#### **CSS**

This lesson gives a brief introduction to cascading style sheets and how they are used with HTML.

#### WE'LL COVER THE FOLLOWING ^

- Introduction
- Linking CSS with HTML
  - Inline CSS
  - Internal CSS
  - External CSS
- Page layout techniques
- Animations
- Preprocessors \*
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### Introduction #

CSS, like HTML, is not a programming language, it's a styling language for HTML. To understand CSS, it's worth recalling the main purpose of HTML. HTML was originally designed as a structural language, but with time and updates, it has been turned into a tool for presentation which uses fonts, colors, and other visual elements. The purpose of CSS is to restore HTML to its original status as a *structural* language. In other words, cascading style sheets are a way to format your page layout, text, fonts, images, and almost anything that controls the look and feel of your web page. This leaves HTML with the structural work only.

## Linking CSS with HTML #

There are three ways to add CSS to the HTML code.

#### Inline CSS #

CSS is said to be added 'inline' when it is used in the style attribute of HTML tags. This is inefficient and not scalable because each individual tag would have to have the CSS inserted. This method is generally never used as it is extremely impractical.

#### **HTML Input**

```
<h3 style ="color:blue">Blue Heading!</h3>
```

#### Output

### **Blue Heading!**

#### Internal CSS #

You can use <style> tags within the <head> of the HTML to define the style of a certain tag. For instance, in the example below, all h3 headings are defined to be blue. This approach is clearly better from using CSS inline because this makes the code less repetitive, easier to read and write, and overall economical.

### External CSS #

CSS is most commonly written in a separate file and linked up with the HTML. The advantage of doing so is that it can be reused by other HTML files, updating it becomes simpler, and web pages can be tailored for different

users, browsers, and platforms.

You can do so by writing a self-closing link tag in your HTML head like the following,

```
<link rel="stylesheet" href="cssfilename.css">
```

the rel attribute of the link element above tells the HTML to import a CSS file.

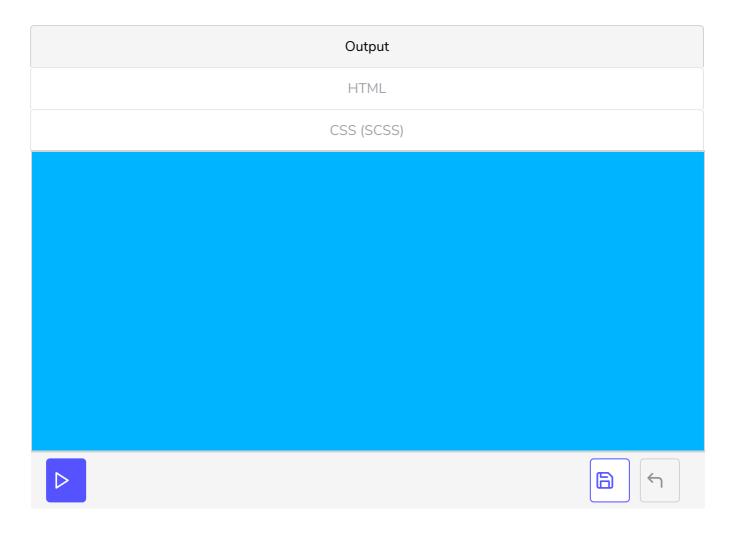
CSS usage goes far beyond changing the colors of headings. It gives you complete control over the look of your page down to the very last pixel.

## Page layout techniques #

CSS page layout techniques provide us with an efficient way to layout, align, and distribute space among elements within your document, even when the viewport and the size of your elements are dynamic or unknown. Some essential page layout techniques involve Flexbox and Grid. To learn more about Flexbox, check out our course Understanding Flexbox: Everything you need to know!

### Animations #

CSS even provides us with a way to animate HTML elements without having to use JavaScript or Flash! So you can move things around with pure CSS. Here is an example. Give it 5-10 seconds to run.



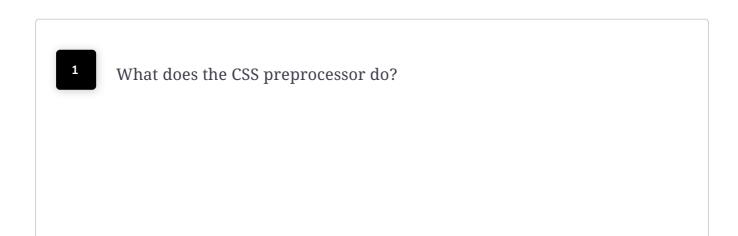
## Preprocessors #

A CSS preprocessor is a scripting language that extends CSS and then compiles it into regular CSS.

#### SASS & LESS #

Syntactically Awesome Style Sheets and Leaner Style Sheets are language extensions for CSS that allow you to use more conventional programming constructs such as variables, conditionals, and loops to generate CSS. The CSS preprocessor converts the SASS code into regular CSS.

# Test yourself on CSS! #



In the next lesson, we'll get an introduction to the world's most popular programming language, JavaScript!