

HTML Images

Images can improve the design and the appearance of a web page.

Example

```

```

Example

```

```

Example

```

```

HTML Images Syntax

In HTML, images are defined with the `` tag.

The `` tag is empty, it contains attributes only, and does not have a closing tag.

The `src` attribute specifies the URL (web address) of the image:

```

```

The alt Attribute

The `alt` attribute provides an alternate text for an image, if the user for some reason cannot view it (because of slow connection, an error in the `src` attribute, or if the user uses a screen reader).

The value of the `alt` attribute should describe the image:

Example

```

```

If a browser cannot find an image, it will display the value of the `alt` attribute:

Example

```

```

Note: The `alt` attribute is required. A web page will not validate correctly without it.

Image Size - Width and Height

You can use the `style` attribute to specify the width and height of an image.

Example

```

```

Alternatively, you can use the `width` and `height` attributes:

Example

```

```

The `width` and `height` attributes always defines the width and height of the image in pixels.

Note: Always specify the width and height of an image. If width and height are not specified, the page might flicker while the image loads.

Width and Height, or Style?

The `width`, `height`, and `style` attributes are valid in HTML5.

However, we suggest using the `style` attribute. It prevents styles sheets from changing the size of images:

Example

```
<!DOCTYPE html>
<html>
<head>
<style>
img {
  width:100%;
}
</style>
</head>
<body>




</body>
</html>
```

Images in Another Folder

If not specified, the browser expects to find the image in the same folder as the web page.

However, it is common to store images in a sub-folder. You must then include the folder name in the `src` attribute:

Example

```

```

Images on Another Server

Some web sites store their images on image servers.

Actually, you can access images from any web address in the world:

Example

```

```

You can read more about file paths in the chapter [HTML File Paths](#).

Animated Images

HTML allows animated GIFs:

Example

```

```

Image as a Link

To use an image as a link, put the `` tag inside the `<a>` tag:

Example

```
<a href="default.asp">  
    
</a>
```

Note: `border:0;` is added to prevent IE9 (and earlier) from displaying a border around the image (when the image is a link).

Image Floating

Use the CSS `float` property to let the image float to the right or to the left of a text:

Example

```
<p>  
The image will float to the right of the text.</p>
```

<p>
The image will float to the left of the text.</p>

Tip: To learn more about CSS Float, read our [CSS Float Tutorial](#).

Image Maps

The <map> tag defines an image-map. An image-map is an image with clickable areas.

In the image below, click on the computer, the phone, or the cup of coffee:



Example

```

```

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

The name attribute of the <map> tag is associated with the 's usemap attribute and creates a relationship between the image and the map.

The <map> element contains a number of <area> tags, that define the clickable areas in the image-map.

Background Image

To add a background image on an HTML element, use the CSS property background-image:

Example

To add a background image on a web page, specify the background-image property on the BODY element:

```
<body style="background-image:url('clouds.jpg')">
<h2>Background Image</h2>
</body>
```

Example

To add a background image on a paragraph, specify the background-image property on the P element:

```
<body>
<p style="background-image:url('clouds.jpg')">
...
</p>
</body>
```

To learn more about background images, study our [CSS Background Tutorial](#).

The <picture> Element

HTML5 introduced the <picture> element to add more flexibility when specifying image resources.

The <picture> element contains a number of <source> elements, each referring to different image sources. This way the browser can choose the image that best fits the current view and/or device.

Each <source> element have attributes describing when their image is the most suitable.

The browser will use the first <source> element with matching attribute values, and ignore any following <source> elements.

Example

Show one picture if the browser window (viewport) is a minimum of 650 pixels, and another image if not, but larger than 465 pixels.

```
<picture>
  <source media="(min-width: 650px)" srcset="img_pink_flowers.jpg">
  <source media="(min-width: 465px)" srcset="img_white_flower.jpg">
  
</picture>
```

Note: Always specify an element as the last child element of the <picture> element. The element is used by browsers that do not support the <picture> element, or if none of the <source> tags matched.

HTML Screen Readers

A screen reader is a software program that reads the HTML code, converts the text, and allows the user to "listen" to the content. Screen readers are useful for people who are blind, visually impaired, or learning disabled.

Chapter Summary

- Use the HTML `` element to define an image
- Use the HTML `src` attribute to define the URL of the image
- Use the HTML `alt` attribute to define an alternate text for an image, if it cannot be displayed
- Use the HTML `width` and `height` attributes to define the size of the image
- Use the CSS `width` and `height` properties to define the size of the image (alternatively)
- Use the CSS `float` property to let the image float
- Use the HTML `<map>` element to define an image-map
- Use the HTML `<area>` element to define the clickable areas in the image-map
- Use the HTML ``'s `usemap` attribute to point to an image-map
- Use the HTML `<picture>` element to show different images for different devices

Note: Loading images takes time. Large images can slow down your page. Use images carefully.

Test Yourself with Exercises!

HTML Image Tags

Tag	Description
	Defines an image
<map>	Defines an image-map
<area>	Defines a clickable area inside an image-map
<picture>	Defines a container for multiple image resources