Attributes

Attributes are used in tags to further define the tag:

- It is used inside the opening tag it is applied to and should be added after a space from the tag name: . The start attribute is used inside the tag.
- start="5"

Attribute name, equal sign, opening quote, attribute value, closing quote

 Attributes are a name-value pair: start="5" name: start value: any positive integer

The only exception to the name-value pair is if the attribute is a 'boolean attribute'.
 These attributes have only two types of values - true or false. But instead of writing "true" or "false" for its value, you add the attribute name to indicate true and omit it to indicate false. An example is the 'reversed' attribute in an ordered list

 Adding this attribute is an indication that the list order should be reversed (in descending order).

• A tag can have multiple attributes:

Global & no-Global attributes

Global attributes can be applied to **all tags**. They are common attributes. Examples of global attributes are id and class. There are many more global attributes. <u>Here is a list of all the global attributes</u> and the values they accept.

So attributes like id and class can be applied to any HTML tag.

Non-global attributes are attributes applied to a specific instance of a tag. It can be applied to one or more tags. For example, start is an attribute for the <01> tag and it cannot be applied on the or <h1> tags.

Try this: Navigate to the <u>HTML attribute reference</u> at Mozilla Developer Network and find out which element(s) the attributes muted and readonly can be applied to.

Try this: Navigate to the <u>HTML attribute reference</u> at Mozilla Developer Network and find out the non-global attributes that can be applied to the > tag. If you click on the > element, it will take you to the list tag's page that specifies applicable attributes.

Global attribute: id

The id attribute gives your element a unique identifier. In your HTML document, that ID value can only be used in one element.

Naming rules for id attribute:

- Must be of at least one character.
- Should not contain any spaces
- Values are case-sensitive. This means 'QuestioN' and 'question' are NOT the same.

id is primarily used for:

- Styling your element. You can specify the style you want for the element in your style sheet by referencing the 'id'.
- Specifying a link target. You can link to a section of your HTML page using the 'id' of the section. You should reference the 'id' value with a number sign preceding it '#id-value'.
- In JavaScript, 'id' can be used to manipulate an html element. Using the 'id' of the element, you can write JavaScript code to make it perform an action

Global attribute: class

The class attribute, while similar to id, groups a set of elements in the same class. Unlike id, which is unique to the element, the same class name can be assigned to more than one element.

Global attribute: lang

The lang attribute indicates the language of the text in the element to which it is attached. Identifying the language of content is increasingly important, as browsers adapt styling and other aspects of the user's experience according to the language of the content.

For more details see Why use the language attribute?

Global attribute: title

Be it a paragraph, header, image or any element, the title attribute is used to provide additional information about it.

https://codepen.io/paqui-molina/pen/XWKrYgv

Introduction to images

```
The <img> Tag
```

Image: 'src' attribute

```
<img src="http://example.com/image-with-absolute-url.png" alt="Example tutorial Image">
<img src="./images/image-with-absolute-url.png" alt="Example tutorial Image">
```

The type of image file format (i.e. png, jpeg, etc.) you should use does not depend on the image element in HTML5 but on the browser that renders the content. Some formats like png, jpeg, gif and bmp are widely supported by browsers and so they are recommended when using images in your Web site

Here is a list of things to keep in mind when using the src attribute:

- Do not include spaces in your image path.
- Make sure your image path matches the capitalization of the actual path. Recommended practice: use lower case for all directories, file names and file extensions.
- Use Unix (/) path name separator instead of Windows (\) style.
- you need to ensure your HTML document root doesn't change. The simplest is to always keep the images at the same level, or one level down.
- Absolute paths are not recommended to use

Image: Formats

Attributes: alt, title, height and width

Importance of the alt attribute

Using this attribute, you can provide a short description of what the image is about.

- If you add alt to your image, screen readers will typically announce that there is an image and read out the contents of the alt attribute.
- Your image will not display if the path in your source attribute is wrong, if you have a slow
 internet connection, or if the image has been relocated or renamed. It will show a broken
 link. It is useful to have the alternate text display so the user can make sense of the missing
 image.
- Search engines do not 'see' images. They rely on the alt attribute to find out what the image is about. If you use your target keyword in alt, it will optimize the search.
- To consume less data, some mobile users turn off images. They need the alt attribute to find out what the image is about.

```
<img src="images/html5.png" alt="HTML resized image" title="Resized image seems to fit the page better" height="173">
```

Purpose of the images

You can use images for various reasons in your Web page like:

- represent a concept, illustration or just a photograph that provide information
- background for a button or link

- display a quote or message in the form of text in an image
- decorative images

We can use WAI Images Tutorial to decide the category of our image

The title attribute

To provide to provide additional information about the image.

The alt attribute is an alternate source of information

The height and width attributes

The width and height attributes can be used to resize the image in pixels without using an external editor.

you don't need to define both width and height. You can just specify either height or width and the aspect ratio will be adjusted.

The use of these attributes depends on how you are using the image. If it is part of an image grid or a list with multiple images of the same size, it is best achieved by CSS.

However, if you are adding the image into some content and it needs to be a certain size for the visual flow of the reader, then it is best to add it to HTML using the height and width attributes.

Decorative images

Should all images be part of HTML content?

A significant part of images on the Web are not used for any meaning. They merely serve a decorative purpose and fall under the presentation category. How do you identify these images? Well, if you have nothing relevant to put in your alt attribute or if you feel like it is not important to your or to the prospective reader, it should not be in your HTML.

We know we should keep content and style separate in HTML. Then how do we move these images out of content? Well, don't add them using the tag in HTML. Use CSS instead.

Examples of such images:

background images
fancy border graphics
banner graphics
pictures of landscapes or textures that are being
used as elements behind or surrounding the content





Introduction to hyperlinks

What Are Hyperlinks?

Hyperlink is any text or image you can click and it will take you to another page. This page can be: another Web page, a local link, an email, a bookmark (a specific part of a Web page).

Why you should use text over image links

When it comes to hyperlinks, try to use text instead of images when possible.

- Images are not as well understood or recognized as text.
- Text is better for accessibility.
- If you have text in an image like the 'Buy now' button, search engines do not recognize text in images.

Best practices

- Apply hyperlinks to short phrases. It is unusual to see the link tag used around a whole paragraph.
- Make link phrase meaningful. Avoid phrases like 'Click Here' or 'Read More'. 'Click here to get help' is redundant, better 'Get Help'.
- Don't use short link text. It is easy to miss the 'blue' hyperlink if it is used on one word or character and is hard for users to click using touch screen.(not usable)
- Appearance links have a default appearance in most browsers, blue and underlined. Ensure no other text in your page is underlined so as to avoid confusing the user (false affordance). They might get frustrated trying to click text that they think is a link.(not usable)
- If you choose to have image links, it should have **alternate text** that describes the purpose of the link instead of the image used describe the target link

States of a hyperlink

1. **Unvisited**: blue + underlined

2. **Visited**: purple + underlined

3. **Active**: red + underlined

Usage

```
<!-- Text in a hyperlink-->
<a href="https://www.iesayala.com/">If you click on me, I will take you to iesayala.com</a>
<!-- Paragraph in a hyperlink-->
<a href="https://www.iesayala.com/">If you click on me, I will take you to
iesayala.com</a>
<!-- Image in a hyperlink-->
<a href="https://www.iesayala.com/"><img src="images/logoayala.png" alt="Image navigating to IES
Ayala"></a>
```

You can even use the anchor element to add your email address under the contacts section of your Web page.

```
Feedback: <a href="mailto:authors@example.com">Send Mail to Authors</a>Feedback: <a href="mailto:authors@example.com?Subject=Hello">Send Mail to Authors with Subject</a>
```

nevertheless, it's not a good idea

- The email address usually opens up on the default email client on the user's computer which they might not use. This defeats the whole purpose. Bad UX
- Providing your email address in your Web page directly as text or a hyperlink will expose your email address. Bots or spam crawlers can be used to search the Web to pick up email addresses for spam. You should avoid this if possible and, better, use contact forms instead.

Attributes: href and target

```
<a href="https://iesayala.com"></a>
<a href="contacts.html"></a>
<a href="#details"></a>
<a href="https://iesayala.com/" target="_self"></a> LINK will open in same window
<a href="https://iesayala.com/" target="_blank"></a> LINK will open in new window
```

Attributes: media and download

The 'download' attribute

The download attribute is also new in HTML5 and it makes a link download a file instead of navigate to another location.

```
<a href="/assets/hello.txt" download></a>
<a href="/assets/hello.txt" download="new-name-for-text-file"</a>
```

https://developer.mozilla.org/es/docs/Web/HTML/Elemento/a -> download attribute

The media attribute

It could be useful for downloads where you have to differentiate screen sizes.

```
$$  < a href="download/320" media="min-width: 320px" > < img src="files/imagen_320.jpg" alt="Texto alternativo" > </a >  < a href="download/1382" media="min-width: 1280px" > < img src="files/imagen_1280.jpg" alt="Texto alternativo" > </a >
```