

# HTML and CSS: Some Definitions

## What Are HTML & CSS?

HTML, (HyperText Markup Language), gives content structure and meaning by defining that content as, for example, headings, paragraphs, or images. CSS, (Cascading Style Sheets), is a presentation language created to style the appearance of content—using, for example, fonts or colors.

The two languages—HTML and CSS—are independent of one another and should remain that way. CSS should not be written inside of an HTML document and vice versa.

**As a rule, HTML will always represent content, and CSS will always represent the appearance of that content.**

## Common HTML Terms

**Elements:** designators that define the structure and content of objects within a page (headings, paragraphs, links, divs, etc)

**Tags:** An opening tag marks the beginning of an element. It consists of a less-than sign followed by an element's name, and then ends with a greater-than sign; for example, <div>.

A closing tag marks the end of an element. It consists of a less-than sign followed by a forward slash and the element's name, and then ends with a greater-than sign; for example, </div>.

The content that falls between the opening and closing tags is the content of that element.

**Attributes:** Attributes are properties used to provide additional information about an element. The most common attributes include the id attribute, which identifies an element; the class attribute, which classifies an element; the src attribute, which specifies a source for embeddable content; and the href attribute, which provides a hyperlink reference to a linked resource.

Element Tag

```
<a href="http://shayhowe.com/">Shay Howe</a>
```

Attribute

## Common CSS Terms

**Selectors:** A selector designates exactly which element or elements within our HTML to target and apply styles (such as color, size, and position) to. Selectors may include a combination of different qualifiers to select unique elements, all depending on how specific we wish to be. Selectors generally target an attribute value, such as an id or class value, or target the type of element, such as <h1> or <p>.

**Properties:** Once an element is selected, a property determines the styles that will be applied to that element. Property names fall after a selector, within the curly brackets, {}, and immediately preceding a colon, :. There are numerous properties we can use, such as background, color, font-size, height, and width, and new properties are often added.

**Values:** Values can be identified as the text between the colon, :, and semicolon, ;

### Selector

```
p {  
  color: orange;  
  font-size: 16px;  
}
```



The diagram shows a CSS rule for the 'p' element. A bracket above the 'p' is labeled 'Selector'. A bracket above 'orange' is labeled 'Value'. A bracket below 'font-size: 16px;' is labeled 'Property'.

## Working with Selectors

Selectors, as previously mentioned, indicate which HTML elements are being styled. It is important to fully understand how to use selectors and how they can be leveraged. The first step is to become familiar with the different types of selectors. We'll start with the most common selectors: type, class, and ID selectors.

**Type Selectors:** Type selectors target elements by their element type. For example, should we wish to target all division elements, <div>, we would use a type selector of div

**Class Selectors:** Class selectors allow us to select an element based on the element's class attribute value. Class selectors are a little more specific than type selectors, as they select a particular group of elements rather than all elements of one type.

Class selectors allow us to apply the same styles to different elements at once by using the same class attribute value across multiple elements.

Within CSS, classes are denoted by a leading period, ., followed by the class attribute value.

## CSS

```
1 .awesome { ... }
```

## HTML

```
1 <div class="awesome">...</div>  
2 <p class="awesome">...</p>
```

**ID Selectors:** ID selectors are even more precise than class selectors, as they target only one unique element at a time. Just as class selectors use an element's class attribute value as the selector, ID selectors use an element's id attribute value as a selector.

Regardless of which type of element they appear on, id attribute values can only be used once per page. If used they should be reserved for significant elements.