

CSS Lesson

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What is CSS?

CSS is used to control the style of a web document in a simple way and easy way. CSS stands for Cascading Style Sheets. CSS handles the look and feel part of a web page. Using css can control the color of the text, the style of the fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colors are used, as well as verify of other effects.

How does it Work

- Selecting an HTML Element (like a paragraph)
- Choosing a property to alter (like the color)
- Applying a certain value (like red)

CSS Syntax

```
selector { property : value }
```

Selector : A selector is an HTML tag at which a style will be applied.

Property : A property is a type of attribute of HTML tag. All HTML attributes are covered into CSS properties

Value : Values are assigned to properties.

CSS Inclusion

Three ways to insert CSS

1. External Style Sheet (in an external CSS file)
2. Internal Style Sheet (insert the head section of a HTML page)
3. Inline Style Sheet (inside an HTML element)

Inline Style Sheet

```
<h1 style="color:green; text-decoration:none">  
    Hello World  
</h1>  
  
<p style="font-size:25px; font-family:"Courier New",  
Courier, monospace"> I ♥ CSS </p>
```

Internal Style Sheet

```
<head>
  <style>
    h1{
      color:green;
      text-decoration:underline;
    }
    p{
      font-size:25px;
      font-family:"Courier New",
        Courier, monospace
    }
  </style>
</head>
<body>
  <h1> Hello World </h1>
  <p> I ♥ CSS </p>
</body>
```

External Style Sheet

hello.html

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <title></title>
  <link rel="stylesheet" type="text/css"
href="style.css">
</head>
<body>
  <h1> Hello World </h1>
  <p> I ♥ CSS </p>
</body>
</html>
```

style.css

```
h1{
  color:green;
  text-decoration: underline;
}
p{
font-size:25px;
font-family:"Courier New", Courier, monospace
}
```

Colors

| Format | Syntax | Example |
|----------------|-------------------------|------------------------------|
| Hex Code | #RRGGBB | p{ color: #FF0000; } |
| Short Hex Code | #RGB | p{ color: #6A7 } |
| RGB % | rgb(rrr%, ggg%, bbb%) | p{color: rgb(50%, 50%, 50%)} |
| RGB Absolute | rgb(rrr, ggg, bbb) | p{color:rgb(0,0,255)} |
| keyword | aqua, black, etc. | p{color:teal;} |

Measurement Units

Absolute Length Units

| Unit | Description |
|------|----------------------|
| px | 96 px = 1 inch |
| pt | 72 pt = 1 inch |
| pc | 12 pt = 1 pc |
| cm | 37.795276 px = 1 cm |
| mm | 10 mm = 1 cm |
| in | 1 in = 2.54cm = 96px |

Relative Length Units

| Unit | Relative to |
|------|---|
| % | Parent's element value for the property |
| em | Font size of the element |
| ex | X-height of the element's font |
| ch | The advance measure (width) of the glyph "0" of the element's font. |
| rem | Font-size to the root-element |
| lh | Line height of the element |
| vw | Viewpoint width |
| vh | Viewpoint height |

Selector

Universal Selector

```
*{  
  color: blue;  
  background-color: silver;  
}
```

Tag Selector / Element Selector

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

Attribute Selector

```
a[title="two"]{  
  text-decoration: none;  
}
```

ID Selector

```
#headline{  
  color: black;  
}
```

```
h1#headline{  
  color: black;  
}
```

```
#headline h1{  
  color: black;  
}
```

Class Selector

```
.black{  
  color: black;  
}
```

```
h2.black{  
  color: black;  
}
```

Descendant Selector

```
p a{  
  color:red;  
}
```

Child Selector

```
p>a{  
  color:red;  
}
```

Pseudo Selector

Link

Applies to any links which haven't been visited by the user.

<a> Google

```
a:link{  
    color:red;  
}
```

Hover

Applies to any element being hovered by the user's pointing device, but not activated.

```
a:hover{  
    color:hotpink;  
}
```

Active

Applies to any element being activated by the user.

```
a:active{  
    color:blue;  
}
```

Visited

Applies to any link which has been visited by a user.

```
a:visited{  
    color:pink;  
}
```


Target

Selects the current active #news element (clicked on URL containing the anchor name)

```
:target{  
    border: 2px solid #D4D4D4;  
    background-color: #e5eccc;  
}
```

Focus

```
input[type=text]{  
    width:100px;  
    transition: width .35s ease-in-out;  
}  
input[type=text]:focus{  
    width:250px;  
}
```

Checked

```
input[type=radio]:checked+label{  
    font-weight:bold;  
    color:red;  
}
```

Disabled

```
input[type="text"]:disabled {  
    background: #dddddd;  
}
```

Enabled

Applies to any UI element which is in enabled state

```
|-----|  
| input[type="text"]:enabled {  
|   background: #ffff00;  
| }  
|-----|
```

Read-only

Applies to any element which is not editable by the user.

```
|-----|  
| input:read-only {  
|   background-color: yellow;  
| }  
|-----|
```

Read-write

Applies to any element which is editable by the user.

```
|-----|  
| input:read-write {  
|   background-color: yellow;  
| }  
|-----|
```

Empty

```
|-----|  
| p:empty{  
|   background-color:#ff0000;  
| }  
|-----|
```

First-child

Represents any element that is the first-child element of its parent.

```
li:first-child{
    background-color:yellow;
}
```

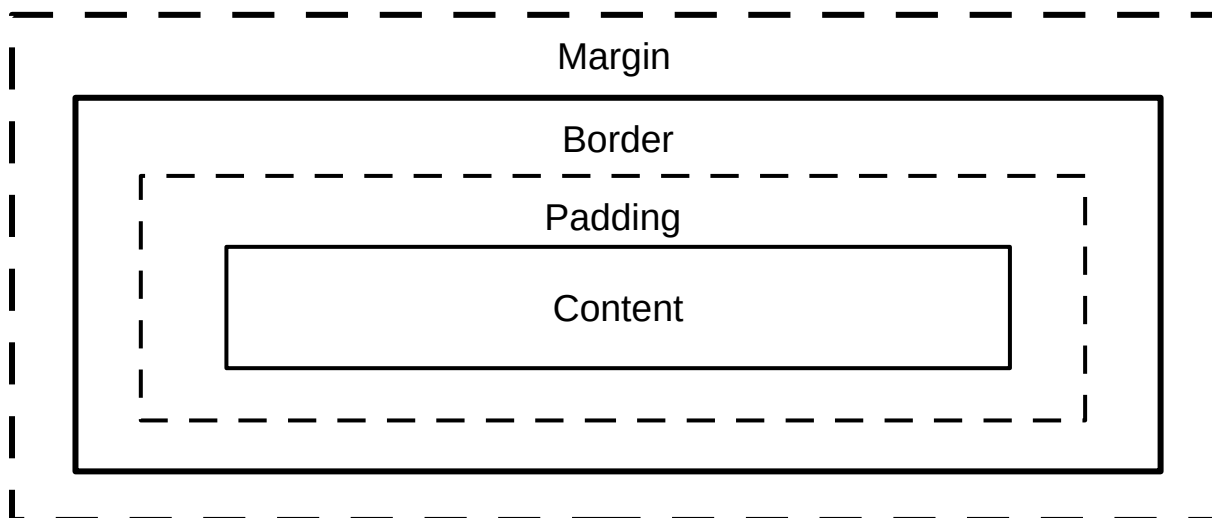
Last-child

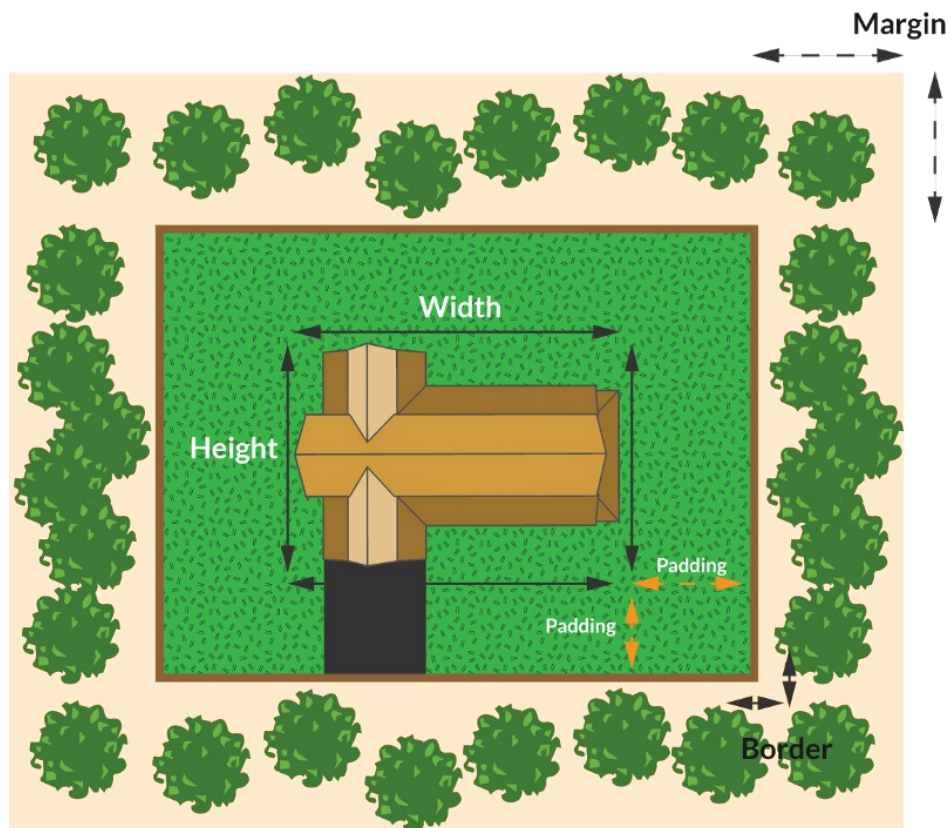
Represents any element that is the last-child element of its parent.

```
li:last-child{
    background-color:red;
}
```

Box Model

The browser creates a rectangle for each element in the HTML document. The Box Model describes how the padding, border, and margin are added to the content to create this rectangle.



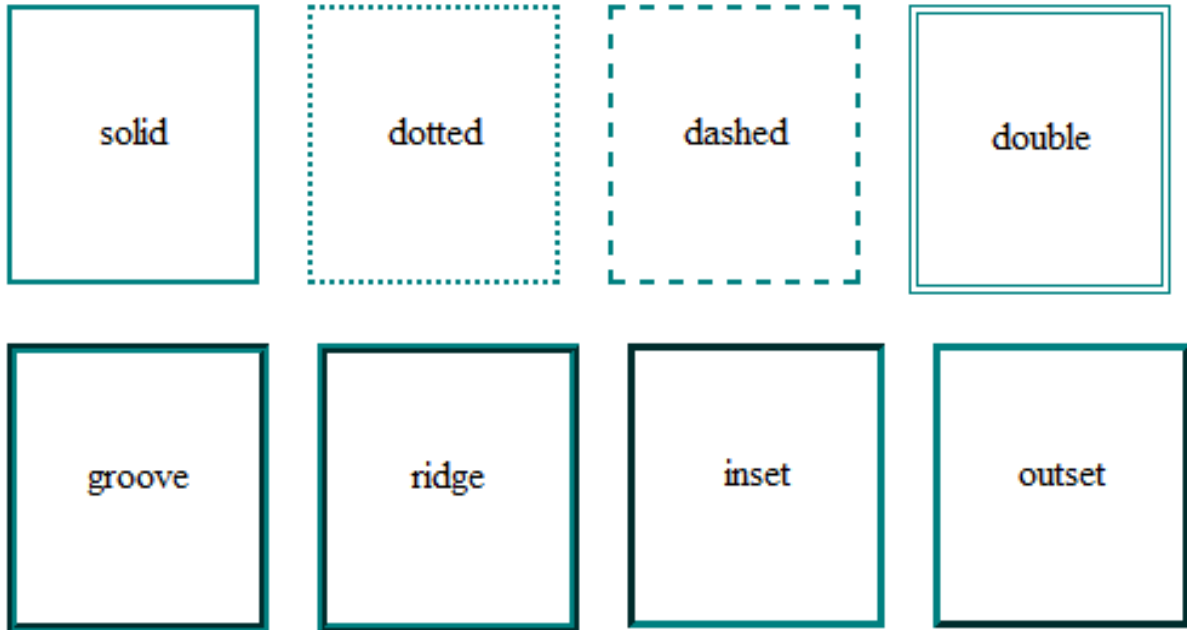


Border

The border of an element is defined using the border property. This is a shorthand property that defines the element's border-width, border-style and border-color.

border: size style color

- Border-size (which accepts unit value)
(top ~ right ~ bottom ~ left)
- Border-style (which accepts a number of keyboard values)
(solid, dashed, dotted, double, groove, ridge, inset, outset, none/hidden)
- Border-color (which accepts any valid CSS color value)



Margin

The Margin of an element is defined using padding property. The margin is the space around the content. It can be defined.

*** Negative values are allowed**

| Parameter | Details |
|-----------|---|
| 0 | Set margins to none |
| auto | Used for centering, by evenly setting values on each side |
| units | See parameters section in Units for list of valid units |
| inherit | Inherit margin value from parent element |
| initial | Restore to initial value |

Usage

1. All Four margin has ONE value
margin : 10px;
2. Each margin has TWO value
margin : 10px 5px;
top ~ bottom margins are 10px;
left ~ right margins are 5px;
3. margin has THREE value
margin: 10px 5px 15px;
top margin is 10px;
left ~ right margins are 5px;
bottom margin is 15px;
4. margin has FOUR value

| | |
|---|--|
| <i>margin: 10px 5px 15px 20px;</i> top margin is 10px; right margin is 5px; bottom margin is 15px; left margin is 20px; | margin-top : 10px; margin-right: 5px; margin-bottom : 15px; margin-left : 20px; |
|---|--|

Padding

Padding is similar to margin. However, unlike padding, the padding portion of an element exists inside the element. A padding creates space between the target element and surrounding elements.

*** Negative values are not allowed**

Usage

1. All Four padding has ONE value
padding : 10px;
2. Each padding has TWO value
padding : 10px 5px;
top ~ bottom paddings are 10px;
left ~ right paddings are 5px;

3. padding has THREE value
padding : 10px 5px 15px;
top padding is 10px;
left ~ right paddings are 5px;
bottom padding is 15px;
4. padding has FOUR value

| | |
|---|--|
| padding: 10px 5px 15px 20px; top padding is 10px; right padding is 5px; bottom padding is 15px; left padding is 20px; | padding-top : 10px; padding-right: 5px; padding-bottom : 15px; padding-left : 20px; |
|---|--|

Layout

| Value | Effect |
|--------------|---|
| none | Hide the element and prevent it from occupying space. |
| block | Block element, occupy 100% of the available width, break the element |
| inline | Inline element, occupy no width, no break after element. |
| inline-block | Tasking special properties from both inline and block elements, no break , but can have width. |
| inline-flex | Displays an element as an inline-level flex container |
| inline-table | The element is displayed as an inline-level table |
| grid | Behaves like a block element and lays out its content according to the grid model. |
| flex | Behaves like a block element and lays out its content according to the flexbox model. |
| inherit | Inherit the value from the parent element. |
| initial | Reset the value to the default value taken from behaviors described in the HTML specifications or from the browser/user default stylesheet. |

| | |
|--------------|---|
| table | Behaves like the HTML table element |
| table-cell | Let the element behave like a < td > element |
| table-column | Let the element behave like a < col > element |
| table-row | Let the element behave like a < tr > element |
| list-item | Let the element behave like a < li > element |

Inline

An inline element occupies only as much width as necessary. It stacks horizontally with other elements of the same type and may not contain other non-line elements.

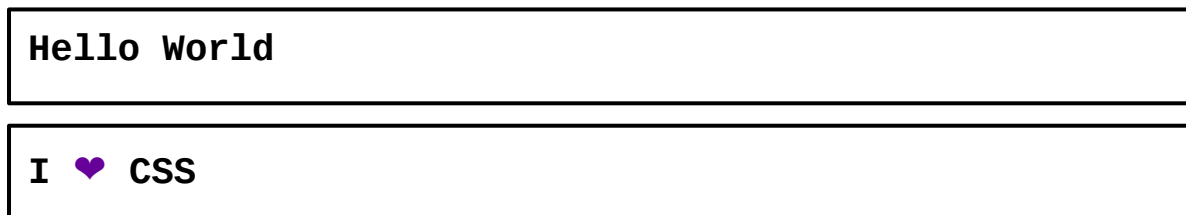
< b >, < i >, < small >, < em >, < strong >, < a >, < br >, < img >, < object >, < q >, < span >, < sub >, < button >, < input >, < label >, < select >, < textarea >



Block

A block element occupies the maximum available width of it's parent element. It starts with a new line and, in contrast to inline elements, it does not restrict the type of elements it may contain.

< address >, < article >, < blockquote >, < div >, < form >, < h1 > - < h6 >, < li >, < ol >, < p >, < table >, < ul >



Inline-block

The inline-block value gives us the best of both worlds: it bends the element in with the flow of the text while allowing to use padding, margin, height and similar properties which has no visible effect on inline elements.

First Element

Second Element

Third Element

Float

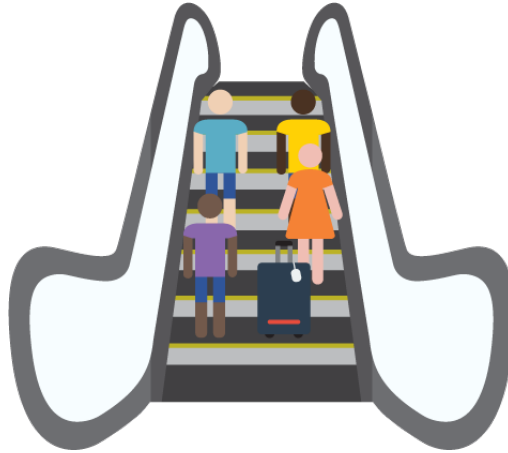
The most basic use of a float is having text wrap around an image. The below code will produce two paragraphs and an image, with the second paragraph flowing around the image. Notice that it is always content after the floated element that flows around the floated element.

| Property | Description |
|----------|--|
| left | The element floats to the left of its container |
| right | The element floats to the right of its container |



Clear

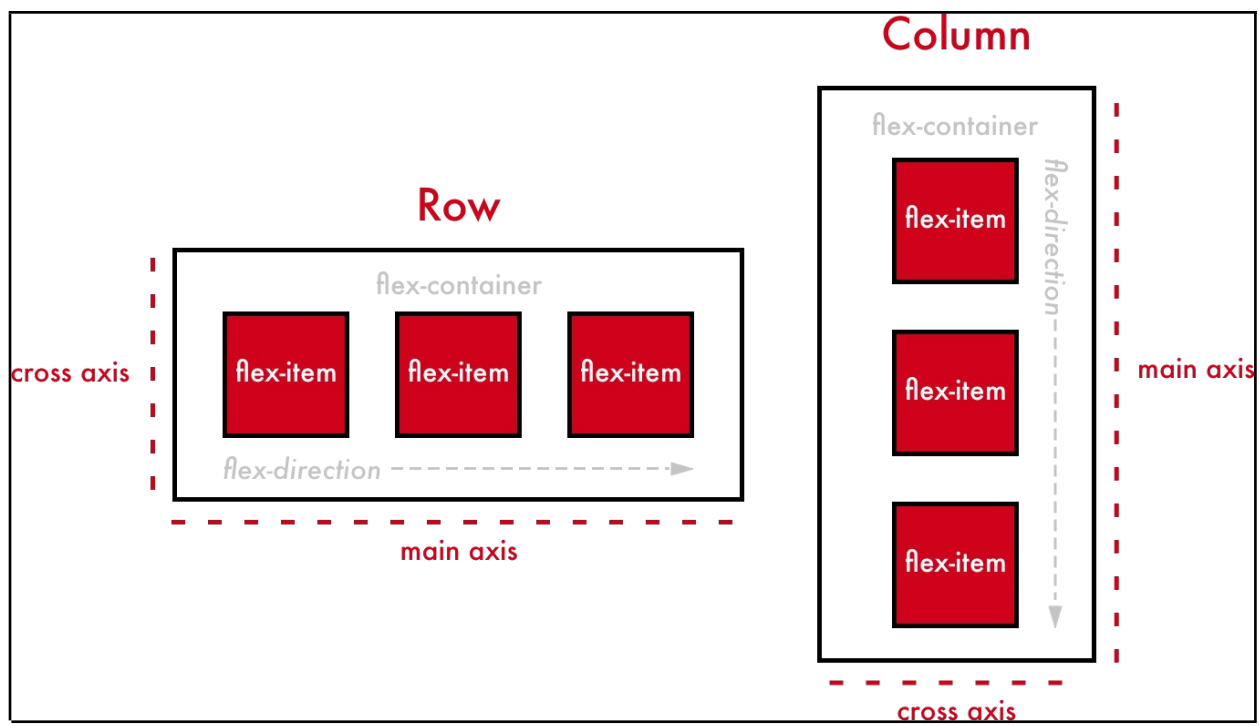
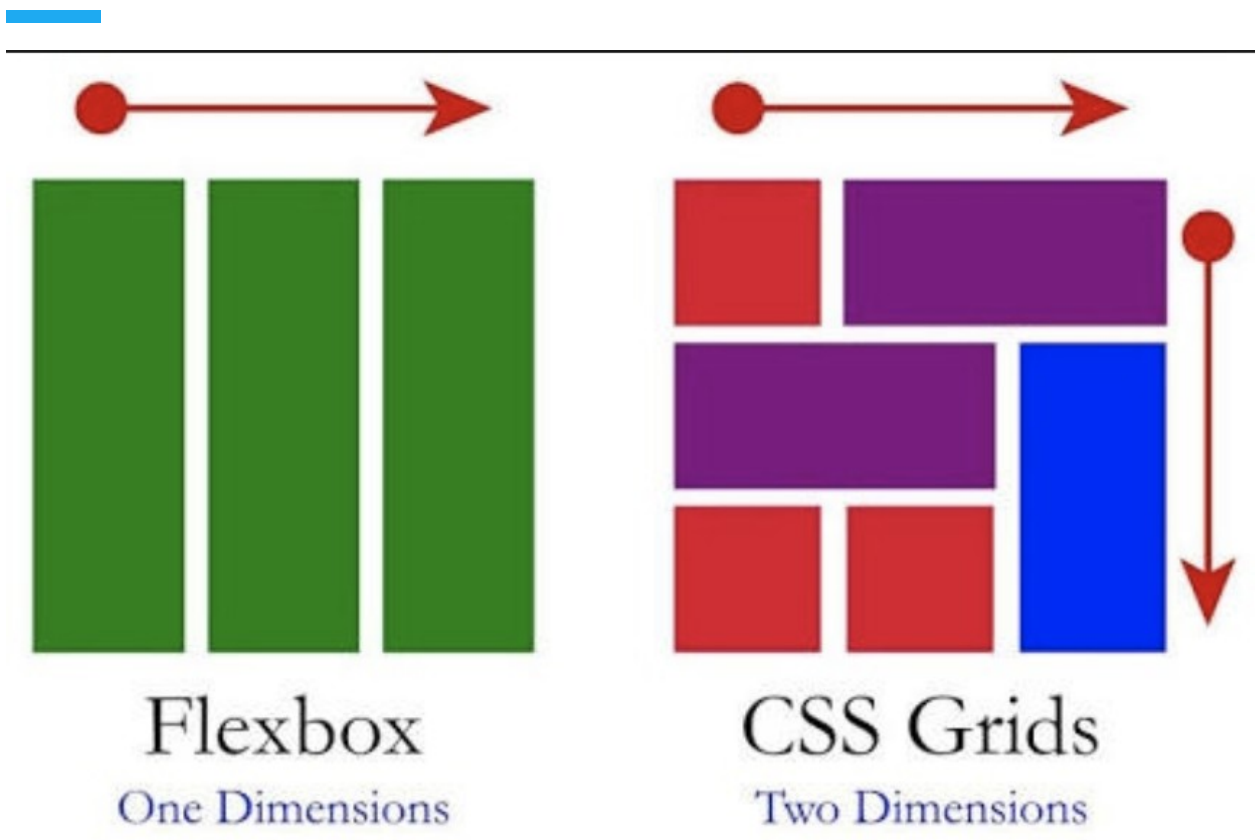
There is one more wrinkle that we have not discussed yet: the [clear property](#). “Clear” allows elements to specify where they should align in comparison to the floated elements.



Flex

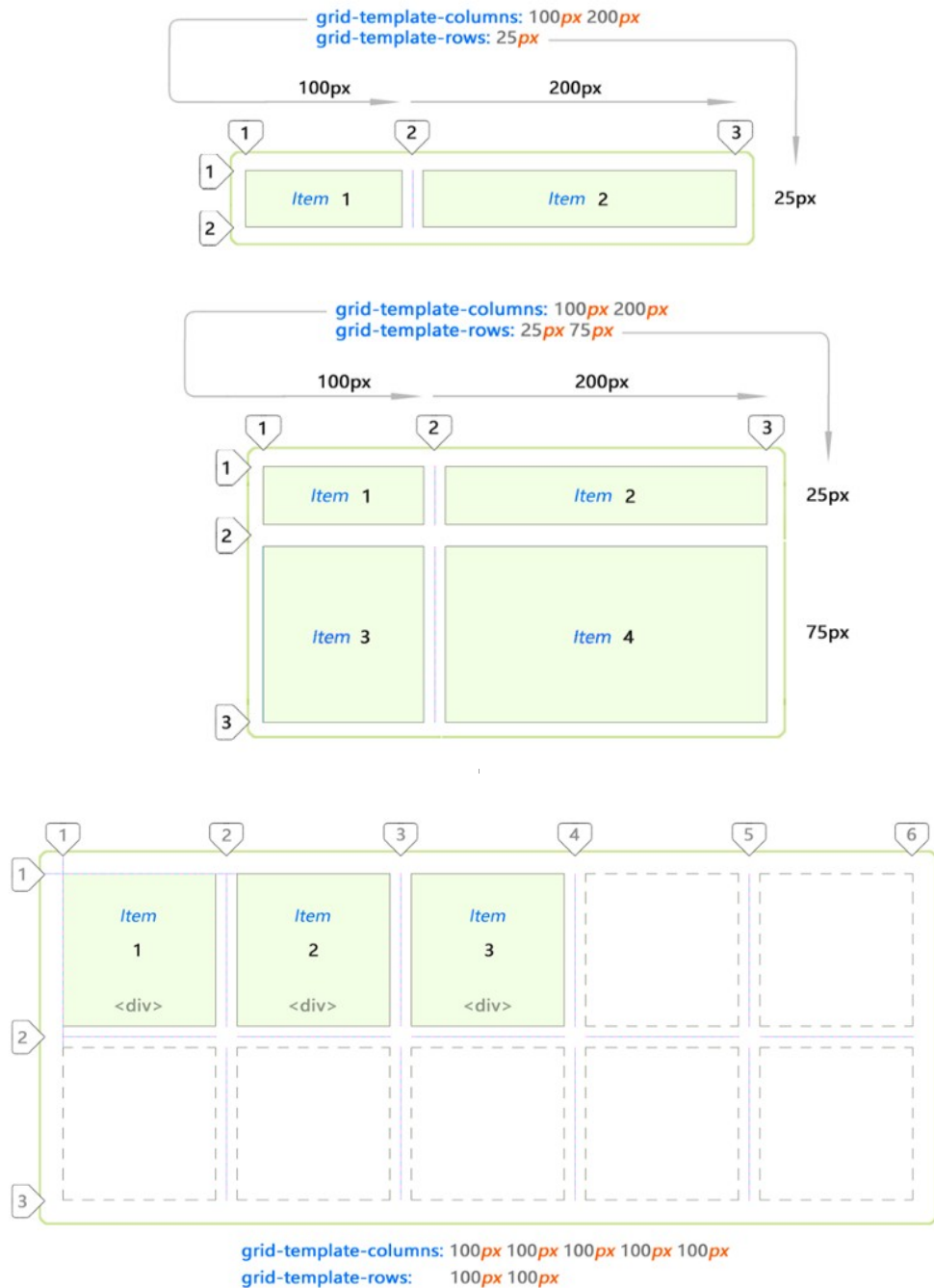
The Flexible Box module, or just 'flexbox' for short, is a box model designed for user interfaces, and it allows users to align and distribute space among items in a container such that elements behave predictably when the page layout must accommodate different, unknown screen sizes. A flex container expands items to fill available space and shrinks them to prevent overflow.

| Property | Description |
|-------------------------------------|---|
| <code>align-items:center</code> | This centers the elements along the axis other than the one specified by <code>flex-direction</code> , center i.e., vertical centering for a horizontal flexbox and horizontal centering for a vertical flexbox. |
| <code>justify-content:center</code> | This centers the elements along the axis specified by <code>flex-direction</code> . I.e., for a horizontal (<code>flex-direction: row</code>) flexbox, this centers horizontally, and for a vertical Flexbox (<code>flex-direction: column</code>)flexbox, this centers vertically. |



Grid

Grid layout is a new and powerful CSS layout system that allows to divide a web page content into rows and columns in an easy way

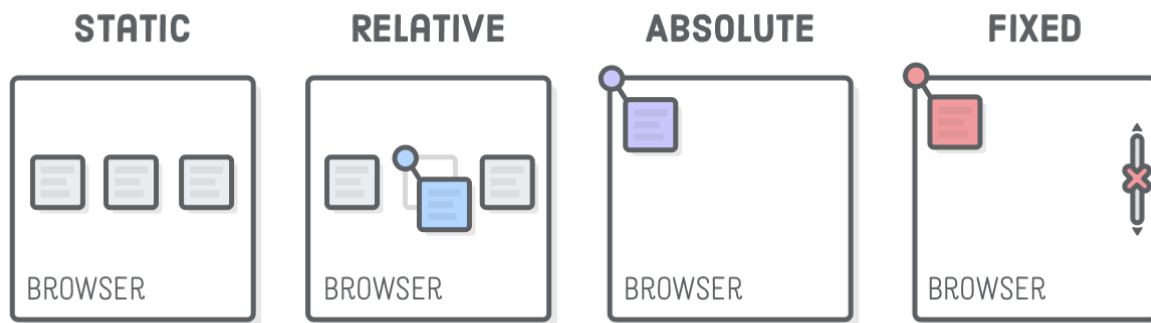




outer line (not affected by gaps)

Position

Using CSS, you can lay out all your elements on your web page visually. For example, you can position an element at the very top of your page, or 50px below the element before it.



1. Static

`position:static` is the **default value**. Whether we declare it or not, elements are positioned in a normal order on the webpage

2. Relative

`position:relative` is for all **non-static** position values, elements with relative position can be placed *relatively* to the space they would occupy in the normal document flow. They're still part of the document flow, but support `top`, `right`, `bottom` and `left` properties.

3. Absolute

`position:absolute` is the element is positioned **relative to itself**. However, an **absolutely** positioned element is **relative to its parent**. Absolute elements are **removed from the normal document flow**. This means they don't affect and aren't affected by other elements in the page. It can be fine tuned using `top`, `right`, `bottom` and `left`.

4. Fixed

`position:fixed` elements are not part of the document flow and their position is based on the whole window, sometimes referred to as *viewport*. Also, they're not affected by scrolling.

Typography

The problem is that every system differs a bit. Windows-based devices might have one group. MacOS ones pull from another. Google's own Android system uses its own as well. Now pull up a website. Even this one would work. The font you see may not be the one original one intended. Meaning: Let's say the designer picked some obscure, paid font family for this site's design. If you don't have that font already installed and it's not pulling from a web-friendly place, the font you see would default back to some basic variation like Times New Roman.

Recommended Fonts (Sans-serif Group)

- | | |
|--------------------|-------------------|
| 1. Arial | 9. Palatino |
| 2. Roboto | 10. Garamond |
| 3. Times New Roman | 11. Bookman |
| 4. Times | 12. Comic Sans MS |
| 5. Courier New | 13. Candara |
| 6. Courier | 14. Arial Black |
| 7. Verdana | 15. Impact |
| 8. Georgia | |

Download Link

<https://fonts.google.com/>

<https://www.dafont.com/>

<https://www.1001fonts.com/>

<https://www.supremo.co.uk/typeterms/>

CSS Properties

Background

| Syntax | | |
|------------------------|--|---|
| background: | background-color background-image background-position background-size background-repeat background-attachment background-origin background-clip | Defines a variety of background properties within one declaration. |
| background-attachment: | scroll fixed | Specify whether the background image is fixed in the viewport or scrolls. |
| background-clip: | border-box padding-box content-box | Specifies the painting area of the background. |
| background-color: | color transparent | Defines an element's background color. |
| background-image: | url | Defines an element's background image. |
| background-origin: | border-box padding-box content-box | Specifies the positioning area of the background images |
| background-position: | % length left right center | Defines the origin of a background image. |
| background-repeat: | repeat repeat-x repeat-y no-repeat | Specify whether/how the background image is tiled. |
| background-size | % length auto cover contain | Specifies the size of the background images. |

Border

| Syntax | | |
|----------------------|---|---|
| border: | border-width border-style border-color | Sets the width, style, and color for all four sides of an element's border. |
| border-width: | thin medium thick length | Sets the width of the border on all the four sides of an element. |
| border-style: | none hidden dotted dashed solid double groove ridge inset outset | Sets the style of the border on all the four sides of an element. |
| border-color: | color transparent | Sets the color of the border on all the four sides of an element. |
| border-radius | % length FOUR values: top-left-corner top-right-corner bottom-right-corner bottom-left-corner THREE values: top-left-corner top-right & bottom-left corners bottom-right-corner TWO values: top-left & bottom-right corners Top-right & bottom-left corners ONE value: All four corners | Defines the shape of the border corners of an element. |
| border-image: | source (url) slice width outset repeat | Specifies how an image is to be used in place of the border styles. |
| border-image-outset: | length | Specifies the amount by which |

| | | |
|-----------------------------|--|--|
| | | the border image area extends beyond the border box. |
| <u>border-image-repeat:</u> | stretch repeat round space | Specifies whether the image-border should be repeated, rounded or stretched. |
| border-image-slice: | % number | Specifies the inward offsets of the image-border. |
| border-image-source: | none image | Specifies the location of the image to be used as a border. |
| border-image-width: | % number length auto | Specifies the width of the image-border. |
| border-top: | border-width | Sets the width, style, and color of the top border of an element. |
| border-top-color: | Color transparent | Sets the color of the top border of an element. |
| border-top-left-radius: | % length | Defines the shape of the top-left border corner of an element. |
| border-top-right-radius: | % length | Defines the shape of the top-right border corner of an element. |
| border-top-style | none hidden dotted dashed solid double groove ridge inset outset | Sets the style of the top border of an element. |
| border-bottom-width: | thin thick medium | Sets the width of the bottom border of an element. |
| border-bottom: | border-width border-style border-color | Sets the width, style, and color of the bottom border of an element. |
| border-bottom-color: | color transparent | Sets the color of the bottom border of an element. |
| border-bottom-left-radius: | % length | Defines the shape of the bottom-left border corner of an element. |
| border-bottom-right-radius: | % length | Defines the shape of the bottom right border corner of an |

| | | |
|----------------------|--|---|
| | | element. |
| border-bottom-style | none hidden dotted dashed solid double groove ridge inset outset | Sets the style of the bottom border of an element. |
| border-bottom-width: | thin thick medium | Sets the width of the bottom border of an element. |
| border-left: | border-left-width border-left-style border-left-color | Sets the width, style, and color of the left border of an element. |
| border-left-width: | thin medium thick length | Sets the width of the left border of an element. |
| border-left-style: | none hidden dotted dashed solid double groove ridge inset outset | Sets the style of the left border of an element. |
| border-left-color | Color transparent | Sets the color of the left border of an element. |
| border-right: | border-right-width border-right-style border-right-color | Sets the width, style, and color of the right border of an element. |
| border-right-width: | thin medium thick length | Sets the width of the right border of an element. |
| border-right-style: | none hidden dotted dashed solid double groove ridge inset outset | Sets the style of the right border of an element. |
| border-right-color | Color transparent | Sets the color of the right border of an element. |

Color

| Syntax | | |
|--------|---|--|
| color: | Hex Code Short Hex RGB % RGB Absolute keyword | Specify the color of the text of an element. |

| | | |
|---------|------------|---|
| opacity | alphavalue | Specifies the transparency of an element. |
|---------|------------|---|

Dimension

| Syntax | | |
|-------------|-------------------|---|
| width: | % length auto | Specify the width of an element. |
| height | | Specify the height of an element. |
| max-width: | | Specify the maximum width of an element. |
| max-height: | | Specify the maximum height of an element. |
| min-width: | | Specify the minimum width of an element. |
| min-height: | | Specify the maximum height of an element. |

Generated Content Properties

| Syntax | | |
|-------------------|---|--|
| content: | normal none counter open-quote close-quote no-open-quote no-close-quote | Inserts generated content. |
| quotes | none [string string] | Specifies quotation marks for embedded quotations. |
| counter-reset | [identifier integer] | Creates or resets one or more counters. |
| counter-increment | [identifier integer] | Increments one or more counter values. |

Flexible Box Layout

| Syntax | | |
|-----------------|--|--|
| align-content: | center flex-start flex-end space-between space-around stretch | Inserts generated content. |
| align-items: | baseline center flex-start flex-end stretch | Specifies the default alignment for items within the flex container. |
| align-self | auto baseline center flex-start flex-end stretch | Specifies the alignment for selected items within the flex container. |
| flex | flex-grow flex-shrink flex-basis 0 1 auto | Specifies the components of a flexible length. |
| flex-grow | number | Specifies how the flex item will grow relative to the other items inside the flex container |
| flex-shrink | number | Specifies how the flex item will shrink relative to the other items inside the flex container. |
| flex-basis | width auto | Specifies the initial main size of the flex item. |
| flex-direction | row row-reverse column column-reverse | Specifies the direction of the flexible items. |
| flex-flow | [flex-direction flex-wrap] | A shorthand property for the flex-direction and the flex-wrap properties. |
| flex-wrap | Nowrap wrap wrap-reverse | Specifies whether the flexible items should wrap or not. |
| justify-content | flex-start flex-end center space-between space-around | Specifies how flex items are aligned along the main axis of the flex container after any flexible lengths and auto margins have been resolved. |

| | | |
|-------|---------|---|
| order | integer | Specifies the order in which flex items are displayed and laid out within a flex container. |
|-------|---------|---|

Font

| Syntax | | |
|------------------|--|---|
| font: | font-style font-variant font-weight font-style / line-height | Defines a variety of font properties within one declaration. |
| font-family | family-name | Defines a list of fonts for elements. |
| font-size | % length xx-small x-small small medium large xx-large smaller larger | Defines the font size for the text. |
| font-size-adjust | number | Preserves the readability of text when font fallback occurs. *only firefox support |
| font-stretch | normal ultra-condensed extra-condensed condensed semi-condensed semi-expanded expanded extra-expanded ultra-expanded | Selects a normal, condensed, or expanded face from a font. |
| font-style | normal italic oblique | Defines the font style for the text. |
| font-variant | normal small-caps | Specify the font variant. |
| font-weight | normal bold bolder lighter 100 200 300 400 500 600 700 800 900 | Specify the font weight of the text. |

List

| Syntax | | |
|---------------------|--|---|
| list-style: | list-style-type list-style-position list-style-image | Defines the display style for a list and list elements. |
| list-style-type | disc circle square decimal decimal-leading-zero lower-roman upper-roman lower-greek lower-latin upper-latin armenian georgian lower-alpha upper-alpha none | Specifies the marker style for a list-item. |
| list-style-position | inside outside | Specifies the position of the list-item marker. |
| list-style-image | url | Specifies the image to be used as a list-item marker. |

Margin

| Syntax | | |
|---------|--|---|
| margin: | % length FOUR values: top right bottom left THREE values: top left-right bottom TWO values: top-bottom left-right ONE value: All four values | Sets the margin on all four sides of the element. |

| | | |
|---------------|------------|--|
| margin-bottom | length % | Sets the bottom margin of the element. |
| margin-left | length % | Sets the left margin of the element. |
| margin-right | length % | Sets the right margin of the element. |
| margin-top | length % | Sets the top margin of the element. |

Multi-column

| Syntax | | |
|-------------------|--|--|
| column-count: | number | Specifies the number of columns in a multi-column element. |
| column-fill | auto | Specifies how columns will be filled. * support in firefox |
| column-gap | length | Specifies the gap between the columns in a multi-column element. |
| column-rule | column-rule-width column-rule-style column-rule-color | Specifies a straight line, or "rule", to be drawn between each column in a multi-column element. |
| column-rule-width | length medium thin thick | Specifies the width of the rule drawn between the columns in a multi-column layout. |
| column-rule-style | none hidden dotted dashed solid double groove ridge inset outset | Specifies the style of the rule drawn between the columns in a multi-column layout. |
| column-rule-color | color | Specifies the color of the rule drawn between the columns in a multi-column layout. |
| column-span | none all | Specifies how many columns an element spans across in a multi-column layout. |



| | | |
|--------------|------------------------------|--|
| | | |
| column-width | length auto | Specifies the optimal width of the columns in a multi-column element. |
| columns | column-width column-count | A shorthand property for setting column-width and column-count properties. |

Outline

| | | |
|----------------|--|--|
| Syntax | | |
| outline: | outline-width outline-style outline-color | Sets the width, style, and color for all four sides of an element's outline. |
| outline-width | thin medium thick | Sets the width of the outline. |
| outline-style | none hidden dotted dashed solid double groove ridge inset outset | Sets a style for an outline. |
| outline-color | color | Sets the color of the outline. |
| outline-offset | length | Set the space between an outline and the border edge of an element. |

Padding

| | | |
|----------|---|--|
| Syntax | | |
| padding: | % length FOUR values: top right bottom | Sets the padding on all four sides of the element. |



| | | |
|----------------|--|---|
| | <p>left</p> <p>THREE values: top left-right bottom</p> <p>TWO values: top-bottom left-right</p> <p>ONE value: All four values</p> | |
| padding-bottom | length % | Sets the bottom padding of the element. |
| padding-left | length % | Sets the left padding of the element. |
| padding-right | length % | Sets the right padding of the element. |
| padding-top | length % | Sets the top padding of the element. |

Print

| Syntax | | |
|-------------------|--------------------------------------|---|
| page-break-after: | auto always avoid left right | Insert a page breaks after an element. |
| page-break-before | auto always avoid left right | Insert a page breaks before an element. |
| page-break-inside | Auto avoid | Insert a page breaks inside an element. |

Table

| Syntax | | |
|------------------|---------------------|--|
| border-collapse: | separate collapse | Specifies whether table cell borders are connected or separated. |
| border-spacing | length | Sets the spacing between the borders of adjacent table cells. |
| caption-side | top bottom | Specify the position of table's caption. |
| empty-cells | show hide | Specify the position of the table's caption. |
| table-layout | auto fixed | Specifies a table layout algorithm. |

Text

| Syntax | | |
|-----------------------|--|--|
| direction: | ltr rtl | Define the text direction/writing direction. |
| tab-size | integer length | Specifies the length of the tab character. |
| text-align | left right center justify | Sets the horizontal alignment of inline content. |
| text-align-last | auto start end left right center justify | Specifies how the last line of a block or a line right before a forced line break is aligned when text-align is justified. |
| text-decoration | none underline overline line-through blink | Specifies the decoration added to text.Specifies the decoration added to text. |
| text-decoration-color | color | Specifies the color of the text- |

| | | |
|-----------------------|---|---|
| | | decoration-line . |
| text-decoration-line | none underline overline line-through blink | Specifies what kind of line decorations are added to the element. |
| text-decoration-style | solid double dotted dashed wavy | Specifies the style of the lines specified by the text-decoration-line property |
| text-indent | length | Indent the first line of text. |
| text-justify | auto none inter-word distribute | Specifies the justification method to use when the text-align property is set to justify. |
| text-overflow | slip ellipsis | Specifies how the text content will be displayed, when it overflows the block containers. |
| text-shadow | offset-x offset-y blur-radius color | Applies one or more shadows to the text content of an element. |
| text-transform | capitalize lowercase none uppercase | Transforms the case of the text. |
| line-height | % length number | Sets the height between lines of text. |
| vertical-align | baseline sub super top text-top middle bottom text-bottom | Sets the vertical positioning of an element relative to the current text baseline. |
| letter-spacing | length | Sets the extra spacing between letters. |
| word-spacing | length | Sets the spacing between words. |
| white-space | normal pre nowrap pre-line pre-wrap | Specifies how white space inside the element is handled. |
| word-break | normal break-all keep-all | Specifies how to break lines within words. |
| word-wrap | normal break-word | Specifies whether to break words when the content overflows the boundaries of its |

| | | |
|--|--|------------|
| | | container. |
|--|--|------------|

Transform

| Syntax | | |
|----------------------|--|--|
| backface-visibility: | visible hidden | Specifies whether or not the "back" side of a transformed element is visible when facing the user. |
| perspective | length | Defines the perspective from which all child elements of the object are viewed. |
| perspective-origin | x-position y-position | Defines the origin (the vanishing point for the 3D space) for the perspective property. |
| transform | transform-function | Applies a 2D or 3D transformation to an element |
| transform-origin | x-position y-position z-position | Defines the origin of transformation for an element. |
| transform-style | flat preserve-3d | Specifies how nested elements are rendered in 3D space. |

Transitions

| Syntax | | |
|---------------------|--|---|
| transition: | transition-property transition-duration transition-timing-function transition-delay | Defines the transition between two states of an element. |
| transition-property | property none all | Specifies the names of the CSS properties to which a transition effect should be applied. |
| transition-duration | time | Specifies the number of seconds or milliseconds a transition effect |



| | | |
|------------------|------|--|
| | | should take to complete. |
| transition-delay | time | Specifies when the transition effect will start. |

Visual

| Syntax | | |
|----------|---|---|
| display: | inline block contents flex flow flow-root grid inline-block inline-flex inline-grid inline-table list-item run-in table table-caption table-column-group table-header-group table-footer-group table-row-group table-cell table-column table-row none | Specifies how an element is displayed on screen. |
| position | static relative absolute fixed sticky | Specifies how an element is positioned. |
| top | % length | Specify the location of the top edge of the positioned element. |
| right | % length | Specify the location of the right edge of the positioned element. |
| bottom | % length | Specify the location of the bottom edge of the positioned element. |
| left | % length | Specify the location of the left edge of the positioned element. |
| float | left right none | Specifies whether or not a box should float. |
| clear | left right auto both none | Specifies the placement of an element in relation to floating elements. |
| z-index | auto integer | Specifies a layering or stacking order for positioned elements. |
| overflow | auto hidden scroll visible | Specifies the treatment of |

| | | |
|------------|---|---|
| | | content that overflows the element's box. |
| overflow-x | visible hidden scroll auto | Specifies how to manage the content when it overflows the width of the element's content area. |
| overflow-y | visible hidden scroll auto | Specifies how to manage the content when it overflows the height of the element's content area. |
| resize | none both horizontal vertical | Specifies whether or not an element is resizable by the user. |
| clip | Shape auto | Defines the clipping region. |
| visibility | visible hidden collapse | Specifies whether or not an element is visible. |
| cursor | auto default none context-menu help pointer progress wait cell crosshair text vertical-text alias copy move no-drop not-allowed grab grabbing e-resize n-resize ne-resize nw-resize s-resize se-resize sw-resize w-resize ew-resize ns-resize nesw-resize nwse-resize col-resize row-resize all-scroll zoom-in zoom-out | Specify the type of cursor. |
| box-shadow | offset-x offset-y blur-radius spread radius-color | Applies one or more drop-shadows to the element's box. |
| box-sizing | content-box padding-box border-box | Alter the default CSS box model. |