FUNDAMENTALS

Terms

Attributes	HTML element
Client	HTTP (Hypertext Transfer Protocol)
CSS	HTTP request
CSS declaration	HTTP response
CSS property	JavaScript
CSS rule	Opening/closing tags
DOM (Document Object Model)	Server
HTML	URL (Uniform Resource Locator)
HTML document	Validation

Summary

- *HTML (Hypertext Markup Language)* is a markup language used to define the structure and contents of web pages.

- *CSS (Cascading Stylesheets)* are used for styling web pages.

- *JavaScript* is a programming language used for making web pages interactive.

- To view a web page, we enter its *URL (Uniform Resource Locator)* into the browser's address bar.

- To view the HTML behind a web page, we right-click on the page and select View Source or View Page Source.

- *HTTP (Hypertext Transfer Protocol)* is a set of rules that clients and servers use to communicate and exchange data.

- When you visit a website, your browser (client) sends an *HTTP request* to the server and receives an *HTTP response*. The response includes an *HTML document* that represents the page you're visiting. The browser reads the HTML document to construct a *Document Object Model* (an in-memory representation of the elements on the page). Once the DOM is ready, the browser *renders* (displays) the target page.

- We can use the Network tab of Chrome DevTools to inspect HTTP requests and responses exchanged between the browser and the server.

- An HTML document consists of a `DOCTYPE` declaration that specifies the version of HTML being used followed by a tree (hierarchy) of elements that define the structure and content of the document.

- The *root element* in an HTML document is the `html` element which always includes a `head` and a `body` element. The `head` element contains information about the page such as its title. The `body` element includes the structure and content of the page.

- Most HTML elements include an *opening and closing tag*.

- We can use *attributes* to provide additional information about an element (like the source of an image). Attributes are coded as part of the opening tag.

- To style an element using CSS, we write a *CSS rule* which consists of a *selector* and one or more *declarations*.

- The selector is used to target one or more elements. We can select elements by their type, class, ID and so on.

- A declaration consists of a property, a colon, a value and is terminated by a semicolon.

- Prettier is the most popular VSCode extension for formatting code.

- Using *validation* services we can ensure that our HTML/CSS code is valid and follows the official rules. This helps us get better rankings in search engines.