

THE CASCADE: SPECIFICITY & SELECTORS PART 1

IN THIS LESSON

The Cascade

Inline styles & stylesheets

Inline styles, element, class, id

Specificity point values

THE CASCADE

The "C" in CSS



Image attribution: Howard Kang
[https://en.wikipedia.org/wiki/Ramona_Falls_\(Oregon\)](https://en.wikipedia.org/wiki/Ramona_Falls_(Oregon))

THE CASCADE

The "C" in CSS

One HTML page can have many different sources for styles: multiple external stylesheets, an internal stylesheet, inline styles, user-agent stylesheet (browser defaults), user stylesheet

CSS is meant to be flexible and support all these options

When there are rules that compete against each other, the cascading algorithm in CSS determines how to sort them and figure out which ones have higher priority

SPECIFICITY: INLINE STYLES & STYLESHEETS

CSS Specificity: a measure of a **selector**'s level of specificity; higher specificities have higher priority in the cascade

Element/type, **class** & **id** are three kinds of **selectors** - they define what HTML elements to target to apply style declarations

Inline styles can also be considered a kind of selector - an inline style is created directly on an element - it directly selects it

Inline styles have the highest level of specificity

SPECIFICITY: INLINE STYLES & STYLESHEETS

Inline style vs internal stylesheet

css-specificity.html ✕

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <meta charset="utf-8" />
5   <title>CSS Specificity Demo</title>
6   <style>
7     h1 {
8       color: blue;
9     }
10  </style>
11 </head>
12 <body>
13   <h1 style="color: red;">What color
14 </body>
15 </html>
```

CSS Specificity Demo ✕ +

127.0.0.1:5501/css-specificity.html 🔍 ☆ 📄

What color is this text?

Internal vs external stylesheets

css-specificity.html × # styles.css

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <meta charset="utf-8" />
5   <title>CSS Specificity Demo</title>
6   <link rel="stylesheet" href="css/styles.css" />
7   <style>
8     h1 {
9       color: blue;
10    }
11  </style>
12 </head>
13 <body>
14   <h1>What color is this text?</h1>
15 </body>
16 </html>
```

styles.css ×

```
1 h1 {
2   color: red;
3 }
```

CSS Specificity Demo × +

127.0.0.1:5501/css-specificity.html

What color is this text?

```
<> css-specificity.html × # styles.css
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <meta charset="utf-8" />
5   <title>CSS Specificity Demo</title>
6   <style>
7     h1 {
8       color: blue;
9     }
10  </style>
11  <link rel="stylesheet" href="css/styles.css" />
12 </head>
13 <body>
14   <h1>What color is this text?</h1>
15 </body>
16 </html>
```

```
# styles.css ×
1 h1 {
2   color: red;
3 }
```

CSS Specificity Demo

127.0.0.1:5501/css-specificity.html

What color is this text?

```
<> css-specificity.html x # styles.css ...  
1 <!DOCTYPE html>  
2 <html>  
3 <head>  
4 <meta charset="utf-8" />  
5 <title>CSS Specificity Demo</title>  
6 <style>  
7 <h1 {  
8 <color: blue;>  
9 }  
10 </style>  
11 <link rel="stylesheet" href="css/s<  
12 </head>  
13 <body>  
14 <h1>What color is this text?</h1>  
15 </body>  
16 </html>
```

```
# styles.css x  
1 h1 {  
2 <color: red;>  
3 }  
4  
5 h1 {  
6 <color: green;>  
7 }
```

CSS Specificity Demo x +

127.0.0.1:5501/css-specificity.html

What color is this text?

```
<> css-specificity.html × # styles.css
1 <!DOCTYPE html>
2 <html>
3 <head>
4 <!--<meta charset="utf-8" />
5 <!--<title>CSS Specificity Demo</title>
6 <!--<style>
7 <!--<h1 {
8 <!--<color: blue;
9 <!--<background: yellow;
10 <!--<
11 <!--</style>
12 <!--<link rel="stylesheet" href="css/s
13 </head>
14 <body>
15 <!--<h1>What color is this text?</h1>
16 </body>
17 </html>
```

```
# styles.css ×
1 h1 {
2 <!--<color: red;
3 }
4
5 h1 {
6 <!--<color: green;
7 }
```

CSS Specificity Demo

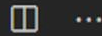
127.0.0.1:5501/css-specificity.html

What color is this text?

SPECIFICITY: INLINE STYLES,
ELEMENT, CLASS, ID



css-specificity.html × # styles.css



```
6 <link rel="stylesheet" href="css/styles.css" />
7 </head>
8 <body>
9 <div style="background: yellow; class="bg-red" id="bg-green">
10 <div>What color is my background?
11 </div>
12 </body>
```

styles.css ×



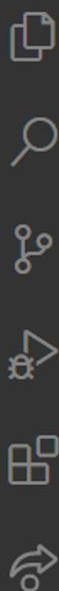
```
1 div { /* ELEMENT/TYPE-SELECTOR */
2   background: blue;
3 }
4
5 .bg-red {
6   background: red; /* CLASS-SELECTOR */
7 }
8
9 #bg-green {
10  background: green; /* ID-SELECTOR */
11 }
12
```



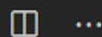
127.0.0.1:5501/css-...



What color is my background?



css-specificity.html × # styles.css



```
6 <link rel="stylesheet" href="css/styles.css" />
7 </head>
8 <body>
9 <div class="bg-red" id="bg-green">
10   What color is my background?
11 </div>
12 </body>
```

styles.css ×



```
1 div { ..... /* ELEMENT/TYPE-SELECTOR */
2   background: blue;
3 }
4
5 .bg-red {
6   background: red; ..... /* CLASS-SELECTOR */
7 }
8
9 #bg-green {
10  background: green; ..... /* ID-SELECTOR */
11 }
12
```

What color is my background?



css-specificity.html x # styles.css



```
6 <link rel="stylesheet" href="css/styles.css" />
7 </head>
8 <body>
9 <div class="bg-red" id="bg-green">
10   What color is my background?
11 </div>
12 </body>
```

styles.css x

```
1 #bg-green {
2   background: green; /* ID-SELECTOR */
3 }
4
5 div { /* ELEMENT/TYPE-SELECTOR */
6   background: blue;
7 }
8
9 .bg-red {
10  background: red; /* CLASS-SELECTOR */
11 }
```

What color is my background?



css-specificity.html x # styles.css



```
6 <link rel="stylesheet" href="css/styles.css" />
7 </head>
8 <body>
9 <div class="bg-red">
10   What color is my background?
11 </div>
12 </body>
```

styles.css x



```
1 #bg-green {
2   background: green; /* ID-SELECTOR */
3 }
4
5 div { /* ELEMENT/TYPE-SELECTOR */
6   background: blue;
7 }
8
9 .bg-red {
10  background: red; /* CLASS-SELECTOR */
11 }
```



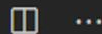
127.0.0.1:5501/css-...



What color is my background?



css-specificity.html x # styles.css



```
6 <link rel="stylesheet" href="css/styles.css" />
7 </head>
8 <body>
9   <div>
10     What color is my background?
11   </div>
12 </body>
```

styles.css x



```
1 #bg-green {
2   background: green; /* ID-SELECTOR */
3 }
4
5 div { /* ELEMENT/TYPE-SELECTOR */
6   background: blue;
7 }
8
9 .bg-red {
10  background: red; /* CLASS-SELECTOR */
11 }
```

What color is my background?

SPECIFICITY POINT VALUES

INLINE STYLES	ID SELECTOR	CLASS SELECTOR	ELEMENT/ TYPE SELECTOR
1000	100	10	1

SPECIFICITY POINT VALUES

```
div {  
  background: blue;  
}  
  
.bg-red {  
  background: red;  
}
```

<div class="bg-red">What
color is my background?</div>

10

>

1