

Lesson:

Semantics and its importance



Topics Covered

- Introduction to semantic tag
- Understanding semantic tags with example
- Benefits of using semantic tags

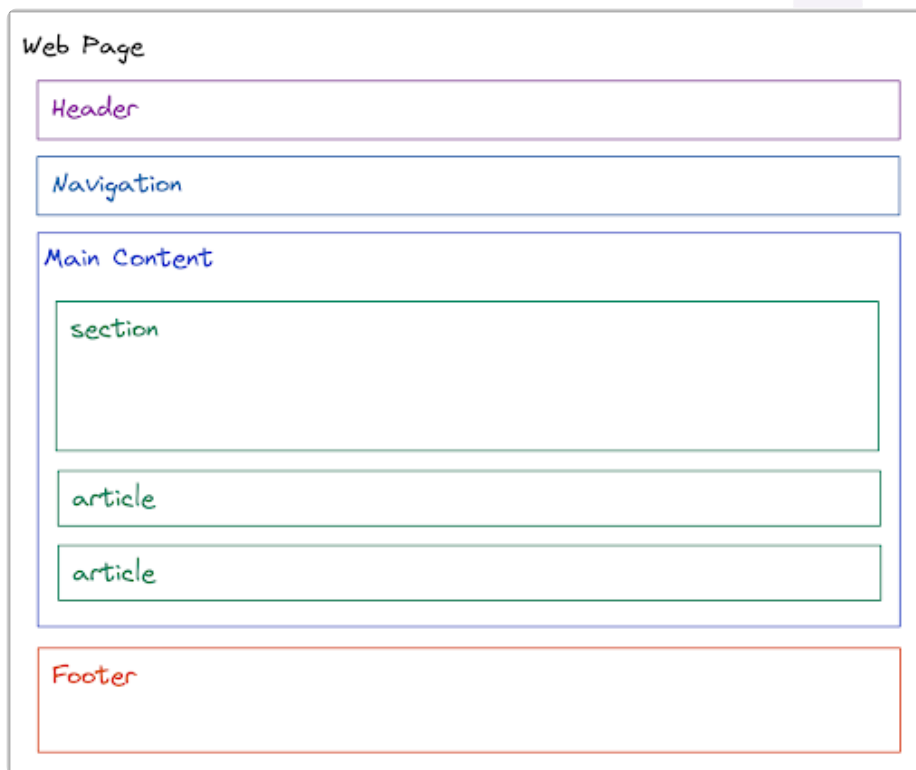
Introduction to semantic tags

Semantic tags are HTML tags that give **meaning to the content** of a web page beyond just its presentation. They provide information about the structure and meaning of the content, making it easier for **search engines, screen readers**, and other tools to understand the page and its content.

Understanding semantic tags with an example

To understand semantics, we will build a web page using newly introduced structural semantic elements in HTML.

See below web page structure,



Unlike traditional HTML tags, semantic tags focus on the meaning of the content, rather than on the visual appearance. Like in the above example, the **<header>** tag is a semantic tag indicating that the header section of a page begins, while the **<article>** tag indicates that the enclosed content is an **independent piece of content** that can stand alone and so on.

Let's code a web page, using all common semantic tags to define a common web page structure.

Unset

```

<-- semantic.html --!>

<!DOCTYPE html>
<html>|
<head>
    <title>Example of Semantic HTML Tags</title>
</head>
<body>
    <header>
        <h1>Example of Semantic HTML Tags</h1>
        <nav>
            <ul>
                <li><a href="#">Home</a></li>
                <li><a href="#">About Us</a></li>
                <li><a href="#">Services</a></li>
                <li><a href="#">Contact Us</a></li>
            </ul>
        </nav>
    </header>
    <main>
        <article>
            <header>
                <h2>What are Semantic HTML Tags?</h2>
            </header>
            <p>Semantic HTML tags are tags that give
meaning to the content they surround. They provide
information about the structure and meaning of the
content on a web page, making it easier for search
engines, screen readers, and other tools to understand
the page and its content.</p>
        </article>
        <article>
            <header>
                <h2>Examples of Semantic HTML Tags</h2>
            </header>
            <ul>
                <li>header: Indicates the beginning of a
header section</li>
                <li>nav: Defines a section of navigation
links</li>
                <li>article: Indicates an independent,
self-contained piece of content</li>
            </ul>
        </article>
    </main>
</body>
</html>

```

```

        <li>footer: Defines a footer section at
the end of a page or article</li>
    </ul>
</article>
</main>
<footer>
    <p>&copy; 2023 Example Company. All rights
reserved.</p>
</footer>
</body>
</html>

```

In the above example, we've used many semantic tags, such as **<header>**, **<nav>**, **<main>**, **<article>**, **<footer>**, **<h1>**, **<p>** to provide additional information about the structure and meaning of the content on the page. Lets understand them in below table,

Sr.no	Semantic tags	Description
1	<aside>	Defines content aside from the page content
2	<details>	Defines additional details that the user can view or hide
3	<figure>	Specifies self-contained content, like illustrations, Diagrams, photos, code listings, etc
4	<footer>	Defines a footer for a document or section
5	<header>	Specifies a header for a document of section
6	<main>	Specifies the main content of document
7	<section>	Defines a section in document
8	<nav>	Defines navigation links
9	<article>	Defines an article
10	<h1>	Defines a Heading
11	<p>	Defines a paragraph

These tags make the code more readable and easier to understand, both for humans and for web browsers and other tools that might be parsing the HTML.

Browser output -

Example of Semantic HTML Tags

- [Home](#)
- [About Us](#)
- [Services](#)
- [Contact Us](#)

What are Semantic HTML Tags?

Semantic HTML tags are tags that give meaning to the content they surround. They provide information about the structure and meaning of the content on a web page, making it easier for search engines, screen readers, and other tools to understand the page and its content.

Examples of Semantic HTML Tags

- header: Indicates the beginning of a header section
- nav: Defines a section of navigation links
- article: Indicates an independent, self-contained piece of content
- footer: Defines a footer section at the end of a page or article

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Benefits of using semantic tags

- By using Semantic tags in our code, we can **provide additional information** about that document by defining the layout and sections of the webpage.
- Semantic elements are of great help to people using screen readers. The additional information provided by semantic tags **helps screen readers** understand the content better and help them to determine the different sections within a page more efficiently.
- HTML Semantic tags help the browser determine the purpose of the page and its content. Semantic tags also help in **Search Engine Optimization** as they help browsers interpret the content more easily by making content more adaptive.

