**The Relationship Between The Web Technologies**

The relationship between the web technologies cannot be explained if we do not have an idea of what the web technologies are.

**What Are Web Technologies?**

I would say Web technologies are the tools we use to interact with websites or web applications. Or instead of tools I can call them languages used to interact with different websites and web applications.But calling them languages might not sit well with some people as not all these methods or tools are called languages as it includes a wide range of frameworks, languages, protocols and tools.

Due to how wide and diverse it is, my focus today is on 3 languages. They are:

1. HTML (HyperText Markup Language)
2. CSS (Cascading Style Sheets)
3. JavaScript.

Now that we have an idea on what web technologies are, we need to understand what these 3 languages (HTML, CSS, JavaScript) are so as to fully grasp the relationship between them.

1. **HTML (HyperText Markup Language):** From the name it is a markup language and just like we were taught, markup means formatting text to add an extra spice to the text. Spice such as making it bold, making it small, or in italics etc. So in a simple explanation, HTML is the standard language for creating web pages. It gives ***structure*** to a web page and it is also the language in which the ***content*** of a web page is written.
2. **CSS (Cascading Style Sheets):** As usual I would like to start the explanation with the name “Style sheet”. To a layman, it can be understood as a language for adding styles in your web page. And to also elaborate, it doesn't only add ***style***, it also adds ***layout***, ***responsiveness*** and controls the ***look*** and the ***feel*** of the webpage.

* When we say it adds style to a page, we are referring to colors, fonts and borders. Even spacing as well.
* Explaining how it adds layout to a page can simply mean arranging elements on a web page.putting them in the exact position that makes them look good.
* Then for responsiveness, we can say it also means adaptability. This is because we have different sizes of devices trying to access a certain webpage. And it is with CSS that we can make one webpage adapt to different screen sizes.

1. **JavaScript:** This is typically a ***programming*** language. In a simple term it can be said to make a webpage ***interactive***, functional and ***dynamic***. In other words, it enables the web pages to respond to a user's actions such as clicks, or mouse hovering over a text etc.

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Now that we have a fleshy understanding about each web technologies, we can go ahead to explain the relationship between them. For a relationship to be present it can be said they are codependent on each other for a proper and efficient webpage to exist. Below we shall try as much as possible to explain how each web technologies need each other and work together with each serving specific roles.

*On a lighter note I can summarize everything by saying:* ***HTML*** *provides the structure of the web page while* ***CSS*** *styles the web page to make it visually appealing and* ***JavaScript*** *adds interactivity and dynamic behavior to the web page*.

But for the purpose of marks awarded to this assignment, I would like to elaborate by picking up some key words which I tried to point out while explaining each web technology.

***HTML*** being the language that provides structure or better still provides the content, It defines elements such as headings, paragraphs, lists, links, images, and other types of content that you see on a web page. Without these elements provided by the ***HTML*** there isn't going to be any use for ***CSS*** or ***JavaScript***, as their effect is only experienced on the content provided by the HTML.

Now that being said, ***HTML*** might begin to look like a boss language knowing the others depend on it for fulfillment. But without the ***CSS***, the ***HTML*** codes or language is so boring and not appealing to the eyes. And trust me no one is interested in what is boring or not attractive. So this is where ***CSS*** comes in, as the styling language to add style like colors, fonts, spacing, and borders. ***CSS*** puts the contents of the ***HTML*** into position so they flow in an appealing way. Also we can say, ***CSS*** then helps the content to look good on both desktop computers and mobile devices (responsiveness).

Try picturing a very attractive and appealing webpage but you can't interact or use such a web page. It's more like a lifeless beautiful body. Now that’s where ***JavaScript*** comes into action to give live to such a page. ***JavaScript*** makes web pages respond to our actions carried out on the page such as clicking a button that says “delete” and the item is deleted, or our keyboard input in an input field.

**Example:**

My body cannot have formation or structure without my skeleton. It's just going to be a pound of flesh dumped together. And also my skeleton can’t be seen roaming on the street on its own when it's not halloween or any form of scary performance. This is to say my skeleton is more like HTML (structure & content).

Then now to my flesh that's my skin, you can tell i am an African cos i am dark skinned (CSS : color). I can also add makeup on or decide to put on my wig and clothes just so I dress up nicely (visually appealing : CSS). As my skeleton can't take up any makeup or clothes on its own as it will still look scary.

Then imagine seeing such a pretty looking lady like myself and I can't function as a human. I can't talk, I can't walk, I can't run or do anything. I will probably just fit as a fleshy mannequin. *Lol*  So with the help of JavaScript, I get to hear instructions given to me and obey them such as: If I was asked what my name was, I would respond with “My name is Nonye” (JavaScript: ***interactive).***

That way you get to interact with me and get to know me better, and you can surely say “ ooh i had a great experience interacting with Nonye”( it is with JavaScript a user can fully experience a website or webpage).

**Conclusion**

In conclusion, we can say ***HTML*** provides the basic structure, ***CSS*** applies styles to this structure, and ***JavaScript*** makes the structure interactive.

We can also say ***HTML*** is used as the *foundation*, ***CSS*** for *presentation* and ***JavaScript*** for the behavior or ***user experience*** of the web page.

Together, **HTML**, **CSS**, and **JavaScript** form the backbone of modern web development, allowing developers to create well-structured, beautifully designed, and interactive websites.