

Selectors

In this lesson, we will get acquainted with selectors in CSS.
Let's begin!

WE'LL COVER THE FOLLOWING



- Tag, class, and ID selectors
- [Listing 9-2](#): Applying the three types of selectors in CSS
 - Explanation
- [Listing 9-3](#): Applying more selectors for a single HTML element
 - Explanation
- Quiz time! :)



Selectors in CSS



You can easily define what a rule in a style sheet does: **it declares one or more property and value pairs to apply on a set of HTML nodes within the current document.**

In this approach, selectors identify the part of the document that should be styled. Here, you'll learn them through simple examples.

Tag, class, and ID selectors

The **three** most frequently used selector types are:

1. the **tag selector** —applied to every occurrence of an HTML tag
2. the **class selector** —applied to every occurrence of an HTML tag that has a specific value in its class attribute
3. the **ID selector** - applied to the HTML tag with a specific identifier (the value of the ID attribute).

The tag selector uses the same name as the corresponding HTML tag, the class selector prefixes the class attribute value name with a dot (**.**), while the ID selector uses a number sign (**#**) prefix before the identifier value.

Listing 9-2 demonstrates these concepts.

Listing 9-2: Applying the three types of selectors in CSS

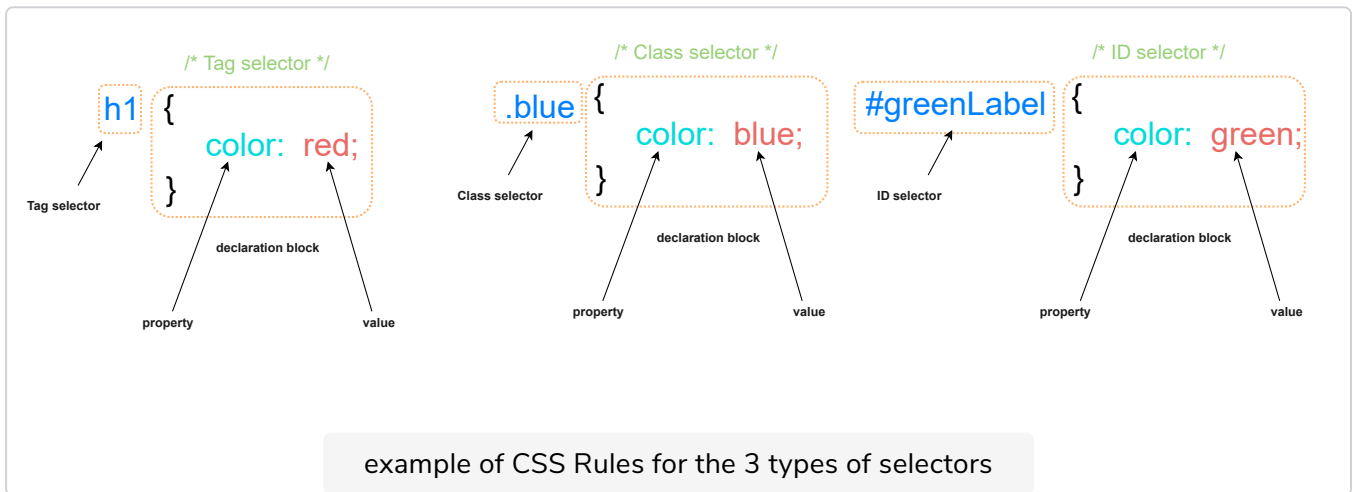
```
<!DOCTYPE html>
<html>
<head>
  <title>Tag, class, and ID selectors</title>
  <style>
    /* Tag selector*/
    h1 { color: red; }

    /* Class selector */
    .blue { color: blue; }

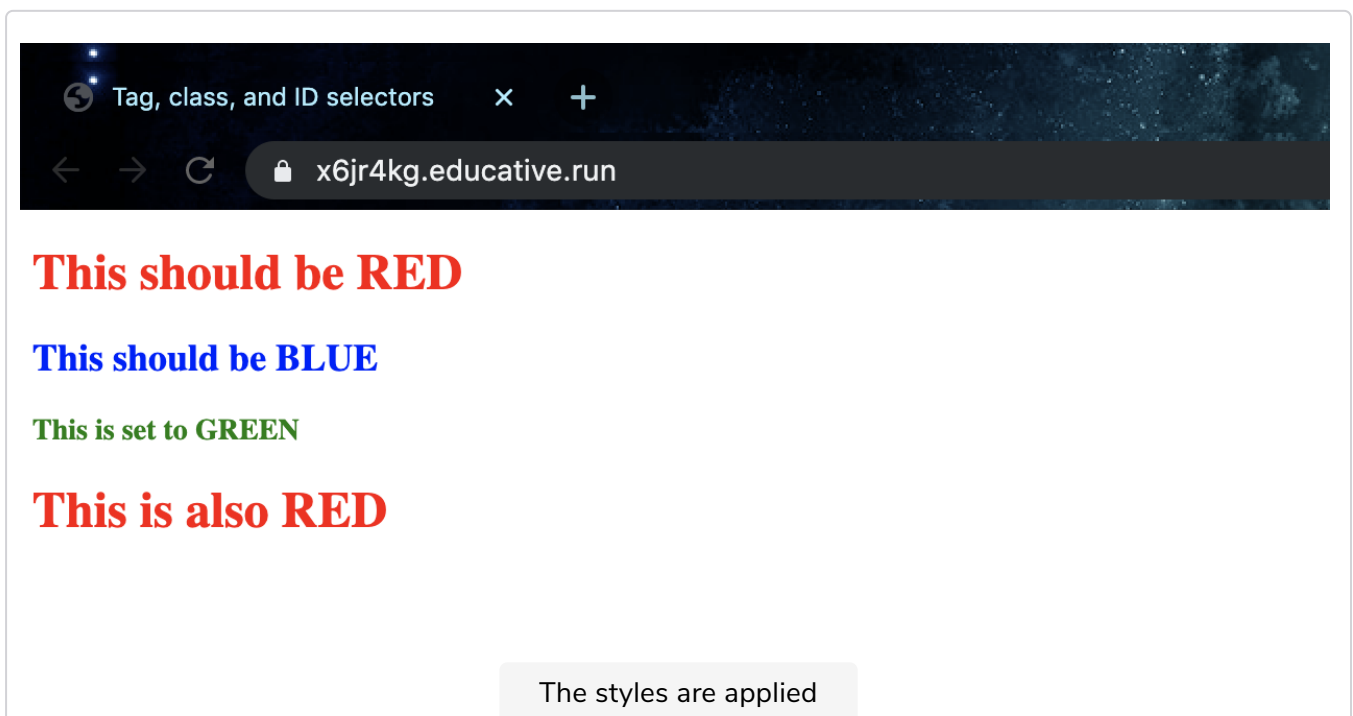
    /* ID selector */
    #greenLabel { color: green; }
  </style>
</head>
<body>
  <h1>This should be RED</h1>
  <h2 class="blue">This should be BLUE</h2>
  <h3 id="greenLabel">This is set to GREEN</h3>
  <h1>This is also RED</h1>
</body>
</html>
```

Explanation

The `h1` style is applied to both `<h1>` tags, so both first-level headings are displayed in red. The `.blue` style (observe the *dot* prefix) is taken into account only for the single `<h2>` tag because only this tag has a class attribute set to blue. The `<h3>` tag has an identifier of `greenLabel` so the `#greenLabel` rule (observe the number sign prefix) is applied.



The page is displayed as shown in the image below:



You can apply more selectors for a single HTML element. Listing 9-3 contains three `<h1>` tags in which one, two, and three rules listed above are applied.

The `h1` selector is bound to all headings, the `.blue` selector applies to the last two of them, while `#greenlabel` is taken into account only for the third heading.

Listing 9-3: Applying more selectors for a single

HTML element

```
<!DOCTYPE html>
<html>
<head>
  <title>Multiple selectors applied</title>
  <style>
    /* Tag selector */
    h1 { color: red; }

    /* Class selector */
    .blue {
      color: blue;
      background-color: #ffffb2;
    }

    /* ID selector */
    #greenLabel { color: green; }
  </style>
</head>
<body>
  <h1>This should be RED</h1>
  <h1 class="blue">Now this should be BLUE</h1>
  <h1 class="blue" id="greenLabel">GREEN!</h1>
</body>
</html>
```

Explanation

The `.blue` selector specifies that the background color should be set to `#ffffb2`, a light shade of yellow. As you can see in the image below, it is applied to the last two headings just as expected. It is obvious that the first heading has a transparent background while the last two are `#ffffb2`.

The more interesting thing is the color of the text.

The first heading's color is taken from the `h1` rule, but there is a conflict for the second and third heading, where **multiple rules** define the text color.

In the second heading the `h1` rule defines red and the `.blue` rule sets a blue color. The third heading has another candidate, green, specified by the `#greenLabel` rule.



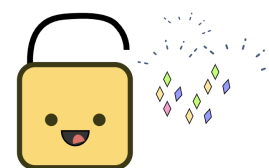
By the CSS specification, if multiple selectors set the same property, the most specific is applied.

Comparing the tag, class, and ID selectors, **the ID selector is the *most specific***, followed by the **class selector**, and the **tag selector** is the *least specific*.

This results in the first heading being red (tag selector), the second being blue (class selector is more specific than the tag selector), and the third heading being green (ID selector is more specific than either the class or the tag selector).

Achievement unlocked! 🎉

Congratulations! You've learned to make use of all three types of selectors in CSS!



Good job! Give yourself a round of applause!

Quiz time! :) #

Question 1

Q

Given the following HTML code:

```
<h1 class="name">Machine Learning: A New Era</h1>
```

and the following CSS code:

```
.name {  
  color: purple;  
}  
  
h1 {  
  color: blue;  
}
```

What color will the `h1` element from the above HTML have?

Check Answers

Question 2

Q

Given the following HTML code:

```
<h1 id="center">Red and center-aligned heading</h1>  
<p class="center">Red and center-aligned paragraph.</p>
```

and the following CSS code:

```
#center {
```

```
text-align: center;
color: red;

}
```

What will the `h1` and `p` elements from the above HTML look like?

(please note, default style here is black and left aligned)

Check Answers

Question 3

Q

Given the following HTML code:

```
<h1 id="center">Red and center-aligned heading</h1>
<p class="center">Red and center-aligned paragraph.</p>
```

and the following CSS code:

```
#center {
  text-align: center;
  color: red;
}

.center {
  text-align: center;
  color: red;
}
```

What will the `h1` and `p` elements from the above HTML look like?
(please note, default style here is black and left aligned)

Check Answers

In the *next lesson*, we will study the attribute selectors.