

What is Specificity?

If there are two or more CSS rules that point to the same element, the selector with the highest specificity value will "win", and its style declaration will be applied to that HTML element.

Think of specificity as a score/rank that determines which style declaration are ultimately applied to an element.

Example 1

In this example, we have used the "p" element as selector, and specified a red color for this element. The text will be red:

```
1  <html>
2  <head>
3    <style>
4      p {color:  red;}
5    </style>
6  </head>
7  <body>
8
9    <p>Hello World!</p>
10
11  </body>
12 </html>
```

Example 2

In this example, we have added a class selector (named "test"), and specified a green color for this class. The text will now be green (even though we have specified a red color for the element selector "p". This is because the class selector is given higher priority:

```
1  <html>
2  <head>
3    <style>
4      .test {color: green;}
5      p {color: red;}
6    </style>
7  </head>
8  <body>
9
10 <p class="test">Hello World!</p>
11
12 </body>
13 </html>
```

Example 3

In this example, we have added the id selector (named "demo"). The text will now be blue, because the id selector is given higher priority:

```
1  <html>
2  <head>
3    <style>
4      #demo {color: blue;}
5      .test {color: green;}
6      p {color: red;}
7    </style>
8  </head>
9  <body>
10
11  <p id="demo" class="test">Hello World!</p>
12
13  </body>
14  </html>
```

Example 4

In this example, we have added an inline style for the "p" element. The text will now be pink, because the inline style is given the highest priority:

```
1  <html>
2  <head>
3    <style>
4      #demo {color: blue;}
5      .test {color: green;}
6      p {color: red;}
7    </style>
8  </head>
9  <body>
10
11    <p id="demo" class="test" style="color: pink;">Hello World!</p>
12
13  </body>
14 </html>
```

Specificity Hierarchy

Every CSS selector has its place in the specificity hierarchy.

There are four categories which define the specificity level of a selector:

Inline styles - Example: <h1 style="color: pink;">

IDs - Example: #navbar

Classes, pseudo-classes, attribute selectors - Example: .test, :hover, [href]

Elements and pseudo-elements - Example: h1, :before

How to Calculate Specificity?

Memorize how to calculate specificity!

Start at 0, add 100 for each ID value, add 10 for each class value (or pseudo-class or attribute selector), add 1 for each element selector or pseudo-element.

Note: Inline style gets a specificity value of 1000, and is always given the highest priority!

Note 2: There is one exception to this rule: if you use the **!important** rule, it will even override inline styles!

The table below shows some examples on how to calculate specificity values:

| Selector | Specificity Value | Calculation |
|--------------------------|-------------------|---------------------------------------|
| p | 1 | 1 |
| p.test | 11 | 1 + 10 |
| p#demo | 101 | 1 + 100 |
| <p style="color: pink;"> | 1000 | 1000 |
| #demo | 100 | 100 |
| .test | 10 | 10 |
| p.test1.test2 | 21 | 1 + 10 + 10 |
| #navbar p#demo | 201 | 100 + 1 + 100 |
| * | 0 | 0 (the universal selector is ignored) |

The selector with the highest specificity value will win and take effect!