



# HTML.1

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▼ What is HTML?

a fairly simple language made up of elements, which can be applied to pieces of text to give them different meaning in a document

▼ What does HTML stand for?

Hypertext Markup Language

▼ HTML is not a programming language but instead a what?

markup language

▼ What does HTML tell web browsers to do?

how to structure the web pages you visit.

▼ What is SVG?

SVG is an image format for vector graphics. It means Scalable Vector Graphics. Basically, what you work with in Adobe Illustrator.

▼ What is one of HTML's main jobs?

to give text structure and meaning (semantics) so that a browser can display it correctly

▼ Why are heading elements important for search engines?

Search engines indexing your page consider the contents of headings as important keywords for influencing the page's search rankings.

Without headings, your page will perform poorly in terms of SEO (Search Engine Optimization).

▼ You can mark up HTML elements to do what?

to make it appear or act in a certain way

▼ What is a block element?

an element that appears on a new line following the content that precedes it

▼ What is an inline element?

Inline elements are contained within block-level elements.

An inline element will not cause a new line to appear in the document.

▼ What is an attribute?

Attributes contain extra information about the element that won't appear in the content.

e.g. a class attribute

▼ What is href?

This attribute's value specifies the web address for the link. For example:

href="<https://www.mozilla.org/>".

▼ What is title attribute?

The title attribute specifies extra information about the link, such as a description of the page that is being linked to.

▼ What is a tooltip?

This appears as a tooltip when a cursor hovers over the element.

For example, title="The Mozilla homepage".

▼ What is the target attribute?

The target attribute specifies the browsing context used to display the link.

For example, target="\_blank" will display the link in a new tab.

▼ What are Boolean attributes?

attributes written without values

<input type="text" disabled>

▼ What is <!DOCTYPE html>?

the doctype is a historical artifact that **needs to be included for everything else to work right**

▼ What were doctypes intended for?

doctypes were meant to act as links to a set of rules that the HTML page had to follow to be considered good HTML

▼ What is the <html> element?

This element wraps all the content on the page. It is sometimes known as the root element.

▼ What is the <head> element?

This element acts as a container for everything you want to include on the HTML page, that isn't the content

▼ What is the <meta charset="utf-8"> element?

This element **specifies the character set for your document** to UTF-8, which includes most characters from the vast majority of human written languages.

With this setting, the page can now handle any textual content it might contain.

▼ What is the <title> element?



This sets the title of the page, which is the title that appears in the browser tab the page is loaded in.

▼ What is the <body> element?

This contains all the content that displays on the page, including text, images, videos, games, playable audio tracks, or whatever else.

▼ How to include special characters in HTML? (For example, if you want to use an ampersand or less-than sign, and not have it interpreted as code.)

### Special Characters in HTML

 Literal character	 Character reference
≤	&lt;
≥	&gt;

Aa Literal character	≡ Character reference
"	&quot;
'	&apos;
&	&amp;

#### ▼ How to do comments in HTML?

```
<!-- <p>I am a comment</p> -->
```

#### ▼ What is the art direction problem (responsive images)?

The general problem whereby you want to serve different cropped images, for various layouts

#### ▼ What is the resolution switching problem (responsive images)?

the problem whereby you want to serve different resolution images to high density/low density screens

e.g. a small image starts to look grainy when displayed larger than its original size

#### ▼ What is a raster image?

an image that is a set number of pixels wide and a set number of pixels tall

#### ▼ When will IE (Internet Explorer) be retired?

the browser will be retired on June 15, 2022

#### ▼ What attributes can you use when you want to display identical image content, just larger or smaller depending on the device?

srcset and sizes

```

```

▼ What is srcset?

an attribute that defines the set of images we will allow the browser to choose between, and what size each image is

Includes:

1. An **image filename** ( `elva-fairy-480w.jpg` )
2. The image's **intrinsic width in pixels** ( `480w` ) — note that this uses the `w` unit, not `px` as you might expect. This is the image's real size, which can be found by inspecting the image file on your computer

e.g. `elva-fairy-480w.jpg 480w`

▼ What is the w unit for an image?

the image's real size, which can be found by inspecting the image file on your computer

▼ What is sizes?

an attribute that defines a set of media conditions (e.g. screen widths) and indicates what image size would be best to choose, when certain media conditions are true

1. A **media condition** ( `(max-width:600px)` ) — you'll learn more about these in the [CSS topic](#), but for now let's just say that a media condition describes a possible state that the screen can be in. In this case, we are saying "when the viewport width is 600 pixels or less".
2. The **width of the slot** the image will fill when the media condition is true ( `480px` )

e.g. `(max-width: 600px) 480px`

▼ How can you get the viewport's (browser window) approximate width using the browser's JavaScript console?

```
document.querySelector('html').clientWidth
```

▼ What does this attribute do for mobile: `<meta name="viewport" content="width=device-width">` ?

this forces mobile browsers to adopt their real viewport width for loading web pages

### ▼ What does the <picture> element do?

it is a wrapper containing several <source> elements that provide different sources for the browser to choose from, followed by the all-important <img> element

```
<picture>
  <source media="(max-width: 799px)" srcset="elva-480w-close-portrait.jpg">
  <source media="(min-width: 800px)" srcset="elva-800w.jpg">
  
</picture>
```

### ▼ What does the media attribute do?

it contains a media condition that is a test that decides which image is shown

```
<picture>
  <source media="(max-width: 799px)" srcset="elva-480w-close-portrait.jpg">
  <source media="(min-width: 800px)" srcset="elva-800w.jpg">
  
</picture>
```

The first one that returns true will be displayed. In this case, if the viewport width is 799px wide or less, the first <source> element's image will be displayed. If the viewport width is 800px or more, it'll be the second one.

### ▼ What does the srcset attribute contain?

the path to the image to display

### ▼ For sources how can you supply MIME types?

You can supply MIME types inside type attributes so the browser can immediately reject unsupported file types.

```
<source type="image/svg+xml" srcset="pyramid.svg">
```

### ▼ What are MIME types?

Media types

they are identifiers for file formats and format contents

e.g. application, audio, image, message, multipart, text and video

▼ What is WebP?

an image format that has broad browser support but little "historical depth"

Provide a fallback in either JPEG or PNG format, such as with the <picture> element.

▼ What is an AVIF image?

a AV1 Image File Format (AVIF) is a powerful new, open source, royalty-free file format that encodes AV1 bitstreams in the High Efficiency Image File Format (HEIF) container

▼ What is image compression?

a type of data compression applied to digital images, to reduce their cost for storage or transmission

▼ .htm vs .html

HTM is used as an alternate to . HTML for some operating systems and servers that do not accept four-letter extensions