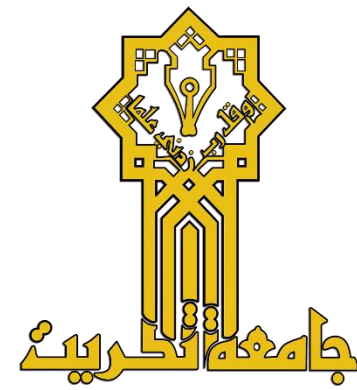




WEB PROGRAMMING



Department of Computer Sciences
Academic Year: 2023-2024
First stage
Semester: Two

Lecture - 10

By:
Harith Abdullah
Yahya Layth Khaleel

Span tag in HTML

In HTML, the `` tag is used to group inline-elements in a document. It doesn't inherently represent anything specific semantically, nor does it affect the layout directly. However, `` is quite useful for styling purposes with CSS or manipulating elements with JavaScript because it allows you to target inline elements or segments of text without introducing any additional formatting or structure.

Span tag in HTML

```
<!DOCTYPE html>
<html>
<head>
  <title>Span Example</title>
</head>
<body>
  <p>Welcome to our website. For support, please contact us at <span style="color:
blue; font-weight: bold;">support@example.com</span>.</p>
</body>
</html>
```

Div tag in HTML

- The div tag is known as the Division tag. The div tag is used in HTML to make divisions of content on the web page like (text, images, header, footer, navigation bar, etc).
- Div tag has both opening(<div>) and closing (</div>) tags and it is mandatory to close the tag.
- The <div> tag is a fundamental HTML element used to structure and group larger blocks of content or layout parts on a web page.
- Unlike the tag, which is used for inline grouping and styling, <div> is a block-level element and naturally takes up the full width available, starting on a new line before and after the element.

Div tag in HTML

```
<!DOCTYPE html>
<html>
<head>
  <title>Simple Div Example</title>
</head>
<body>
  <div>
    <h1>My Simple Website</h1>
    <p>Welcome to my simple website built without
CSS and JavaScript!</p>
  </div>
  <div>
    <h2>About Me</h2>
    <p>Hello, I'm a web enthusiast learning to
build web pages.</p>
    <p>I enjoy exploring basic web structures and
plain HTML.</p>
  </div>
  <div>
    <h2>Contact</h2>
    <p>You can contact me via email:
email@example.com</p>
  </div>
  <div>
    <p>This is the footer of the webpage. It's
plain and simple.</p>
  </div>
</body>
</html>
```

My Simple Website

Welcome to my simple website built without CSS and JavaScript!

About Me

Hello, I'm a web enthusiast learning to build web pages.

I enjoy exploring basic web structures and plain HTML.

Contact

You can contact me via email: email@example.com

This is the footer of the webpage. It's plain and simple.

Div tag in HTML

```
<!DOCTYPE html>
<html>
<body>
<h1>The div element</h1>
<div style="border: 10px outset red;
background-color: lightblue; text-align:
center;">
  <h2>This is a heading in a div element</h2>
  <p>This is some text in a div element.</p>
</div>

<p>This is some text outside the div element.
</p>

</body>
</html>
```

The div element

This is a heading in a div element

This is some text in a div element.

This is some text outside the div element.

Difference between <div> and

The <div> tag and tag are used to represent the part of the webpage, the <div> tag is used as a block part of the webpage, and the tag is used as an inline part of the webpage like below:

<div>

A Computer Science

First Stage

</div>

Difference between <div> and

```
<!DOCTYPE html>
<html>

<body>
  <h2>Welcome To Our Course</h2>
  <div style="border: 10px outset blue; text-align:
center;">
    <p>
      <span style="background-color:lightgreen">
        Web Programming
      </span>
      is A Computer Science Course where you can
      <span style="color:blue;">
        study
      </span> with draw your own
      <span style="background-color:lightblue">
        thinks
      </span>
      and share your knowledge with the world!
    </p>
  </div>
</body>

</html>
```

Welcome To Our Course

Web Programming is A Computer Science Course where you can study with draw your own thinks and share your knowledge with the world!

Article tag in HTML

- The `<article>` tag is very useful in modern web development as it helps organize web content into discrete, manageable blocks that are easier to manage, style, and also optimize for search engines and accessibility. It defines the scope of content sections that are meant to be syndicated or stand alone, such as news articles, blog posts, etc., thereby improving the semantic structure of web pages.

```
<article>  
.....  
.....  
</article>
```

Article tag in HTML

Benefits of Using `<article>`:

- **Accessibility:** Helps screen readers and other assistive technologies understand the structure and boundaries of independent content units.
- **SEO (Search Engine Optimization):** Enhances content discoverability by clearly defining sections of content that are important and potentially syndicable.
- **Flexibility:** Content wrapped in an `<article>` tag can easily be styled, manipulated, or extracted due to its self-contained nature.

Article tag in HTML

```
<!DOCTYPE html>
<html>
<body>

<h1>The article element</h1>

<article>
  <h2>Google Chrome</h2>
  <p>Google Chrome is a web browser developed by
Google, released in 2008. Chrome is the world's
most popular web browser today!</p>
</article>

<article>
  <h2>Mozilla Firefox</h2>
  <p>Mozilla Firefox is an open-source web browser
developed by Mozilla. Firefox has been the second
most popular web browser since January, 2018.</p>
</article>

<article>
  <h2>Microsoft Edge</h2>
  <p>Microsoft Edge is a web browser developed by
Microsoft, released in 2015. Microsoft Edge
replaced Internet Explorer.</p>
</article>

</body>
</html>
```



The article element

Google Chrome

Google Chrome is a web browser developed by Google, released in 2008. Chrome is the world's most popular web browser today!

Mozilla Firefox

Mozilla Firefox is an open-source web browser developed by Mozilla. Firefox has been the second most popular web browser since January, 2018.

Microsoft Edge

Microsoft Edge is a web browser developed by Microsoft, released in 2015. Microsoft Edge replaced Internet Explorer.

Article tag in HTML

```
<!DOCTYPE html>
<html>
<head>

  <title>Styled Article Tag Example</title>

</head>
<body>
  <article style="border: 1px solid #cccccc;
padding: 10px; margin-top: 20px;
                background-color: #f8f8f8; ">
    <h1>News Story Title</h1>
    <p>Published on: <time datetime="2024-04-12"
style="color: #777777">April 12, 2024</time></p>
    <p>This article describes an event in a self-
contained way, making it a perfect example of how to
use an article tag in HTML.</p>
  </article>
</body>
</html>
```

News Story Title

Published on: April 12, 2024

This article describes an event in a self-contained way, making it a perfect example of how to use an article tag in HTML.

The `<aside>` tag

The `<aside>` tag in HTML is a semantic element used to mark up portions of a page that could be considered separate from the main content. These sections are often related to the surrounding content but serve a secondary role, such as providing additional information, contextual ads, sidebars, or callouts. The content inside an `<aside>` element should be indirectly related to the main content, making it suitable for tangents or supplementary information.

The <aside> tag

```
<!DOCTYPE html>
<html>
<head>
  <meta>
  <title>Article with Aside Example</title>
</head>
<body>
  <article>
    <h1>Introduction to HTML5</h1>
    <p>HTML5 is the latest evolution of the
standard that defines HTML. It introduces a number of
new elements and attributes that provide greater
flexibility and interoperability.</p>

    <aside>
      <h2>Did You Know?</h2>
      <p>HTML5 was published as a public
working draft by the W3C in January 2008 and was
finalized as a complete W3C Recommendation in October
2014.</p>
    </aside>

    <p>With HTML5, developers can create more
interactive and dynamic websites. It supports video
and audio elements natively, and it provides better
support for embedded content.</p>
  </article>
</body>
</html>
```

Introduction to HTML5

HTML5 is the latest evolution of the standard that defines HTML. It introduces a number of new elements and attributes that provide greater flexibility and interoperability.

Did You Know?

HTML5 was published as a public working draft by the W3C in January 2008 and was finalized as a complete W3C Recommendation in October 2014.

With HTML5, developers can create more interactive and dynamic websites. It supports video and audio elements natively, and it provides better support for embedded content.

The <aside> tag

```
<!DOCTYPE html>
<html>
<body>
<h1>The Benefits of Urban Green Spaces</h1>
<p>Urban green spaces such as parks, gardens, and green rooftops provide numerous benefits. They improve air quality, provide recreational opportunities, and can significantly enhance the mental and physical health of city residents.</p>

<aside style="float: right; width: 25%; padding: 20px; background-color: #f0f0f0;">
  <h2>Did You Know?</h2>
  <p>Parks and green spaces reduce stress and increase overall happiness. They are also known to lower temperatures in urban areas during hot weather.</p>
</aside>
<p>Urban green spaces such as parks, gardens, and green rooftops provide numerous benefits. They improve air quality, provide recreational opportunities, and can significantly enhance the mental and physical health of city residents.</p>
<p>Urban green spaces such as parks, gardens, and green rooftops provide numerous benefits. They improve air quality, provide recreational opportunities, and can significantly enhance the mental and physical health of city residents.</p>
</body>
</html>
```

The Benefits of Urban Green Spaces

Urban green spaces such as parks, gardens, and green rooftops provide numerous benefits. They improve air quality, provide recreational opportunities, and can significantly enhance the mental and physical health of city residents.

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Did You Know?

Parks and green spaces reduce stress and increase overall happiness. They are also known to lower temperatures in urban areas during hot weather.

HTML `<section>` Tag

The HTML `<section>` tag is used to define a section in a document. This tag is part of HTML5's grouping content elements and is intended to group thematic content blocks within a document. The `<section>` tag can be useful for organizing content into logically grouped areas that make sense when read independently from the rest of the page.

Examples of `<section>` Usage

- A chapter in a book
- A group of related articles in a magazine or newspaper
- Different sections of a single-page application
- Parts of a blog or news site articles, such as the comment section or the navigation links that group related items

HTML <section> Tag

```
<html>
<body>
  <header>
    <h1>Welcome to My Website</h1>
    <nav>
      <ul>
        <li><a href="#news">News</a></li>
        <li><a href="#about">About Us</a></li>
        <li><a href="#contact">Contact</a></li>
      </ul>
    </nav>
  </header>
  <section id="news">
    <h2>Latest News</h2>
    <article>
      <h3>Heading of the First News Item</h3>
      <p>Description about the first news article...</p>
    </article>
    <article>
      <h3>Heading of the Second News Item</h3>
      <p>Description about the second news article...</p>
    </article>
  </section>
  <section id="about">
    <h2>About Us</h2>
    <p>We are a team dedicated to bringing you the latest news. Our mission is to
provide timely and accurate information.</p>
  </section>
  <section id="contact">
    <h2>Contact Information</h2><p>You can contact us via email</p>
  </section>
  <footer> <p>Copyright © 2024</p> </footer>
</body> </html>
```

Welcome to My Website

- [News](#)
- [About Us](#)
- [Contact](#)

Latest News

Heading of the First News Item

Description about the first news article...

Heading of the Second News Item

Description about the second news article...

About Us

We are a team dedicated to bringing you the latest news. Our mission is to provide timely and accurate information.

Contact Information

You can contact us via email

Copyright © 2024

More References Used

- https://www.w3schools.com/tags/tag_article.asp
- https://www.w3schools.com/tags/tryit.asp?filename=tryhtml5_article
- <https://www.geeksforgeeks.org/difference-between-div-and-span-tag-in-html/>
- <https://www.freecodecamp.org/news/span-vs-div-html-tags-what-is-the-difference/>
- https://www.w3schools.com/tags/tag_article.asp
- https://www.w3schools.com/tags/tag_aside.asp
- https://www.w3schools.com/tags/tag_section.asp



THANK YOU