

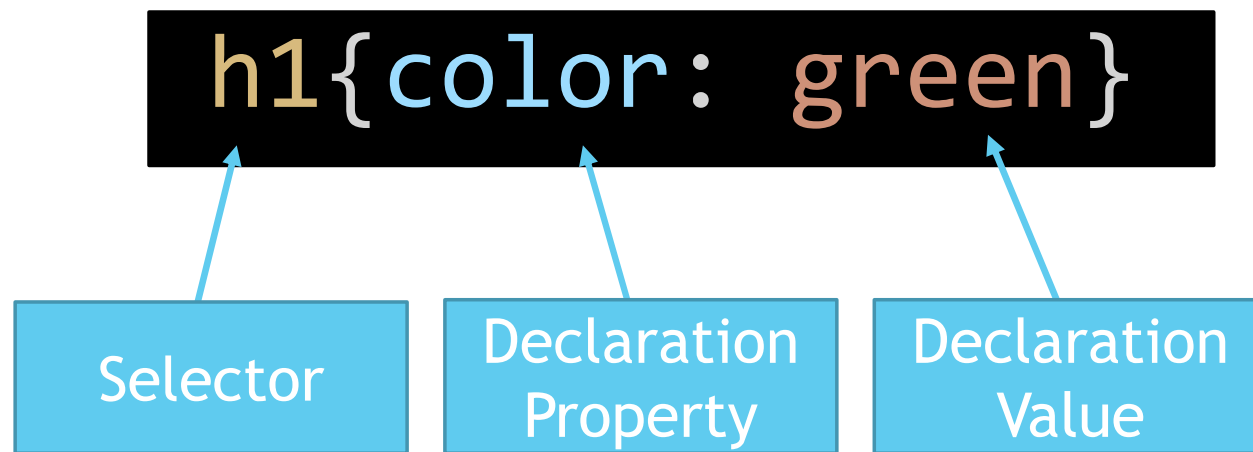
Selectors

- ▶ This is possible by using CSS (Cascading Style Sheets)

```
h1
{
    color: green;
    background-color: black;
}
```

- ▶ HTML uses **tags** whereas CSS Uses **selectors**

Selectors



- This changes every h1 heading to the colour green

Selectors

```
h1{color: green; background-color:black;}
```

- ▶ Separate multiple statements with a semicolon ;
- ▶ Multiple statements are often listed vertically for clarity

```
h1
{
    color: green;
    background-color:black;
}
```

External Styling

► Put in head section!

```
<link rel="stylesheet" type="text/css" href="styling_types.css" />
```

H1

{

color: green;

background-color: black;

}

.CSS file

Name of
external CSS
file

Simple External example - Full Webpage

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Document</title>
  <link rel="stylesheet" type="text/css" href="styles.css" />
</head>
<body>
  <h1>Hello World!</h1>
</body>
</html>
```

Separate file: styles.css

```
h1
{
  color: green;
}
```

Advantages of CSS

- ▶ Greater control over layout - CSS can be use for many things such as:
 - ▶ Colour
 - ▶ Background Colour
 - ▶ Positioning of elements
 - ▶ Element widths and heights
 - ▶ Font sizes
 - ▶ Borders
 - ▶ Padding and margins
- And many more

Grouping

- ▶ If you want multiple tags to have the same styles, use commas and list them:

```
h1, h2, h3, p  
{  
    color: green;  
}
```

- ▶ This example would make every h1, h2, h3 heading and paragraph green

Decendents

- ▶ If you want particular combinations to have a style, separate with a space

```
p strong  
{  
    color: green;  
}
```

- ▶ This example would make every strong tag green, only if it is used in a paragraph

Universal selector

- ▶ If you want EVERYTHING to have a particular style, use *

```
*  
{  
  color: green;  
}
```

- ▶ This example would make everything green (aside from backgrounds)

Type, Classes and IDs

for CSS

You can define your own style selectors to use with any tag

Keyword
“class” in
HTML

NB: Note
the dot
in CSS

```
.greentext  
{  
    color: green;  
    font-style: italic;  
}
```

```
<h1 class="greentext">Hello World!</h1>  
  
<p class="greentext">Hi World</p>
```

You can define your own style selectors to use with any tag

NB: Note
the hash
in CSS

```
#greentext  
{  
  color: green;  
}
```

Keyword
“id” in
HTML

```
<h1 id="greentext">  
Hello World!  
</h1>
```

IDs vs Classes

- ▶ A class selector can be used on any number of elements
- ▶ An ID selector can only be used only once
 - ▶ It identifies a *specific* element (useful for JavaScript etc.)

Types, Classes and IDs

Type selector;
for existing
elements

Dot => Class
selector

Hash
=> ID selector

```
h1
{
    color: green;
}

.greenytext
{
    color: green;
    font-style: italic;
}

#main_image
{
    border-width: 5px;
    padding: 10px;
}
```

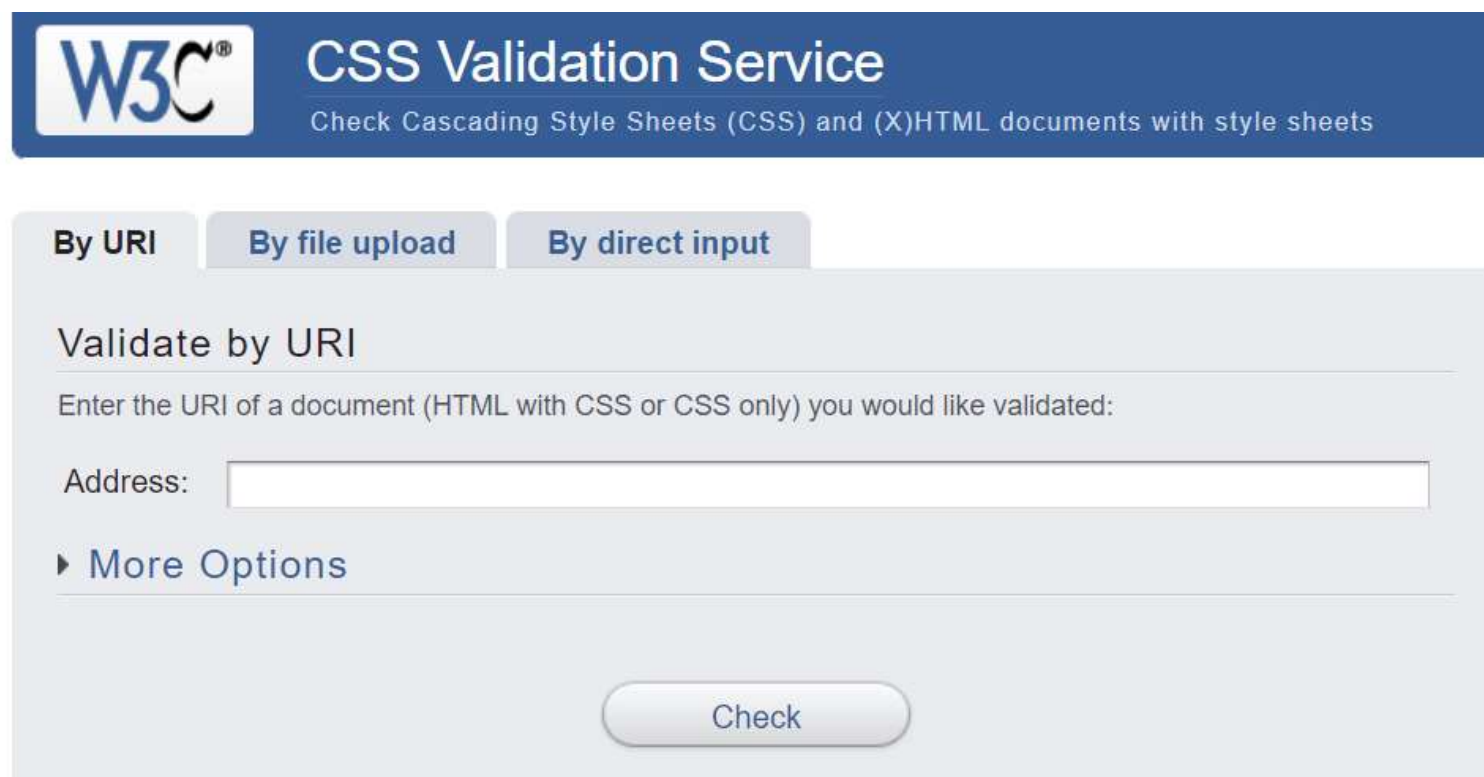
Selector Types

| Type | Description | E.g., |
|----------------|--|---|
| Type Selector | For existing tags | <pre>h1 { color: green; }</pre> |
| Class Selector | For defining your own class style to use on any element. Start with a dot in CSS | <pre>.greentext { color:green }</pre> |
| ID Selector | For defining a style on one element only. Starts with a hash in CSS | <pre>#main_image { border-width: 5px; margin: 10px; }</pre> |

Advantages of CSS

- ▶ CSS keeps style separate from the HTML content, allowing you to manipulate the appearance easier
- ▶ A single CSS file can be used to manage the appearance of a whole website very easily and very quickly
- ▶ HTML documents are simpler and smaller as the styling information can be removed

Don't forget to check your pages for errors



The image shows the W3C CSS Validation Service interface. At the top, there is a dark blue header with the W3C logo on the left and the text "CSS Validation Service" in white. Below the header, a subtitle reads "Check Cascading Style Sheets (CSS) and (X)HTML documents with style sheets". The main content area has three tabs: "By URI" (selected), "By file upload", and "By direct input". Under the "By URI" tab, the heading "Validate by URI" is followed by the instruction "Enter the URI of a document (HTML with CSS or CSS only) you would like validated:". Below this is a text input field labeled "Address:". At the bottom of the form, there is a link "More Options" with a right-pointing triangle icon, and a "Check" button.

W3C CSS Validation Service
Check Cascading Style Sheets (CSS) and (X)HTML documents with style sheets

By URI By file upload By direct input

Validate by URI

Enter the URI of a document (HTML with CSS or CSS only) you would like validated:

Address:

► More Options

Check

Be careful copying/pasting CSS

- ▶ PowerPoint and other programs can add invisible characters and you might be wondering why your code doesn't work!

