

Semantic HTML

Semantics is a branch of linguistics that focuses on meaning. When web designers talk about the semantic web, it's a conversation about the use of HTML tags and structure to convey meaning. Semantic markup in HTML focuses on writing content that is readable by *both* computers *and* humans. When content is created using semantic markup, it becomes more accessible.

HTML5 introduces a variety of tags that can be used to structure content to make it meaningful to a machine. Remember that web languages are used not just by users, but also by search engines who rely on structured content to generate search results. Assistive technologies like screen readers need these tags to express content. SEO and accessibility are enabled through semantic HTML tags.

Writing Semantic Mark-up

HTML is made up of elements that are semantic and non-semantic elements. Semantic elements convey meaning about the content within the element to the browser (computer). Non-semantic elements do not convey any meaning.

An example of a non-semantic element is the `div` element. On its own, this tag doesn't tell the computer anything about the meaning of the contents of the element, but it's been widely used to define the different parts of a webpage, for example:

```
<div id="header">
```

The `div` tag needs an `id` attribute to define its meaning on a page. For example, `<div id="header">`, or `<div id="footer">`. Both `div` tags impart meaning that identifies information about each of these tags on a the page—one identifying the page's header section, the other identifying the page's footer section.

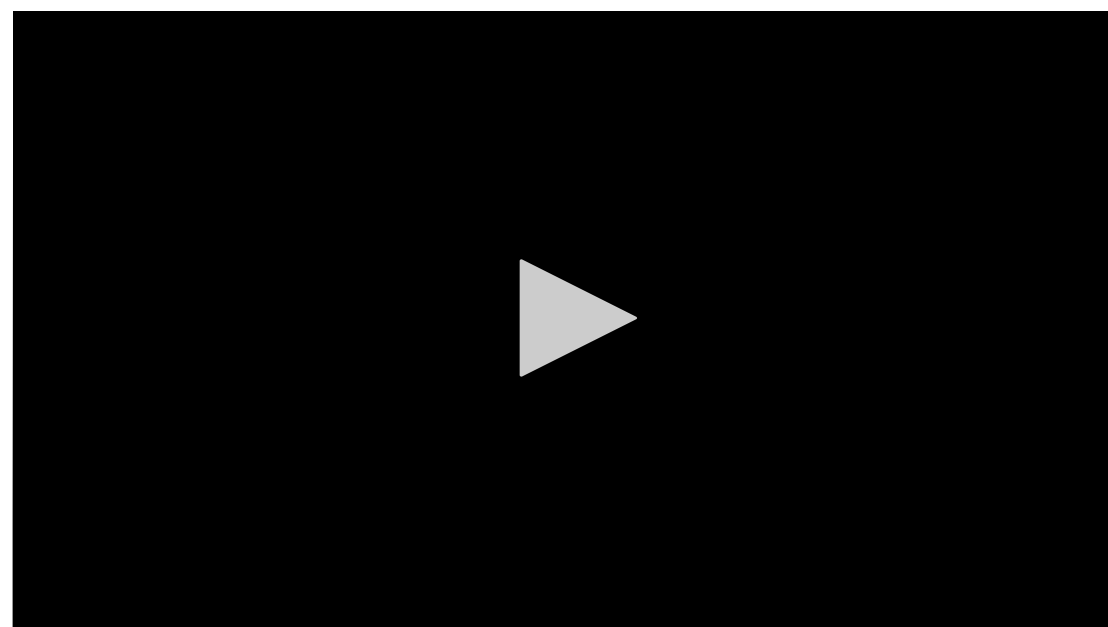
Before the development of semantic markup, many webpages used a variety of `id` and `class` attributes within `div` tags to add meaning to the contents of non-semantic elements. Many semantic tags come from webpage markup analytics. Using this data, the W3C identified new semantic tags to include in HTML5, for example `<header>` and `<footer>`.

The most common semantic elements can be grouped into four categories. The table below defines each category type, as well as provides examples of semantic tags within each category. Note: this table does not list all semantic elements—there are roughly [100 semantic elements](#).

Categories of Common Semantic Elements	
Textual meaning	<p>Semantic tags that provide semantic meaning to textual content, often replacing the non-semantic <code></code> tag:</p> <ul style="list-style-type: none">• <code><blockquote></blockquote></code>: identifies a section of text from another source on a webpage• <code><cite></cite></code>: identifies the original source of content on a webpage• <code></code>: identifies a section of text that should be rendered in <i>italics</i>• <code></code> identifies a section of important text.

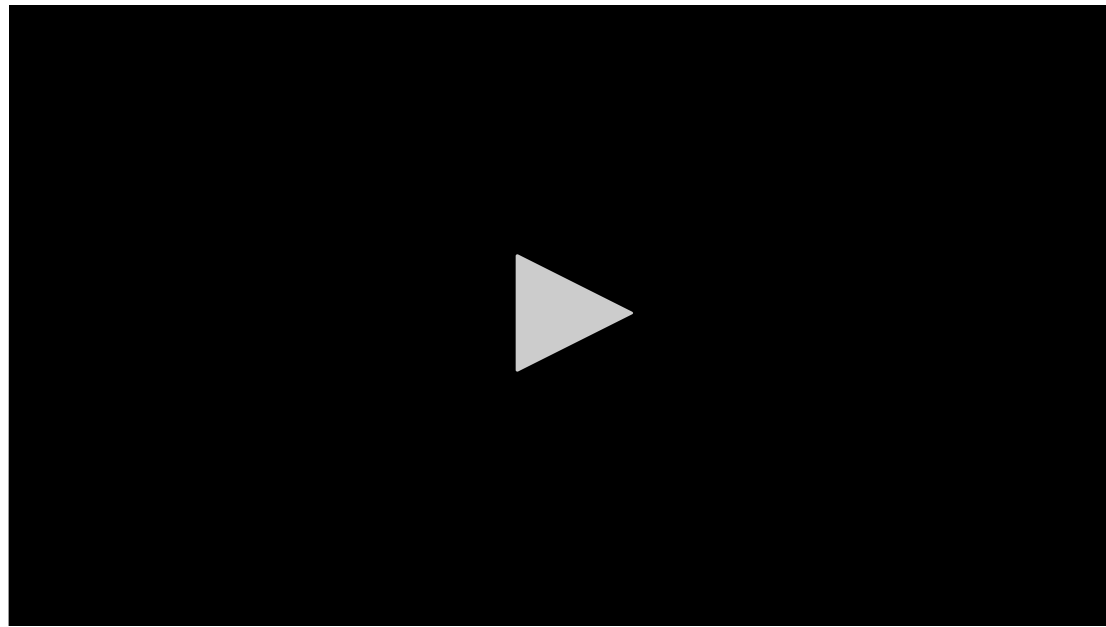
Document structure	<p>Semantic tags that provide semantic meaning to grouping attributes previously used in conjunction with the div tag. Some examples are:</p> <ul style="list-style-type: none">• <code><header></header></code>: identifies the header section of a webpage• <code><footer></footer></code>: identifies the footer section of a webpage• <code><nav></nav></code>: identifies a section of a webpage associated with navigation• <code><section></section></code> identifies a section of a webpage
Media style	<p>Semantic tags that provide semantic meaning by identifying the type of media contained within the tag. Additionally, these tags signal to the browser to activate the resource needed to correctly render the media type on the webpage.</p> <ul style="list-style-type: none">• <code><audio></audio></code>: identifies audio content and signals to the browser to activate the best resource to play the audio based on the user's device and browser.• <code><video></video></code>: identifies video content and signals to the browser to activate the best resource to play the video based on the user's device and browser.
Correlation	<p>Semantic tags that provide semantic meaning by identifying correlations between multiple elements on a webpage.</p> <ul style="list-style-type: none">• <code></code>: identifies an ordered list of content on a webpage• <code></code>: identifies an unordered list of content on a webpage• <code><figure></figure></code>: identifies a content associated with a chart, caption, image, or graph on a webpage

Video Commentary: More on Semantic HTML



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Semantic HTML Tip

It is always a best practice to look to see if there is a semantic tag available for a specific use, before resorting to using a non-semantic tag.



Review Checkpoint

To test your understanding of the content presented in this assignment, please click on the Questions icon below. If you have trouble answering any of the questions presented here, you are always free to return to this or any assignment to re-read the material.



1. Which of the following semantic elements identifies a section of a webpage associated with navigation?

a. <loc>

Incorrect. Try again.

b. <menu>

Incorrect. Try again.

c. <nav>

Correct. <nav> is used to identify a section of a webpage associated with navigational links.

d. <navigation>

Incorrect. Try again.

2. Which of the following semantic elements is used to identify an original source of content on a webpage?

a. <blockquote>

Incorrect. Try again.

b. <cite>

Correct. The semantic tag <cite> is used to identify the original source of content on a page.

c. <section>

Incorrect. Try again.

d. None of the above

Incorrect. Try again.