

Web Development

Bsc Applied, Forensics, Entertainment Systems, IOT

Eamonn de Leastar (edeleastar@wit.ie)
Dr. Brenda Mullally (bmullally@wit.ie)

Department of Computing, Maths &
Physics

Waterford Institute of Technology

<http://www.wit.ie>

<http://elearning.wit.ie>

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Agenda

- CSS
 - Combining Rules & Selectors
 - Classes and class based styling

Multiple Rules

```
h1 {  
    font-family: sans-serif;  
    color:      gray;  
}
```

```
h2 {  
    font-family: sans-serif;  
    color:      gray;  
}
```

```
p {  
    color: maroon;  
}
```

Here's the rule to select <h1> elements and change the font-family to sans-serif and the font color to gray. We'll talk a lot more about fonts later.

And here's another rule to do the exact same thing to the <h2> element.

Combining Selectors (1)

Rules can be combined if they are identical

```
h1 {  
    font-family: sans-serif;  
    color:      gray;  
}  
  
h2 {  
    font-family: sans-serif;  
    color:      gray;  
}  
  
p {  
    color: maroon;  
}
```

Here's the rule to select `<h1>` elements and change the font-family to sans-serif and the font color to gray. We'll talk a lot more about fonts later.

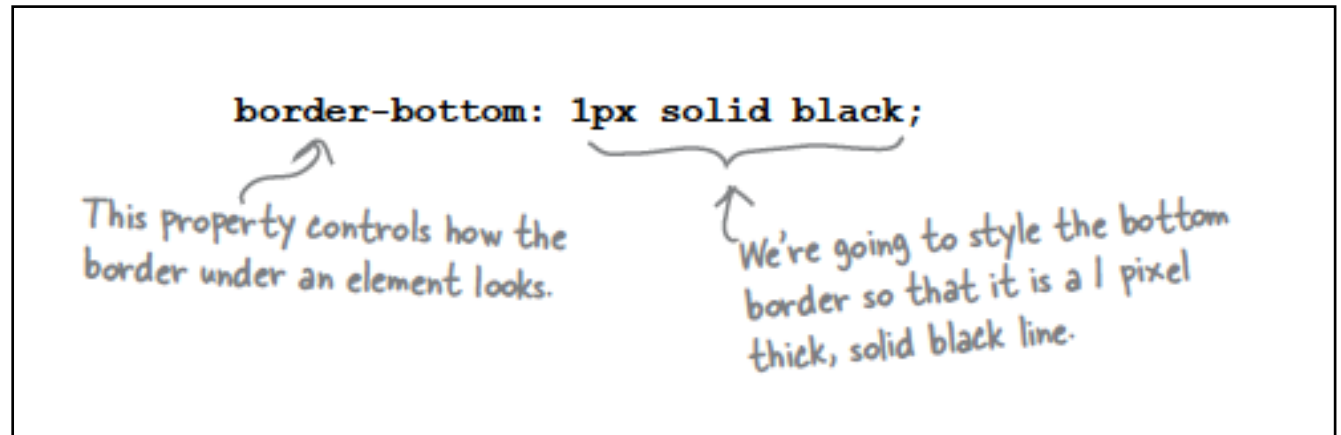
And here's another rule to do the exact same thing to the `<h2>` element.

```
h1, h2 {  
    font-family: sans-serif;  
    color:      gray;  
}
```

To write a rule for more than one element, just put commas between the selectors, like "h1, h2".

```
p {  
    color: maroon;  
}
```





Placing the above rule associated with h1 “selector”, will draw a line - 1 pixel wide - under the heading in our site (you did this in lab01)

Mobile Applications

1. [Apps](#)

Combining Selectors

```
h1, h2 {  
  font-family: sans-serif;  
  color: gray;  
}
```

The first rule stays the same. We're still going to use a combined rule for the font-family and color for both <h1> and <h2>.

```
h1 {  
  border-bottom: 1px solid black;  
}
```

But now we're adding a second rule that adds another property just to <h1>: the border-bottom property.

```
p {  
  color: maroon;  
}
```

- Both h1 and h2 share the font-family and color attributes, however only h1 is underlined

Combining Rules

- Rules can be combined. The following two sets of style rules would produce identical results
- Rules can be listed separately:
- Or, rules can be grouped. Property:Value pairs need to be separated by a semicolon.

```
p {color: black;}
p {background-color: teal;}
p {padding: 1em;}
p {margin: 1em;}
p {font-family: helvetica, sans-serif;}
p {text-align: justify;}
```

```
p {
  color: black;
  background-color: teal;
  padding: 1em;
  margin: 1em;
  font-family: helvetica, sans-serif;
  text-align: justify;
}
```

Combining Selectors

- Selectors can be combined into comma-separated groups.
- We combine the selectors so that a single declaration applies to multiple selectors.

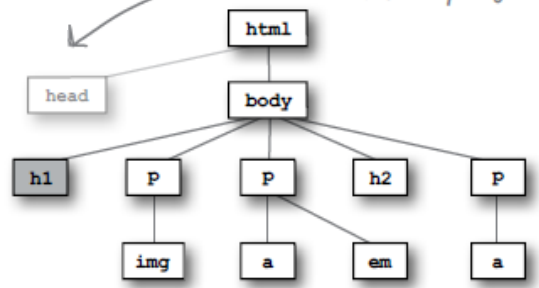
```
h1 { color: maroon; }  
h2 { color: maroon; }  
h3 { color: maroon; }  
h4 { color: maroon; }  
h5 { color: maroon; }  
h6 { color: maroon; }
```

```
h1, h2, h3, h4, h5, h6 { color: maroon; }
```



```
h1 {
  font-family: sans-serif;
}
```

This selector matches any <h1> elements in the page, and there's only one.

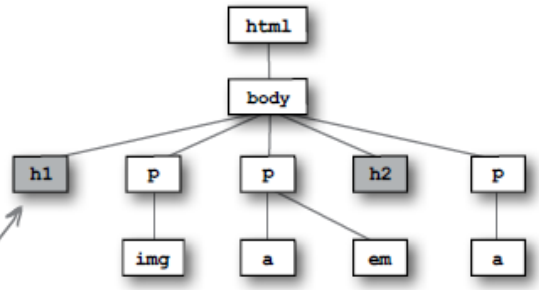


We can only style elements in the body, so we're not showing the <head> element and everything under it.

And here's how the "h1, h2" selector looks:

```
h1, h2 {
  font-family: sans-serif;
}
```

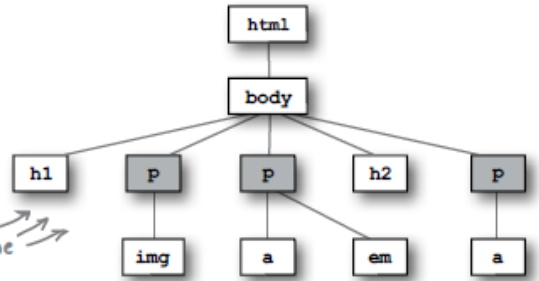
Now the selector matches both <h1> and <h2> elements.



If we use a "p" selector, here's how that looks:

```
p {
  font-family: sans-serif;
}
```

This selector matches all the <p> elements in the tree.



Agenda

- CSS
 - Combining Rules & Selectors
 - Classes and class based styling
 - Selector rules and the “Cascade” in CSS

```

<body>
  <p>
    Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras sollicitudin, orci
    nec facilisis vehicula, neque urna porta risus, ut sagittis enim velit at orci.
  </p>
  <p>
    Fusce velit. Integer sapien enim, rhoncus vitae, cursus non,
    commodo vitae, felis. Nulla convallis ante sit amet urna. Maecenas condimentum
    hendrerit turpis.
  </p>
  <p>
    Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras
    sollicitudin, orci nec facilisis vehicula, neque urna porta risus, ut sagittis enim
    velit at orci.
  </p>
  <p>
    Lorem ipsum dolor sit amet, <span>consectetur adipiscing elit</span>. Cras
    sollicitudin, orci
    nec acilisis vehicula, neque urna porta risus, ut sagittis enim velit at orci.
  </p>
  <p>
    Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras
    sollicitudin, orci nec facilisis vehicula, neque urna porta risus, ut sagittis enim
    velit at orci.
  </p>
</body>

```

- How to style these paragraphs differently?
- Just using p as the selector will set the style for them all.

```

p {
  color: black;
  background-color: teal;
}

```

Class of elements

- Using a class of elements for styling
- You can then write a css rule to style any elements that belong to the class.
- Elements can be in more than one class

Using **class** to identify elements

```
<body>
  <p>
    Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras sollicitudin, orci
    nec facilisis vehicula, neque urna porta risus, ut sagittis enim velit at orci.
  </p>
  <p class="withstyle">
    Fusce velit. Integer sapien enim, rhoncus vitae, cursus non,
    commodo vitae, felis. Nulla convallis ante sit amet urna. Maecenas condimentum
    hendrerit turpis.
  </p>
  <p class="warning">
    Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras
    sollicitudin, orci nec facilisis vehicula, neque urna porta risus, ut sagittis enim
    velit at orci.
  </p>
  <p>
    Lorem ipsum dolor sit amet,<span class="warning">consectetur adipiscing elit</span>.
    Cras sollicitudin, orci nec acilisis vehicula, neque urna porta risus, ut sagittis
    enim velit at orci.
  </p>
</body>
```

- To indicate that an element is a member of a class we use the class attribute.
- While the name of an element specifies its *type*, the class attribute lets you assign to it one or more *subtypes*.

```
<body>
  <p>
    Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras sollicitudin, orci
    nec facilisis vehicula, neque urna porta risus, ut sagittis enim velit at orci.
  </p>
  <p class="withstyle">
    Fusce velit. Integer sapien enim, rhoncus vitae, cursus non,
    commodo vitae, felis. Nulla convallis ante sit amet urna. Maecenas condimentum
    hendrerit turpis.
  </p>
  <p class="warning">
    Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras
    sollicitudin, orci nec facilisis vehicula, neque urna porta risus, ut sagittis enim
    velit at orci.
  </p>
  <p>
    Lorem ipsum dolor sit amet, <span class="warning">consectetur adipiscing elit</span>.
    Cras sollicitudin, orci nec acilisis vehicula, neque urna porta risus, ut sagittis
    enim velit at orci.
  </p>
</body>
```

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras sollicitudin, orci nec facilisis vehicula, neque urna porta risus, ut sagittis enim velit at orci.

Fusce velit. Integer sapien enim, rhoncus vitae, cursus non, commodo vitae, felis. Nulla convallis ante sit amet urna. Maecenas condimentum hendrerit turpis.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras sollicitudin, orci nec facilisis vehicula, neque urna porta risus, ut sagittis enim velit at orci.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras sollicitudin, orci nec facilisis vehicula, neque urna porta risus, ut sagittis enim velit at orci.

Using Classes in CSS

- Class names are referenced in CSS stylesheet as
 - element.classname

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras sollicitudin, orci nec facilisis vehicula, neque urna porta risus, ut sagittis enim velit at orci.

Fusce velit. Integer sapien enim, rhoncus vitae, cursus non, commodo vitae, felis. Nulla convallis ante sit amet urna. Maecenas condimentum hendrerit turpis.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras sollicitudin, orci nec facilisis vehicula, neque urna porta risus, ut sagittis enim velit at orci.

```
p {  
  background-color: white;  
  color: black;  
  font-family: times;  
  margin: 0.5em;  
  padding: 0.5em;  
}
```

```
p.withstyle {  
  background-color: olive;  
  color: navy;  
  font-family: sans-serif;  
  margin: 0.5em;  
  padding: 0.5em;  
}
```

```
p.warning {  
  background-color: yellow;  
  color: red;  
  font-weight: bold;  
}
```

Classes Independent of Elements

- May not have an element name preceding the period:

.classname

- Selector now matches *any* element of the given class

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras sollicitudin, orci nec facilisis vehicula, neque urna porta risus, ut sagittis enim velit at orci.

Fusce velit. Integer sapien enim, rhoncus vitae, cursus non, commodo vitae, felis. Nulla convallis ante sit amet urna. Maecenas condimentum hendrerit turpis.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras sollicitudin, orci nec facilisis vehicula, neque urna porta risus, ut sagittis enim velit at orci.

Lorem ipsum dolor sit amet, **consectetur adipiscing elit**. Cras sollicitudin, orci nec acilisis vehicula, neque urna porta risus, ut sagittis enim velit at orci.

```
p {
  background-color: white;
  color: black;
  font-family: times;
  margin: 0.5em;
  padding: 0.5em;
}

.withstyle {
  background-color: olive;
  color: navy;
  font-family: sans-serif;
  margin: 0.5em;
  padding: 0.5em;
}

.warning {
  background-color: yellow;
  color: red;
  font-weight: bold;
}
```


Learning Outcomes

- You should now be able to:
 - Understand the motivations for using CSS in web site development
 - Be able to compose simple CSS rules and incorporate them into a separate CSS file for a site.