

INTRODUCTION TO CSS

What is CSS and what does it do?

- CSS stands for **C**ascading **S**tyle **S**heets
- CSS is a simple way of adding styles (color, spacing, even transitions) to HTML elements
- CSS styles applied to elements are inherited by child elements, that makes it pretty powerful

Where can you put CSS?

- CSS styles can be declared inline (applied to individual elements), internally (using the `<style>` tag), and loaded from an external file.

Inline CSS

```
<p style="color: red;">Hello world</p>
```

Internal CSS

```
<head>
```

```
...
```

```
<style type="text/css">
```

```
p {  
  color: red;  
}
```

```
</style>
```

```
...
```

```
</head>
```


External CSS

- You write your CSS just the way you do internally, and save it in an external file. You then load this external CSS file into your HTML

```
<head>
```

```
...
```

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

```
...
```

```
</head>
```

Selectors

Element selectors

- Using element selectors we can control all instances of a type of elements

```
h1 {  
  margin: 0;  
  padding: 0;  
  color: #0099ff;  
}
```

```
ul, ol {  
  list-style: none;  
}
```

Class selectors

- Using CSS classes we can create reusable style definitions that can be applied to elements using the given class
- CSS class selectors override the element selector styling

```
p {  
  color: red;  
}
```

```
p.blue {  
  color: blue;  
}
```

...

```
<p>This text will be red</p>
```

```
<p class='blue'>This text will be blue</p>
```


ID selectors

- Using ID selectors we can distinguish certain elements from others in our CSS.
- IDs are also reusable, but they shouldn't be applied to more than one element to keep them unique

```
#super_visible_list {  
  font-weight: bold;  
  color: red;  
  border: 2px solid black;  
}
```

...

```
<ul>
```

```
  <li>First item</li>
```

```
  <li>Second item</li>
```

```
  <li>Third item</li>
```

```
</ul>
```

```
<ul id="super_visible_list">
```

```
  <li>First item</li>
```

```
  <li>Second item</li>
```

```
  <li>Third item</li>
```

```
</ul>
```

Pseudo classes and elements

- Pseudo classes and elements are special selectors
- They represent certain states and individual parts of the element they are applied to

```
a:hover {  
  background-color: black;  
  color: white;  
}
```

```
p:first-line {  
  font-weight: bold;  
}
```


Group selectors and declarations

- By combining the grouping of selectors that share the same declaration and declarations that share the same selector you can apply multiple declarations to multiple selectors.
- This technique allows us to create compact yet powerful CSS rules.

```
h1, h2, h3, p, ul {  
  color: #0099ff;  
}  
h4, h5, h6 {  
  color: black;  
}
```

Let's look at some examples!

Inspect

The screenshot shows a web browser window with a document titled "02_basic_css_selectors.html". The document contains several heading levels and paragraphs. The "Inspect" tool is open at the bottom, showing the HTML structure and the computed style for the selected `h2` element.

Main heading (H1 - level 1 heading)

Subheading - (H2 - level 2 heading)

h2 1582px x 19px (H3 - level 3 heading)

Subheading - (H4 - level 4 heading)

Subheading - (H5 - level 5 heading)

Subheading - (H6 - level 6 heading)

Paragraph

This is a paragraph for some text content...

We set the color of all the paragraphs of this document to be blue

This paragraph is different to the others, because I added some inline styling to it...

This is still another paragraph. The above example shows how *inline* styling overrides *internal* styling; and how *internal* styling overrides *external* styling.

Elements | **Resources** | **Network** | **Scripts** | **Timeline** | **Profiles** | **Audits** | **Console**

HTML Structure:

```
<!-- Smart developers always look at the source code :)
If you're not sure about something in HTML, CSS or JS, look at the source code of websites, I've found it the best way to learn from other developers.
You can also use Firebug in Firefox, or Dev tools in Chrome to inspect elements in the HTML document. -->
<!DOCTYPE html>
<html>
  <head>_</head>
  <body>
    <div class="container">
      <h1>Main heading (H1 - level 1 heading)</h1>
      <h2>Subheading - (H2 - level 2 heading)</h2>
      <h3>Subheading - (H3 - level 3 heading)</h3>
      <h4>Subheading - (H4 - level 4 heading)</h4>
      <h5>Subheading - (H5 - level 5 heading)</h5>
      <h6>Subheading - (H6 - level 6 heading)</h6>
      <hr>
      <h2>Paragraph</h2>
      <p>This is a paragraph for some text content...</p>
      <p>We set the color of all the paragraphs of this document to be blue</p>
      <p style="color: orange;">_</p>
      <p style="font-weight: bold; margin-top: 2em; color: inherit; border: 2px solid #0099ff; padding: 1em;">_</p>
    </div>
  </body>
</html>
```

Computed Style:

```
element.style {
}
Matched CSS Rules
h2 {
  color: #86CC00;
}
h2 {
  display: block;
  font-size: 1.5em;
  -webkit-margin-before: 0.83em;
  -webkit-margin-after: 0.83em;
  -webkit-margin-start: 0px;
  -webkit-margin-end: 0px;
  font-weight: bold;
}
Inherited from body, html {
  font-size: 16px;
}
```


References

HTML & CSS book (2012)
<http://htmlandcssbook.com/>



A comprehensive list of CSS selectors
<http://www.w3schools.com/cssref/default.asp>