



# IS311 Web Development

Week 03 - Lecture 04

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# Recap

- HTML Document
- HTML Elements/Tags
- Heading <h#>
- Paragraph <p>
- Hyperlink <a>
- Image <img>

# Attributes of Elements

- All HTML elements may have attributes
- Attributes provide **additional information** about elements
- Attributes are always specified in the **starting tag**
- Name-value pairs e.g. name = "value"

```
<a href="https://www.psu.edu.sa">PSU</a>
```

# Attributes of Elements

```

```

- Zero or more attributes

# <img> attributes

In Line Tag



- src - represents the image file & location
- height - sets height of the image
- width - sets width of the image
- alt - alternate text + accessibility feature

# <img>

## More Details

Attribute	Value	Description
<u>alt</u>	<i>text</i>	Specifies an alternate text for an image
crossorigin	anonymous use-credentials	Allow images from third-party sites that allow cross-origin access to be used with canvas
<u>height</u>	<i>pixels</i>	Specifies the height of an image
<u>ismap</u>	ismap	Specifies an image as a server-side image map
<u>loading</u>	eager lazy	Specifies whether a browser should load an image immediately or to defer loading of images until some conditions are met
<u>longdesc</u>	<i>URL</i>	Specifies a URL to a detailed description of an image
<u>referrerpolicy</u>	no-referrer no-referrer-when-downgrade origin origin-when-cross-origin unsafe-url	Specifies which referrer information to use when fetching an image
sizes	<i>sizes</i>	Specifies image sizes for different page layouts
<u>src</u>	<i>URL</i>	Specifies the path to the image
srcset	<i>URL-list</i>	Specifies a list of image files to use in different situations
<u>usemap</u>	# <i>mapname</i>	Specifies an image as a client-side image map
<u>width</u>	<i>pixels</i>	Specifies the width of an image

# HTML Entity References

- <, > and &: three special characters
- May cause rendering problem if used as contents

<

USE:  
&lt;

>

USE:  
&gt;

&

USE:  
&amp;

# HTML Entity References

```
<h1>Don't be afraid of <than a 100% success &gt;more </h1>
```

**Don't be afraid of**

```
<h1>Don't be afraid of &lt;than a 100% success &amp;gt;more </h1>
```

**Don't be afraid of <than a 100% success &gt;more**

# HTML Entity References

<b>Symbol</b>	<b>Description</b>	<b>Entity Name</b>
"	Quotation mark	&quot;
'	Right single Quotation Mark	&rsquo;
&	Ampersand	&amp;
<	less-than	&lt;
>	greater-than	&gt;
©	Copyright Symbol	&copy;
	Vertical Bar	&#124;
Empty space	Non Breaking Space	&nbsp;

For Complete list see <https://tools.w3cub.com/html-entities>

# Formating Tags

- <b>
- <strong>
- <i>
- <em>
- <mark>
- <small>
- <del>
- <ins>
- <sub>
- <sup>

# <b> & <strong> Tags

In Line Tag



- Make text bold just like in Word

```
<p>This is the normal text.<br>
This is a <b>bold text.</b><br>
This is a <strong>strong text</strong>
</p>
```

This is the normal text.  
This is a **bold text.**  
This is a **strong text**

# <i> & <em> Tags

In Line Tag



- Make text italic

```
<p>This is the normal text.<br>
This is a <i>italic text.</i><br>
This is a <em>emphasis text</em>
</p>
```

This is the normal text.  
This is a *italic text.*  
This is a *emphasis text*

# <small> & <mark> Tags

In Line Tag



```
<p>This is the normal text.<br>
This is a <small>small text.</small><br>
This is a <mark>mark text</mark>
</p>
```

This is the normal text.  
This is a small text.  
This is a mark text

# <del> & <ins> Tags

In Line Tag



<p>This is the normal text.<br>

My favorite game is <del>football</del> cricket.<br>

My favorite game is <del>football</del> <ins>cricket</ins>.

</p>

This is the normal text.

My favorite game is ~~football~~ cricket.

My favorite game is ~~football~~ cricket.

# <sub> & <sup> Tags

In Line Tag



<p>

H<sub>2</sub>O is an example of sub tag.<br>

$3x^2 + 4x^4y^3$  is an example of sup tag.

</p>

H<sub>2</sub>O is an example of sub tag.

$3x^2 + 4x^4y^3$  is an example of sup tag.

# Quotation and Citation Tags

- <blockquote>
- <q>
- <abbr>
- <address>
- <cite>
- <bdo>

# <blockquote>

<blockquote cite="http://www.worldwildlife.org/who/index.html">

For 60 years, WWF has worked to help people and nature thrive. As the world's leading conservation organization, WWF works in nearly 100 countries. At every level, we collaborate with people around the world to develop and deliver innovative solutions that protect communities, wildlife, and the places in which they live.

</blockquote>

Here is a quote from WWF's website:

For 60 years, WWF has worked to help people and nature thrive. As the world's leading conservation organization, WWF works in nearly 100 countries. At every level, we collaborate with people around the world to develop and deliver innovative solutions that protect communities, wildlife, and the places in which they live.

<q>

In Line Tag



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

WWF's goal is to: “Build a future where people live in harmony with nature.”

<abbr>

In Line Tag



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

The WHO was founded in 1948.

World Health Organization

# <address>

<address>

Prince Sultan University<br>

College of Computer and Information Sciences<br>

Visit us at:<br>

[www.psu.edu.sa](http://www.psu.edu.sa)<br>

P.O.Box No. 66833 Rafha Street, Riyadh<br>

11586 Saudi Arabia

</address>

*Prince Sultan University  
College of Computer and Information Sciences  
Visit us at:  
[www.psu.edu.sa](http://www.psu.edu.sa)  
P.O.Box No. 66833 Rafha Street, Riyadh  
11586 Saudi Arabia*

<cite>

In Line Tag



```
<p><cite>The Scream</cite> by Edvard Munch. Painted in 1893.</p>
```

*The Scream* by Edvard Munch. Painted in 1893.

# <bdo>

In Line Tag



```
<bdo dir="rtl">This text will be written from right to left</bdo><br>
<P>This is <bdo dir="ltr">جامعة امير سلطان</bdo> university.</P>
<P>This is جامعة امير سلطان university.</P>
```

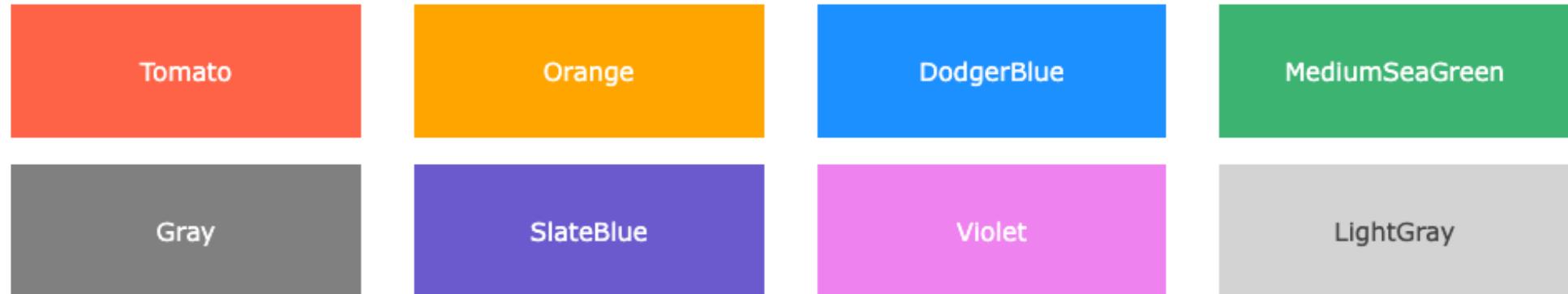
tfel ot thgir morf nettirw eb lliw txet sihT

This is ناطلس ریما هعماج university.

This is جامعة امير سلطان university.

# Colors

- Colors are important
- Text Color, background color
- Can be specified by using color names

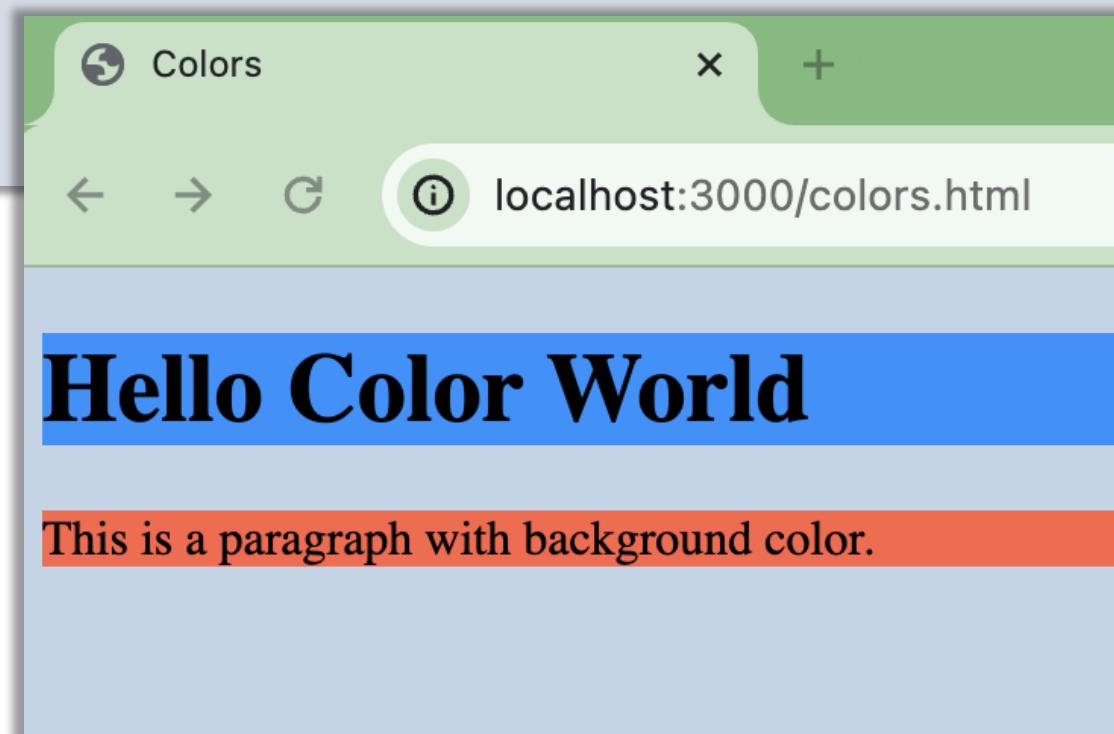


HTML support 140 Standard color names.

[More details](#)

# Background Color style property

```
<body style="background-color:rgb(194, 212, 231);>  
<h1 style="background-color:DodgerBlue;">Hello Color World</h1>  
<p style="background-color:Tomato;">This is a paragraph with  
background color.</p>  
</body>
```



# Text Color style property

```
<body style="background-color:rgb(194, 212, 231);>  
<h1 style="background-color:DodgerBlue; color:white;">Hello Color  
World</h1>  
<p style="background-color:Tomato; color:blue;">This is a paragraph  
with background color.</p>  
</body>
```



# Border Color style property

```
<body style="background-color:rgb(194, 212, 231);>
<h1 style="background-color:DodgerBlue; color:white;
border: 4px dashed tomato;">Hello Color World</h1>
<p style="background-color:Tomato; color:blue;
border: 3px solid white;">This is a paragraph with background
color.</p>
</body>
```

Hello Color World

This is a paragraph with background color.

# Color Values

- Name
- Rbg values using RGB method
- HSL values using HSL method
- Hex values
- RGBA and HSLA values - add 4th parameter to mark the transparency

# Color Values

RGB Value
Hex value #ff6347
HSL Value
RGA value with 50% transparency
HSI value with 50% transparency

```
<h1 style="background-color:rgb(255, 99, 71);">RGB Value</h1>
<h1 style="background-color:#ff6347;">Hex value #ff6347</h1>
<h1 style="background-color:hsl(9, 100%, 64%);">HSL Value</h1>
<h1 style="background-color:rgba(255, 99, 71, 0.5);">RGA value with
50% transparency</h1>
<h1 style="background-color:hsla(9, 100%, 64%, 0.5);">HSI value with
50% transparency</h1>
```

Color Pallets: <https://colorhunt.co/>  
<https://colors.co/palettes/trending>

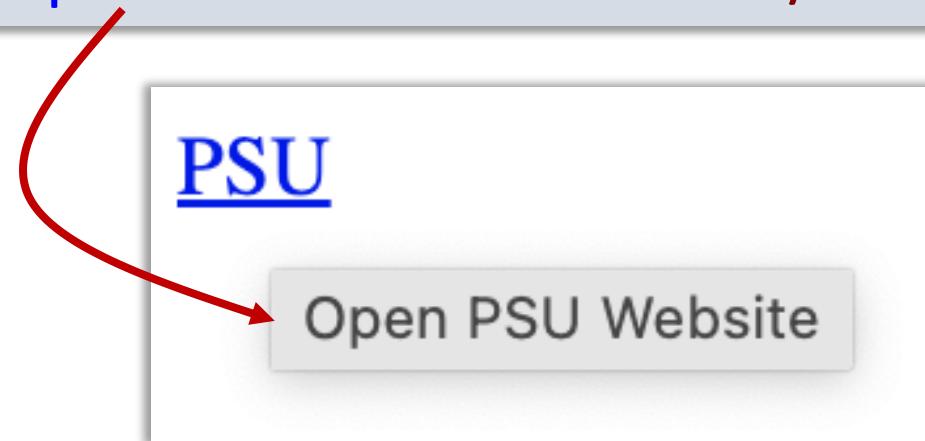
# Hyperlinks <a>

In Line Tag



- <a> tag is used to create hyperlinks

```
<p><a href="http://www.psu.edu.sa"  
title="Open PSU Website">PSU</a></p>
```



# Hyperlink <a> - Target Attribute

- target attribute specifies where to open the linked document
- \_self - default value: opens in same window
- \_blank - opens in new window or tab
- \_parent - opens in the parent frame
- \_top - opens in the full body of the window

# Hyperlinks <a> - Absolute Address

- <a> tag is used to create hyperlinks

```
<p><a href="www.psu.edu.sa" title="Open PSU  
Website">PSU</a></p>
```



Cannot GET /www.psu.edu.sa

```
<p><a href="http://www.psu.edu.sa" title="Open PSU  
Website">PSU</a></p>
```

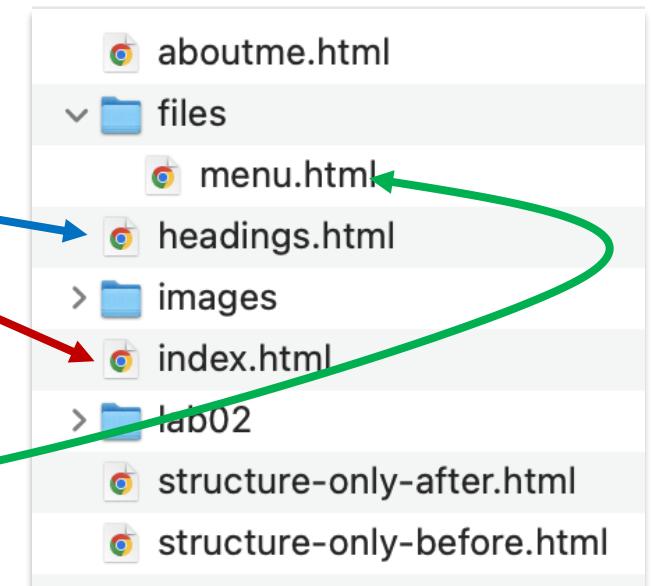
[https://www.w3schools.com/html/html\\_links.asp](https://www.w3schools.com/html/html_links.asp)

# Hyperlinks <a> - Relative Address

- Relative address (URL) with respect to current folder

```
<html>  
...  
<p>  
<a href="headings.html">Headings</a></p>  
<p>  
<a href="/files/menu.html">menu</a></p>  
...  
</html>
```

Index.html



# Relative Address - URL

```

```

# Image as a HyperLink

```
<p>
<a href="http://www.psu.edu.sa" title="Open PSU Website">
    
</a>
</p>
```

# Link to an Email Address

```
<a href="mailto:amaalik@psu.edu.sa">Send email</a>
```

- Open a email client like Outlook and start sending an email to the email address mentioned in the href.

# Button Link

```
<button onclick=
"document.location='https://www.w3schools.com/html/'">
HTML Tutorial
</button>
```

HTML Tutorial

# HypeLink Colors

Send email

Color before visting the link

Colors

Color after visting the link

We can change this default behaviour  
by using the CSS

CSS

Add this style in header

```
<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>
```

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=<device-width>, initial-scale=1.0">
6      <title>Link Color</title>
7      <style>
8          a:link {
9              color: green;
10             background-color: transparent;
11             text-decoration: none;
12         }
13
14         a:visited {
15             color: green;
16             background-color: transparent;
17             text-decoration: none;
18         }
19
20         a:hover {
21             color: red;
22             background-color: transparent;
23             text-decoration: underline;
24         }
25
26         a:active {
27             color: yellow;
28             background-color: transparent;
29             text-decoration: underline;
30         }
31     </style>
32 </head>
33 <body>
34     <h1>Link Colors</h1>
35     <p>
36         <a href="hyperlink.html"> HyperLinks</a>
37     </p>
38 </body>
39 </html>
```

Lectures

linkcolor.html

Week 03 > Code > linkcolor.html > html > body > p > a

```

1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Link Color</title>
7      <style>
8          a:link {
9              color: green;
10             background-color: transparent;
11             text-decoration: none;
12         }
13
14         a:visited {
15             color: black;
16             background-color: transparent;
17             text-decoration: none;
18         }
19
20         a:hover {
21             color: red;
22             background-color: transparent;
23             text-decoration: underline;
24         }
25
26         a:active {
27             color: yellow;
28             background-color: transparent;
29             text-decoration: underline;
30         }
31     </style>
32 </head>
33 <body>
34     <h1>Link Colors</h1>
35     <p>
36         <a href="hyperlink.html"> HyperLinks</a>
37     </p>
38 </body>
39 </html>

```

Link Color

localhost:3000/linkcolor.html

## Link Colors

HyperLinks

Screen Reader Optimized

Ln 36, Col 49

Spaces: 4

UTF-8

LF

HTML

Prettier

# Bookmark - Links in same page

- Bookmarks can be useful if a web page is very long
- First: Create a bookmark
- Second: link to the bookmark

```
<h1 id="topofpage">Bookmark Page</h1>
```

```
<a href="#topofpage">Top of Page</a>
```



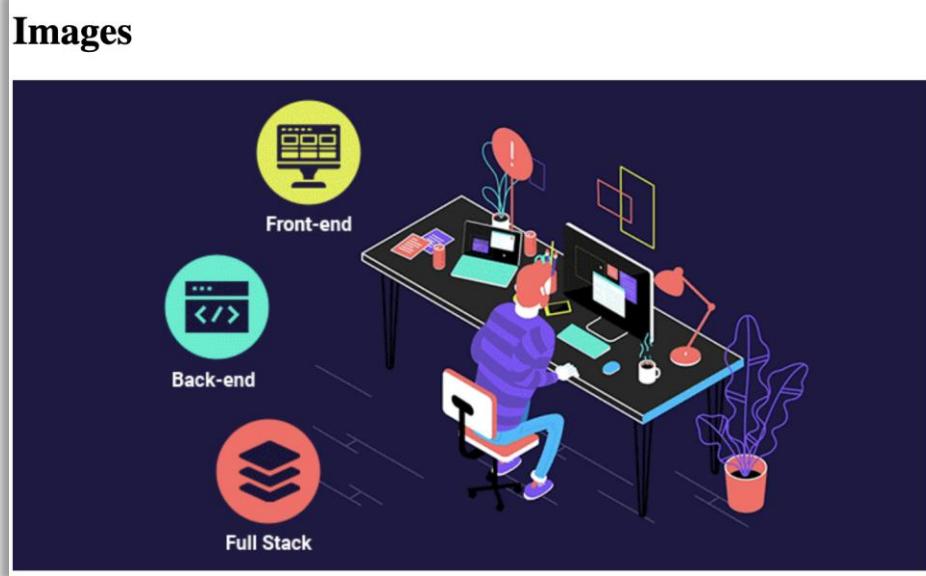
Week 03 > Code > bookmark.html > html > body > p > a

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Bookmark</title>
7  </head>
8  <body>
9      <h1 id="topofpage">Bookmark Page</h1>
10     <p>
11         <h1 style="background-color: #DodgerBlue; color: white; border: 4px dashed #Tomato; color: blue; border: 3px solid white;">T
12         <h1 style="background-color: #rgb(255, 99, 71);">RGB Value</h1>
13         <h1 style="background-color: ##ff6347;">Hex value #ff6347</h1>
14         <h1 style="background-color: #hsl(9, 100%, 64%);">HSL Value</h1>
15         <h1 style="background-color: #rgba(255, 99, 71, 0.5);">RGBA value with 50% transpa
16         <h1 style="background-color: #hsla(9, 100%, 64%, 0.5);">HSL value with 50% transpa
17     </p>
18     <p>
19         Long long text of an html page. Long long text of an html page.
20         Long long text of an html page.
21         Long long text of an html page.
22         Long long text of an html page.
23         Long long text of an html page.
24         Long long text of an html page.
25         Long long text of an html page.
26         Long long text of an html page.
27         Long long text of an html page.
28         Long long text of an html page.
29         Long long text of an html page.
30         Long long text of an html page.
31         Long long text of an html page.
32         Long long text of an html page.
33         Long long text of an html page.
34         Long long text of an html page.
35         Long long text of an html page.
36         Long long text of an html page.
37         Long long text of an html page.
38         Long long text of an html page.<br>
39         Long long text of an html page.<br>
40         Long long text of an html page.<br>
41         Long long text of an html page.<br>
42         Long long text of an html page.<br>
43         Long long text of an html page.<br>
44         Long long text of an html page.<br>
45         Long long text of an html page.<br>
46         Long long text of an html page.<br>
47         Long long text of an html page.<br>Long long text of an html page.<br>Long lo
48     </p>
49     <p>
50         <a href="#topofpage">Top of Page</a>
51     </p>
52 </body>
```

Ln 50, Col 45 (36 selected) Spaces: 4 UTF-8 LF ⚑ HTML ⚑ Prettier ⚑

# Animated images

```
<body>  
<h1>Images</h1>  
  
</body>
```



# Image Map

```
<p>

<map name="workmap">
<area shape="rect" coords="34,44,270,350" alt="Computer"
href="computer.html">
<area shape="rect" coords="290,172,333,250" alt="Phone"
href="phone.html">
<area shape="circle" coords="337,300,44" alt="Coffee"
href="coffee.html">
</map>
</p>
```



# Lab Practice

- [Download Image](#)
- <https://www.image-map.net/>
- Generate the image map
- Copy Code from the site and put it in your page
- Add HyperLinks on each map region to show more details about the region of Saudi Arabia



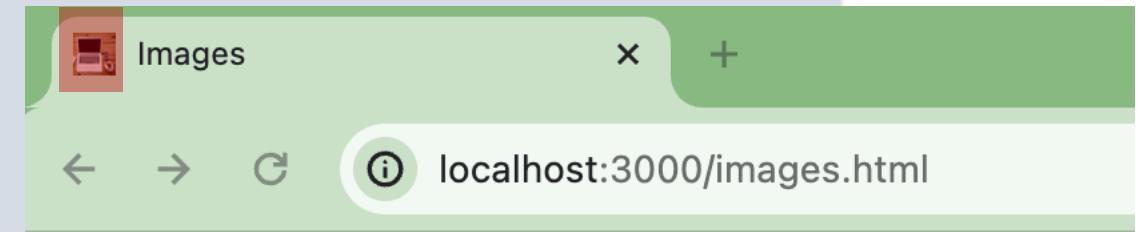
# <picture> tag

- Display different pictures for different devices or screen sizes

```
<picture>
    <source media="(min-width: 650px)"
        srcset="images/workplace.jpg">
    <source media="(min-width: 465px)"
        srcset="images/webdev.gif">
    
</picture>
```

# <favicon> tag

```
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-
scale=1.0">
<link rel="icon" type="image/x-icon"
      href="/images/workplace.jpg">
<title>Images</title>
</head>
```



## Images



# HTML List

## Unordered List <ul>

- Item 1
- Item 2
- Item 3
- ...

## Order List <ol>

1. Item 1
2. Item 2
3. Item 3
4. ...

```
<h1>Html Lists</h1>
<h2>Unordered List</h2>
<ul>
<li>Item 1</li>
<li>Item 2</li>
<li>Item 3</li>
<li>Item 4</li>
</ul>
<ol>
    <li>Item 1</li>
    <li>Item 2</li>
    <li>Item 3</li>
    <li>Item 4</li>
    <ul>
        <li>sublist Item 1</li>
        <li>sublist Item 2</li>
    </ul>
</ol>
```

# Html Lists

## Unordered List

- Item 1
- Item 2
- Item 3
- Item 4

1. Item 1
2. Item 2
3. Item 3
4. Item 4
  - sublist Item 1
  - sublist Item 2

# Definition List <dl>

```
<dl>
  <dt>Coffee</dt>
  <dd>- black hot drink</dd>
  <dt>Milk</dt>
  <dd>- white cold drink</dd>
</dl>
```

**Coffee**

- black hot drink

**Milk**

- white cold drink

# Tables

- Organizing data into rows and columns
- <table> ... </table> - define a table
- <tr> ... </tr> - represents a row of the table
- <td> ... </td> - represents a cell/column in a row
- <th> ... </th> - header for the column

# Tables

```
<table>
```

```
  <tr>
```

```
    <th>Heading 1</th>
    <th>Heading 2</th>
    <th>Heading 3</th>
```

```
  </tr>
```

```
  <tr>
```

```
    <td>Value 11</td>
    <td>Value 21</td>
    <td>Value 31</td>
```

```
  </tr>
```

```
  <tr>
```

```
    <td>Value 12</td>
    <td>Value 22</td>
    <td>Value 32</td>
```

```
  </tr>
```

```
  <tr>
```

```
    <td>Value 13</td>
    <td>Value 23</td>
    <td>Value 33</td>
```

```
  </tr>
```

```
</table>
```

# Tables

Heading 1	Heading 2	Heading 3
-----------	-----------	-----------

Value 11	Value 21	Value 31
----------	----------	----------

Value 12	Value 22	Value 32
----------	----------	----------

Value 13	Value 23	Value 33
----------	----------	----------

```
<h1>Tables</h1>
<table>
    <tr>
        <th>Heading 1</th>
        <th>Heading 2</th>
        <th>Heading 3</th>
        <th>Heading 4</th>
    </tr>
    <tr>
        <td>Value 11</td>
        <td>Value 21</td>
        <td>Value 31</td>
        <td>Value 41</td>
        <td>Value 51</td>
    </tr>
    <tr>
        <td>Value 12</td>
        <td>Value 22</td>
        <td>Value 32</td>
    </tr>
    <tr>
        <td>Value 13</td>
        <td>Value 23</td>
        <td>Value 33</td>
    </tr>
</table>
```

# Tables

Heading 1 Heading 2 Heading 3 Heading 4

Value 11	Value 21	Value 31	Value 41	Value 51
Value 12	Value 22	Value 32		
Value 13	Value 23	Value 33		

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Tables</title>
  <style>
    table {
      border: 1px solid black;
    }
  </style>
</head>
<body>
  <h1>Tables</h1>
  <table>
    <tr>
      <th>Heading 1</th>
      <th>Heading 2</th>
      <th>Heading 3</th>
      <th>Heading 4</th>
    </tr>
    <tr>
      <td>Value 11</td>
      <td>Value 21</td>
      <td>Value 31</td>
      <td>Value 41</td>
      <td>Value 51</td>
    </tr>
    <tr>
      <td>Value 12</td>
      <td>Value 22</td>
      <td>Value 32</td>
    </tr>
    <tr>
      <td>Value 13</td>
      <td>Value 23</td>
      <td>Value 33</td>
    </tr>
  </table>
</body>
</html>

```

# Tables

Heading 1	Heading 2	Heading 3	Heading 4
Value 11	Value 21	Value 31	Value 41
Value 12	Value 22	Value 32	
Value 13	Value 23	Value 33	

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Tables</title>
    <style>
        table, td {
            border: 1px solid black;
        }
    </style>
</head>
<body>
    <h1>Tables</h1>
    <table>
        <tr>
            <th>Heading 1</th>
            <th>Heading 2</th>
            <th>Heading 3</th>
            <th>Heading 4</th>
        </tr>
        <tr>
            <td>Value 11</td>
            <td>Value 21</td>
            <td>Value 31</td>
            <td>Value 41</td>
            <td>Value 51</td>
        </tr>
        <tr>
            <td>Value 12</td>
            <td>Value 22</td>
            <td>Value 32</td>
        </tr>
        <tr>
            <td>Value 13</td>
            <td>Value 23</td>
            <td>Value 33</td>
        </tr>
    </table>
</body>
</html>
```

# Tables

Heading 1 Heading 2 Heading 3 Heading 4

Value 11	Value 21	Value 31	Value 41	Value 51
Value 12	Value 22	Value 32		
Value 13	Value 23	Value 33		

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Tables</title>
  <style>
    table, td, th {
      border: 1px solid black;
    }
  </style>
</head>
<body>
  <h1>Tables</h1>
  <table>
    <tr>
      <th>Heading 1</th>
      <th>Heading 2</th>
      <th>Heading 3</th>
      <th>Heading 4</th>
    </tr>
    <tr>
      <td>Value 11</td>
      <td>Value 21</td>
      <td>Value 31</td>
      <td>Value 41</td>
      <td>Value 51</td>
    </tr>
    <tr>
      <td>Value 12</td>
      <td>Value 22</td>
      <td>Value 32</td>
    </tr>
    <tr>
      <td>Value 13</td>
      <td>Value 23</td>
      <td>Value 33</td>
    </tr>
  </table>
</body>
</html>

```

# Tables

Heading 1	Heading 2	Heading 3	Heading 4	
Value 11	Value 21	Value 31	Value 41	Value 51
Value 12	Value 22	Value 32		
Value 13	Value 23	Value 33		

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Tables</title>
  <style>
    table, td, th {
      border: 1px solid black;
      border-collapse: collapse;
    }
  </style>
</head>
<body>
  <h1>Tables</h1>
  <table>
    <tr>
      <th>Heading 1</th>
      <th>Heading 2</th>
      <th>Heading 3</th>
      <th>Heading 4</th>
    </tr>
    <tr>
      <td>Value 11</td>
      <td>Value 21</td>
      <td>Value 31</td>
      <td>Value 41</td>
      <td>Value 51</td>
    </tr>
    <tr>
      <td>Value 12</td>
      <td>Value 22</td>
      <td>Value 32</td>
    </tr>
    <tr>
      <td>Value 13</td>
      <td>Value 23</td>
      <td>Value 33</td>
    </tr>
  </table>
</body>
</html>

```

# Tables

Heading 1	Heading 2	Heading 3	Heading 4	
Value 11	Value 21	Value 31	Value 41	Value 51
Value 12	Value 22	Value 32		
Value 13	Value 23	Value 33		

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Tables</title>
  <style>
    table, td, th {
      border: 1px solid black;
      border-radius: 5px;
    }
  </style>
</head>
<body>
  <h1>Tables</h1>
  <table>
    <tr>
      <th>Heading 1</th>
      <th>Heading 2</th>
      <th>Heading 3</th>
      <th>Heading 4</th>
    </tr>
    <tr>
      <td>Value 11</td>
      <td>Value 21</td>
      <td>Value 31</td>
      <td>Value 41</td>
      <td>Value 51</td>
    </tr>
    <tr>
      <td>Value 12</td>
      <td>Value 22</td>
      <td>Value 32</td>
    </tr>
    <tr>
      <td>Value 13</td>
      <td>Value 23</td>
      <td>Value 33</td>
    </tr>
  </table>
</body>
</html>

```

# Tables

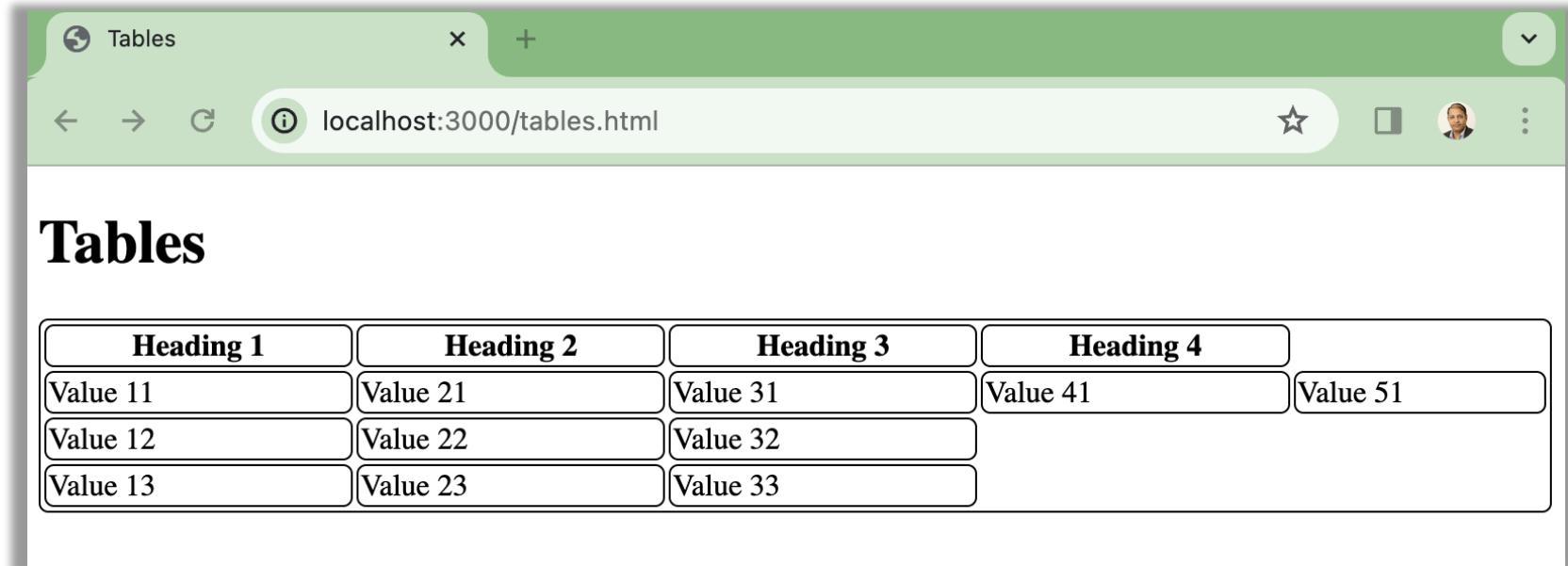
Heading 1	Heading 2	Heading 3	Heading 4
Value 11	Value 21	Value 31	Value 41
Value 12	Value 22	Value 32	
Value 13	Value 23	Value 33	

For more see [Tables Border](#)

# Table Size

- For setting table size, use style on <table> tag

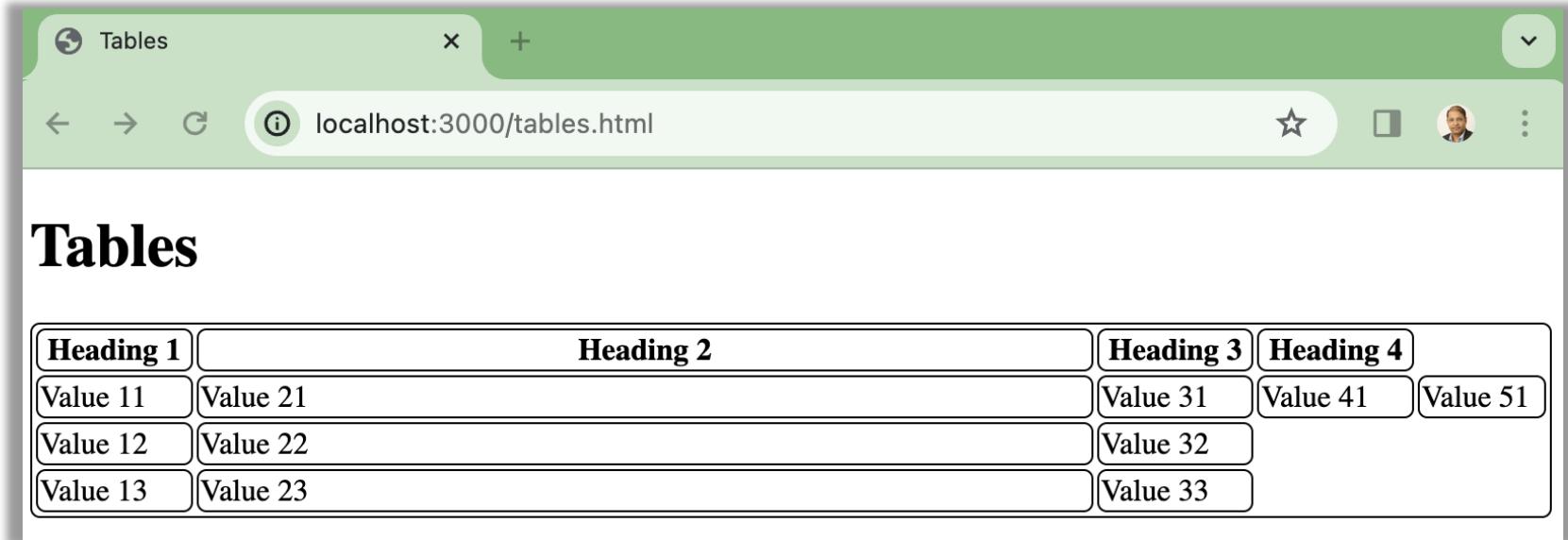
```
<table style="width: 100%;">
```



# Column Width

- Column width: use style on <th> or <td> tag

```
<th style="width: 60%;">Heading 2</th>
```



The screenshot shows a web browser window titled "Tables" at the URL "localhost:3000/tables.html". The page displays a table with four columns. The first column is labeled "Heading 1", the second is "Heading 2", the third is "Heading 3", and the fourth is "Heading 4". The data rows consist of three sets of values: (Value 11, Value 21, Value 31, Value 51), (Value 12, Value 22, Value 32, Value 41), and (Value 13, Value 23, Value 33, Value 31). The "Heading 2" column is visually wider than the others, demonstrating the effect of the CSS width property.

Heading 1	Heading 2	Heading 3	Heading 4
Value 11	Value 21	Value 31	Value 51
Value 12	Value 22	Value 32	Value 41
Value 13	Value 23	Value 33	Value 31

# Row Height

- Row height: use style on <tr> tag

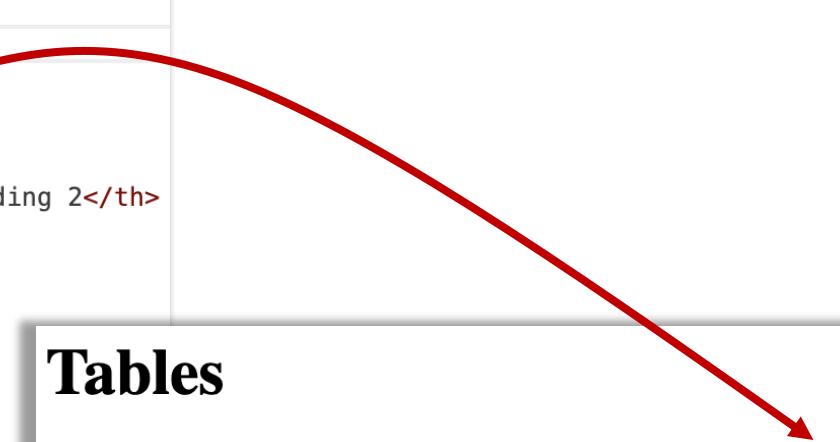
```
<tr style="height: 100px;">
```

## Tables

Heading 1	Heading 2			Heading 3	Heading 4
Value 11	Value 21			Value 31	Value 41
Value 12	Value 22			Value 32	
Value 13	Value 23			Value 33	

# Table Caption

```
<h1>Tables</h1>
<table style="width: 100%;">
  <caption>Table 1</caption>
  <tr style="height: 100px;">
    <th>Heading 1</th>
    <th style="width: 60%;">Heading 2</th>
    <th>Heading 3</th>
    <th>Heading 4</th>
  </tr>
  <tr>
    <td>Value 11</td>
    <td>Value 21</td>
    <td>Value 31</td>
    <td>Value 41</td>
    <td>Value 51</td>
  </tr>
  <tr>
    <td>Value 12</td>
    <td>Value 22</td>
    <td>Value 32</td>
  </tr>
  <tr>
    <td>Value 13</td>
    <td>Value 23</td>
    <td>Value 33</td>
  </tr>
</table>
```



The diagram illustrates the relationship between the HTML code and the resulting web page. A red curved arrow originates from the word "Tables" in the main heading and points to the caption "Table 1" located above the table structure.

**Tables**

Table 1

Heading 1	Heading 2	Heading 3	Heading 4
Value 11	Value 21	Value 31	Value 41
Value 12	Value 22	Value 32	Value 51
Value 13	Value 23	Value 33	

# Colspan attribute

```

<h1>Tables</h1>
<table style="width: 100%;">
  <caption>Table 1</caption>
  <tr style="height: 100px;">
    <th>Heading 1</th>
    <th style="width: 60%;">Heading 2</th>
    <th>Heading 3</th>
    <th colspan="2" style="background-color: #ADD8E6;">Heading 4</th>
  </tr>
  <tr>
    <td>Value 11</td>
    <td>Value 21</td>
    <td>Value 31</td>
    <td>Value 41</td>
    <td>Value 51</td>
  </tr>
  <tr>
    <td>Value 12</td>
    <td>Value 22</td>
    <td>Value 32</td>
  </tr>
  <tr>
    <td>Value 13</td>
    <td>Value 23</td>
    <td>Value 33</td>
  </tr>
</table>

```

## Tables

Table 1

Heading 1	Heading 2	Heading 3	Heading 4
Value 11	Value 21	Value 31	Value 41 Value 51
Value 12	Value 22	Value 32	
Value 13	Value 23	Value 33	

# rowspan

```

<h1>Tables</h1>
<table style="width: 100%;">
  <caption>Table 1</caption>
  <tr style="height: 100px;">
    <th>Heading 1</th>
    <th style="width: 60%;">Heading 2</th>
    <th>Heading 3</th>
    <th colspan="2">Heading 4</th>
  </tr>
  <tr>
    <td>Value 11</td>
    <td>Value 21</td>
    <td>Value 31</td>
    <td rowspan="2">Value 41</td>
    <td>Value 51</td>
  </tr>
  <tr>
    <td>Value 12</td>
    <td>Value 22</td>
    <td>Value 32</td>
  </tr>
  <tr>
    <td>Value 13</td>
    <td>Value 23</td>
    <td>Value 33</td>
  </tr>
</table>

```

## Tables

Table 1

Heading 1	Heading 2	Heading 3	Heading 4
Value 11	Value 41	Value 31	Value 51
Value 12		Value 32	Value 41
Value 13	Value 23	Value 33	

[More details](#)

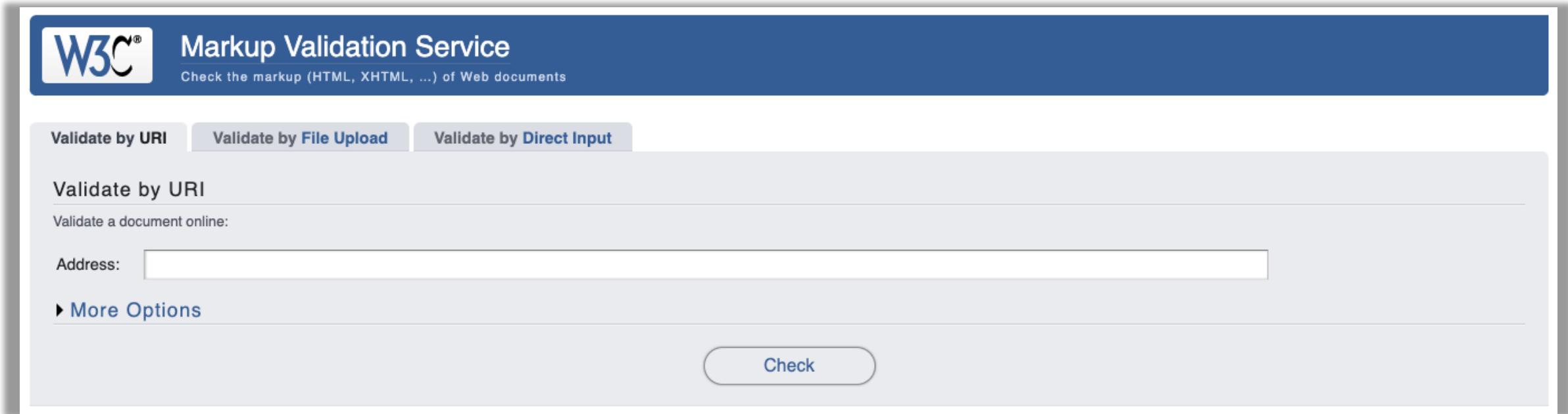
# Tables

- Padding and Spacing - read yourself
- Table styling - read yourself
- Column Grops - read yourself
- For details of each tag - see details

<https://www.w3schools.com/tags/>

# Validate HTML

- <https://validator.w3.org/>



The screenshot shows the homepage of the W3C Markup Validation Service. The header is blue with the W3C logo and the text "Markup Validation Service" and "Check the markup (HTML, XHTML, ...) of Web documents". Below the header are three tabs: "Validate by URI" (selected), "Validate by File Upload", and "Validate by Direct Input". The main section is titled "Validate by URI" and contains a sub-instruction "Validate a document online:" followed by a text input field labeled "Address:". Below this is a link "► More Options". At the bottom right is a rounded rectangular button labeled "Check".

# References

- <https://www.w3schools.com/html/default.asp>
- <https://www.w3schools.com/tags/>