

## What is CSS, and how does it integrate with HTML?

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In HTML, CSS is a way of styling your document other than what the browser does by default. So, when you use markup to kind of put tags around your content, for example, say you use a strong tag. The browser, by default, has its own styles in the browser that define what that strong tag does. So, by placing the strong tag around your text, it makes it bolded. It's possible to override that. And so, the introduction of CSS allowed us to control what those tags do outside of the document.

So, prior to having a separate style sheet where we put all those rules, the only way to change what a strong tag might look like was to write in line the rules that would control its presentation. So, if I had a strong tag, I would have a property on it called style that would then allow me to change its color or its presentation. Now, the problem with that is, suppose I have, you know, 15 strong tags throughout my document, and I have 5,000 pages. Now I'd have to write that rule into 5,000 different strong tags. So, it becomes a nightmare pretty quickly.

The introduction of CSS allows us to take all those rules that we've injected into the markup and put it into a separate document that's then linked to the page. So, we can have one rule that says my strong tag needs to be red. And now every page that has that style sheet attached to it, that inherits that rule, becomes red without having to have all of the rules embedded in the page.

What's powerful about CSS is--it stands for Cascading Style Sheets--is the cascade. So, I can have multiple rules in my document that interfere with each other. And that sounds like a bad thing, but actually, it is helpful because I might want, for example, all of my strong tags to be red, but I might want one of them to be green. Say it's a success tag. So, what I would do is I'd have my strong tag, and instead of, you know, writing in that it's green, I would write a class, a property called class on it, called success. And then, in my rules, I could say whenever success is encountered, I want it to be green. So, if my first rule is strong is red, right, and my second rule is the class success is green, what happens is all of my strong tags become red because of that first rule. Then the second rule, they see a class on my strong tag that says success, and it becomes green because it inherits it. And you can have a really complex cascade in the same way with that--with those rules.

The way we attach the rules to the page is that we reference that document. So, there's a special HTML tag called link that you put in the header that links the entire rules document to the page. In the past, we'd have multiple style sheets, so multiple sets of rules, that could then be applied to interfere with each other in different ways. The way we approach that has changed. But in starting out with CSS--that's a great way to start because you can start to see

how your rules work with each other.