

Module 2: CSS 3 – Cheat Sheet

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2.0. Introduction to CSS 3

What is CSS?	<ul style="list-style-type: none"> Property-based language. Creates styles in the web page. Adds beauty to the web page.
Features:	<ul style="list-style-type: none"> Not a case sensitive language. Defines key-value pairs. property: value; Access HTML elements and add styles.
History:	<ul style="list-style-type: none"> Developed by Håkon Wium Lie and Bert Bos in 1996. CSS 1: Dec 1996 CSS 2: May 1998 CSS 2.1: Jun 2011 CSS 3: 2017 - now

CSS 3 Properties:

2.1. font-family

Example:	font-family: 'Arial', 'Segoe UI';
Interpretation:	<ul style="list-style-type: none"> Specifies font name (style of characters). If multiple font names are specified, it applies first-possible font, which is supported by the browser
Default value:	Times New Roman

2.2. font-size

Example:	font-size: px % em vw;
Interpretation:	<ul style="list-style-type: none"> Specifies font size based on any one of the units.
Default value:	16px

2.3. font-weight

Example:	font-weight: normal bold 100 divisible number;
Interpretation:	<ul style="list-style-type: none"> Specifies thickness (lighter / thicker) of the text.
Default value:	normal

2.4. font-style

Example:	font-style: normal italic
Interpretation:	<ul style="list-style-type: none"> Displays the text in italic.
Default value:	normal

2.5. font-variant

Example:	font-variant: normal small-caps;
Interpretation:	<ul style="list-style-type: none"> Small capital letters for all letters, except for first letter of the word.
Default value:	normal

2.6. font

Example:	font: font-style font-variant font-weight font-size font-family
Interpretation:	<ul style="list-style-type: none"> Specifies all font properties in one.
Default value:	normal normal normal normal 16px 'Times New Roman'

2.7. color

Example:	color: #000000
Interpretation:	<ul style="list-style-type: none"> Specifies text color.
Default value:	None

2.8. text-align

Example:	text-align: left center right justify;
Interpretation:	<ul style="list-style-type: none"> Specifies text alignment in the browser.
Default value:	left

2.9. text-decoration

Example:	text-decoration: none underline overline line-through;
Interpretation:	<ul style="list-style-type: none"> Underlines, overlines, strikes-out the text.
Default value:	ltr

2.10. text-transform

Example:	text-transform: none uppercase lowercase capitalize;
Interpretation:	<ul style="list-style-type: none"> Converts the text into desired case.
Default value:	none

2.11. letter-spacing

Example:	letter-spacing: px;
Interpretation:	<ul style="list-style-type: none"> Represents gap between letters (characters) in the paragraph.
Default value:	normal

2.12. word-spacing

Example:	word-spacing: px;
Interpretation:	<ul style="list-style-type: none"> Represents gap between words in the paragraph.
Default value:	normal

2.13. line-height

Example:	line-height: n;
Interpretation:	<ul style="list-style-type: none"> Represents height of line of text in the paragraph.
Default value:	normal

2.14. text-shadow

Example:	text-shadow: horizontal vertical blur color;
Interpretation:	<ul style="list-style-type: none"> Represents shadow style of text.
Default value:	none

2.15. background-color

Example:	background-color: #ffffff;
Interpretation:	<ul style="list-style-type: none"> Represents background color of the element. Possible color formats: <ul style="list-style-type: none"> rgb(<i>red, green, blue</i>) rgba(<i>red, green, blue, alpha</i>) #rrggbb
Default value:	transparent

2.16. margin

Example:	margin: px;
Interpretation:	<ul style="list-style-type: none"> Specifies gap between elements.
Default value:	0

2.17. padding

Example:	padding: px;
Interpretation:	<ul style="list-style-type: none"> Specifies gap between border and content. In order words, it represents inner space of the element.
Default value:	0

2.18. border

Example:	border: <i>width style color</i> ;
Interpretation:	<ul style="list-style-type: none"> Represents border surrounding element.
Default value:	medium none #000000

2.19. width

Example:	width: px;
Interpretation:	<ul style="list-style-type: none"> Represents width of "content" of the element.
Default value:	auto

2.20. height

Example:	height: px;
Interpretation:	<ul style="list-style-type: none"> Represents height of "content" of the element.
Default value:	auto

2.21. float

Example:	float: left right;
Interpretation:	<ul style="list-style-type: none"> In case of float: left, it displays the block level elements side-by side from left-to-right direction. In case of float: right, it displays the block level elements side-by side from right-to-left direction.
Default value:	none

2.22. clear

Example:	clear: left right both;
Interpretation:	<ul style="list-style-type: none"> Breaks the sequence of "float" and pushes the element to the next line.



Default value:	none
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2.23. border-radius

Example:	border-radius: px;
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Interpretation:	<ul style="list-style-type: none">• Applies rounded corners for element, for all four corners.
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Default value:	0
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2.24. box-shadow

Example:	box-shadow: <i>horizontal vertical blur spread color</i> ;
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Interpretation:	<ul style="list-style-type: none">• Applies shadow for the entire element (after border).
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Default value:	none
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2.25. transition

Example:	transition: <i>property seconds</i> ;
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Interpretation:	<ul style="list-style-type: none">• Specifies the browser to change the property value gradually, based on given time (seconds).
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Default value:	none
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2.26. transform

Example:	transform: rotate(<i>deg</i>) scale(<i>n</i>) skew(<i>deg</i>) translate(<i>x, y</i>);
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Interpretation:	<ul style="list-style-type: none">• Shows the element from a different visual dimension.• It rotates / skews / moves visual position of the element.
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Default value:	none
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2.27. list-style-type

Example:	list-style-type: decimal upper-alpha lower-alpha upper-roman lower-roman disc square circle none;
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Interpretation:	<ul style="list-style-type: none">• Specifies numbering type for / bullet type for tag.
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Default value:	disc decimal
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2.28. list-style-image

Example:	list-style-image: url("filename.png");
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Interpretation:	<ul style="list-style-type: none">• Specifies custom image as bullet for tag.
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Default value:	none
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2.29. vertical-align

Example:	vertical-align: baseline length top bottom middle;
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Interpretation:	<ul style="list-style-type: none">• Specifies vertical alignment of text of the element.
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Default value:	baseline
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2.30. animation

Example:	animation: <i>animationname</i> ;
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Interpretation:	<ul style="list-style-type: none">• Applies keyframe animation to the element.• Keyframe animations are time-based animations (group of transitions), created using @keyframes rule.
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Default value:	none
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2.31. overflow

Example: overflow: visible | hidden | scroll | auto;

Interpretation:

- visible: The extra content which doesn't fit within the element size will be visible.
- hidden: The extra content which doesn't fit within the element size will be hidden.
- scroll: The extra content which doesn't fit within the element size will be shown using scroll bar. The scroll bar is visible even there is no extra content.
- auto: Automatically scrollbars will be displayed only when there is extra content which doesn't fit within the element size.

Default value: visible

2.32. word-wrap

Example: word-wrap: normal | break-word;

Interpretation:

- normal: The longer words will be displayed in the same line.
- break-word: The longer words will be wrapped (split) into the next line automatically.

Default value: normal

2.33. position

Example: position: static | relative | absolute | fixed | sticky;
left: px;
top: px;

Interpretation:

- static: The element will appear in its original position.
- relative: The element will appear based on "top" and "left" co-ordinates (x, y respectively), from its original position.
- absolute: The element will appear based on "top" and "left" co-ordinates (x, y respectively), from the page top-left corner.
- fixed: The element will appear based on "top" and "left" co-ordinates (x, y respectively), from the page top-left corner, always at exact-place.
- sticky: The element will appear based on "top" and "left" co-ordinates (x, y respectively), from the page top-left corner, when the page is scrolled-down.

Default value: static

2.34. min-width

Example: min-width: number;

Interpretation:

- Specifies minimum width of the element, when the browser is resized.

Default value: 0

2.35. max-width

Example: max-width: number;

Interpretation:

- Specifies maximum width of the element, when the browser is resized.

Default value: none

2.36. min-height

Example: min-height: number;

Interpretation:

- Specifies minimum height of the element, when the browser is resized.

Default value: 0



2.37. max-height

Example: max-height: number;

Interpretation:

- Specifies maximum height of the element, when the browser is resized.

Default value: none

2.38. background-image

Example: background-image: url('filename.jpg');

Interpretation:

- Specifies background image of the element.

Default value: none

2.39. background-repeat

Example: background-repeat: repeat | no-repeat | repeat-x | repeat-y;

Interpretation:

- repeat: The background image will be repeated both horizontally and vertically.
- no-repeat: The background image will not be repeated.
- repeat-x: The background image will be repeated only horizontally.
- repeat-y: The background image will be repeated only vertically.

Default value: repeat

2.40. background-position

Example: background-position: left top | center top | right top | left center | center center | right center | left bottom | center bottom | right bottom | *xpos ypos*;

Interpretation:

- Specifies where the background image should be appeared, in case of background-repeat: no-repeat.

Default value: 0% 0%

2.41. background-size

Example: background-size: auto | width height | cover;

Interpretation:

- auto: The background image will be displayed in its original size.
- width height: The background image will be based on the specified width and height.
- cover: The background image will be displayed based width and height of the element; background image covers the entire element.

Default value: auto

2.42. background-attachment

Example: background-attachment: scroll | fixed;

Interpretation:

- scroll: The background image will be scrolled along with the web page.
- fixed: The background image will not be scrolled along with the web page.

Default value: scroll

2.43. display

Example: display: block | inline | none;

Interpretation:

- block: The element appears as block level element (element showed in next line; width is 100%; width, height, float properties are applicable).
- inline: The element appears as inline element (element showed in the same line; width is as per the content; width, height, float properties are not applicable).
- none: The element is hidden.

Default value: block | inline

2.44. visibility

Example: visibility: visible | hidden;

Interpretation:

- visible: The element is visible normally.
- hidden: The element is hidden; but its space remains empty.

Default value: visible

CSS 3 Selectors:

2.45. CSS 3 Selectors - Class Selector

Example: .class1

Interpretation:

- It selects all elements that have a class name called "class1".

Result elements:

```
<tag class="class1"> </tag>
<tag class="class1"> </tag>
<tag class="class1"> </tag>
```

2.46. CSS 3 Selectors - Class-Class Compound Selector

Example: .class1.class2

Interpretation:

- It selects all elements that have class names both "class1" and "class2".

Result elements:

```
<tag class="class1 class2"> </tag>
<tag class="class1 class2"> </tag>
<tag class="class1 class2"> </tag>
```

2.47. CSS 3 Selectors - Class-Class Child Selector

Example: .class1 .class2

Interpretation:

- It selects all elements that have a class name called "class2", which is the child of the element that has class "class1".

Result elements:

```
<tag class="class1">
  <childtag class="class2"> </childtag>
  <childtag class="class2"> </childtag>
  <childtag class="class2"> </childtag>
</tag>
```

2.48. CSS 3 Selectors - ID Selector

Example: #id1

Interpretation:

- It selects all elements that have id as "id1".

Result elements:

```
<tag id="id1">
</tag>
```

2.49. CSS 3 Selectors - ID-Class Child Selector

Example: #id1 .class1

Interpretation:

- It selects all elements that have a class name called "class1", which is the child of the element that has id = "id1".

Result elements:

```
<tag id="id1">
  <childtag class="class1"> </childtag>
  <childtag class="class1"> </childtag>
  <childtag class="class1"> </childtag>
</tag>
```

2.50. CSS 3 Selectors - Tag Selector

Example:	tag1
Interpretation:	<ul style="list-style-type: none"> It selects all instances of the specified tag.
Result elements:	<pre><tag1> </tag1> <tag1> </tag1> <tag1> </tag1></pre>

2.51. CSS 3 Selectors - Tag - Class Compound Selector

Example:	tag1.class1
Interpretation:	<ul style="list-style-type: none"> It selects all instances of the specified tag that have class="class1".
Result elements:	<pre><tag1 class="class1"> </tag1> <tag1 class="class1"> </tag1> <tag1 class="class1"> </tag1></pre>

2.52. CSS 3 Selectors - Tag - ID Compound Selector

Example:	tag1#id1
Interpretation:	<ul style="list-style-type: none"> It selects the instance of the specified tag that has id="id1".
Result elements:	<pre><tag1 id="id1"> </tag1></pre>

2.53. CSS 3 Selectors - Tag - Class Child Selector

Example:	tag1 .class1
Interpretation:	<ul style="list-style-type: none"> It selects all the elements that have class="class1", which are children of <tag1>.
Result elements:	<pre><tag1> <childtag class="class1"> </childtag> <childtag class="class1"> </childtag> <childtag class="class1"> </childtag> </tag1></pre>

2.54. CSS 3 Selectors - Tag - Tag Child Selector

Example:	tag1 tag2
Interpretation:	<ul style="list-style-type: none"> It selects all instances of <tag2> elements, which are children of <tag1>.
Result elements:	<pre><tag1> <tag2> </tag2> <tag2> </tag2> <tag2> </tag2> <other> <tag2> </tag2> <tag2> </tag2> </other> </tag1></pre>

2.55. CSS 3 Selectors - Tag - Tag Direct Child Selector

Example:	tag1>tag2
Interpretation:	<ul style="list-style-type: none"> It selects all instances of <tag2> elements, which are direct children (but not grandchildren) of <tag1>.
Result elements:	<pre><tag1> <tag2> </tag2> <tag2> </tag2> </tag1></pre>

2.56. CSS 3 Selectors - Grouping Selector

Example: tag1,tag2

Interpretation: • It selects both tag1 and tag2.

Result elements: <tag1> </tag1>
<tag1> </tag1>
<tag2> </tag2>
<tag2> </tag2>

2.57. CSS 3 Selectors - Next Sibling Selector

Example: tag1+tag2

Interpretation: • It selects the first instance of <tag2>, which is placed immediately after <tag1>.

Result elements: <tag1> </tag1>
<tag2> </tag2>
<tag2> </tag2>
<tag2> </tag2>

2.58. CSS 3 Selectors - Sibling Selector

Example: tag1~tag2

Interpretation: • It all instances of <tag2>, that are preceded by <tag1>.

Result elements: <tag1> </tag1>
<tag2> </tag2>
<tag2> </tag2>

2.59. CSS 3 Selectors - Attribute Selector

Example: [attribute1]

Interpretation: • It all tags that have the attribute "attribute1".

Result elements: <tag1 attribute1="value"> </tag1>
<tag2 attribute1="value"> </tag2>

2.60. CSS 3 Selectors - Tag with Attribute Selector

Example: tag1[attribute1]

Interpretation: • It all instances of <tag1>, that have the attribute "attribute1".

Result elements: <tag1 attribute1="value"> </tag1>
<tag2 attribute1="value"> </tag2>

2.61. CSS 3 Selectors - Attribute with value Selector

Example: tag1[attribute1=value1]

Interpretation: • It all instances of <tag1>, that have the attribute "attribute1=value1".

Result elements: <tag1 attribute1="value1"> </tag1>
<tag1 attribute1="value2"> </tag1>

2.62. CSS 3 Selectors - Attribute Starts with Selector

Example: tag1[attribute1^=value1]

Interpretation: • It all instances of <tag1>, that have the attribute "attribute1", whose attribute value begins with specified "value1".

Result elements: <tag1 attribute1="value1abc"> </tag1>
<tag1 attribute1="value2xyz"> </tag1>

2.63. CSS 3 Selectors - Attribute Ends with Selector

Example: tag1[attribute1\$=value1]

Interpretation: • It all instances of <tag1>, that have the attribute "attribute1", whose attribute value ends with specified "value1".

Result elements: <tag1 attribute1="abcvalue1"> </tag1>
<tag1 attribute1="xyzvalue2"> </tag1>

2.64. CSS 3 Selectors - Attribute Contains Selector

Example: tag1[attribute1*=value1]

Interpretation: • It all instances of <tag1>, that have the attribute "attribute1", whose attribute value contains specified "value1".

Result elements: <tag1 attribute1="abcvalue1pqr"> </tag1>
<tag1 attribute1="xyzvalue2"> </tag1>

2.65. CSS 3 Selectors - Global Selector

Example: *

Interpretation: • It all tags within the current web page, including <html>, <head>, <body> etc.

Result elements: <html>
<head>
</head>
<body>
<div> </div>
</body>
</html>

2.66. CSS 3 Pseudo Classes - Active

Example: :active

Interpretation: • It selects the elements when the user clicks it and hold the mouse button.

Result elements: Click - User click and hold it

2.67. CSS 3 Pseudo Classes - focus

Example: :focus

Interpretation: • It selects the elements when the cursor focused inside it.

Result elements: <input type="text"> - Cursor is inside the textbox.

2.68. CSS 3 Pseudo Classes - hover

Example: :hover

Interpretation: • It selects the elements when the user places mouse pointer on it.

Result elements: <input type="button"> - Mouse pointer hovered on the button.

2.69. CSS 3 Pseudo Classes - visited

Example: :visited

Interpretation: • It selects the hyperlinks, after visiting it at least once.

Result elements: - User visited the hyperlink.

2.70. CSS 3 Pseudo Classes - checked

Example: `:checked`

Interpretation: • It selects the checkboxes and radio buttons that are currently checked.

Result elements: `<input type="checkbox" checked="checked">` - User checked the checkbox.
`<input type="radio" checked="checked">` - User checked the radio button.

2.71. CSS 3 Pseudo Classes - disabled

Example: `:disabled`

Interpretation: • It selects the form elements that are currently disabled.

Result elements: `<input type="text" disabled="disabled">`

2.72. CSS 3 Pseudo Classes - link

Example: `:link`

Interpretation: • It selects hyperlinks that are unvisited by the user.

Result elements: ` ` - User has not visited the hyperlink.

2.73. CSS 3 Pseudo Classes - read-only

Example: `:read-only`

Interpretation: • It selects the form elements that are readonly.

Result elements: `<input type="text" readonly="readonly">`

2.74. CSS 3 Pseudo Classes - valid

Example: `:valid`

Interpretation: • It selects the form elements, which value is valid.

Result elements: `<input type="text" required="required" value="Hello">` - The value is valid.

2.75. CSS 3 Pseudo Classes - invalid

Example: `:invalid`

Interpretation: • It selects the form elements, which value is invalid.

Result elements: `<input type="text" required="required" value="">` - The value is invalid.

2.78. CSS 3 Pseudo Classes - not

Example: `:not(selector)`

Interpretation: • It selects the elements that are not matching with the given selector.

Result elements: `<tag1> </tag1>`
`<tag2> </tag2>`
 ...

2.79. CSS 3 Pseudo Classes - nth-child

Example: `:nth-child(n)`

Interpretation: • It selects the elements that is nth child of its parent.

Result elements: `<parent>`
`<tag1> </tag1>`
`<tag1> </tag1>`
`</parent>`



2.80. CSS 3 Pseudo Elements - before

Example: tag1::before

Interpretation:

- It inserts some content before the <tag1>.

Result elements: <tag1> </tag1>
<tag1> </tag1>

2.81. CSS 3 Pseudo Elements - after

Example: tag1::after

Interpretation:

- It inserts some content after the <tag1>.

Result elements: <tag1> </tag1>
<tag1> </tag1>

2.82. CSS 3 Pseudo Elements - selection

Example: ::selection

Interpretation:

- It selects the text, which is selected by the user.

Result elements: <tag1> text here </tag1>
<tag1> text here </tag1>