**CSS Selectors:**

* To target **class** selector should be **.one{}**

<div class="one">

<!-- code -->

</div>

* To target **id** selector should be **#one{}**

<div id="one">

<!-- code -->

</div>

* We can also target elements based on their location.

<li><strong>another</strong> item</li>

li strong {

  color: purple;

}

* CSS styles set on parent elements are inherited by the child elements.

<header>

<h1>some title</h1>

<p>some text</p>

<p>another text</p>

</header>

header {

color: red;

font-size: 24px;

}

**Box Model:**

* Html elements appear as boxes.
* It contains **margin, border, padding, content.**
* **Total Width = width + padding\_left + padding\_right.**
* Order of margin values – **TRBL**
* Box size can be adjusted using **width & height** properties.
* **Box-sizing - border-box (calculates width of the box excluding padding & border)**

**Properties:**

**Text:**

**Color**

**Font-size - 1em(16px)**

**Background-color**

**Font-family**

**Font-style - italic/normal/oblique …**

**Font-weight - bold (100-900)**

**400 - normal**

**700 - bold**

**900 - bolder**

**Text-transform - uppercase/capitalize/lowercase.**

**Text-decoration - none/underline/overline/line-through**

**Text-shadow - takes four values (we can add multiple shadows sepated by comma)**

**HorzOff, vertOff, blur, color**

**3px, 3px, 2px, red**

**Text-align - left/right/center/justify.**

**Line-height - 10px, 2 (double the height of the font), ...**

**Letter-spacing - 3px**

**Word-spacing - 3px**

**Margin/Padding/Border:**

**Margin - 5px 10px 5px 10px (TRBL)**

**Margin-top**

**Margin-left**

**Margin-bottom**

**Margin-right**

**Border - 3px solid black**

**Border-width**

**Border-style**

**Border-color**

**Border-radius**

**Padding - 1px 2px 1px 2px**

**Width - 50%**

**Height - 50%**

**Max-width - 100%**

**Max-height - 100%**

**Box-sizing - border-box (calculates width of the box excluding padding & border)**

**Background:**

**Background-color - red**

**Background-image - url (‘path’) -> provide width, height.**

**Linear-gradient(rgba(0,0,0,0),rgba(1,1,1,1)), url(‘path’)**

**Background-repeat - no-repeat/Repeat-x/ Repeat-y/ Repeat**

**Background-position - 50%/center**

**Background-size - cover/contain.**

**Cover - completely covers the box maintaining aspect ratio.**

**Contain - completely fits inside the box.**

**Styling Lists:**

**List-style-type - circle/square/decimal/disc/lower-alpha/lower-roman etc…**

**List-style-position - inside/outside (default)**

**List-style-image - url (‘path’)**

**List-style - none inside url (‘path’)**

**type position image**

**Styling Links:**

**Pseudo Selectors:**

**a:link - style for normal unvisited links**

**a:visited - style for visited links**

**a:active - link becomes active once we click on it**

**a:hover - style for hovered link**

**Styling Tables:**

**Border-collapse - collapse (removes space between cells)**

**tr: nth-child(count) - can add custom styling to specific row/column**

**tr: nth-child(even)**

**tr: nth-child(odd)**

**Styling Forms:**

**Input [type = ’text’] - changes applied to only text fields**

**Input [type = ’text’]: hover**

**Layout:**

**Display - block/inline/flex**

**Flex -** flex items and arrange them in columns. (Add it to parent of items)

**Flex - number (1,2,3 ….)**

**Positioning:**

**Float - left/right.**

**Position - static (default)/relative/absolute/fixed**

**Top**

**Right**

**Bottom**

**Left**

**Z-index -** which element should be placed in front of, or behind, the others. (1, 2, 3, …)

**Transformations:**

**Transform - Translate(50%, 50%)**

**Rotate(10deg)**

**Skew(10deg, 20deg)**

**Scale(1, 2)**

**Transform-origin - 25% 75% (to change position of transformed elements)**

**Transitions:**

**Transition - width 3s ease-in (property time timing-function)**

**Transition-timing-function - ease/ease-in/ease-out/ease-in-out/linear**

**Keyframes & Animation:**

**@keyframes animationName - 0%{color : red}**

**100%{color : green}**

**Animation-name - animationName**

**Animation-duration - 3s**

**Animation-timing-function - ease/ease-in/ease-out/ease-in-out/linear**

**Animation-delay - 2ms**

**Animation-iteration-count - 7/infinite**

**Animation-direction - normal/reverse/alternate/alternate-reverse**

**Animation - animationName 3s ease-in 1s infinite reverse**

div {

    width: 100px;

    height: 100px;

    background-color: red;

    animation-name: colorchange;

    animation-duration: 3s;

}

@keyframes colorchange {

    0% {background-color: red; }

    50% {background-color: green; }

    100% {background-color: blue; }

}

**Responsive Design:**

**FlexLayout:**

**Display - flex**

**Flex-direction - column/column-reverse/row(default)/row-reverse**

**Flex-flow - shorthand for [flex-direction flex-wrap]**

**Justify-content - center/flex-start/flex-end/space-around/space-between**

**(align items on main axis)**

**Align-items - center/flex-start/flex-end/stretch/baseline.**

**(align items on cross axis)**

**Flex-wrap - wrap/nowrap/wrap-reverse**

**Align-content - space-between/space-around/stretch/center/flex-start/flex-end**

**(only works with flex-wrap when it sets to wrap)**

**(align items on cross axis)**

**Gap - 1em (adds gap between items)**

**Order - 1/2/3/-1/-2/-3…**

**Flex-grow - 1/2/3… (default:0)**

**Flex-shrink - 0/2/3… (default:1)**

**Flex-basis - 100px (when flex changes we can override width of item with this)**

**Flex - shorthand for [flex-grow flex-shrink flex-basis]**

**Align-self - center/flex-start/flex-end/baseline**

**Note: flex-shrink/flex-basis/flex-grow used on items not on container**

**Responsive:**

* A screenshot of a computer program

  Description automatically generated with low confidence**screen resolutions for responsive design.**

**To Centre Items:**

**Justify-content - center**

**Align-items - center**

**CSS Units:**

**em, rem, px, ch, vh, ,vw, % - are mostly used**

**default font-size in browsers - 16px**

**font-size should be in rem - 1rem**

**padding should be in em - 1em**

**paragraphs should be in ch - max-width:60ch (60 characters per line)**

**Doubts:**

* **List**
* **Transform-origin**

**Notes:**

* Default background-position is **(0,0) - > top-left corner.**
* We can do **multiple transformations** in a **single property**.
* We can also use **from to** in animation instead of **0% 100%**.
* **Display** property should be along with flex properties.