Study

HTML

The Web consists of three programming languages: HTML, CSS, and Javascript. HTML, short for HyperText Markup Language, is responsible for marking up the content of a website. It informs the user's computer about various elements on the page. Moreover, HTML grants access to a wide range of built-in browser functionalities that can be utilized by incorporating specific HTML code.

CSS

CSS, short for Cascading Style Sheets, is like the stylist of a web page. It is responsible for how everything looks — the colors, fonts, and sizes. It is also capable of adding cool animations and interactions to spice things up.

JavaScript

JavaScript is a programming language that allows you to create really cool and interactive stuff. When you have a fancy and complex interface on a website, chances are JavaScript is behind the scenes making it work smoothly for the users. It is like the superhero of programming languages.

**Text Formatting**

**HTML Syntax**

HTML is a language used to structure web pages. It uses tags, which are enclosed in less-than and greater-than symbols, to mark different elements.

**Nested HTML element**

In fact, an entire HTML document is basically a bunch of HTML elements nested inside each other.

**HTML Paragraphs**

Add an opening <p> tag before the first paragraph and a closing </p> tag at the end. This tells the browser that it is a separate paragraph.

**HTML Headlines**

The HTML elements used for marking up headlines come in six different types: h1, h2, h3, h4, h5, and h6. When viewed in a browser, each headline has a distinct visual effect.

**HTML Bold and Italics**

In HTML, we have two different elements to convey this distinction. We use the "<i>" element to apply visual italics and the "<em>" element to add emphasis

**Bold** in HTML. The first one is the "<strong>" element, which is used to show importance, seriousness, or urgency.

**HTML Lists**

-Unordered lists are the most commonly used type. Take, for instance, a list of ingredients for a recipe. Each item in the list is enclosed in an <li> element, which represents a list item.

-The term "ol" stands for ordered list, indicating that there is a specific order to the items on the list.

-To create a definition list, we use specific elements. The term or key is enclosed in a <dt> tag, which stands for definition term. The description or value is enclosed in a <dd>  tag, which stands for definition description. You can have multiple descriptions for each term by using multiple  <dd>tags. The entire list is wrapped in a <dl> tag, representing the definition list. Interestingly, the <dd> tags and <dl> tags are placed side by side without any additional wrapper around them. This is simply how a definition list is structured.

**HTML Quotes**

**HTML Code, pre and br**

Sometimes you might want to showcase code on a webpage. Let's say you are writing an article on webpage creation or you want to explain some code syntax.

The br element is a simple tag without an opening or closing tag. It does not contain anything inside it; it just indicates where a line break should happen.

Use HTML and the pre element to achieve that. Wrap the poem in pre tags, and now you can see that the browser respects the spacing, line breaks, and everything else. We can even insert a random character anywhere, and it will stay exactly where we put it.

**HTML Superscripts, Subscripts and Small Text**

Mathematical formulas have many superscripts, like five squared. Or in footnotes, the little marker for a footnote is a superscript.

Instead, wrap the two in its sub-element, and now it drops down below the baseline and gets a little smaller.

**Troubleshooting and Debugging HTML Code**

Popular browsers like Safari, Chrome, and Edge have developer tools with an HTML panel that looks similar.

If you are ever about the markup to use, visit other websites with similar content and use the developer tools to find out which elements they used. It is especially useful if the website was built by a team we admire because studying others' work helps to understand how to structure your own HTML. Additionally, we can use the HTML inspector in the dev tools to debug mistakes.

**HTML Attributes**

-When looking at global attributes in HTML that work universally, we will focus on four highly useful ones. The class attribute is the most commonly used. It allows us to assign a reusable name to any element, which can then be styled using CSS for all elements sharing that class.

-Another popular attribute is the ID. It is similar to the class attribute, but we can only use unique names once on an entire HTML page. IDs can be used for CSS targeting, but are more specific, which can sometimes cause issues. As a result, CSS developers usually prefer using classes.

**ARIA Roles**

ARIA (Accessible Rich Internet Applications) is a set of roles and attributes that enhance web accessibility for people with disabilities, especially when interacting with web content developed using JavaScript.

**HTML Navigation and Linking**

When we want to create a link, we use the A element, which stands for anchor. To do this, we need to add an href attribute with a URL enclosed in quotes. <nav>

<a href="/html/">HTML</a>

**HTML URL Pathways**

<a href="https://www.example.com">Visit Example.com</a>