



TOPICS

- HTML Tables
- HTML Lists
- HTML Block and Inline Elements
- HTML class Attribute
- HTML id Attribute
- HTML Iframes



INTROUDCTION

HTML Tables



HTML Tables

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

Define an HTML Table

- A table in HTML consists of table cells inside rows and columns.
- Example: A simple HTML table:

```
<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.
- Example
- ```
<table>
 <tr>
 <td>Emil</td>
 <td>Tobias</td>
 <td>Linus</td>
 </tr>
</table>
```
- **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.
- Example
- ```
<table>
  <tr>
    <td>Emil</td>
    <td>Tobias</td>
    <td>Linus</td>
  </tr>
  <tr>
    <td>16</td>
    <td>14</td>
    <td>10</td>
  </tr>
</table>
```
- 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. You will learn about that in a later chapter.



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.

Example

- Let the first row be table header cells:

```
<table>
  <tr>
    <th>Person 1</th>
    <th>Person 2</th>
    <th>Person 3</th>
  </tr>
  <tr>
    <td>Emil</td>
    <td>Tobias</td>
    <td>Linus</td>
  </tr>
  <tr>
    <td>16</td>
    <td>14</td>
    <td>10</td>
  </tr>
</table>
```

- 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 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:

Example

- ```
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:

- Example

- ```
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:

Example

- ```
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:

## Example

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



Style Table Borders

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

Example

- ```
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.

The following values are allowed:

dotted

dashed

solid

double

groove

ridge

inset

outset

none

Hidden

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



# Table Border Color

- With the **border-color property**, you can set the color of the border.
- Example
- ```
th, td {  
  border-color: #96D4D4;  
}
```




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:

Example

- Set the width of the table to 100%:

```
<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>
```

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 Sizes

HTML Table Column Width

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

Example

- Set the width of the first column to 70%:
- ```
<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 Sizes

## HTML Table Row Height

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

### Example

- Set the height of the second row to 200 pixels:

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

## HTML Table Headers

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

### Example

```
<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>
```





# HTML Table Headers

## Vertical Table Headers

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

- **Example**

```
<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>
```



# HTML Table Headers

## Align Table Headers

- By default, table headers are bold and centered:
- To left-align the table headers, use the **CSS text-align** property:
- Example
- `th { text-align: left; }`

## Header for Multiple Columns

- You can have a header that spans over two or more columns.
- To do this, use the **colspan** attribute on the `<th>` element:

### Example

```
<table>
 <tr>
 <th colspan="2">Name</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 Headers

## Table Caption

- You can add a caption that serves as a heading for the entire table.
- To add a caption to a table, use the `<caption>` tag:

Example

```
<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>
```

**Note:** The `<caption>` tag should be inserted immediately after the `<table>` tag.



# HTML Table Padding & Spacing

- HTML tables can adjust the padding inside the cells, and also the space between the cells.
- 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:
- **Example**
- `th, td { padding: 15px;}`
- 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:
- **Example**
- ```
th, td {  
    padding-top: 10px;  
    padding-bottom: 20px;  
    padding-left: 30px;  
    padding-right: 40px;  
}
```




HTML Table Padding & Spacing

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



# HTML Table Colspan & Rowspan

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

## HTML Table - Colspan

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

- Example

```
<table>
 <tr>
 <th colspan="2">Name</th>
 <th>Age</th>
 </tr>
 <tr>
 <td>Jill</td>
 <td>Smith</td>
 <td>43</td>
 </tr>
 <tr>
 <td>Eve</td>
 <td>Jackson</td>
 <td>57</td>
 </tr>
</table>
```

- **Note:** The value of the colspan attribute represents the number of columns to span.





# HTML Table Colspan & Rowspan

## HTML Table - Rowspan

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

- **Example**

- ```
<table>
  <tr>
    <th>Name</th>
    <td>Jill</td>
  </tr>
  <tr>
    <th rowspan="2">Phone</th>
    <td>555-1234</td>
  </tr>
  <tr>
    <td>555-8745</td>
  </tr>
</table>
```

- **Note:** The value of the rowspan attribute represents the number of rows to span.



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.
- To style every other table row element, use the `:nth-child(even)` selector like this:
- **Example**
- `tr:nth-child(even) { background-color: #D6EEEE; }`
- **Note:** If you use (odd) instead of (even), the styling will occur on row 1,3,5 etc. instead of 2,4,6 etc.

HTML Table - Vertical Zebra Stripes

- To make vertical zebra stripes, style every other column, instead of every other row.
- Set the `:nth-child(even)` for table data elements like this:

Example

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

Note: Put the `:nth-child()` selector on both th and td elements if you want to have the styling on both headers and regular table cells.



HTML Table Styling

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.
- Use **an `rgba()` color** to specify the transparency of the color:
- Example
- ```
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.
- Add the `border-bottom` property to all `tr` elements to get horizontal dividers:
- Example
- ```
tr {
 border-bottom: 1px solid #ddd;
}
```



# HTML Table Styling

## Hoverable Table

- Use the `:hover` selector on `tr` to highlight table rows on mouse over:
- **Example**
- `tr:hover {background-color: #D6EEEE;}`





# HTML Table Colgroup

- The `<colgroup>` element is used to style specific columns of a table.

## HTML Table Colgroup

- If you want to style the two first columns of a table, use the `<colgroup>` and `<col>` elements.
- The `<colgroup>` element should be used as a container for the column specifications.
- Each group is specified with a `<col>` element.
- The `span` attribute specifies how many columns that get the style.
- The `style` attribute specifies the style to give the columns.

### Example

```
<table>
 <colgroup>
 <col span="2" style="background-color: #D6EEEE">
 </colgroup>
 <tr>
 <th>MON</th>
 <th>TUE</th>
 <th>WED</th>
 <th>THU</th>
 <th>FRI</th>
 <th>SAT</th>
 <th>SUN</th>
 </tr>
 <tr>
 <td>1</td>
 <td>2</td>
 <td>3</td>
 <td>4</td>
 <td>5</td>
 <td>6</td>
 <td>7</td>
 </tr>
 <tr>
 <td>8</td>
 <td>9</td>
 <td>10</td>
 <td>11</td>
 <td>12</td>
 <td>13</td>
 <td>14</td>
 </tr>
 <tr>
 <td>15</td>
 <td>16</td>
 <td>17</td>
 <td>18</td>
 <td>19</td>
 <td>20</td>
 <td>21</td>
 </tr>
 <tr>
 <td>22</td>
 <td>23</td>
 <td>24</td>
 <td>25</td>
 <td>26</td>
 <td>27</td>
 <td>28</td>
 </tr>
 <tr>
 <td>29</td>
 <td>30</td>
 <td>31</td>
 <td>1</td>
 <td>2</td>
 <td>3</td>
 <td>4</td>
 </tr>
</table>
```

Note: The `<colgroup>` tag must be a child of a `<table>` element and should be placed before any other table elements, like `<thead>`, `<tr>`, `<td>` etc., but after the `<caption>` element, if present.



# HTML Table Colgroup

## Legal CSS Properties

- There is only a very limited selection of CSS properties that are allowed to be used in the colgroup:
  - width property
  - visibility property
  - background properties
  - border properties
- All other CSS properties will have no effect on your tables.

## Multiple Col Elements

- If you want to style more columns with different styles, use more <col> elements inside the <colgroup>:

- **Example**

- ```
<table>
  <colgroup>
    <col span="2" style="background-color: #D6EEEE">
    <col span="3" style="background-color: pink">
  </colgroup>
  <tr>
    <th>MON</th>
    <th>TUE</th>
    <th>WED</th>
    <th>THU</th>
```




HTML Table Colgroup

Empty Colgroups

If you want to style columns in the middle of a table, insert a "empty" `<col>` element (with no styles) for the columns before:

- **Example**
- ```
<table>
 <colgroup>
 <col span="3">
 <col span="2" style="background-color: pink">
 </colgroup>
 <tr>
 <th>MON</th>
 <th>TUE</th>
 <th>WED</th>
 <th>THU</th>
```

## Hide Columns

- You can hide columns with the visibility: collapse property:
- Example
- ```
<table>
  <colgroup>
    <col span="2">
    <col span="3" style="visibility: collapse">
  </colgroup>
```



HTML Lists

- HTML lists allow web developers to group a set of related items in lists.

Example

An unordered HTML list:

- Item
- Item
- Item
- Item

An ordered HTML list:

1. First item
2. Second item
3. Third item
4. Fourth item



Unordered HTML List

- An unordered list starts with the `` tag. Each list item starts with the `` tag.
- The list items will be marked with bullets (small black circles) by default:
- Example
- ```

 Coffee
 Tea
 Milk

```

## Ordered HTML List

- An ordered list starts with the `<ol>` tag. Each list item starts with the `<li>` tag.
- The list items will be marked with numbers by default:
- Example
- ```
<ol>  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ol>
```

HTML Description Lists

- HTML also supports description lists.
- A description list is a list of terms, with a description of each term.
- The `<dl>` tag defines the description list, the `<dt>` tag defines the term (name), and the `<dd>` tag describes each term:
- Example
 - `<dl>`
 - `<dt>Coffee</dt>`
 - `<dd>- black hot drink</dd>`
 - `<dt>Milk</dt>`
 - `<dd>- white cold drink</dd>`
 - `</dl>`

HTML List Tags

| Tag | Description |
|-------------------|--|
| <u></u> | Defines an unordered list |
| <u></u> | Defines an ordered list |
| <u></u> | Defines a list item |
| <u><dl></u> | Defines a description list |
| <u><dt></u> | Defines a term in a description list |
| <u><dd></u> | Describes the term in a description list |



Unordered HTML List

- The HTML `` tag defines an unordered (bulleted) list.

Unordered HTML List

- An unordered list starts with the `` tag. Each list item starts with the `` tag.
- The list items will be marked with bullets (small black circles) by default:

Example

- ```

 Coffee
 Tea
 Milk

```





# Unordered HTML List

## Unordered HTML List - Choose List Item Marker

- The CSS list-style-type property is used to define the style of the list item marker. It can have one of the following values:

| Value  | Description                                     |
|--------|-------------------------------------------------|
| disc   | Sets the list item marker to a bullet (default) |
| circle | Sets the list item marker to a circle           |
| square | Sets the list item marker to a square           |
| none   | The list items will not be marked               |

### Example - Disc

```
<ul style="list-style-type:disc;">
 Coffee
 Tea
 Milk

```



# Unordered HTML List

## Example - Circle

- ```
<ul style="list-style-type:circle;">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ul>
```

Example - Square

- ```
<ul style="list-style-type:square;">
 Coffee
 Tea
 Milk

```





# Unordered HTML List

## Example - None

- ```
<ul style="list-style-type:none;">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ul>
```

Nested HTML Lists

- Lists can be nested (list inside list):

Example

- ```

 Coffee
 Tea

 Black tea
 Green tea

 Milk

```



# Unordered HTML List

## Horizontal List with CSS

- HTML lists can be styled in many different ways with CSS.
- One popular way is to style a list horizontally, to create a navigation menu:



## Example

```
<!DOCTYPE html>
<html>
<head>
<style>
ul {
 list-style-type: none;
 margin: 0;
 padding: 0;
 overflow: hidden;
 background-color: #333333;
}

li {
 float: left;
}

li a {
 display: block;
 color: white;
 text-align: center;
 padding: 16px;
 text-decoration: none;
}

li a:hover {
 background-color: #111111;
}
</style>
</head>
<body>

 Home
 News
 Contact
 About

</body>
</html>
```



# HTML List Tags

| Tag               | Description                              |
|-------------------|------------------------------------------|
| <u>&lt;ul&gt;</u> | Defines an unordered list                |
| <u>&lt;ol&gt;</u> | Defines an ordered list                  |
| <u>&lt;li&gt;</u> | Defines a list item                      |
| <u>&lt;dl&gt;</u> | Defines a description list               |
| <u>&lt;dt&gt;</u> | Defines a term in a description list     |
| <u>&lt;dd&gt;</u> | Describes the term in a description list |



# HTML Ordered Lists

- The HTML `<ol>` tag defines an ordered list. An ordered list can be numerical or alphabetical.
- Ordered HTML List
- An ordered list starts with the `<ol>` tag. Each list item starts with the `<li>` tag.
- The list items will be marked with numbers by default:
- **Example**
  - `<ol>`
    - `<li>Coffee</li>`
    - `<li>Tea</li>`
    - `<li>Milk</li>`
  - `</ol>`

# HTML Ordered Lists

- Ordered HTML List - The Type Attribute
- The type attribute of the `<ol>` tag, defines the type of the list item marker:

| Type     | Description                                                  |
|----------|--------------------------------------------------------------|
| type="1" | The list items will be numbered with numbers (default)       |
| type="A" | The list items will be numbered with uppercase letters       |
| type="a" | The list items will be numbered with lowercase letters       |
| type="I" | The list items will be numbered with uppercase roman numbers |
| type="i" | The list items will be numbered with lowercase roman numbers |



# HTML Ordered Lists

## Numbers:

- ```
<ol type="1">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ol>
```

Uppercase Letters:

- ```
<ol type="A">
 Coffee
 Tea
 Milk

```

## Lowercase Letters:

- ```
<ol type="a">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ol>
```

-

HTML Ordered Lists

- **Uppercase Roman Numbers:**

- ```
<ol type="I">
 Coffee
 Tea
 Milk

```

- **Lowercase Roman Numbers:**

- ```
<ol type="i">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ol>
```

-

HTML Ordered Lists

Control List Counting

- By default, an ordered list will start counting from 1. If you want to start counting from a specified number, you can use the start attribute:

Example

- ```
<ol start="50">
 Coffee
 Tea
 Milk

```

## Nested HTML Lists

- Lists can be nested (list inside list):

## Example

- ```
<ol>
  <li>Coffee</li>
  <li>Tea
    <ol>
      <li>Black tea</li>
      <li>Green tea</li>
    </ol>
  </li>
  <li>Milk</li>
</ol>
```

Note: A list item () can contain a new list, and other HTML elements, like images and links, etc.

HTML Ordered Lists

HTML List Tags

| Tag | Description |
|-------------------|--|
| <u></u> | Defines an unordered list |
| <u></u> | Defines an ordered list |
| <u></u> | Defines a list item |
| <u><dl></u> | Defines a description list |
| <u><dt></u> | Defines a term in a description list |
| <u><dd></u> | Describes the term in a description list |

HTML Other Lists

- HTML also supports description lists.
- **HTML Description Lists**
- A description list is a list of terms, with a description of each term.
- The `<dl>` tag defines the description list, the `<dt>` tag defines the term (**name**), and the `<dd>` tag describes each term:

Example

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



# HTML Block and Inline Elements

- Every HTML element has a default display value, depending on what type of element it is.
- There are two display values: **block** and **inline**.

## Block-level Elements

- A block-level element always starts on a new line, and the browsers automatically add some space (a margin) before and after the element.
- A block-level element always takes up the full width available (stretches out to the left and right as far as it can).
- Two commonly used block elements are: **<p>** and **<div>**.
- The **<p>** element defines a paragraph in an HTML document.
- The **<div>** element defines a division or a section in an HTML document.

## Example

- `<p>Hello World</p>`  
`<div>Hello World</div>`



# HTML Block and Inline Elements

## Inline Elements

- An inline element does not start on a new line.
- An inline element only takes up as much width as necessary.
- This is a `<span>` element inside a paragraph.

## Example

- `<span>Hello World</span>`



# The <div> Element

- The **<div>** element is often used as a container for other HTML elements.
- The **<div>** element has no required attributes, but **style**, **class** and **id** are common.
- When used together with CSS, the **<div>** element can be used to style blocks of content:

## Example

- ```
<div style="background-color:black;color:white;padding:20px;">
  <h2>London</h2>
  <p>London is the capital city of England. It is the most populous city in the United Kingdom,
  with a metropolitan area of over 13 million inhabitants.</p>
</div>
```
- The **** Element
- The **** element is an inline container used to mark up a part of a text, or a part of a document.
- The **** element has no required attributes, but **style**, **class** and **id** are common.
- When used together with CSS, the **** element can be used to style parts of the text:

Example

- ```
<p>My mother has blue eyes and my father
has dark green eyes.</p>
```





# HTML class Attribute

- The HTML class attribute is used to specify a class for an HTML element.
- Multiple HTML elements can share the same **class**.

## Using The class Attribute

- The class attribute is often used to point to a class name in a style sheet. It can also be used by a JavaScript to access and manipulate elements with the specific class name.
- In the following example we have three **<div>** elements with a **class** attribute with the value of "**city**". All of the three **<div>** elements will be styled equally according to the **.city** style definition in the head section:



## Example

```
• <!DOCTYPE html>
 <html>
 <head>
 <style>
 .city {
 background-color: tomato;
 color: white;
 border: 2px solid black;
 margin: 20px;
 padding: 20px;
 }
 </style>
 </head>
 <body>

 <div class="city">
 <h2>London</h2>
 <p>London is the capital of England.</p>
 </div>

 <div class="city">
 <h2>Paris</h2>
 <p>Paris is the capital of France.</p>
 </div>

 <div class="city">
 <h2>Tokyo</h2>
 <p>Tokyo is the capital of Japan.</p>
 </div>

 </body>
 </html>
```



In the following example we have two `<span>` elements with a class attribute with the value of "note". Both `<span>` elements will be styled equally according to the .note style definition in the head section:

## Example

- ```
<!DOCTYPE html>
<html>
<head>
<style>
.note {
  font-size: 120%;
  color: red;
}
</style>
</head>
<body>

<h1>My <span class="note">Important</span> Heading</h1>
<p>This is some <span class="note">important</span> text.</p>

</body>
</html>
```

- Tip: The class attribute can be used on any HTML element.
- Note: The class name is case sensitive!

The Syntax For Class

- To create a class; write a period (.) character, followed by a class name. Then, define the CSS properties within curly braces {}:

Example

- Create a class named "city":

```
• <!DOCTYPE html>
  <html>
  <head>
  <style>
  .city {
    background-color: tomato;
    color: white;
    padding: 10px;
  }
  </style>
  </head>
  <body>

  <h2 class="city">London</h2>
  <p>London is the capital of England.</p>

  <h2 class="city">Paris</h2>
  <p>Paris is the capital of France.</p>

  <h2 class="city">Tokyo</h2>
  <p>Tokyo is the capital of Japan.</p>

  </body>
  </html>
```


Multiple Classes

- HTML elements can belong to more than one class.
- To define multiple classes, separate the class names with a space, e.g. `<div class="city main">`. The element will be styled according to all the classes specified.
- In the following example, the first `<h2>` element belongs to both the city class and also to the main class, and will get the CSS styles from both of the classes:
- **Example**
- ```
<h2 class="city main">London</h2>
<h2 class="city">Paris</h2>
<h2 class="city">Tokyo</h2>
```



# Multiple Classes

- Different Elements Can Share Same Class
- Different HTML elements can point to the same class name.
- In the following example, both `<h2>` and `<p>` point to the "city" class and will share the same style:
- **Example**
- `<h2 class="city">Paris</h2>`  
`<p class="city">Paris is the capital of France</p>`

## Use of The class Attribute in JavaScript

- The class name can also be used by JavaScript to perform certain tasks for specific elements.
- JavaScript can access elements with a specific class name with the `getElementsByClassName()` method:

Don't worry if you don't understand the code in the example above.



# Chapter Summary

- The HTML class attribute specifies one or more class names for an element
- Classes are used by CSS and JavaScript to select and access specific elements
- The class attribute can be used on any HTML element
- The class name is case sensitive
- Different HTML elements can point to the same class name
- JavaScript can access elements with a specific class name with the `getElementsByClassName()` method



# HTML id Attribute

- The HTML **id** attribute is used to specify a unique id for an HTML element.
- You cannot have more than one element with the same id in an HTML document.
- Using The id Attribute
- The id attribute specifies a unique id for an HTML element. The value of the **id** attribute must be unique within the HTML document.
- The id attribute is used to point to a specific style declaration in a style sheet. It is also used by JavaScript to access and manipulate the element with the specific **id**.
- The syntax for id is: write a hash character (#), followed by an id name. Then, define the CSS properties within curly braces {}.
- In the following example we have an **<h1>** element that points to the id name **"myHeader"**. This **<h1>** element will be styled according to the **#myHeader** style definition in the head section:



- **Example**

- ```
<!DOCTYPE html>
<html>
<head>
<style>
#myHeader {
  background-color: lightblue;
  color: black;
  padding: 40px;
  text-align: center;
}
</style>
</head>
<body>

<h1 id="myHeader">My Header</h1>

</body>
</html>
```

- **Note:** The id name is case sensitive!

- **Note:** The id name must contain at least one character, cannot start with a number, and must not contain whitespaces (spaces, tabs, etc.).

HTML Iframes

- An HTML **iframe** is used to display a web page within a web page.

HTML **Iframe** Syntax

- The HTML `<iframe>` tag specifies an inline frame.
- An inline frame is used to embed another document within the current HTML document.
- Syntax
- `<iframe src="url" title="description"></iframe>`
- **Tip:** It is a good practice to always include a title attribute for the `<iframe>`. This is used by screen readers to read out what the content of the iframe is.

Iframe - Set Height and Width

- Use the height and width attributes to specify the size of the iframe.
- The height and width are specified in pixels by default:
- Example
- `<iframe src="demo_iframe.htm" height="200" width="300" title="Iframe Example"></iframe>`
- Or you can add the style attribute and use the CSS height and width properties:
- **Example**
- `<iframe src="demo_iframe.htm" style="height:200px;width:300px;" title="Iframe Example"></iframe>`
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THANK YOU !

