8/21/24, 10:59 AM index.html

index.html

```
<!DOCTYPE html>
   <html lang="en">
 3
   <head>
       <meta charset="UTF-8">
 5
 6
       <meta name="viewport" content="width=device-width, initial-scale=1.0">
 7
       <link rel="stylesheet" href="style.css">
       <title>Units in CSS</title>
 8
   </head>
10
11
   <body>
12
       <section id="units-section">
13
14
15
           <h1>Units in CSS</h1>
16
           CSS units defines the matrix using which we put the size, length and dimensions of our HTML
17
           elements. Example: 10px (pixel) is the unit of measurement.
18
19
           CSS units are of two types: Absolute units and Relative units.
20
21
22
           Absolute Units are those which remains of constant measurement. They stay unchanged
23
           regardless of the device configuration.
24
25
           Relative Units are those which changes depending on the device configuration. They change
26
           according to the device configuration. For example: em: This is relative to parent's element.
27
28
       </section>
29
       <section id="difference">
30
31
32
           <h1>DOM & CSSOM</h1>
33
34
           <u1>
35
               Parse HTML: To parse the HTML, first of all browser tokenizes the HTML. Browser creates HTML
36
```

```
37
               elements with these tokens and then connect them in DOM (Document Object Model) tree structure.
38
39
               <br>>
40
               CSS Parsing: Browser parses CSS in a similar fashion, and creates a tree like structure called as
41
               CSSOM (CSS Object Model). Browser executes the internal algorithm called as Selector Matching. It
42
               decides the final set of styles which will be applied to any elements.
43
44
45
           46
47
           <h1>HTML DOM Tree</h1>
48
49
           <img src="html tree structure.jpg" alt="html tree">
50
           <h1>CSSOM Tree</h1>
51
52
           <img src="cssom tree structure.png" alt="cssom tree">
53
54
55
       </section>
56
57
   </body>
58
59
    </html>
```

style.css

```
2
 3
   1em = 16px
   1rem = 16px
 6
   1.5em = 24px
 8
   100\% = 16px
10
11
   1px = 6.25\%
12
   */
13
14
   #units-section {
15
       width: 100%;
16
   }
17
18
19
   h1 {
20
        font-size: 40px;
21
22
   #units {
        font-size: 18px;
24
25
26
27
   #unit-1 {
        font-size: 2rem;
28
29
30
   #unit-2 {
31
32
       font-size: 1.5em;
33
34
   #unit-3 {
35
        font-size: 2em;
36
```

```
37
38
39
   #difference ul li {
       font-size: 18px;
40
       line-height: 1.5;
41
       color: red
42
43
44
   #difference img {
45
46
       width: 50%;
47
       height: 50%;
       margin: 0 auto;
48
49
       display: block;
       margin-top: 15px;
50
51
52
53
   h1 {
54
       text-align: center;
55
```

8/21/24, 11:09 AM Units in CSS

Units in CSS

CSS units defines the matrix using which we put the size, length and dimensions of our HTML elements. Example: 10px (pixel) is the unit of measurement.

CSS units are of two types: Absolute units and Relative units.

Absolute Units are those which remains of constant measurement. They stay unchanged regardless of the device configuration.

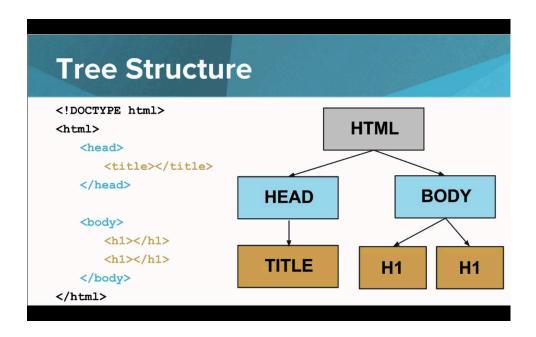
Relative Units are those which changes depending on the device configuration. They change according to the device configuration. For example: em: This is relative to parent's element.

DOM & CSSOM

- Parse HTML: To parse the HTML, first of all browser tokenizes the HTML. Browser creates HTML elements with these tokens and then connect them in DOM (Document Object Model) tree structure.
- CSS Parsing: Browser parses CSS in a similar fashion, and creates a tree like structure called as CSSOM (CSS Object Model). Browser executes the internal algorithm called as Selector Matching. It decides the final set of styles which will be applied to any elements.

8/21/24, 11:09 AM Units in CSS

HTML DOM Tree



CSSOM Tree

