

HTML FUNDAMENTALS

PART 4

A solid orange horizontal bar spanning the width of the slide at the bottom.

HTML FAVICON

HTML Favicon

A favicon is a small image displayed next to the page title in the browser tab.

How To Add a Favicon in HTML

You can use any image you like as your favicon. You can also create your own favicon on sites like <https://www.favicon.cc>.

Favicon images are small in size, only **16 pixels in height** by **16 pixels in width**, so there is not much space for complex designs.

How To Add a Favicon in HTML

Tip: A favicon is a small image, so it should be a simple image with high contrast.

A favicon image is displayed to the left of the page title in the browser tab, like this:



How To Add a Favicon in HTML

To add a favicon to your website, either save your favicon image to the root directory of your webserver, or create a folder in the root directory called images, and save your favicon image in this folder.

A common name for a favicon image is "favicon.ico".

How To Add a Favicon in HTML

Next, add a `<link>` element to your "index.html" file, after the `<title>` element, like this:

```
<head>  
  <title>Lesson 5</title>  
  <link rel="icon" type="image/x-icon" href="images/favicon.ico">  
</head>
```

Now, save the “**Lesson 5.html**” file and reload it in your browser. Your browser tab should now display your favicon image to the left of the page title.

Favicon File Format Support

The following table shows the file format support for a favicon image:

Browser	ICO	PNG	GIF	JPEG	SVG
Edge	Yes	Yes	Yes	Yes	Yes
Chrome	Yes	Yes	Yes	Yes	Yes
Firefox	Yes	Yes	Yes	Yes	Yes
Opera	Yes	Yes	Yes	Yes	Yes
Safari	Yes	Yes	Yes	Yes	Yes

HTML Tables

HTML Tables

HTML tables allow web developers to arrange data into rows and columns.

Company	Contact	Country
Alfreds Futterkiste	Maria Anders	Germany
Centro comercial Moctezuma	Francisco Chang	Mexico
Ernst Handel	Roland Mendel	Austria
Island Trading	Helen Bennett	UK
Laughing Bacchus Winecellars	Yoshi Tannamuri	Canada
Magazzini Alimentari Riuniti	Giovanni Rovelli	Italy

Define an HTML Table

A table in HTML consists of table cells inside rows and columns.

```
<table>
  <tr>
    <th>Company</th>
    <th>Contact</th>
    <th>Country</th>
  </tr>
  <tr>
    <td>Alfreds Futterkiste</td>
    <td>Maria Anders</td>
    <td>Germany</td>
  </tr>
  <tr>
    <td>Centro comercial Moctezuma</td>
    <td>Francisco Chang</td>
    <td>Mexico</td>
  </tr>
</table>
```

Table Cells

Each table cell is defined by a `<td>` and a `</td>` tag.

`td` stands for table data.

Everything between `<td>` and `</td>` are the content of the table cell.

Table Cells

- Each table cell is defined by a `<td>` and a `</td>` tag.
- `td` stands for table data.
- Everything between `<td>` and `</td>` are the content of the table cell.
- Note: A table cell can contain all sorts of HTML elements: text, images, lists, links, other tables, etc.

Table Rows

- Each table row starts with a `<tr>` and ends with a `</tr>` tag.
- `tr` stands for table row.
- You can have as many rows as you like in a table; just make sure that the number of cells are the same in each row.
- Note: There are times when a row can have less or more cells than another.

Table Headers

- Sometimes you want your cells to be table header cells. In those cases use the `<th>` tag instead of the `<td>` tag:
- `th` stands for table header.
- By default, the text in `<th>` elements are **bold** and **centered**, but you can change that with **CSS**.

HTML Table Tags

Tag	Description
<u><table></u>	Defines a table
<u><th></u>	Defines a header cell in a table
<u><tr></u>	Defines a row in a table
<u><td></u>	Defines a cell in a table
<u><caption></u>	Defines a table caption
<u><colgroup></u>	Specifies a group of one or more columns in a table for formatting
<u><col></u>	Specifies column properties for each column within a <colgroup> element
<u><thead></u>	Groups the header content in a table
<u><tbody></u>	Groups the body content in a table
<u><tfoot></u>	Groups the footer content in a table

HTML Table Borders

HTML Table Borders

HTML tables can have borders of different styles and shapes.

How To Add a Border

To add a border, use the CSS border property on table, th, and td elements:

```
table, th, td {  
    border: 1px solid black;  
}
```

Collapsed Table Borders

To avoid having double borders like in the example above, set the CSS border-collapse property to collapse.

This will make the borders collapse into a single border:

```
table, th, td {  
    border: 1px solid black;  
    border-collapse: collapse;  
}
```

Style Table Borders

If you set a background color of each cell, and give the border a white color (the same as the document background), you get the impression of an invisible border:

```
table, th, td {  
    border: 1px solid white;  
    border-collapse: collapse;  
}  
th, td {  
    background-color: #96D4D4;  
}
```

Round Table Borders

With the border-radius property, the borders get rounded corners:

```
table, th, td {  
    border: 1px solid black;  
    border-radius: 10px;  
}
```

Round Table Borders

Skip the border around the table by leaving out table from the css selector:

```
th, td {  
    border: 1px solid black;  
    border-radius: 10px;  
}
```


Dotted Table Borders

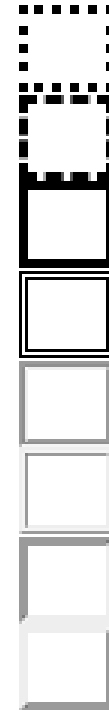
With the border-style property, you can set the appearance of the border.

```
th, td {  
    border-style: dotted;  
}
```

Border Visuals

The following values are allowed:

- dotted
- dashed
- solid
- double
- groove
- ridge
- inset
- outset
- none
- hidden



Border Color

With the border-color property, you can set the color of the border.

```
th, td {  
    border-color: #96D4D4;  
}
```

HTML Table Sizes

HTML Table Sizes

HTML tables can have different sizes for each column, row or the entire table.

Use the **style** attribute with the **width** or **height** properties to specify the size of a table, row or column.

HTML Table Width

To set the width of a table, add the style attribute to the `<table>` element:

```
<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>
</table>
```

HTML Table Width

Note: Using a percentage as the size unit for a width means how wide will this element be compared to its parent element, which in this case is the `<body>` element.

HTML Table Column Width

To set the size of a specific column, add the style attribute on a `<th>` or `<td>` element:


```
<table style="width:100%">
  <tr>
    <th style="width:70%">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>
</table>
```

HTML Table Row Height

To set the height of a specific row, add the style attribute on a table row element:


```
<table style="width:100%">
  <tr>
    <th>Firstname</th>
    <th>Lastname</th>
    <th>Age</th>
  </tr>
  <tr style="height:200px">
    <td>Jill</td>
    <td>Smith</td>
    <td>50</td>
  </tr>
  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>94</td>
  </tr>
</table>
```

HTML Table Headers

HTML Table Headers

HTML tables can have headers for each column or row, or for many columns/rows.

EMIL	TOBIAS	LINUS

8:00		
9:00		
10:00		
11:00		
12:00		
13:00		

	MON	TUE	WED	THU	FRI
8:00					
9:00					
10:00					
11:00					
12:00					

DECEMBER		

HTML Table Headers

Table headers are defined with `th` elements. Each `th` element represents a table cell.

```
<table>
  <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>
</table>
```


Vertical Table Headers

To use the first column as table headers, define the first cell in each row as a `<th>` element:

```
<table>
  <tr>
    <th>Firstname</th>
    <td>Jill</td>
    <td>Eve</td>
  </tr>
  <tr>
    <th>Lastname</th>
    <td>Smith</td>
    <td>Jackson</td>
  </tr>
  <tr>
    <th>Age</th>
    <td>94</td>
    <td>50</td>
  </tr>
</table>
```

Align Table Headers

By default, table headers are bold and centered:

Firstname	Lastname	Age
Jill	Smith	50
Eve	Jackson	94

To left-align the table headers, use the CSS text-align property:

```
th {  
    text-align: left;  
}
```

Header for Multiple Columns

You can have a header that spans over two or more columns.

Name		Age
Jill	Smith	50
Eve	Jackson	94

Header for Multiple Columns

To do this, use the colspan attribute on the <th> element:

```
<tr>  
  <th colspan="2">Name</th>  
  <th>Age</th>  
</tr>
```

Table Caption

You can add a caption that serves as a heading for the entire table.

Monthly savings	
Month	Savings
January	\$100
February	\$50

To add a caption to a table, use the `<caption>` tag:

```
<table style="width:100%">
  <caption>Monthly savings</caption>
  <tr>
    <th>Month</th>
    <th>Savings</th>
  </tr>
  <tr>
    <td>January</td>
    <td>$100</td>
  </tr>
  <tr>
    <td>February</td>
    <td>$50</td>
  </tr>
</table>
```

Table Caption

You can add a caption that serves as a heading for the entire table.

Monthly savings	
Month	Savings
January	\$100
February	\$50

To add a caption to a table, use the `<caption>` tag:

HTML Table Padding & Spacing

HTML Table Padding & Spacing

HTML tables can adjust the padding inside the cells, and also the space between the cells.

With Padding

hello	hello	hello
hello	hello	hello
hello	hello	hello

With Spacing

hello	hello	hello
hello	hello	hello
hello	hello	hello

HTML Table - Cell Padding

Cell padding is the space between the cell edges and the cell content.

By default the padding is set to 0.

To add padding on table cells, use the CSS padding property:

```
th, td {  
    padding: 15px;  
}
```

HTML Table - Cell Padding

To add padding only above the content, use the padding-top property.

And the others sides with the padding-bottom, padding-left, and padding-right properties:

```
th, td {  
    padding-top: 10px;  
    padding-bottom: 20px;  
    padding-left: 30px;  
    padding-right: 40px;  
}
```

HTML Table - Cell Spacing

Cell spacing is the space between each cell.

By default the space is set to **2 pixels**.

To change the space between table cells, use the CSS border-spacing property on the table element:

```
table {  
    border-spacing: 30px;  
}
```

HTML Table - Cell Spacing

Cell spacing is the space between each cell.

By default the space is set to **2 pixels**.

To change the space between table cells, use the CSS border-spacing property on the table element:

```
table {  
    border-spacing: 30px;  
}
```

HTML Table Colspan & Rowspan

HTML Table Colspan & Rowspan

HTML tables can have cells that span over multiple rows and/or columns.

NAME		

APRIL		

2022		
FIESTA		

HTML Table - Colspan

To make a cell span over multiple columns, use the **colspan** attribute:

```
<tr>  
  <th colspan="2">Name</th>  
  <th>Age</th>  
</tr>
```

HTML Table - Rowspan

To make a cell span over multiple rows, use the **rowspan** attribute:

```
<tr>  
  <th rowspan="2">Phone</th>  
  <td>555-1234</td>  
</tr>
```

HTML Table Styling

HTML Table Styling

Use CSS to make your tables look better.

HTML Table - Zebra Stripes

If you add a background color on every other table row, you will get a nice zebra stripes effect.

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20

HTML Table - Zebra Stripes

To style every other table row element, use the `:nth-child(even)` selector like this:

```
tr:nth-child(even) {  
    background-color: #D6EEEE;  
}
```

HTML Table - Vertical Zebra Stripes

To make vertical zebra stripes, style every other **column**, instead of every other row.

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20

HTML Table - Vertical Zebra Stripes

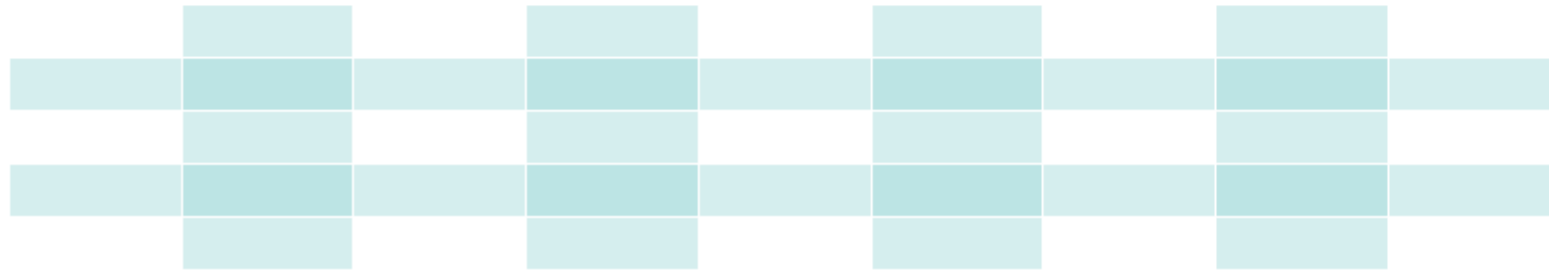
Set the `:nth-child(even)` for table data elements like this:

```
td:nth-child(even), th:nth-child(even) {  
    background-color: #D6EEEE;  
}
```


Combine Vertical and Horizontal Zebra Stripes

You can combine the styling from the two examples above and you will have stripes on every other row and every other column.

If you use a transparent color you will get an overlapping effect.



Combine Vertical and Horizontal Zebra Stripes

Use an `rgba()` color to specify the transparency of the color:

```
tr:nth-child(even) {  
    background-color: rgba(150, 212, 212, 0.4);  
}
```

```
th:nth-child(even),td:nth-child(even) {  
    background-color: rgba(150, 212, 212, 0.4);  
}
```

Horizontal Dividers

If you specify borders only at the bottom of each table row, you will have a table with horizontal dividers.

First Name	Last Name	Savings
Peter	Griffin	\$100
Lois	Griffin	\$150
Joe	Swanson	\$300

Horizontal Dividers

Add the border-bottom property to all tr elements to get horizontal dividers:

```
tr {  
    border-bottom: 1px solid #ddd;  
}
```

Hoverable Table

Use the `:hover` selector on `tr` to highlight table rows on mouse over:

```
tr:hover {background-color: #D6EEEE;}
```

Activity!

Activity

Objective: Create a webpage that displays information about your favorite animals using an HTML table and apply some basic styling using CSS.

1. Create the HTML Structure – 10 pts.
2. Create a CSS File – 10 pts.
3. Populate the Table (5 animals) – 10 pts.
4. Images – 10 pts.
5. Enhancements – 10 pts.

Example Output

My Favorite Animals				
Lion	Elephant	Dog	Bird	Horse
I like lion because it is strong and brave	I like elephants because its BIG!	I like dogs because it is a man's best friend	I like birds because they can fly	I like horses because they are fast and has BIG... muscles!
				