



Semantic Elements

The so-called *semantic elements* were introduced to reflect important distinctions in the **meaning** of content. Few of these elements have any impact whatsoever on the content's *appearance*, but using them helps browsers, screen-readers, and other tools understand the content they contain.

On This Page

Header

Footer

Main

Article

Section

Aside

Nav

Figure & Figcaption

Video Lesson

Practice Exercise

Header

Not to be confused with <code>head</code> or headings (<code>h1</code>, <code>h2</code>, etc.), the <code>header</code> element should be used to contain introductory content for a page or <code>article</code>. It might contain things such as the title, a tagline, authorship information, etcetera.

You may use more than one header per page. For instance, you may want a header for the page itself, and an additional header for an article contained on the page.

In spite of the name, there is no requirement that a header be at the top of the page or article.

Footer

The footer element should be used to contain content about the creator or creation of a page or article. It might contain things such as publication date, authorship information, links to related content, etcetera.

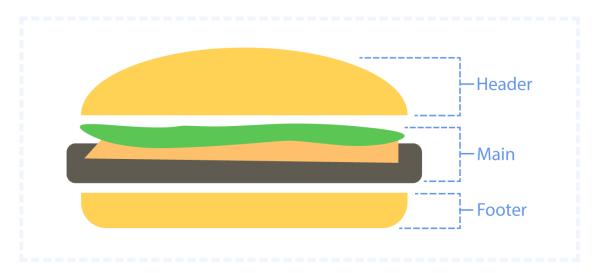
Similar to the header element, you may use more than one footer per page. For instance, you may want a footer for the page itself, and an additional header for an article contained on the page.

In spite of the name, there is no requirement that a footer be at the bottom of the page or article.

Main

The main element represents the primary content of a page. As such, it should only be used once per page. This is the defacto target for screen-reader users who wish to skip the sort of introductory content and navigation that might, for instance, be found in the header of a page.

A common pattern, though certainly *not required*, is for a site to have a common <code>header</code> on every page with things like a logo and the main <code>nav</code>, a unique <code>main</code> with the specific contents of each page, then a common <code>footer</code> on every page with things like copyright information or a company-specific navigation. I tend to think of this pattern as a sort of sandwich:



A common pattern is for pages to have a header, then a main, then a footer.

Article

The article element signifies content that could stand alone as a document. A good way to think of it is to ask yourself if the content would make sense if you shared it with someone who didn't know what website it came from. Examples of content that might use an article element are articles (go figure), blog posts, reviews, essays, user-submitted comments, etcetera.

Because an article acts as an independent unit of content, it may contain most of the other semantic elements, such as <code>header</code>, <code>footer</code>, <code>section</code>, <code>aside</code>, and <code>nav</code>. It could also contain nested articles, such as when the <code>article</code> element is used for post comments.

To decide if an article is appropriate, ask yourself if the content would make sense completely on its own.

The article element should only be used for the full and actual content it represents. In other words, it should not be used for the links in a list of articles or posts.

Section

The section element is the most nonspecific of the semantic elements and represents a thematically-related section of a page, application, or article. It should be used only in instances where other semantic elements don't make sense. Example uses might include, a chapter or subsection of an article or a distinct functional area of a page.

The section element should **always** have a natural heading demarcating its content.

If you simply want a container for styling or scripting purposes, a div should be used instead.

Aside

The aside element should contain secondary or related content to a page or article. If used in an article, the content should be related to the article, such as a list of related terms or a timeline. On a page as a whole, it might include a blogroll, advertising, etcetera.

You can think of the aside element as containing *bonus* content; something extra, but not required for understanding.

Nav

The nav element is relatively straightforward and should be used for sets of links that represent major navigation for a site or page. Examples might include primary site navigation, pagination links, a table of contents, or breadcrumb navigation.

nav is not typically used for lists or articles or posts.

Figure & Figcaption

The figure element is used to contain a useful image, illustration, diagram, code snippet, et cetera, that helps to explain the content in the text.

You might think of figure as a way of saying "for example...."

It is important to remember figure should not be used for purely decorative or supplemental images or content. A great example would be a chart illustrating data that is referenced in a post or an image that shows key information. Things like banner images or incidental images should not use figure.

It is important to note the difference between figure and aside. If the content is more generally related and not especially helpful to understanding, use aside. If the content is essential but its position in the flow of content isn't important, use figure.

It's okay to have a figure without a figcaption, but every figcaption should be inside a figure.

The figcaption element can be used for a caption or legend within a figure . It is not required for every figure to contain a figcaption . The figcaption may come before or after the primary content of a figure . Only one figcaption may be used per figure .

Video Lesson

The following video demo is fully interactive. You can pause at any time to directly edit the code, and resume playback to restore to where you left off.

Create Account Log In

Practice Exercise

Open exercise in a new tab

Let's test your knowledge

Enter your first name

Start the Lesson

You must complete at least 70% of steps to pass.

You may start over at any time.

Works best in the Chrome browser.

Previous Chapter:

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How are websites built and what are they made of?

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HTML Introduction

What is HTML? What are the rules of the language?

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Practice Exercise

• File Structure

How to structure the folders and files of a website project

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Practice Exercise

Skeleton Code

The code that should be included in every HTML document

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Basic HTML Text Elements

The most common elements for structuring text content

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The most fundamental type of interactivity in HTML

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Semantic Elements

A set of elements aimed at adding meaning to the parts of a web page

```
Header | Footer | Main | Article | Section | Aside | Nav |
Figure & Figcaption | Video Lesson | Practice Exercise
```

• Divs & Spans

Meaningless elements

Div versus Span | Practice Exercise

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Image formats, the HTML image element, and inline SVG

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How to accept input or information from users

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• Introduction to CSS

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Different ways CSS can select HTML elements to style

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How to control the appearance of the area behind a page or element

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How to apply unique styles such as shadows and rounded corners

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How to make elements stretch or squish depending to fit the space available

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• Responsive Design

Using media queries to adapt a page to different screen sizes

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Web Fonts

Custom typefaces for web pages

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For when you want full manual control of the placement of an element

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CSS Transitions & Animation

For adding motion to web pages

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• Advanced Typographic CSS

Techniques for creating cohesive and responsive typography

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For creating reusable CSS values

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Insert visual content with CSS

Pseudo-Elements | Styling Inserted Content | Absolute Positioning

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• Styling a Responsive Nav

A simple example of responsive design for site navigation

The HTML | Mobile-First Styles | Making it Responsive

• Site Icons (Favicons)

An icon for the browser tab and elsewhere

Creating a Favicon | Using a Favicon on a Site

• Git / Github

Version control to keep track of changes

Repositories | Commits | Workflow | Video Lesson | Resource Links

Going Beyond

Want to know more about front-end coding?

General | More HTML | More CSS | Animation | Javascript

Reference Resources

Practical Challenges

A series of step-by-step challenges to practice what you've learned by creating a realistic website

• Code Style Guide

A guide for formatting and other best practices for writing your code HTML Guide | CSS Guide

Glossary

Some of the most common HTML & CSS terms and their meanings General Terms | HTML Terms | CSS Terms

Website Project Checklist

Make sure you have considered these items before completing a website project

General | HTML-Specific | CSS-Specific

• Reference Index

An index of all HTML elements, HTML attributes, and CSS properties discussed on this site

HTML Elements | HTML Attributes | CSS Properties

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