

▼ 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

<u>Aa</u> Literal character	■ Character reference
<u><</u>	<
<u>></u>	>

<u>Aa</u> Literal character	■ Character reference
	"
-	'
<u>&</u>	&

▼ How to do comments in HTML?

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

▼ 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 <u>CSS topic</u>, 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 element

```
<picture>
  <source media="(max-width: 799px)" srcset="elva-480w-close-portrait.jpg">
  <source media="(min-width: 800px)" srcset="elva-800w.jpg">
  <img src="elva-800w.jpg" alt="Chris standing up holding his daughter Elva">
  </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">
    <img src="elva-800w.jpg" alt="Chris standing up holding his daughter Elva">
    </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