Attributes

Attributes

- **Attributes** → provide ==additional information about HTML element==.

  <code><a href="<u>https://www.google.com</u>"> Click on me</code>

- In above example, href is an attribute that contains the link, to which user will be navigated when they click on this element
- Attributes usually is in the format: ==**attribute name="attribute value"**==
  - <img **src="carpic.jpg" alt="Red Maserati"**>

- Attributes are always ==specified within the **start tag**==.
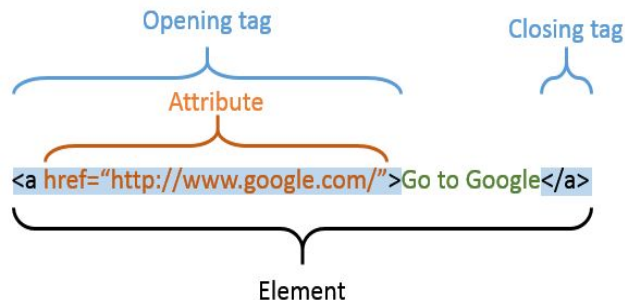
The <a> tag & Href Attribute

▸ The **<a>** tag → is anchor tag. It defines a hyperlink.

▸ The **href** attribute → is used with anchor tag mostly and points to the destination URL the link takes you when clicked on.

```
<p>
    <a href="https://www.youtube.com">Youtube</a>
</p>
```

▸ In above example the word: Youtube will be visible to the user.

▸ You can also nest links inside other tags:

```
<!DOCTYPE html>
<html>
<body>

<h1>HTML Links</h1>

<p><a href="https://www.youtube.com/">Youtube</a></p>

</body>
</html>
```

HTML Links

Youtube

The <a> tag & Target Attribute

The target attribute defines where to open the linked document.

- **_self** → Opens the document in the same window/tab as it was clicked. It's the default behaviour when not mentioned.

- **_blank** → Opens the document in a new window or tab

- **_parent** → Opens the document in the parent frame

- **_top** → Opens the document in the full body of the window

```
<p>
    <a href="https://www.youtube.com" target="_blank">Youtube</a>
</p>
```

Image Tag & src attribute

▸ The **<img>** tag → is used to add Images in HTML documents.

▸ The **'src'** attribute →is used to give source(address) of the image.

▸ The height and width of the image can be controlled by the attributes - height="px" and width="px".

```
<body>
    <p> Lorem Ipsum is simply dummy
      text of the printing and typesetting industry.
    <br />
    <img src="porche.jpg" width="400" height="250"/>
    <br />
      Lorem Ipsum has been the industry's
              standard dummy text ever since the 1500s,
  </p>

</body>
```

Lorem Ipsum is simply dummy text of the printing and typesetting industry.

Lorem Ipsum has been the industry's standard dummy text ever since the 1500s,

Borders & Clickable Images

▸ border attribute can be used to define how thick the border of the image needs to be.

```
<img src="/images/porche.jpg" width="400" height="250" border="5" />
```

BMW

Lorem Ipsum has been the industry's standard dummy text ever since the 1500s,

▸ Alignment attribute → will align table left, right or center.

▸ To make an image clickable link → we put the <img> tag inside the <a> tag:

```
<a href="https://www.porsche.com/usa/" target="_blank">
    <img src="/images/porche.jpg" width="400" height="250" alt="White Porche Taycan Turbo"/>
</a>
```

Alt attribute & URL Types

▸ The **alt** attribute → is used as an alternative in a case if the image is not shown. It's also used by search engines.

▸ There are 2 ways to provide link in src attribute:
  ▷ **Absolute URL** → Links to an image that is hosted on **external website**
    ▷ `src="https://www.yoll.io/images/laptop.jpg"`

  ▷ **Relative URL** → Links to an image that is hosted **within the website**

```
<body>
   <p> Lorem Ipsum is simply dummy
      text of the printing and typesetting industry.
   <br />
   <img src="porche.jpg" width="400" height="250" alt="White Porche Taycan Turbo"/>
   <br />
      Lorem Ipsum has been the industry's
               standard dummy text ever since the 1500s,
</p>

</body>
```


127.0.0.1:5500/index.html

Lorem Ipsum is simply dummy text of the printing and typesetting industry.
White Porche Taycan Turbo
Lorem Ipsum has been the industry's standard dummy text ever since the 1500s,
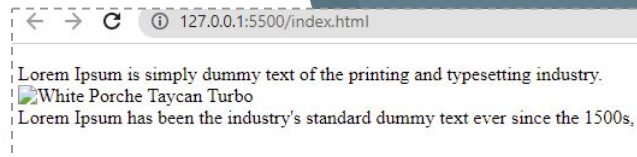
ID, Name, Class Attributes

- **Id** attribute → is used to <mark>uniquely</mark> identify any element within an HTML page.
  - ▷ The value of the id attribute must be unique within html document.

- **Name** attribute → specifies a name for an HTML element. It's used to reference the element in a JavaScript.

- **Class** attribute → is used to associate an element with a style sheet. We will use it to group elements together to apply CSS on them.

```
<button name="submitInfo" id="submitInfo1" class="mrq"></button>
```

- **Class vs ID** → A class name can be used by multiple HTML elements, while an id name must only be used by one HTML element within the page.

Style Attribute

The style attribute is used to specify(CSS) rules within the element.

CSS stands for Cascading Style Sheets

- ‣ It defines the CSS styling of element like color, font, size, shadow etc.

```
<h3 style="color:■red"> Mercedes </h4>
<h3 style="color:■blue"> BMW </h4>
```

Mercedes

BMW

Css styling will be explored in another module.

Bookmarks

Bookmarks are created so that readers can jump to specific parts of a web page.

It is done in two steps.

Step 1 => Create the bookmark. [id attribute]

Step 2 => Add a link to it. [href attribute]
(use # to refer to the bookmark)

It is useful if a webpage is very long.

Assignment # 3

Create an HTML document with two links, one of which will navigate to Google.com and the other will navigate to Facebook.com on clicking them.

Also make sure that both the pages (Google and Facebook) should open in a new tab/window.

HTML Block and Inline Elements

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.

Block-level Elements

Here are the block-level elements in HTML:

```
<address>      <article>      <aside>        <blockquote>  <canvas>      <dd>          <div>         <dl>
<dt>           <fieldset>     <figcaption>   <figure>      <footer>      <form>        <h1>-<h6>     <header>
<hr>           <li>           <main>         <nav>         <noscript>    <ol>          <p>           <pre>
<section>      <table>        <tfoot>        <ul>          <video>
```

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.

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

Inline Elements

Here are the inline elements in HTML:

```
<a>          <abbr>       <acronym>    <b>          <bdo>        <big>        <br>         <button>
<cite>       <code>       <dfn>        <em>         <i>          <img>        <input>      <kbd>
<label>      <map>        <object>     <output>     <q>          <samp>       <script>     <select>
<small>      <span>       <strong>     <sub>        <sup>        <textarea>   <time>       <tt>
<var>
```

Div Tags

The <div> tag defines a division or a section in an HTML document.

The <div> tag is used as a container for HTML elements - which is then styled with CSS or manipulated with JavaScript.

The <div> tag is easily styled by using the class or id attribute.

Any sort of content can be put inside the <div> tag!

Note: By default, browsers always place a line break before and after the <div> element.

```html
<html>
<head>
<style>
.myDiv {
border: 5px outset red;
background-color: lightblue;
text-align: center;
}
</style>
</head>
<body>

<div class="myDiv">
<h2>This is a heading in a div element</h2>
<p>This is some text in a div element.</p>
</div>

</body>
</html>
```

The div element

This is a heading in a div element

This is some text in a div element.

This is some text outside the div element.

The <span> Element

The <span> element is an inline container used to mark up a part of a text, or a part of a document.

The <span> element has no required attributes, but style, class and id are common.

When used together with CSS, the <span> element can be used to style parts of the text:

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

<p>My mother has
    <span style="color:blue;font-weight:bold;">blue</span>
        eyes and my father has
    <span style="color:darkolivegreen;font-weight:bold;">dark green</span>
    eyes.
</p>
```

<DIV> v/s <SPAN>

DIV Tag	SPAN Tag
It is a block level element.	It is an inline element.
It is best to attach it to a section of a web page.	It is best to attach a CSS to a small section of a line in a web page.
It accepts align attribute.	It does not accept align attribute.
This tag should be used to wrap a section, for highlighting that section.	This tag should be used to wrap any specific word that you want to highlight in your webpage.

Assignment # 4

Create an HTML document to show the following using div and span.

Hello, **This is just a sample paragraph.**