

23' Jan Semantics

Assignments

Q.1) What are the new things introduced in HTML5?

Ans.) HTML5 (Hypertext Markup Language) used to structure and layout the web pages. In HTML 5 lots of new things are introduced ,which are following:

New Elements: HTML5 introduces new elements such as <header>, <nav>, <section>, <article>, <aside>, <footer>, <audio>, <video>, and <canvas>, which provide new ways to structure and present content on a webpage. These new elements make it easier for developers to create structured, meaningful and accessible webpages.

Improved Semantic Support: HTML5 provides improved semantic support, with new tags that give meaning to the content they contain, making it clear to both the browser and the user what the content is and how it should be displayed.

Multimedia Support: HTML5 includes new multimedia tags like <audio> and <video>, which can be embedded directly into the webpage without the need for additional plug-ins. This improves the overall user experience and reduces the need for third-party software.

Offline Support: HTML5 allows for offline support, which enables web applications to work without an internet connection. This is useful for

creating web applications that can be used in remote or low-bandwidth areas.

Mobile-friendly: HTML5 is designed to be mobile-friendly and responsive, which means it can adapt to different screen sizes and resolutions. This allows developers to create mobile-optimized webpages that work well on both desktop and mobile devices.

Better Performance: HTML5 has improved performance, as it allows for faster parsing, caching, and execution of webpages. This results in faster loading times and better overall performance.

Basically, HTML5 is an updated version of HTML that provides new features and capabilities that make it easier for developers to create more powerful and interactive web pages , while also improving the accessibility , performance and user experience.

Q.2) What are semantic tags? Give a couple of examples.

Ans.) Semantic , in the context of web development , means giving meaning to the various elements of a webpage. In other words, it's about using the appropriate HTML elements to describe the content of the web page in a way that is meaningful to both humans and machines.

HTML5 introduced new semantic tags such as `<header>` , `<nav>` , `<section>` , `<main>` , `<article>` , `<aside>` , `<footer>` which makes it easy to understand the purpose of different elements of a webpage. These tags give meaning to the content they contain , making it clear to both the browser and the user what the content is and how it should be displayed.

Basically , Semantic HTML improves the overall accessibility and search engine optimization of a webpage as it gives search engines and screen readers a clear understanding of the content and structure of the page.

Q.3) List some uses of semantic tags.

Ans.) These are the following semantic tags:

- **<header> tag** is used to define the header of a webpage, which typically contains the site title , logo and main navigation.
- **<nav> tag** is used to define the navigation section of a webpage , which contains the links to different pages of the website.
- **<section> tag** is used to define a specific section of the webpage, such as the main content, sidebar, or footer.
- **<article> tag** is used to define a self-contained piece of content on a web page. This tag is used to mark up content that is independent and can make sense on its own, such as blog post , a news story, or a forum post.
- **<aside> tag** is used to define a section of a webpage that contains content that is related to the main content but can be considered separate from it. This tag is used to mark up content such as sidebars , pull quotes or supplementary information.
- **<footer> tag** is used to define the footer section of a web page , typically containing information such as the copyrights notice , contact information and links to related pages. It is used to mark up the bottom section of the webpage where we would typically find information that is not critical to the main content , but still useful for the user.

These are some semantic tags which we use mostly in our web development journey. There are other semantic tags as well which we use in html to optimize our web page.

