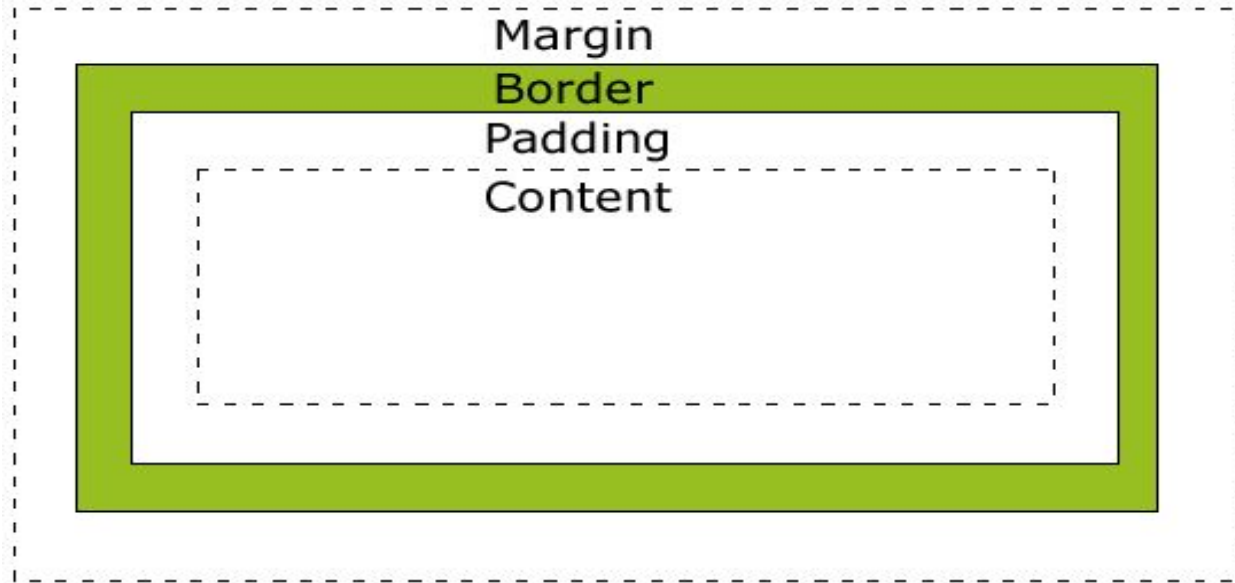


CSS

Box Model

Box Model



Box Model

- Content - The content of the box, where text and images appear
- Padding - The CSS padding properties define the space between the element border and the element content.
 - length Defines a fixed padding (in pixels, pt, em, etc.)
 - % Defines a padding in % of the containing element

Box Model

- Margin - The CSS margin properties define the space around elements.
 - auto The browser calculates a margin
 - length Specifies a margin in px, pt, em, etc. Default value is 0
 - % Specifies a margin in percent of the width of the containing
element

Box Model (border)

- Border - A border that goes around the padding and content

border: 5px solid red;

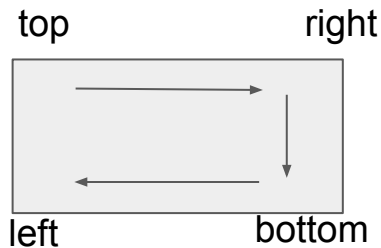
↓ ↓ ↓
Size style color

border-style: none, dotted, dashed, solid, double, groove, ridge, inset, outset

The border-style property can have different values.

border-style: dotted solid double dashed;

↓ ↓ ↓ ↓
top right bottom left



Box Model (border)

border-style: dotted solid;

top and bottom borders are dotted

right and left borders are solid

border-style: dotted;

all four borders are dotted

border-color, border-width(thin, medium, thick, length)

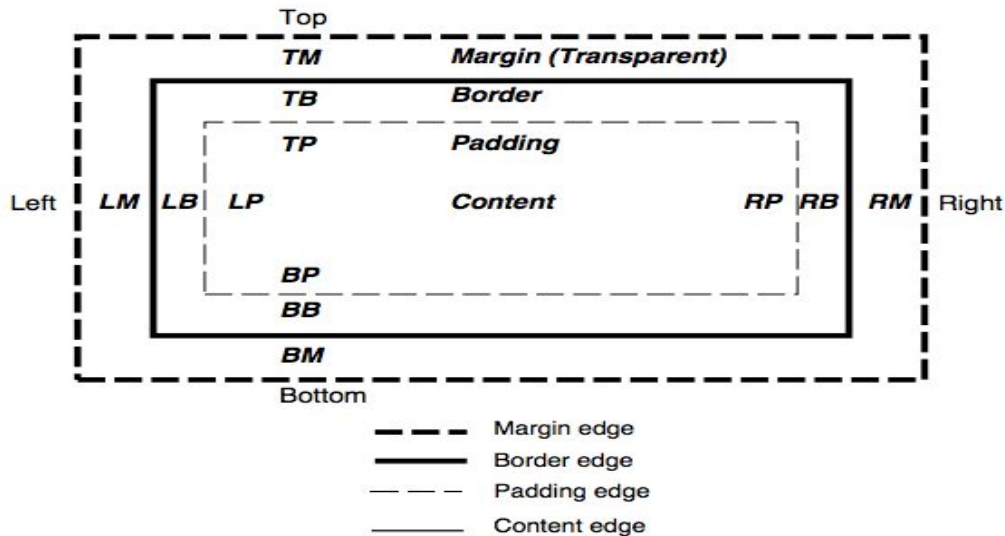
Box Model (border)

- `border-bottom` Sets all the bottom border properties in one declaration
- `border-bottom-color` Sets the color of the bottom border
- `border-bottom-style` Sets the style of the bottom border
- `border-bottom-width` Sets the width of the bottom border

The above applies for left, top, right as well

Box Model

Padding and Margin can have similar different values just like the border-style but for example `padding: 10px 20px 30px 40px;`



Box Model (outline)

An outline is a line that is drawn around elements (outside the borders) to make the element "stand out".

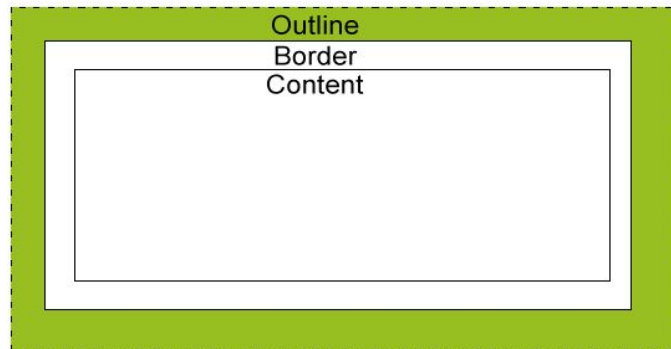
The outline is different from the border and it is not a part of an element's dimensions; the element's total width and height is not affected by the width of the outline.

`outline`: Sets all the outline properties in one declaration

`outline-color` Sets the color of an outline

`outline-style` Sets the style of an outline

`outline-width` Sets the width of an outline



Box Model (border-radius)

`border-radius(IE9 and up): 20px 0 10px 0;`

`border-radius:2em;`

is equivalent to:

`border-top-left-radius:2em;`

`border-top-right-radius:2em;`

`border-bottom-right-radius:2em;`

`border-bottom-left-radius:2em;`

Box Model (border-image)

```
.borderimage {  
    border-width: 50px;  
    border-style: solid;  
    border-image: url('borderimage.png') 50 round; /* repeat, stretch */  
}
```

Generator: <http://border-image.com>

More details: <https://css-tricks.com/understanding-border-image/>

Box Model (box-shadow)

box-shadow: IE9 and up (css3)

- None: Default value. No shadow is displayed
- h-shadow: Required. The position of the horizontal shadow. -ve values are allowed
- v-shadow: Required. The position of the vertical shadow. -ve values are allowed
- blur: Optional. The blur distance
- spread: Optional. The size of shadow. Negative values are allowed
- color: Optional. The color of the shadow.
- inset: Optional. Changes the shadow from outer(outset) to inner

Box Model (text-shadow)

text-shadow: IE9 and up (css3)

- none: Default value. No shadow
- h-shadow: Required. The position of the horizontal shadow. -ve values are allowed
- v-shadow: Required. The position of the vertical shadow. -ve values are allowed
- blur-radius: Optional. The blur radius. Default value is 0
- color: Optional. The color of the shadow.

Box Model (display)

display: The display property specifies the type of box used for an HTML element.

- inline Displays an element as an inline element (like)
- block Displays an element as a block element (like <p>)
- flex Displays an element as a block-level flex container.
- none hidden, Can be also done by [visibility: visible | hidden](#)

Other: list-item, inline-block, table, table-cell, table-row

Exercise: make an unordered list go horizontal

Box Model (order)

Order:

The order property specifies the order of a flexible item relative to the rest of the flexible items inside the same container. not supported in IE10 or earlier.

Box Model (overflow)

overflow: The overflow property specifies what happens if content overflows an element's box.

- visible: (default) The overflow is not clipped. It renders outside the element's box.
- hidden: The overflow is clipped, and the rest of the content will be invisible
- scroll: The overflow is clipped, a scroll-bar is added to see the rest of the content
- auto: If overflow is clipped, a scroll-bar is added to see the rest of the content

CSS3 adds overflow-x and overflow-y

Box Model (text-overflow)

CSS3 text-overflow:

- clip Default value. Clips the text
- ellipsis Render an ellipsis ("...") to represent clipped text

Depth

z-index

When html elements overlap, z-index determines which one covers the other.

An element with a higher z-index covers an element with a lower one.

Box Model (float)

float: The float property specifies whether or not a box (an element) should float.

- none: The element is not floated. This is default
- left: The element floats to the left
- right: The element floats the right

Box Model (clear)

clear: The clear CSS property specifies whether an element can be next to floating elements that precede it or must be moved down (cleared) below them.

- none: Default. Allows floating elements on both sides
- left: No floating elements allowed on the left side
- right: No floating elements allowed on the right side
- both: No floating elements allowed on either the left or the right side

Box Model (position)

The position CSS property chooses alternative rules for positioning elements

static

Elements render in order, as they appear in the document flow. The top, right, bottom, left and z-index properties do not apply.

Box Model (position)

relative

Relative positioning moves an element RELATIVE to its original position.

The style "left:-20px" subtracts 20 pixels from the element's original left position.

The style "left: 20px" adds 20 pixels to the element's original left position.

The effect of position:relative on table-* -group, table-row, table-column, table-cell, and table-caption elements is undefined.

Box Model (position)

absolute

An absolute position element is positioned relative to the first parent element that has a position other than static. If no such element is found, the containing block is `<html>`

Box Model (position)

fixed

An element with a fixed position is positioned relative to the browser window, and will not move even if the window is scrolled

top, left, bottom, right properties are used to position the element

Cursors

- `cursor: auto | default | none | help | pointer | progress | wait, ...`
- `cursor: url(hyper.cur) 10 20, auto;`

Standard cursor value as fallback for `url()` must be provided (doesn't work without). Firefox limit cursor size to 128×128px. Larger cursor images are ignored. 32×32 guarantees maximum compatibility.

You can use PNG, GIF, JPG, BMP, CUR, etc. images. An animated PNG or GIF will not create an animated cursor.

<https://developer.mozilla.org/en/docs/Web/CSS/cursor>