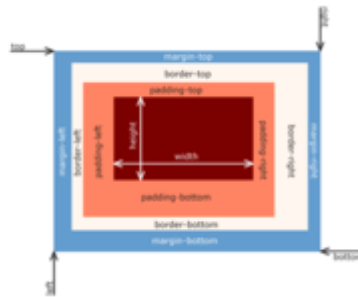


model kotak CSS

Dalam [pengembangan web](#) , **model kotak CSS** mengacu pada bagaimana elemen HTML dimodelkan di [mesin browser](#) dan bagaimana dimensi elemen HTML tersebut diturunkan dari properti CSS . Ini adalah konsep dasar untuk komposisi halaman web HTML . ^[3] Pedoman model kotak dijelaskan oleh standar web World Wide Web Consortium (W3C) khususnya Kelompok Kerja CSS. Untuk sebagian besar akhir 1990-an dan awal 2000-an telah ada implementasi model kotak yang tidak sesuai standar di browser arus utama. Dengan munculnya [CSS2](#) pada tahun 1998, yang memperkenalkan `box-sizing` properti, sebagian besar masalah telah diselesaikan.

Model Kotak

Modul Model Kotak CSS Level 3



Model kotak CSS

Nama asli	Modul Model Kotak CSS Level 3
Status	Cuplikan Rekomendasi Kandidat W3C
Versi terbaru	Tingkat 3 22 Desember 2020 ^[1]
Organisasi	Konsorsium World Wide Web
Komite	Kelompok Kerja CSS
Editor	Elika J. Etemad ^[1] Bert Bos ^[2] Anton Prowse ^[2]
Standar dasar	CSS
Domain	CSS
Situs web	www.w3.org/TR/css-box-3/ (http://www.w3.org/TR/css-box-3/)

Spesifik

Spesifikasi Cascading Style Sheets (CSS) menjelaskan bagaimana elemen halaman web ditampilkan oleh browser grafis. Bagian 4 dari spesifikasi CSS1 mendefinisikan "model pemformatan" yang memberikan elemen level blok—seperti `p` dan `blockquote`—lebar dan tinggi, dan tiga tingkat kotak yang mengelilinginya: padding, border, dan margin. ^[4]

Sementara spesifikasi tidak pernah menggunakan istilah "model kotak" secara eksplisit, istilah ini telah banyak digunakan oleh pengembang web dan vendor browser web.

Semua elemen HTML dapat dianggap sebagai "kotak", ini termasuk `div` tag, `p` tag, atau `a` tag. Masing-masing kotak tersebut memiliki lima dimensi yang dapat dimodifikasi:

- the `height` and `width` describe dimensions of the actual content of the box (text, images, ...)
- the `padding` describes the space between this content and the border of the box
- the `border` is any kind of line (solid, dotted, dashed...) surrounding the box, if present
- the `margin` is the space around the border

According to the CSS1 specification, released by W3C in 1996 and revised in 1999, when a width or height is explicitly specified for any block-level element, it should determine only the width or height of the visible element, with the padding, borders, and margins applied afterward.^{[4][5]} Before CSS3, this box model was known as **W3C box model**, in CSS3, it is known as the `content-box`.

The total width of a box is therefore `left-margin` + `left-border` + `left-padding` + `width` + `right-padding` + `right-border` + `right-margin`.

Similarly, the total height of a box equals `top-margin` + `top-border` + `top-padding` + `height` + `bottom-padding` + `bottom-border` + `bottom-margin`.

For example, the following CSS code

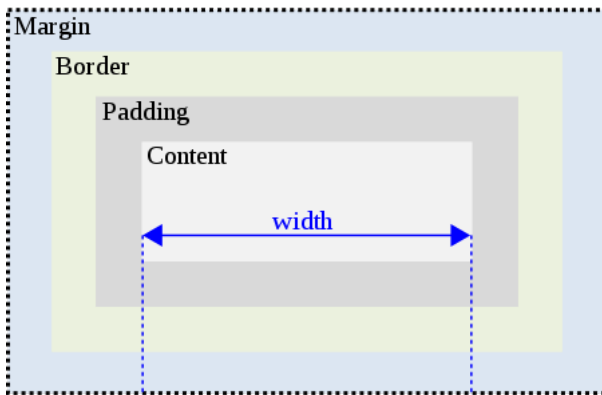
```
.myClass {  
  width: 200px;  
  height: 100px;  
  padding: 10px;  
  border: solid 10px black;  
  margin: 10px;  
}
```

would specify the box dimensions of each block belonging to 'myClass'. Moreover, each such box will have total height 160px and width 260px.

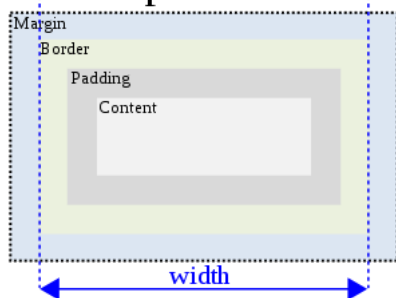
CSS3 introduced the **Internet Explorer box model** to the standard, known referred to as `border-box`.^[6]

History

W3C box model



Internet Explorer box model



The difference in how width is interpreted between the W3C and Internet Explorer box models

Before HTML 4 and CSS, very few HTML elements supported both border and padding, so the definition of the width and height of an element was not very contentious. However, it varied depending on the element. The HTML width attribute of a table defined the width of the table including its border.^[7] On the other hand, the HTML width attribute of an image defined the width of the image itself (inside any border).^[8] The only element to support padding in those early days was the table cell. Width for the cell was defined as "the suggested width for a cell content in pixels excluding the cell padding."^[9]

In 1996, CSS^[10] introduced margin, border and padding for many more elements. It adopted a definition width in relation to content, border, margin and padding similar to that for a table cell.^[11] This has since become known as the *W3C box model*.

At the time, very few browser vendors implemented the W3C box model to the letter. The two major browsers at the time, [Netscape 4.0](#) and [Internet Explorer 4.0](#) both defined width and height as the distance from border to border.^[12] This has been referred to as the *traditional*^[13] or the *Internet Explorer box model*.^[14]

[Internet Explorer](#) in "[quirks mode](#)" includes the content, padding and borders within a specified width or height; this results in a narrower or shorter rendering of a box than would result following the standard behavior.^[15]

The *Internet Explorer box model* behavior was often considered a bug, because of the way in which earlier versions of [Internet Explorer](#) handle the box model or sizing of elements in a web page, which differs from the standard way recommended by the [W3C](#) for the [Cascading Style Sheets](#) language.^{[16][17]} As of [Internet Explorer 6](#), the browser supports an alternative rendering mode (called the "standards-compliant mode") which solves this discrepancy. However, for backward compatibility reasons, all versions still behave in the usual, non-standard way by default (see [quirks mode](#)). [Internet Explorer for Mac](#) is not affected by this non-standard behavior.

Workarounds

Internet Explorer versions 6 and onward are not affected by the bug if the page contains certain HTML [document type declarations](#). These versions maintain the buggy behavior when in [quirks mode](#) for reasons of backward compatibility.^[18] For example, quirks mode is triggered:

- When the [document type declaration](#) is absent or incomplete;
- When an HTML 3 or earlier document is encountered;
- When an HTML 4.0 Transitional or Frameset document type declaration is used and a system identifier (URI) is not present;
- When an SGML comment or other unrecognized content appears before the document type declaration
- Internet Explorer 6 also uses quirks mode if there is an [XML](#) declaration prior to the document type declaration.^[19]

Various workarounds have been devised to force Internet Explorer versions 5 and earlier to display Web pages using the W3C box model. These workarounds generally exploit unrelated bugs in Internet Explorer's CSS selector processing in order to hide certain rules from the browser. The best known of these workarounds is the "box model hack" developed by [Tantek Çelik](#), a former Microsoft employee who developed this idea while working on Internet Explorer for the Macintosh. It involves specifying a width declaration for Internet Explorer for Windows, and then overriding it with another width declaration for CSS-compliant browsers. This second declaration is hidden from Internet Explorer for Windows by exploiting other bugs in the way that it parses CSS rules. The implementation of these CSS "hacks" has been

further complicated by the public release of Internet Explorer 7, which has had some issues fixed, but not others, causing undesired results in pages using these hacks.^[18]

Box model hacks have proven unreliable because they rely on bugs in browsers' CSS support that may be fixed in later versions. For this reason, some Web developers have instead recommended either avoiding specifying both width and padding for the same element or using [conditional comment](#) and/or [CSS filters](#) to work around the box model bug in older versions of Internet Explorer.^{[14][20]}

Support for Internet Explorer's box model

Web designer Doug Bowman has said that the original Internet Explorer box model represents a better, more logical approach.^[21] Peter-Paul Koch gives the example of a physical box, whose dimensions always refer to the box itself, including potential padding, but never its content.^[13] He says that this box model is more useful for graphic designers, who create designs based on the visible width of boxes rather than the width of their content.^[22] Bernie Zimmermann says that the Internet Explorer box model is closer to the definition of cell dimensions and padding used in the HTML table model.^[23]

The W3C has included a "box-sizing" property in CSS3. When `box-sizing: border-box;` is specified for an element, any padding or border of the element is drawn *inside* the specified width and height, "as commonly implemented by legacy HTML user agents".^[24] Internet Explorer 8, WebKit browsers such as Apple Safari 5.1+ and Google Chrome, Gecko-based browsers such as Mozilla Firefox 29.0 and later, Opera 7.0 and later, and Konqueror 3.3.2 and later support the CSS3 box-sizing property. Gecko browsers previous than 29.0 support the same functionality using the browser-specific `-moz-box-sizing` property.^[25] `border-box` is the default box model used in [Bootstrap framework](#).

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External links

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- Tantek Çelik's description of the "box model hack" (<http://tantek.com/CSS/Examples/boxmodelhack.html>)

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Terakhir diedit 23 hari yang lalu oleh **Matthewdelmonte**