## Classes and Ids

To target an element in CSS as a selector we have been referring to them by their element name. But there are two attributes for elements that identify them with a different name. Because we might have a whole lot of tags on our page but maybe I only want to apply CSS to one or some of them. That's when they come in handy. These naming attributes are the class and id attribute. Every HTML element can use these attributes and classes and ids can be used as a selector in CSS.

The developer can choose the name or values of ids and classes but they should not start with numbers. These id and class attributes are placed inside the beginning tag of the element. Then later when CSS is used, the id and class values can be used to target just that element. Ids and classes don't affect the presentation of an element, unless there is a CSS rule selecting that class or id that indicates it should be displayed differently.

For example, if I had 4 paragraphs and I only wanted every other paragraph to have a light gray background. How do I target just some of the paragraphs in CSS and not others. I could give the paragraphs I want shaded a class name of 'shaded'. Then in CSS I target not the tag but the class name of 'shaded'. To show that it is a class we put a dot or period in front of it. This tells CSS to look for a class name. Now I can put a background color and it will apply to all paragraphs with that class name.

Ids work similarly but an id attribute is used to uniquely identify that element from others on the page. This means I can't apply one id name to multiple elements like I did the class 'shaded'. If I give my <h1> an id of 'myheader', I can't use the id of 'myheader' anywhere else in this HTML document. If I do, my code will not validate. To apply CSS to that Id I would use the Id name with a hashtag in front of it. This tells CSS that you are looking for an Id called 'myheader'.

You could also use a class name that is used only once on the page as well, and CSS can be applied to only that one class with the same results. So there is always some confusion as to why we need Ids. If you go on to learn JavaScript later, id attributes can be used to allow the script to work with that particular element and no other.

Elements can also have more than one class. For example if I wanted to emphasize this text to be more bold and dark red I can apply a class of emphasize to it. So if I wanted another paragraph also emphasized I could give it two class names. So now it has the 'shaded' class name and the 'emphasize' class name. In CSS I have different rules for each of those class names.

You could even have an id and a class in one attribute. I can add the 'emphasize' class to my <h1> element that already has an id.

As your website grows larger with more and more html pages, it's nice to have just one CSS file so you don't have to reuse the same CSS for parts of the page that remain the same, but simple

element name selectors can affect multiple pages in unexpected ways sometimes. So, using meaningful classes and ID can be help organizing your CSS for multiple pages as well.