a></p> <!—target attribute value can be \_top or \_blank 🡪

</body>

</html>

<img src="smiley.gif"alt="Smileyface"style="float:right;width:42px;height:42px;">

**HTML Tables**

<!DOCTYPE html>

<html>

<head>

<style>

table, th, td {

border: 1px solid black;

padding: 5px;

}

table {

border-spacing: 15px;

}

</style>

</head>

<body>

<table style="width:100%">

<tr>

<th>Firstname</th>

<th>Lastname</th>

<th>Age</th>

</tr>

<tr>

<td>Jill</td>

<td>Smith</td>

<td>50</td>

</tr>

<tr>

<td>Eve</td>

<td>Jackson</td>

<td>94</td>

</tr>

<tr>

<td>John</td>

<td>Doe</td>

<td>80</td>

</tr>

</table>

<p>Try to change the border-spacing to 5px.</p>

</body>

</html>

<!DOCTYPE html>

<html>

<head>

<style>

table, th, td {

border: 1px solid black;

border-collapse: collapse;

}

th, td {

padding: 5px;

text-align: left;

}

</style>

</head>

<body>

<h2>Cell that spans two columns:</h2>

<table style="width:100%">

<tr>

<th>Name</th>

<th colspan="2">Telephone</th>

</tr>

<tr>

<td>Bill Gates</td>

<td>55577854</td>

<td>55577855</td>

</tr>

</table>

</body>

</html>

<!DOCTYPE html>

<html>

<head>

<style>

table, th, td {

border: 1px solid black;

border-collapse: collapse;

}

th, td {

padding: 5px;

text-align: left;

}

</style>

</head>

<body>

<h2>Cell that spans two rows:</h2>

<table style="width:100%">

<tr>

<th>Name:</th>

<td>Bill Gates</td>

</tr>

<tr>

<th rowspan="2">Telephone:</th>

<td>55577854</td>

</tr>

<tr>

<td>55577855</td>

</tr>

</table>

</body>

</html>

**HTML Lists**

<!DOCTYPE html>

<html>

<body>

<h2>An unordered HTML list</h2>

<ul>

<li>Coffee</li>

<li>Tea</li>

<li>Milk</li>

</ul>

</body>

</html>

<!DOCTYPE html>

<html>

<body>

<h2>Unordered List with Circle Bullets</h2>

<ul style="list-style-type:circle"> <!—list style can be disc,circle,square,non🡪

<li>Coffee</li>

<li>Tea</li>

<li>Milk</li>

</ul>

</body>

</html>

<!DOCTYPE html>

<html>

<body>

<h2>An ordered HTML list</h2>

<ol>

<li>Coffee</li>

<li>Tea</li>

<li>Milk</li>

</ol>

</body>

</html>

<!DOCTYPE html>

<html>

<body>

<h2>Ordered List with Numbers</h2>

<ol type="1"> <!—type can be 1,A,a,i🡪

<li>Coffee</li>

<li>Tea</li>

<li>Milk</li>

</ol>

</body>

</html>

<!DOCTYPE html>

<html>

<head>

<style>

ul {

list-style-type: none;

margin: 0;

padding: 0;

overflow: hidden;

background-color: #333333;

}

li {

float: right;

}

li a {

display: block;

color: white;

text-align: center;

padding: 16px;

text-decoration: none;

}

li a:hover {

background-color: #111111;

}

</style>

</head>

<body>

<ul>

<li><a href="#home">Home</a></li>

<li><a href="#news">News</a></li>

<li><a href="#contact">Contact</a></li>

<li><a href="#about">About</a></li>

</ul>

</body>

</html>

**Forms**

<!DOCTYPE html>

<html>

<body>

<form >

First name:<br>

<input type="text" name="firstname" value="Mickey">

<br>

Last name:<br>

<input type="text" name="lastname" value="Mouse">

<br><br>

User password:<br>

<input type="password" name="psw">

<input type="radio" name="gender" value="male" checked> Male<br>

<input type="radio" name="gender" value="female"> Female<br>

<input type="radio" name="gender" value="other"> Other

<select name="cars">

<option value="volvo">Volvo</option>

<option value="saab">Saab</option>

<option value="fiat">Fiat</option>

<option value="audi">Audi</option>

</select>

<input type="checkbox" name="vehicle1" value="Bike">I have a bike

<br>

<input type="checkbox" name="vehicle2" value="Car">I have a car

<br><br>

<textarea name="message" rows="10" cols="30">The cat was playing in the garden.</textarea>

<input type="submit" value="Submit">

User password:<br>

<input type="password" name="psw">

<input type="color" name="favcolor" value="#ff0000">

<input type="date" name="bday">

<input type="email" name="email">

<input type="number" name="quantity" min="1" max="5">

<input type="text" name="firstname" value ="John" readonly>

<input type="text" name="firstname" value ="John" disabled>

<input type="text" name="firstname" maxlength="10">

</form>

</body>

</html>

HTML5 new Elements

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>HTML5</title>

<script src="https://oss.maxcdn.com/libs/html5shiv/3.7.0/html5shiv.js"></script>

</script>

<![endif]-->

<style>

body {

font-family: Verdana,sans-serif;

font-size: 0.9em;

}

header, footer {

padding: 10px;

color: white;

background-color: black;

}

section {

margin: 5px;

padding: 10px;

background-color: lightgrey;

}

article {

margin: 5px;

padding: 10px;

background-color: white;

}

nav ul {

padding: 0;

}

nav ul li {

display: inline;

margin: 5px;

}

</style>

</head>

<body>

<header>

<h1>Monday Times</h1>

</header>

<nav>

<ul>

<li>News</li>

<li>Sports</li>

<li>Weather</li>

</ul>

</nav>

<section>

<h2>News Section</h2>

<article>

<h2>News Article</h2>

<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque in porta lorem. Morbi condimentum est nibh, et consectetur tortor feugiat at.</p>

<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque in porta lorem. Morbi condimentum est nibh, et consectetur tortor feugiat at.</p>

</article>

<article>

<h2>News Article</h2>

<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque in porta lorem. Morbi condimentum est nibh, et consectetur tortor feugiat at.</p>

<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque in porta lorem. Morbi condimentum est nibh, et consectetur tortor feugiat at.</p>

</article>

</section>

<footer>

<p>&copy; 2014 Monday Times. All rights reserved.</p>

</footer>

</body>

</html>

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>HTML5</title>

<!--[if lt IE 9]>

<script src="https://oss.maxcdn.com/libs/html5shiv/3.7.0/html5shiv.js"></script>

</script>

<![endif]-->

<style>

body {

font-family: Verdana,sans-serif;

font-size: 0.9em;

}

header, footer {

padding: 10px;

color: white;

background-color: black;

}

section {

margin: 5px;

padding: 10px;

background-color: lightgrey;

}

article {

margin: 5px;

padding: 10px;

background-color: white;

}

nav ul {

padding: 0;

}

nav ul li {

display: inline;

margin: 5px;

}

</style>

</head>

<body>

<header>

<h1>Monday Times</h1>

</header>

<nav>

<ul>

<li>News</li>

<li>Sports</li>

<li>Weather</li>

</ul>

</nav>

<section>

<h2>News Section</h2>

<article>

<h2>News Article</h2>

<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque in porta lorem. Morbi condimentum est nibh, et consectetur tortor feugiat at.</p>

<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque in porta lorem. Morbi condimentum est nibh, et consectetur tortor feugiat at.</p>

</article>

<article>

<h2>News Article</h2>

<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque in porta lorem. Morbi condimentum est nibh, et consectetur tortor feugiat at.</p>

<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque in porta lorem. Morbi condimentum est nibh, et consectetur tortor feugiat at.</p>

</article>

</section>

<footer>

<p>&copy; 2014 Monday Times. All rights reserved.</p>

</footer>

</body>

</html>

**HTML5 Canvas Tag**

**Canvas**

<!DOCTYPE html>

<html>

<body>

<canvas id="myCanvas" width="200" height="100" style="border:1px solid #000000;">

Your browser does not support the HTML5 canvas tag.

</canvas>

</body>

</html>

<!DOCTYPE html>

<html>

<body>

<canvas id="myCanvas" width="200" height="100" style="border:1px solid #d3d3d3;">

Your browser does not support the HTML5 canvas tag.</canvas>

<script>

var c = document.getElementById("myCanvas");

var ctx = c.getContext("2d");

ctx.moveTo(0,0);

ctx.lineTo(200,100);

ctx.stroke();

</script>

</body>

</html>

<!DOCTYPE html>

<html>

<body>

<canvas id="myCanvas" width="200" height="100" style="border:1px solid #d3d3d3;">

Your browser does not support the HTML5 canvas tag.</canvas>

<script>

var c = document.getElementById("myCanvas");

var ctx = c.getContext("2d");

ctx.beginPath();

ctx.arc(95,50,40,0,2\*Math.PI);

ctx.stroke();

</script>

</body>

</html>

<!DOCTYPE html>

<html>

<body>

<canvas id="myCanvas" width="200" height="100" style="border:1px solid #d3d3d3;">

Your browser does not support the HTML5 canvas tag.</canvas>

<script>

var c = document.getElementById("myCanvas");

var ctx = c.getContext("2d");

ctx.beginPath();

ctx.arc(95,50,40,0,2\*Math.PI);//x,y,radius,startAngle,endAngle

ctx.stroke();

</script>

</body>

</html>

<!DOCTYPE html>

<html>

<body>

<canvas id="myCanvas" width="200" height="100" style="border:1px solid #d3d3d3;">

Your browser does not support the HTML5 canvas tag.</canvas>

<script>

var c = document.getElementById("myCanvas");

var ctx = c.getContext("2d");

ctx.font = "30px Arial";

ctx.fillText("Hello World",10,50);// ctx.strokeText("Hello World",10,50);

</script>

</body>

</html>

<!DOCTYPE html>

<html>

<body>

<canvas id="myCanvas" width="200" height="100" style="border:1px solid #d3d3d3;">

Your browser does not support the HTML5 canvas tag.</canvas>

<script>

var c = document.getElementById("myCanvas");

var ctx = c.getContext("2d");

// Create gradient

var grd = ctx.createLinearGradient(0,0,200,0);//x,y,startpt,endpt

grd.addColorStop(0,"red");

grd.addColorStop(1,"white");

// Fill with gradient

ctx.fillStyle = grd;

ctx.fillRect(10,10,150,80);

</script>

</body>

</html

<canvas id="myCanvas" width="200" height="100" style="border:1px solid #d3d3d3;">

Your browser does not support the HTML5 canvas tag.</canvas>

<script>

var c = document.getElementById("myCanvas");

var ctx = c.getContext("2d");

// Create gradient

var grd = ctx.createRadialGradient(75,50,5,90,60,100);//x,y,radius,endingx1,endingy1,radiusof endclircle

grd.addColorStop(0,"red");

grd.addColorStop(1,"white");

// Fill with gradient

ctx.fillStyle = grd;

ctx.fillRect(10,10,150,80);

</script>

</body>

</html>

**SVG**

* SVG stands for Scalable Vector Graphics
* SVG is used to define graphics for the Web

<!DOCTYPE html>

<html>

<body>

<svg width="100" height="100">

<circle cx="50" cy="50" r="40"

stroke="green" stroke-width="4" fill="yellow" />

Sorry, your browser does not support inline SVG.

</svg>

</body>

</html>

<!DOCTYPE html>

<html>

<body>

<svg width="400" height="100">

<rect width="400" height="100"

style="fill:rgb(0,0,255);stroke-width:10;stroke:rgb(0,0,0)" />

Sorry, your browser does not support inline SVG.

</svg>

</body>

</html>

<!DOCTYPE html>

<html>

<body>

<svg width="400" height="180">

<rect x="50" y="20" rx="10" ry="20" width="150" height="150"

style="fill:red;stroke:black;stroke-width:5;opacity:0.5" />

Sorry, your browser does not support inline SVG.

</svg>

</body>

</html>

<!DOCTYPE html>

<html>

<body>

<svg height="130" width="500">

<defs>

<linearGradient id="grad1" x1="0%" y1="0%" x2="100%" y2="0%">

<stop offset="0%"

style="stop-color:rgb(255,255,0);stop-opacity:1" />

<stop offset="100%"

style="stop-color:rgb(255,0,0);stop-opacity:1" />

</linearGradient>

</defs>

<ellipse cx="100" cy="70" rx="85" ry="55" fill="url(#grad1)" />

<text fill="#ffffff" font-size="45" font-family="Verdana"

x="50" y="86">SVG</text>

Sorry, your browser does not support inline SVG.

</svg>

</body>

</html>

**HTML5 Audio**

<!DOCTYPE>

<html>

<body>

<audio controls>

<source src="Kalimba.mp3"

type="audio/mpeg">

Your browser does not support the html audio

tag.

</audio>

</body>

</html>

**HTML Video Tag**

<html>

<head>

<title>AngularJS Directives</title>

</head>

<body>

<video width="320" height="240" controls>

<source src="hyder.mp4" type="video/mp4">

Your browser does not support the html video tag.

</video>

</body>

</html>

**Google Maps**

<!DOCTYPE html>

<html>

<body>

<h1>My First Google Map</h1>

<div id="map" style="width:400px;height:400px;background:yellow"></div>

<script>

function myMap() {

var mapOptions = {

center: new google.maps.LatLng(10.5, -0.12),

zoom: 10,

mapTypeId: google.maps.MapTypeId.HYBRID

}

var map = new google.maps.Map(document.getElementById("map"), mapOptions);

}

</script>

<script src="https://maps.googleapis.com/maps/api/js?key=AIzaSyBu-916DdpKAjTmJNIgngS6HL\_kDIKU0aU&callback=myMap"></script>

<!--

To use this code on your website, get a free API key from Google.

Read more at: https://www.w3schools.com/graphics/google\_maps\_basic.asp

-->

</body>

</html>

<html>

<head>

<style>

body {

background-image: url("img\_tree.png");

background-repeat: no-repeat;

background-position: right top;

margin-right: 200px;

}

</style>

</head>

<body>

<h1>Hello World!</h1>

<p>The background image is only showing once, but it is disturbing the reader!</p>

</body>

</html>

<html>

<head>

<style>

body {

background-image: url("img\_tree.png");

background-repeat: no-repeat;

background-position: right top;

margin-right: 200px;

background-attachment: fixed;

}

</style>

</head>

<body>

<h1>Hello World!</h1>

<p>The background-image is fixed. Try to scroll down the page.</p>

</body>

</html>

<html>

<head>

<style>

table {

border-collapse: collapse;

width: 100%;

}

th, td {

text-align: left;

padding: 8px;

}

tr:nth-child(even){background-color: #f2f2f2}

th {

background-color: #4CAF50;

color: white;

}

</style>

</head>

<body>

<h2>Colored Table Header</h2>

<table>

<tr>

<th>Firstname</th>

<th>Lastname</th>

<th>Savings</th>

</tr>

<tr>

<td>Peter</td>

<td>Griffin</td>

<td>$100</td>

</tr>

<tr>

<td>Lois</td>

<td>Griffin</td>

<td>$150</td>

</tr>

<tr>

<td>Joe</td>

<td>Swanson</td>

<td>$300</td>

</tr>

<tr>

<td>Cleveland</td>

<td>Brown</td>

<td>$250</td>

</tr>

</table>

</body>

</html>

<html>

<head>

<style>

img {

position: absolute;

left: 0px;

top: 0px;

z-index: -1;

}

</style>

</head>

<body>

<h1>This is a heading</h1>

<img src="w3css.gif" width="100" height="140">

<p>Because the image has a z-index of -1, it will be placed behind the text.</p>

</body>

</html>