

# HTML & CSS

طراحی صفحات وب

# `span` Tag

Groups inline elements/contents.

```
1 <!DOCTYPE HTML>
2 <html>
3   <head>
4     <title>Span Tag</title>
5   </head>
6   <body>
7     <p>
8       Span can be used for grouping <span style="color:
9         #ff0000">inline content</span>
10     </p>
11   </body>
12 </html>
```



file:///Users/alireza/HTML\_Class/03/span.html

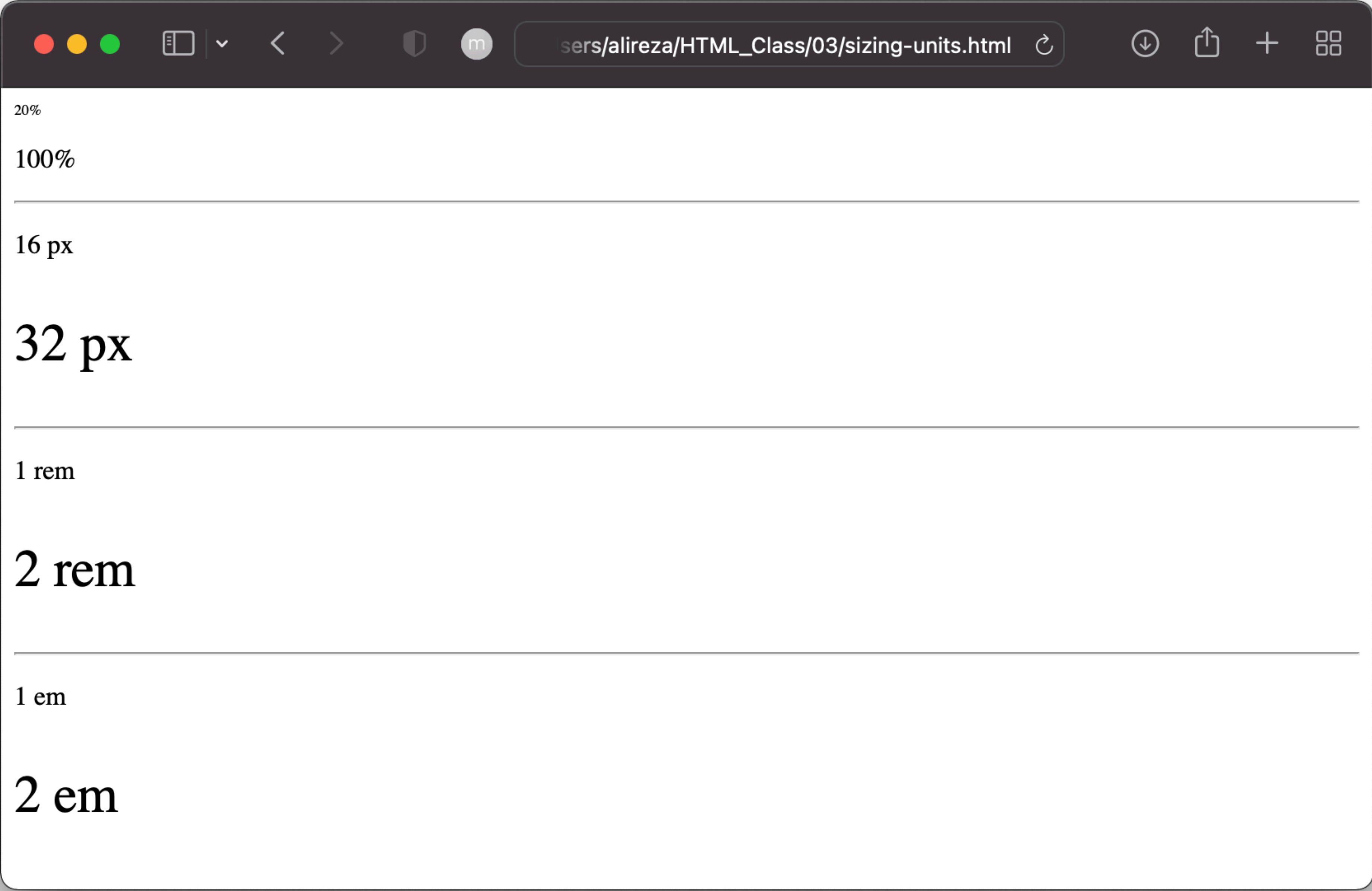


Span can be used for grouping **inline content**

# Sizing Units

- There are many sizing units.
- Mostly used:
  - Percentage (%)
  - Pixels (px)
  - em
  - Root em (rem)

```
1 <!DOCTYPE HTML>
2 <html>
3   <head>
4     <title>Sizing Units</title>
5   </head>
6   <body>
7     <p style="font-size: 20%">20%</p>
8     <p style="font-size: 100%">100%</p>
9     <hr />
10    <p style="font-size: 16px">16 px</p>
11    <p style="font-size: 32px">32 px</p>
12    <hr />
13    <p style="font-size: 1rem">1 rem</p>
14    <p style="font-size: 2rem">2 rem</p>
15    <hr />
16    <p style="font-size: 1em">1 em</p>
17    <p style="font-size: 2em">2 em</p>
18  </body>
19 </html>
```



# Pixels

- Static.
- Shown by `px`.
- The font size is `16px` by default.

```
1 <!DOCTYPE HTML>
2 <html>
3   <head>
4     <title>Pixels</title>
5   </head>
6   <body>
7     <div>This section has no styles.</div>
8     <div style="font-size: 16px;">
9       This section has the default font-size.
10    </div>
11    <div style="font-size: 65px;">
12      This section has the font-size of 65px.
13    </div>
14  </body>
15 </html>
```





This section has no styles.

This section has the default font-size.

This section has the font-size  
of 65px.

# Percentage

- Fluid.
- Shown by `%`.
- Takes the parent's value as default.

```
1 <!DOCTYPE HTML>
2 <html>
3   <head>
4     <title>Percentage</title>
5   </head>
6   <body>
7     <div>This section has no styles.</div>
8     <div style="font-size: 100%;">
9       This section has the default font-size.
10    </div>
11    <div style="font-size: 20px;">
12      This section has the font-size of 20px as it's 100%.
13      <p style="font-size: 90%">
14        This section has the font-size of 90% of 20px.
15      </p>
16    </div>
17  </body>
18 </html>
```





Users/alireza/HTML\_Class/03/percentage.html



This section has no styles.

This section has the default font-size.

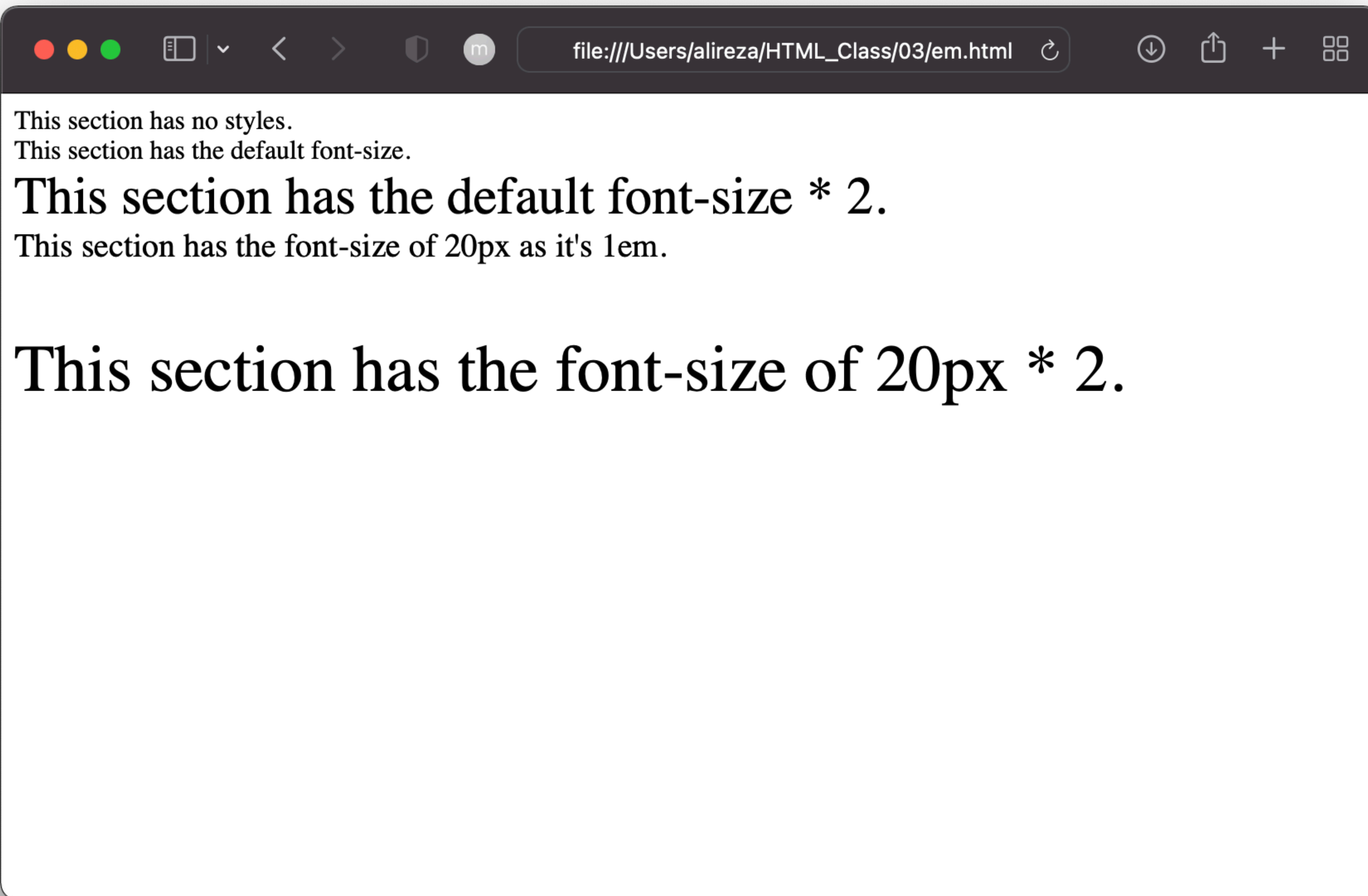
This section has the font-size of 20px as it's 100%.

This section has the font-size of 90% of 20px.

# em

- Fluid/Static.
- Shown by `em`.
- 1 em == Parent's value.

```
1 <!DOCTYPE HTML>
2 <html>
3   <head>
4     <title>em</title>
5   </head>
6   <body>
7     <div>This section has no styles.</div>
8     <div style="font-size: 1em;">
9       This section has the default font-size.
10    </div>
11    <div style="font-size: 2em;">
12      This section has the default font-size * 2.
13    </div>
14    <div style="font-size: 20px;">
15      This section has the font-size of 20px as it's 1em.
16      <p style="font-size: 2em;">
17        This section has the font-size of 20px * 2.
18      </p>
19    </div>
20  </body>
21 </html>
```



This section has no styles.

This section has the default font-size.

This section has the default font-size \* 2.

This section has the font-size of 20px as it's 1em.

This section has the font-size of 20px \* 2.

# Root em

- Fluid/Static.
- Shown by `rem`.
- 1 rem == Root's value (html tag).

```
1 <!DOCTYPE HTML>
2 <html>
3   <head>
4     <title>Root em</title>
5   </head>
6   <body>
7     <div>This section has no styles.</div>
8     <div style="font-size: 1rem;">
9       This section has the default font-size.
10    </div>
11    <div style="font-size: 2rem;">
12      This section has the default font-size * 2.
13    </div>
14    <div style="font-size: 20px;">
15      This section has the font-size of 20px.
16      <p style="font-size: 2rem;">
17        This section has the default font-size * 2.
18      </p>
19    </div>
20  </body>
21 </html>
```



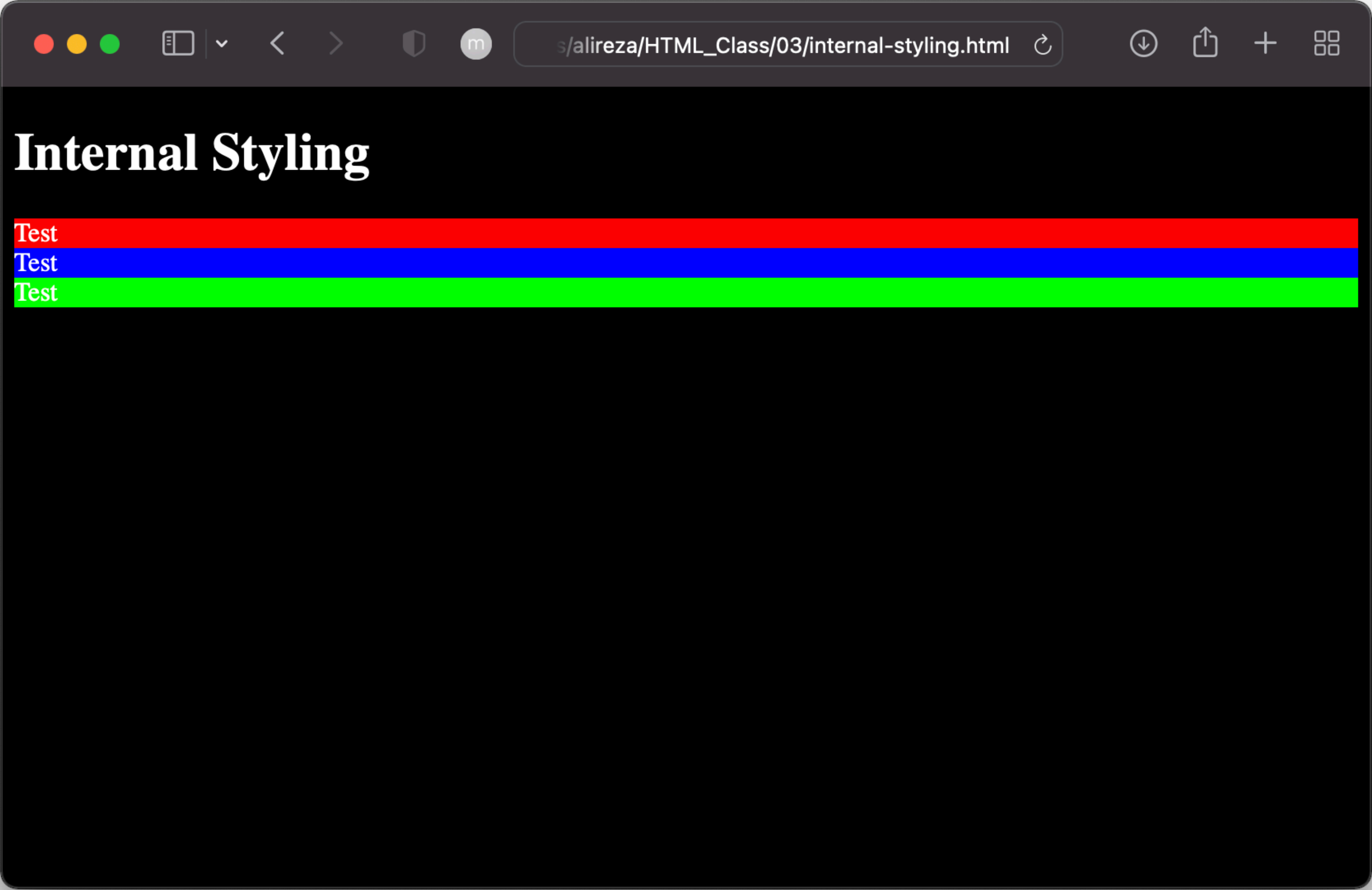




# Internal Styling

## Another method to use CSS.

```
1 <!DOCTYPE HTML>
2 <html>
3   <head>
4     <title>Internal Styling</title>
5     <style>
6       .bg-red {
7         background-color: #ff0000;
8       }
9       .bg-blue {
10        background-color: #0000ff;
11      }
12      .bg-green {
13        background-color: #00ff00;
14      }
15      body {
16        background-color: #000000;
17        color: #ffffff;
18      }
19    </style>
20  </head>
21  <body>
22    <h1>Internal Styling</h1>
23    <div class="bg-red">Test</div>
24    <div class="bg-blue">Test</div>
25    <div class="bg-green">Test</div>
26  </body>
27 </html>
```



# `style` Tag

## Internal Styling

- Should be placed inside `head`.
- Takes one or more CSS Rule as Content.

```
3 <head>
4   <title>Internal Styling</title>
5   <style>
6     .bg-red {
7       background-color:  #ff0000;
8     }
9     .bg-blue {
10      background-color:  #0000ff;
11    }
12    .bg-green {
13      background-color:  #00ff00;
14    }
15    body {
16      background-color:  #000000;
17      color:  #ffffff;
18    }
19  </style>
20 </head>
```



# CSS Rule

## Internal Styling

- Has a Set of CSS Properties.
- Has one or more CSS Selector.

```
3  <head>
4    <title>Internal Styling</title>
5    <style>
6      .bg-red {
7        background-color:  #ff0000;
8      }
9      .bg-blue {
10       background-color:  #0000ff;
11     }
12     .bg-green {
13       background-color:  #00ff00;
14     }
15     body {
16       background-color:  #000000;
17       color:  #ffffff;
18     }
19   </style>
20 </head>
```

# CSS Selector

## Internal Styling

- First part of a CSS Rule
- Tells browser, which elements should use the rule.

```
3  <head>
4    <title>Internal Styling</title>
5    <style>
6      .bg-red {
7        background-color:  #ff0000;
8      }
9      .bg-blue {
10       background-color:  #0000ff;
11     }
12     .bg-green {
13       background-color:  #00ff00;
14     }
15     body {
16       background-color:  #000000;
17       color:  #ffffff;
18     }
19   </style>
20 </head>
```



# Simple Selectors

## Internal Styling

	CSS Selector	Description	Example
Tag Selector	p	All ` <code>&lt;p&gt;...&lt;/p&gt;</code> Tags.	<code>p {   color: #0000ff; }</code>
Class Selector	<code>.my-class</code>	All Tags with ` <code>class="my-class"</code> ` attribute.	<code>.my-class {   background-color: #00ff00; }</code>
ID Selector	<code>#my-element</code>	All Tags with ` <code>id="my-element"</code> ` attribute.	<code>#my-element {   background-color: #ffff00; }</code>

# Tag Selector

## Internal Styling

- Points to HTML Tags.

```
1 <!DOCTYPE HTML>
2 <html>
3 <head>
4   <title>Tag Selector</title>
5   <style>
6     h1 {
7       background-color: #000000;
8       color: #ffffff;
9       margin: 0;
10      padding: 20px;
11    }
12    p {
13      padding: 20px;
14      background-color: #0000ff;
15      color: #ffffff
16    }
17  </style>
18 </head>
19 <body>
20   <h1>Internal Styling</h1>
21   <p>
22     Lorem ipsum dolor sit amet consectetur adipisicing elit.
23     Corporis eligendi obcaecati repellat eum maiores facere,
24     numquam dolores voluptates excepturi itaque pariatur hic
25     dolor.
26     Facere a vitae voluptatibus ipsum nesciunt quae?
27   </p>
28   <p>Another Paragraph, just to see the effects.</p>
29 </body>
30 </html>
```



/alireza/HTML\_Class/03/tag-selector.html



# Internal Styling

Lorem ipsum dolor sit amet consectetur adipisicing elit. Corporis eligendi obcaecati repellat eum maiores facere, numquam dolores voluptates excepturi itaque pariatur hic dolor. Facere a vitae voluptatibus ipsum nesciunt quae?

Another Paragraph, just to see the effects.

# Class Selector

## Internal Styling

- Starts with `.`
- Has a name.
- Points to all tags with the specified tag.
- A tag can have multiple classes.
- A class can be used on multiple tags.

```
1 <!DOCTYPE HTML>
2 <html>
3 <head>
4   <title>Internal Styling</title>
5   <style>
6     .bg-dark {
7       background-color: #252525;
8       color: #999999;
9     }
10    .space-inside {
11      padding: 20px;
12    }
13  </style>
14 </head>
15 <body>
16   <div class="bg-dark">This is a dark box.</div>
17   <div class="space-inside">This is a box with space inside.
18     </div>
19   <div class="bg-dark space-inside">This is a dark box with
20     space inside.</div>
21 </body>
22 </html>
```



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This is a dark box.

This is a box with space inside.

This is a dark box with space inside.



# ID Selector

## Internal Styling

- Starts with `#`
- Has a name.
- Should only be used on one tag.
- A tag can have only one ID.

```
1 <!DOCTYPE HTML>
2 <html>
3
4 <head>
5   <title>Internal Styling</title>
6   <style>
7     #content {
8       padding: 10px;
9       margin: 0;
10      background-color: #cccccc;
11      color: #525252;
12      border-radius: 10px;
13    }
14  </style>
15 </head>
16
17 <body>
18   <h1>Lorem Ipsum</h1>
19   <div id="content">
20     Lorem ipsum dolor sit amet consectetur, adipisicing elit.
21     Dolorem fuga voluptates laboriosam ratione, fugit maxime
22     obcaecati! Dolores eum nobis iusto repellendus dolorum
23     error,
24     mollitia sit similique voluptatibus, quos, minus maxime!
25   </div>
26 </body>
27 </html>
```





rs/alireza/HTML\_Class/03/id-selector.html



# Lorem Ipsum

Lorem ipsum dolor sit amet consectetur, adipisicing elit. Dolorem fuga voluptates laboriosam ratione, fugit maxime obcaecati! Dolores eum nobis iusto repellendus dolorum error, mollitia sit similique voluptatibus, quos, minus maxime!



# Grouping Selectors

We can separate Selectors, with comma (`,`).

```
1 <!DOCTYPE HTML>
2 <html>
3
4 <head>
5   <title>Internal Styling</title>
6   <style>
7     #content, .content-like, p {
8       padding: 10px;
9       margin: 0;
10      background-color: #cccccc;
11      color: #525252;
12      border-radius: 10px;
13    }
14  </style>
15 </head>
16
17 <body>
18   <h1>Lorem Ipsum</h1>
19   <p>
20     Lorem ipsum dolor sit amet consectetur, adipisicing elit.
21     Dolorem fuga voluptates laboriosam ratione,
22     fugit maxime obcaecati! Dolores eum nobis iusto repellendus
23     dolorum error, mollitia sit similique voluptatibus,
24     quos, minus maxime!
25   </p>
26   <div class="content-like">
27     Lorem ipsum dolor sit amet consectetur, adipisicing elit.
28     Dolorem fuga voluptates laboriosam ratione,
29     fugit maxime obcaecati! Dolores eum nobis iusto repellendus
30     dolorum error, mollitia sit similique voluptatibus,
31     quos, minus maxime!
32   </div>
33   <div id="content">
34     Lorem ipsum dolor sit amet consectetur, adipisicing elit.
35     Dolorem fuga voluptates laboriosam ratione,
36     fugit maxime obcaecati! Dolores eum nobis iusto repellendus
37     dolorum error, mollitia sit similique voluptatibus,
38     quos, minus maxime!
39   </div>
40 </body>
41 </html>
```



reza/HTML\_Class/03/grouping-selectors.html



# Lorem Ipsum

Lorem ipsum dolor sit amet consectetur, adipisicing elit. Dolorem fuga voluptates laboriosam ratione, fugit maxime obcaecati! Dolores eum nobis iusto repellendus dolorum error, mollitia sit similique voluptatibus, quos, minus maxime!

Lorem ipsum dolor sit amet consectetur, adipisicing elit. Dolorem fuga voluptates laboriosam ratione, fugit maxime obcaecati! Dolores eum nobis iusto repellendus dolorum error, mollitia sit similique voluptatibus, quos, minus maxime!

Lorem ipsum dolor sit amet consectetur, adipisicing elit. Dolorem fuga voluptates laboriosam ratione, fugit maxime obcaecati! Dolores eum nobis iusto repellendus dolorum error, mollitia sit similique voluptatibus, quos, minus maxime!