CSS

* CSS stands for Cascading Style Sheets
* CSS describes how HTML elements are to be displayed on screen, paper, or in other media
* CSS saves a lot of work. It can control the layout of multiple web pages all at once
* External stylesheets are stored in CSS files
* **C**ascading **S**tyle **S**heets, fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable.
* CSS handles the look and feel part of a web page. Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colors are used, layout designs,variations in display for different devices and screen sizes as well as a variety of other effects.
* CSS stands for Cascading Style Sheets with an emphasis placed on “Style.” While HTML is used to structure a web document (defining things like headlines and paragraphs, and allowing you to embed images, video, and other media), CSS comes through and specifies your document’s style—page layouts, colors, and fonts are all determined with CSS. Think of HTML as the foundation (every house has one), and CSS as the aesthetic choices (there’s a big difference between a Victorian mansion and a mid-century modern home).

Advantages of CSS

* **CSS saves time** − You can write CSS once and then reuse same sheet in multiple HTML pages. You can define a style for each HTML element and apply it to as many Web pages as you want.
* **Pages load faster** − If you are using CSS, you do not need to write HTML tag attributes every time. Just write one CSS rule of a tag and apply it to all the occurrences of that tag. So less code means faster download times.
* **Easy maintenance** − To make a global change, simply change the style, and all elements in all the web pages will be updated automatically.
* **Superior styles to HTML** − CSS has a much wider array of attributes than HTML, so you can give a far better look to your HTML page in comparison to HTML attributes.
* **Multiple Device Compatibility** − Style sheets allow content to be optimized for more than one type of device. By using the same HTML document, different versions of a website can be presented for handheld devices such as PDAs and cell phones or for printing.

## [CSS syntax](https://developer.mozilla.org/en-US/docs/Learn/CSS/First_steps/What_is_CSS#css_syntax)

CSS is a rule-based language — you define rules specifying groups of styles that should be applied to particular elements or groups of elements on your web page

CSS has a simple [syntax](https://en.wikipedia.org/wiki/Syntax) and uses a number of English keywords to specify the names of various style properties.

A style sheet consists of a list of *rules*. Each rule or rule-set consists of one or more *selectors*, and a *declaration block*.

n CSS, *selectors* declare which part of the markup a style applies to by matching tags and attributes in the markup itself.

Selectors may apply to the following:

* all [elements](https://en.wikipedia.org/wiki/HTML_element) of a specific type, e.g. the second-level headers [h2](https://en.wikipedia.org/wiki/HTML_element#Basic_text)
* elements specified by [attribute](https://en.wikipedia.org/wiki/HTML_attribute), in particular:
  + *id*: an identifier unique within the document, identified with a hash prefix e.g. #id
  + *class*: an identifier that can annotate multiple elements in a document, identified with a period prefix e.g. .classname
* elements depending on how they are placed relative to others in the [document tree](https://en.wikipedia.org/wiki/Document_Object_Model).

Classes and IDs are case-sensitive, start with letters, and can include alphanumeric characters, hyphens, and underscores. A class may apply to any number of instances of any elements. An ID may only be applied to a single element.

There are three ways you can use to implement CSS: internal, external, and inline styles.

### Internal CSS

Internal or embedded CSS requires you to add **<style>** tag in the **<head>** section of your HTML document.

This CSS style is an effective method of styling a single page. However, using this style for multiple pages is time-consuming as you need to put CSS rules to every page of your website.

### External CSS

This CSS type is a more efficient method, especially for styling a large website. By editing one **.css** file, you can change your entire site at once.

With external CSS, you’ll link your web pages to an external **.css** file, which can be created by any text editor in your device

### Inline CSS

Inline CSS is used to style a specific HTML element. For this CSS style, you’ll only need to add the **style** attribute to each HTML tag, without using selectors.

This CSS type is not really recommended, as each HTML tag needs to be styled individually. Managing your website may become too hard if you only use inline CSS.

However, inline CSS in HTML can be useful in some situations. For example, in cases where you don’t have access to CSS files or need to apply styles for a single element only.

### Inheritance

Inheritance is a key feature in CSS; it relies on the ancestor-descendant relationship to operate. Inheritance is the mechanism by which properties are applied not only to a specified element, but also to its descendants.[[16]](https://en.wikipedia.org/wiki/CSS#cite_note-Cascading-16) Inheritance relies on the document tree, which is the hierarchy of [XHTML](https://en.wikipedia.org/wiki/XHTML) elements in a page based on nesting. Descendant elements may inherit CSS property values from any ancestor element enclosing them. In general, descendant elements inherit text-related properties, but their box-related properties are not inherited. Properties that can be inherited are color, font, letter-spacing, line-height, list-style, text-align, text-indent, text-transform, visibility, white-space and word-spacing. Properties that cannot be inherited are background, border, display, float and clear, height, and width, margin, min- and max-height and -width, outline, overflow, padding, position, text-decoration, vertical-align and z-index.

Inheritance can be used to avoid declaring certain properties over and over again in a style sheet, allowing for shorter CSS.