



CSS

Cascading Style Sheets

(Folhas de Estilo em Cascata)

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Parte I *CSS Basic*



CSS

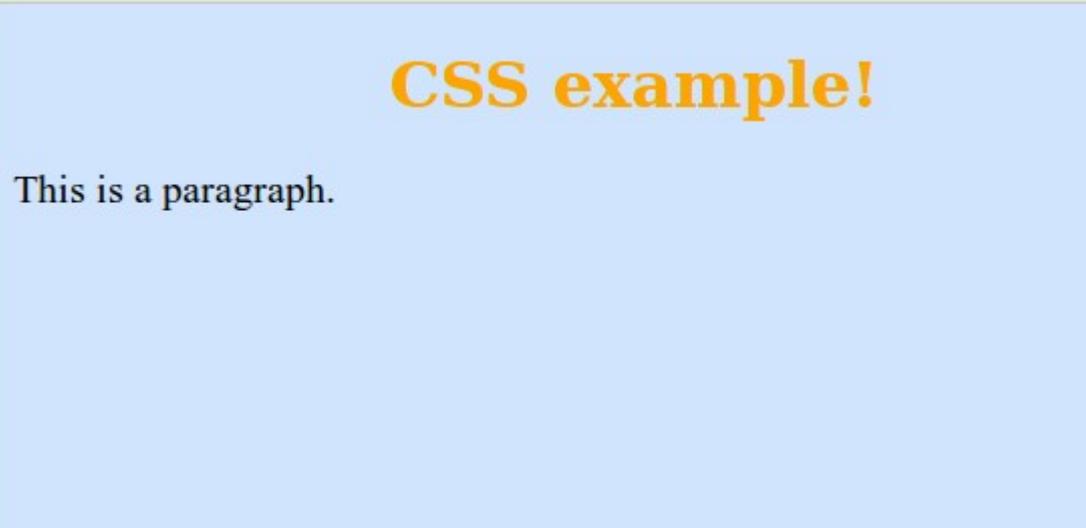
- Determina como elementos HTML serão exibidos;
- Foi criado no HTML 4.0 para resolver alguns problemas da época;
- Pode poupar bastante trabalho quando se usa folhas de estilo externas;
- Folhas de estilo externas são armazenadas em arquivos.css.

Exemplo

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      body{
        background-color:#d0e4fe;
      }
      h1{
        color:orange;
        text-align:center;
      }
      p{
        font-family:"Times New Roman";
        font-size:20px;
      }
    </style>
  </head>
  <body>
    <h1>CSS example!</h1>
    <p>This is a paragraph.</p>
  </body>
</html>
```

Result:



CSS example!

This is a paragraph.



Exemplo 2

- *Site* sem aplicação de CSS:

Heading 1

This is some text in a paragraph.

This is another paragraph.

Heading 2

Name	E-mail	Phone
Doe, John	jdoe@example.com	555-789-7222
Smith, Eva	esmith@example.com	555-324-3693

Heading 3

Visit our [Home Page](#) or our [CSS Tutorial](#).

What you should already know:

1. HTML
2. XHTML

Favorite drinks:

- Smoothie
- Green tea
- Coffee



Aplicando a Folha de Estilo 01

- Código

```
1  body{
2      font-size:75%;
3      font-family:verdana,arial,'sans serif';
4      background-color:#FFFFFF0;
5      color:#000080;
6      margin:10px;
7  }
8
9  h1 {font-size:200%;}
10 h2 {font-size:140%;}
11 h3 {font-size:110%;}
12
13 th {background-color:#ADD8E6;}
14
15 ul {list-style:circle;}
16 ol {list-style:upper-roman;}
17
18 a:link {color:#000080;}
19 a:hover {color:red;}
20
```



Resultado 01

Heading 1

This is some text in a paragraph.

This is another paragraph.

Heading 2

Name	E-mail	Phone
Doe, John	jdoe@example.com	555-789-7222
Smith, Eva	esmith@example.com	555-324-3693

Heading 3

Visit our [Home Page](#) or our [CSS Tutorial](#).

What you should already know:

- I. HTML
- II. XHTML

Favorite drinks:

- Smoothie
- Green tea
- Coffee



Aplicando a Folha de Estilo 02

- Código

```
1
2  body
3  {
4      font-size:75%;
5      font-family:"lucida calligraphy",arial,'sans serif';
6      background-color:#DCDCDC;
7      color:#8A2BE2;
8      margin:10px;
9  }
10
11  h1 {font-size:200%;}
12  h2 {font-size:140%;}
13  h3 {font-size:110%;}
14
15  th {background-color:#D3D3D3;}
16  td {background-color:#FFFAF0;}
17
18  a:link {color:#8A2BE2;text-decoration:none;}
19  a:hover {color:red;font-weight:bold;text-decoration:none;}
20  a:visited {text-decoration:none;}
```



Resultado 02

Heading 1

This is some text in a paragraph.

This is another paragraph.

Heading 2

Name	E-mail	Phone
Doe, John	jdoe@example.com	555-789-7222
Smith, Eva	esmith@example.com	555-324-3693

Heading 3

Visit our [Home Page](#) or our [CSS Tutorial](#).

What you should already know:

1. HTML
2. XHTML

Favorite drinks:

- Smoothie
- Green tea
- Coffee

Aplicando a Folha de Estilo 03

- Código

```
1  body{
2      font-size:75%;
3      font-family:verdana,arial,'sans serif';
4      background-image:url('gradient.png');
5      background-repeat:repeat-x;
6      background-color:#FFFFFF0;
7      color:#000080;
8      margin:70px;
9  }
10
11  h1 {font-size:200%;}
12  h2 {font-size:140%;}
13  h3 {font-size:110%;}
14
15  th {background-color:#ADD8E6;}
16
17  ul {list-style:circle;}
18  ol {list-style:upper-roman;}
19
20  a:link {color:#000080;}
21  a:hover {color:red;}
```



Resultado 03

Heading 1

This is some text in a paragraph.

This is another paragraph.

Heading 2

Name	E-mail	Phone
Doe, John	jdoe@example.com	555-789-7222
Smith, Eva	esmith@example.com	555-324-3693

Heading 3

Visit our [Home Page](#) or our [CSS Tutorial](#).

What you should already know:

- I. HTML
- II. XHTML

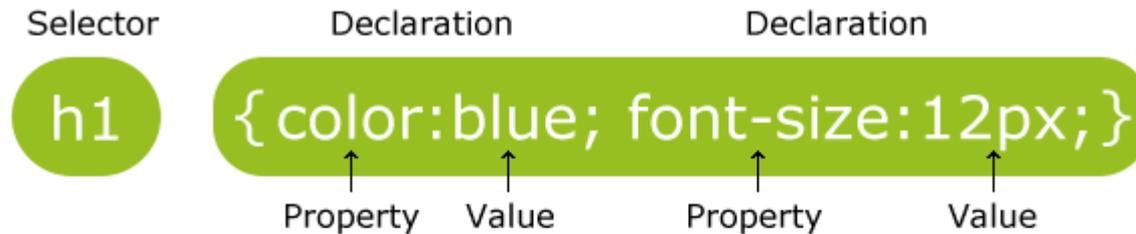
Favorite drinks:

- Smoothie
- Green tea
- Coffee



Sintaxe

- Uma regra CSS é constituída de duas partes:
 - um seletor e
 - uma ou mais declarações.



The selector is normally the HTML element you want to style.

Each declaration consists of a property and a value.

The property is the style attribute you want to change. Each property has a value.

CSS Example

A CSS declaration always ends with a semicolon, and declaration groups are surrounded by curly brackets:

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



Exemplo 03

Source Code:

```
<html>
<head>
  <style>
    body {background-color:tan;}
    h1  {color:maroon;font-size:20pt;}
    hr  {color:navy;}
    p   {font-size:11pt;margin-left:15px;}
    a:link  {color:green;}
    a:visited {color:yellow;}
    a:hover  {color:black;}
    a:active {color:blue;}
  </style>
</head>
<body>
  <h1>This is a header 1</h1>
  <hr>
  <p>You can see that the style sheet formats the text</p>
  <p><a href="http://www.w3schools.com" target="_blank">This is a link</a></p>
</body>
</html>
```

Result:

This is a header 1

You can see that the style sheet formats the text

[This is a link](http://www.w3schools.com)

Seletor “id”

- Um estilo pode ser aplicado a um único elemento em um documento por meio da identificação do mesmo;
- Dê um nome para o atributo “id” do elemento HTML (e. g. id=”para1”);
- No CSS será criado como: #para1

Example

```
#para1
{
text-align:center;
color:red;
}
```

💡 Do **NOT** start an ID name with a number! It will not work in Mozilla/Firefox.



Seletor “class”

- Um estilo pode ser aplicado a uma determinada classe de elementos em um documento;
- Dê um nome para o atributo “class” do(s) elemento(s) HTML (e. g. class=“center”);
- No CSS será criado como: .center

Example

```
.center {text-align:center;}
```

Try it yourself »

You can also specify that only specific HTML elements should be affected by a class.

In the example below, all p elements with class=“center” will be center-aligned:

Example

```
p.center {text-align:center;}
```

Try it yourself »

 Do **NOT** start a class name with a number! This is only supported in Internet Explorer.



Três Maneiras de Usar CSS

- Folha de Estilo Externa;
- Folha de Estilo Interna e
- Estilo em Linha.

Folha de Estilo Externa

- Pode ser criada em qualquer editor de texto;
- O arquivo deve ser salvo com a extensão “.css”;
- O arquivo não deve conter elementos HTML;
- Deve ser relacionado a página por meio da TAG *link* no cabeçalho da página (exemplo abaixo);
- Excelente para aplicação de um determinado estilo para diversas páginas.

```
<head>
<link rel="stylesheet" type="text/css" href="mystyle.css">
</head>
```

Exemplo de como deve ser o *link*.

```
hr {color:sienna;}
p {margin-left:20px;}
body {background-image:url("images/back40.gif");}
```

Exemplo de como deve ser o arquivo.

 Do not add a space between the property value and the unit (such as margin-left:20 px). The correct way is: margin-left:20px



Folha de Estilo Interna

- Deve ser usada preferencialmente quando uma única página tiver um estilo diferenciado das demais;
- O estilo deve ser definido na seção <head> da página por meio da TAG <style>.

```
<head>
<style>
hr {color:sienna;}
p {margin-left:20px;}
body {background-image:url("images/back40.gif");}
</style>
</head>
```



Estilo em Linha

- Ao se usar estilo em linha, perde-se muito das vantagens proporcionadas pelo CSS, pois, mistura-se conteúdo com formatação. Use este método com moderação!
- Para usar estilo em linha, basta fazer uso do atributo *style* da TAG em questão.

```
<p style="color:sienna;margin-left:20px">This is a paragraph.</p>
```



Múltiplas Folhas de Estilo

- Algumas propriedades podem ser configuradas em mais de uma folha de estilo. Neste caso, o *browser* respeitará a que for mais específica.

For example, an external style sheet has these properties for the h3 selector:

```
h3
{
color:red;
text-align:left;
font-size:8pt;
}
```

And an internal style sheet has these properties for the h3 selector:

```
h3
{
text-align:right;
font-size:20pt;
}
```

If the page with the internal style sheet also links to the external style sheet the properties for h3 will be:

```
color:red;
text-align:right;
font-size:20pt;
```

The color is inherited from the external style sheet and the text-alignment and the font-size is replaced by the internal style sheet.



Parte II *CSS Styling*



Background

- Usada para definir os efeitos de fundo de tela de um elemento.

CSS background properties are used to define the background effects of an element.

CSS properties used for background effects:

- background-color
- background-image
- background-repeat
- background-attachment
- background-position



background-color

Background Color

The background-color property specifies the background color of an element.

The background color of a page is defined in the body selector:

Example

```
body {background-color:#b0c4de;}
```

CSS Colors

With CSS, a color is most often specified by:

- a HEX value - like "#ff0000"
- an RGB value - like "rgb(255,0,0)"
- a color name - like "red"

Colors in CSS can be specified by the following methods:

- Hexadecimal colors
- RGB colors
- RGBA colors
- HSL colors
- HSLA colors
- Predefined/Cross-browser color names

Mais informações sobre os tipos de cores usados no CSS acesse este link.

In the example below, the h1, p, and div elements have different background colors:

Example

```
h1 {background-color:#6495ed;}  
p {background-color:#e0ffff;}  
div {background-color:#b0c4de;}
```



background-image

Background Image

The background-image property specifies an image to use as the background of an element.

By default, the image is repeated so it covers the entire element.

The background image for a page can be set like this:

Example

```
body {background-image:url('paper.gif');}
```

[Try it yourself »](#)

Below is an example of a bad combination of text and background image. The text is almost not readable:

Example

```
body {background-image:url('bgdesert.jpg');}
```

[Try it yourself »](#)

background-image

Result:

Imagem de fundo com bom contraste.

Result:

Imagem de fundo com péssimo contraste.

Este texto não é fácil de ler com esta imagem de fundo.



Background-image Repetidamente

- Por padrão as imagens se repetem horizontal e verticalmente;
- Algumas somente horizontalmente outras apenas verticalmete.

Some images should be repeated only horizontally or vertically, or they will look strange, like this:

Example

```
body
{
background-image:url('gradient2.png');
}
```

If the image is repeated only horizontally (repeat-x), the background will look better:

Example

```
body
{
background-image:url('gradient2.png');
background-repeat:repeat-x;
}
```

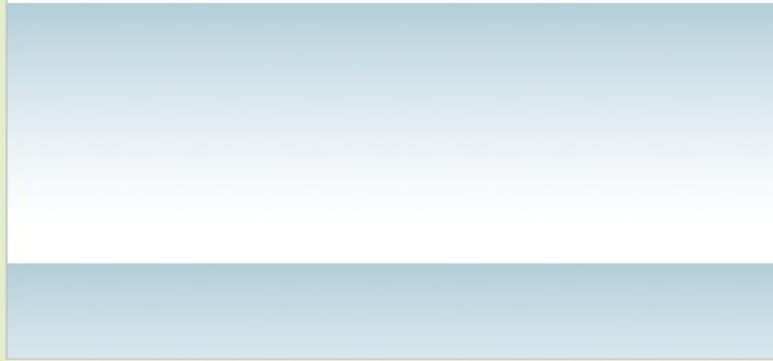
Comando para que a imagem se repita somente no eixo X (horizontal).



Background-image Repetidamente

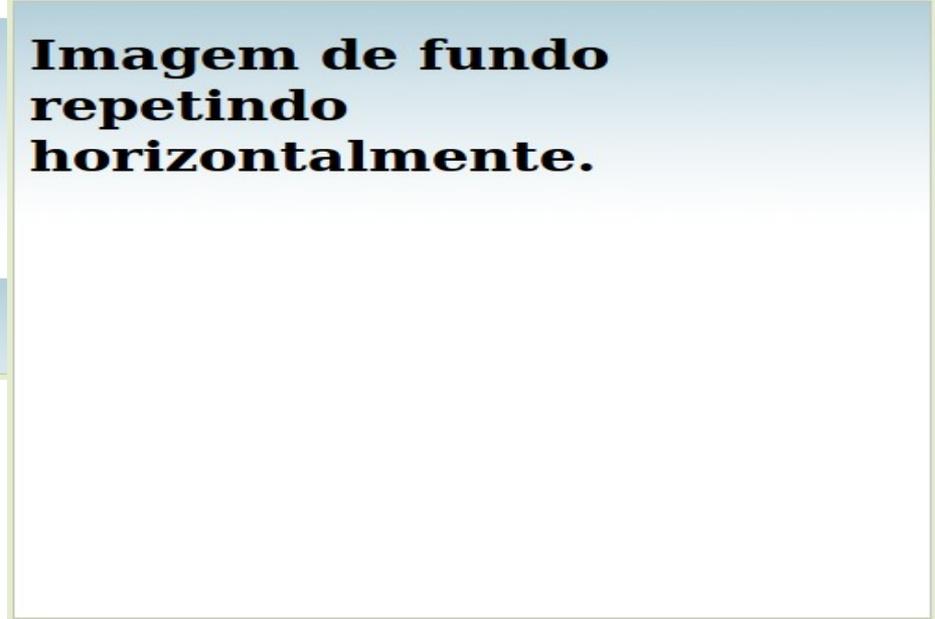
Result:

**Imagem de fundo
repetindo verticalmente.**



Result:

**Imagem de fundo
repetindo
horizontalmente.**



Background-image Configurando Posição e Não-repetição

💡 When using a background image, use an image that does not disturb the text.

Showing the image only once is specified by the background-repeat property:

Example

```
body
{
background-image:url('img_tree.png');
background-repeat:no-repeat;
}
```

Result:

Hello World!

W3Schools background image example.

The background image is only showing once, but it is disturbing the reader!



Background-image Configurando Posição e Não-repetição

In the example above, the background image is shown in the same place as the text. We want to change the position of the image, so that it does not disturb the text too much.

The position of the image is specified by the background-position property:

Example

```
body
{
background-image:url('img_tree.png');
background-repeat:no-repeat;
background-position:right top;
}
```

Result:

Hello World!

W3Schools background no-repeat, set position example.

Now the background image is only shown once, and positioned away from the text.

In this example we have also added a margin on the right side, so the background image will never disturb the text.



background

Todas as Propriedades Num Único Comando

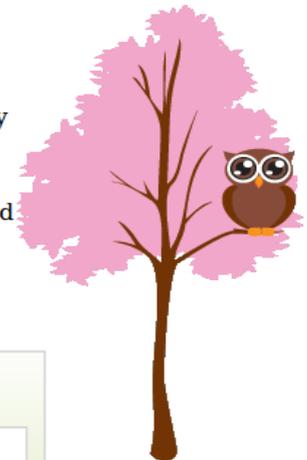
- É possível de ser feito, porém há algumas mudanças:
 - a propriedade é tratada apenas com “*background*”,
 - os valores devem seguir a seguinte ordem:
 - *background-color*,
 - *background-image*,
 - *background-repeat*,
 - *background-attachment* e
 - *background-position*.

Result:

Hello World!

Now the background image is only shown once, and it is also positioned away from the text.

In this example we have also added a margin on the right side, so that the background image will not disturb the text.



Example

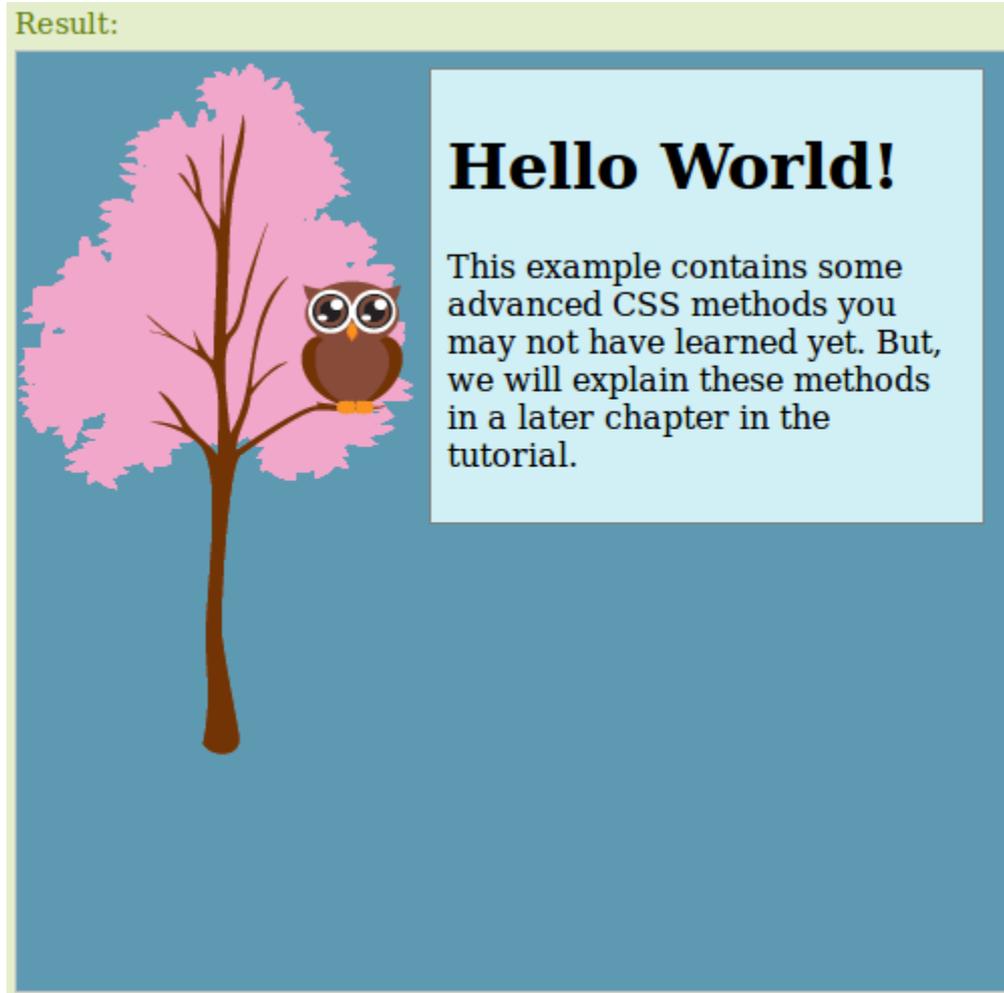
```
body {background:#ffffff url('img_tree.png') no-repeat right top;}
```

Exemplo 04

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <style>
5       body{
6         margin-left:200px;
7         background:#5d9ab2 url('img_tree.png') no-repeat top left;
8       }
9
10      .container{
11        text-align:center;
12      }
13
14      .center_div{
15        border:1px solid gray;
16        margin-left:auto;
17        margin-right:auto;
18        width:90%;
19        background-color:#d0f0f6;
20        text-align:left;
21        padding:8px;
22      }
23    </style>
24  </head>
25  <body>
26    <div class="container">
27      <div class="center_div">
28        <h1>Hello World!</h1>
29        <p>This example contains some advanced CSS methods you may
30          not have learned yet. But, we will explain these methods
31          in a later chapter in the tutorial.</p>
32      </div>
33    </div>
34  </body>
35 </html>
```



Resultado 04





Todas as Propriedades CSS do Background

All CSS Background Properties

Property	Description
<u>background</u>	Sets all the background properties in one declaration
<u>background-attachment</u>	Sets whether a background image is fixed or scrolls with the rest of the page
<u>background-color</u>	Sets the background color of an element
<u>background-image</u>	Sets the background image for an element
<u>background-position</u>	Sets the starting position of a background image
<u>background-repeat</u>	Sets how a background image will be repeated



Formatação de Texto

TEXT FORMATTING

This text is styled with some of the text formatting properties. The heading uses the text-align, text-transform, and color properties. The paragraph is indented, aligned, and the space between characters is specified. The underline is removed from the "Try it yourself" link.



Color

- A propriedade *color* é usada para configurar a cor de um texto;
- A cor padrão de uma página é definida no seletor *body*;
- Pode-se usar, da mesma forma que para o *background*, os diversos tipos de formatos de cores ao *background* aplicáveis. Sendo que os mais utilizados são:
 - valor hexadecimal (e. g. #00FF00),
 - valor RGB (e. g. “rgb(255,0,0)”) e
 - o nome da cor (e. g. “red”).

Example

```
body {color:blue;}  
h1 {color:#00ff00;}  
h2 {color:rgb(255,0,0);}
```

text-align

Text Alignment

The text-align property is used to set the horizontal alignment of a text.

Text can be centered, or aligned to the left or right, or justified.

When text-align is set to "justify", each line is stretched so that every line has equal width, and the left and right margins are straight (like in magazines and newspapers).

Example

```
h1 {text-align:center;}  
p.date {text-align:right;}  
p.main {text-align:justify;}
```

Result:

CSS text-align Example

May, 2009

In my younger and more vulnerable years my father gave me some advice that I've been turning over in my mind ever since. 'Whenever you feel like criticizing anyone,' he told me, 'just remember that all the people in this world haven't had the advantages that you've had.'

Note: Resize the browser window to see how the value "justify" works.

text-decoration

Text Decoration

The text-decoration property is used to set or remove decorations from text.

The text-decoration property is mostly used to remove underlines from links for design purposes:

Example

```
a {text-decoration:none;}
```

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      a {text-decoration:none;}
    </style>
  </head>
  <body>
    <p>Link to: <a href="http://www.w3schools.com">W3Schools.com</a>
  </p>
</body>
</html>
```

Result:

Link to: [W3Schools.com](http://www.w3schools.com)

text-decoration

It can also be used to decorate text:

Example

```
h1 {text-decoration:overline;}
h2 {text-decoration:line-through;}
h3 {text-decoration:underline;}
h4 {text-decoration:blink;}
```

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      h1 {text-decoration:overline;}
      h2 {text-decoration:line-through;}
      h3 {text-decoration:underline;}
      h4 {text-decoration:blink;}
    </style>
  </head>
  <body>
    <h1>This is heading 1</h1>
    <h2>This is heading 2</h2>
    <h3>This is heading 3</h3>
    <h4>This is heading 4</h4>
    <p><b>Note:</b> The "blink" value is not supported in IE, Chrome,
or Safari.</p>
  </body>
</html>
```

Result:

This is heading 1

~~**This is heading 2**~~

This is heading 3

This is heading 4

Note: The "blink" value is not supported in IE, Chrome, or Safari.

O título 4 fica piscando. Porém isto não acontece nos navegadores: IE, Chrome e Safari.

💡 It is not recommended to underline text that is not a link, as this often confuses users.

text-transform

Text Transformation

The text-transform property is used to specify uppercase and lowercase letters in a text.

It can be used to turn everything into uppercase or lowercase letters, or capitalize the first letter of each word.

Example

```
p.uppercase {text-transform:uppercase;}  
p.lowercase {text-transform:lowercase;}  
p.capitalize {text-transform:capitalize;}
```

Source Code:

```
<!DOCTYPE html>  
<html>  
  <head>  
    <style>  
      p.uppercase {text-transform:uppercase;}  
      p.lowercase {text-transform:lowercase;}  
      p.capitalize {text-transform:capitalize;}  
    </style>  
  </head>  
  <body>  
    <p class="uppercase">This is some text.</p>  
    <p class="lowercase">This is some text.</p>  
    <p class="capitalize">This is some text.</p>  
  </body>  
</html>
```

Result:

THIS IS SOME TEXT.

this is some text.

This Is Some Text.

text-indent

Text Indentation

The text-indentation property is used to specify the indentation of the first line of a text.

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      p {text-indent:100px;}
    </style>
  </head>
  <body>
    <p>In my younger and more vulnerable years my father gave me some
advice that I've been turning over in my mind ever since. 'Whenever
you feel like criticizing anyone,' he told me, 'just remember that
all the people in this world haven't had the advantages that you've
had.' </p>
  </body>
</html>
```

Example

```
p {text-indent:50px;}
```

Em outras palavras, define a distância entre a margem esquerda e o início do parágrafo.

Result:

 In my younger and more vulnerable years my father gave me some advice that I've been turning over in my mind ever since. 'Whenever you feel like criticizing anyone,' he told me, 'just remember that all the people in this world haven't had the advantages that you've had.'

Fonte

- As propriedades CSS das fontes definem:
 - família,
 - cor,
 - tamanho e
 - estilo do texto.

Difference Between Serif and Sans-serif Fonts



Sans-serif



Serif



Serif
(red serifs)

CSS Font Families

In CSS, there are two types of font family names:

- **generic family** - a group of font families with a similar look (like "Serif" or "Monospace")
- **font family** - a specific font family (like "Times New Roman" or "Arial")

💡 On computer screens, sans-serif fonts are considered easier to read than serif fonts.

Generic family	Font family	Description
Serif	Times New Roman Georgia	Serif fonts have small lines at the ends on some characters
Sans-serif	Arial Verdana	"Sans" means without - these fonts do not have the lines at the ends of characters
Monospace	Courier New Lucida Console	All monospace characters have the same width

Família da Fonte

Font Family

The font family of a text is set with the font-family property.

The font-family property should hold several font names as a "fallback" system. If the browser does not support the first font, it tries the next font.

Start with the font you want, and end with a generic family, to let the browser pick a similar font in the generic family, if no other fonts are available.

Note: If the name of a font family is more than one word, it must be in quotation marks, like font-family: "Times New Roman".

More than one font family is specified in a comma-separated list:

Example

```
p{font-family:"Times New Roman", Times, serif;}
```

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      p.serif{font-family:"Times New Roman",Times,serif;}
      p.sansserif{font-family:Arial,Helvetica,sans-serif;}
    </style>
  </head>
  <body>
    <h1>CSS font-family</h1>
    <p class="serif">This is a paragraph, shown in the Times New
Roman font.</p>
    <p class="sansserif">This is a paragraph, shown in the Arial
font.</p>
  </body>
</html>
```

Submit Code

Result:

CSS font-family

This is a paragraph, shown in the Times New Roman font.

This is a paragraph, shown in the Arial font.

font-style

Font Style

The font-style property is mostly used to specify italic text.

This property has three values:

- normal - The text is shown normally
- italic - The text is shown in italics
- oblique - The text is "leaning" (oblique is very similar to italic, but less supported)

Example

```
p.normal {font-style:normal;}  
p.italic {font-style:italic;}  
p.oblique {font-style:oblique;}
```

Source Code:

Sub

```
<!DOCTYPE html>  
<html>  
  <head>  
    <style>  
      p.normal {font-style:normal;}  
      p.italic {font-style:italic;}  
      p.oblique {font-style:oblique;}  
    </style>  
  </head>  
  <body>  
    <p class="normal">This is a paragraph, normal.</p>  
    <p class="italic">This is a paragraph, italic.</p>  
    <p class="oblique">This is a paragraph, oblique.</p>  
  </body>  
</html>
```

Result:

This is a paragraph, normal.

This is a paragraph, italic.

This is a paragraph, oblique.

font-size

Font Size

The font-size property sets the size of the text.

Being able to manage the text size is important in web design. However, you should not use font size adjustments to make paragraphs look like headings, or headings look like paragraphs.

Always use the proper HTML tags, like `<h1>` - `<h6>` for headings and `<p>` for paragraphs.

The font-size value can be an absolute, or relative size.

Absolute size:

- Sets the text to a specified size
- Does not allow a user to change the text size in all browsers (bad for accessibility reasons)
- Absolute size is useful when the physical size of the output is known

Relative size:

- Sets the size relative to surrounding elements
- Allows a user to change the text size in browsers

💡 If you do not specify a font size, the default size for normal text, like paragraphs, is 16px (16px=1em).

Set Font Size With Pixels

Setting the text size with pixels gives you full control over the text size:

Example

```
h1 {font-size:40px;}  
h2 {font-size:30px;}  
p {font-size:14px;}
```

font-size

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      h1 {font-size:40px;}
      h2 {font-size:30px;}
      p {font-size:14px;}
    </style>
  </head>
  <body>
    <h1>This is heading 1</h1>
    <h2>This is heading 2</h2>
    <p>This is a paragraph.</p>
    <p>Specifying the font-size in px allows Internet Explorer 9,
Firefox, Chrome, Opera, and Safari to resize the text.</p>
    <p><b>Note:</b> This example does not work in IE, prior version 9.</p>
  </body>
</html>
```

Result:

This is heading 1

This is heading 2

This is a paragraph.

Specifying the font-size in px allows Internet Explorer 9, Firefox, Chrome, Opera, and Safari to resize the text.

Note: This example does not work in IE, prior version 9.

font-size

Set Font Size With Em

To avoid the resizing problem with older versions of Internet Explorer, many developers use em instead of pixels.

The em size unit is recommended by the W3C.

1 em is equal to the current font size. The default text size in browsers is 16px. So, the default size of 1em is 16px.

The size can be calculated from pixels to em using this formula: $pixels/16=em$

Example

```
h1 {font-size:2.5em;} /* 40px/16=2.5em */
h2 {font-size:1.875em;} /* 30px/16=1.875em */
p {font-size:0.875em;} /* 14px/16=0.875em */
```

Use a Combination of Percent and Em

The solution that works in all browsers, is to set a default font-size in percent for the <body> element:

Example

```
body {font-size:100%;}
h1 {font-size:2.5em;}
h2 {font-size:1.875em;}
p {font-size:0.875em;}
```

font-size

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      body {font-size:100%;}
      h1 {font-size:2.5em;}
      h2 {font-size:1.875em;}
      p {font-size:0.875em;}
    </style>
  </head>
  <body>
    <h1>This is heading 1</h1>
    <h2>This is heading 2</h2>
    <p>This is a paragraph.</p>
    <p>Specifying the font-size in percent and em displays the same
size in all major browsers, and allows all browsers to resize the
text!</p>
  </body>
</html>
```

Result:

This is heading 1

This is heading 2

This is a paragraph.

Specifying the font-size in percent and em displays the same size in all major browsers, and allows all browsers to resize the text!



Links

Styling Links

Links can be styled with any CSS property (e.g. color, font-family, background, etc.).

Special for links are that they can be styled differently depending on what state they are in.

The four links states are:

- `a:link` - a normal, unvisited link
- `a:visited` - a link the user has visited
- `a:hover` - a link when the user mouses over it
- `a:active` - a link the moment it is clicked

Example

```
a:link {color:#FF0000;} /* unvisited link */
a:visited {color:#00FF00;} /* visited link */
a:hover {color:#FF00FF;} /* mouse over link */
a:active {color:#0000FF;} /* selected link */
```

When setting the style for several link states, there are some order rules:

- `a:hover` MUST come after `a:link` and `a:visited`
- `a:active` MUST come after `a:hover`

Links

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      a:link {color:#FF0000;} /* unvisited link */
      a:visited {color:#00FF00;} /* visited link */
      a:hover {color:#FF00FF;} /* mouse over link */
      a:active {color:#0000FF;} /* selected link */
    </style>
  </head>
  <body>
    <p><b><a href="default.asp" target="_blank">This is a link</a></b></p>
  </b></p>
    <p><b>Note:</b> a:hover MUST come after a:link and a:visited in
the CSS definition in order to be effective.</p>
    <p><b>Note:</b> a:active MUST come after a:hover in the CSS
definition in order to be effective.</p>
  </body>
</html>
```

Result:

[This is a link](#)

Note: a:hover MUST come after a:link and a:visited in the CSS definition in order to be effective.

Note: a:active MUST come after a:hover in the CSS definition in order to be effective.

Links

Common Link Styles

In the example above the link changes color depending on what state it is in.

Lets go through some of the other common ways to style links:

Text Decoration

The text-decoration property is mostly used to remove underlines from links:

Example

```
a:link {text-decoration:none;}
a:visited {text-decoration:none;}
a:hover {text-decoration:underline;}
a:active {text-decoration:underline;}
```

Result:

This is a link

Note: a:hover MUST come after a:link and a:visited in the CSS definition in order to be effective.

Note: a:active MUST come after a:hover in the CSS definition in order to be effective.

Source Code:

Submit Code x

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      a:link {text-decoration:none;} /* unvisited link */
      a:visited {text-decoration:none;} /* visited link */
      a:hover {text-decoration:underline;} /* mouse over link */
      a:active {text-decoration:underline;} /* selected link */
    </style>
  </head>
  <body>
    <p><b><a href="default.asp" target="_blank">This is a link</a>
  </b></p>
    <p><b>Note:</b> a:hover MUST come after a:link and a:visited in
the CSS definition in order to be effective.</p>
    <p><b>Note:</b> a:active MUST come after a:hover in the CSS
definition in order to be effective.</p>
  </body>
</html>
```

Links

Background Color

The background-color property specifies the background color for links:

Example

```
a:link {background-color:#B2FF99;}
a:visited {background-color:#FFFF85;}
a:hover {background-color:#FF704D;}
a:active {background-color:#FF704D;}
```

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      a:link {background-color:#B2FF99;} /* unvisited link */
      a:visited {background-color:#FFFF85;} /* visited link */
      a:hover {background-color:#FF704D;} /* mouse over link */
      a:active {background-color:#FF704D;} /* selected link */
    </style>
  </head>
  <body>
    <p><b><a href="default.asp" target="_blank">This is a link</a>
</b></p>
    <p><b>Note:</b> a:hover MUST come after a:link and a:visited in
the CSS definition in order to be effective.</p>
    <p><b>Note:</b> a:active MUST come after a:hover in the CSS
definition in order to be effective.</p>
  </body>
</html>
```

Result:

[This is a link](#)

Note: a:hover MUST come after a:link and a:visited in the CSS definition in order to be effective.

Note: a:active MUST come after a:hover in the CSS definition in order to be effective.



Lista

The CSS list properties allow you to:

- Set different list item markers for ordered lists
- Set different list item markers for unordered lists
- Set an image as the list item marker

List

In HTML, there are two types of lists:

- unordered lists - the list items are marked with bullets
- ordered lists - the list items are marked with numbers or letters

With CSS, lists can be styled further, and images can be used as the list item marker.

Different List Item Markers

The type of list item marker is specified with the `list-style-type` property:

Example

```
ul.a {list-style-type: circle;}  
ul.b {list-style-type: square;}  
  
ol.c {list-style-type: upper-roman;}  
ol.d {list-style-type: lower-alpha;}
```

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      ul.a {list-style-type:circle;}
      ul.b {list-style-type:square;}
      ol.c {list-style-type:upper-roman;}
      ol.d {list-style-type:lower-alpha;}
    </style>
  </head>
  <body>

    <p>Example of unordered lists:</p>
    <ul class="a">
      <li>Coffee</li>
      <li>Tea</li>
      <li>Coca Cola</li>
    </ul>
    <ul class="b">
      <li>Coffee</li>
      <li>Tea</li>
      <li>Coca Cola</li>
    </ul>

    <p>Example of ordered lists:</p>
    <ol class="c">
      <li>Coffee</li>
      <li>Tea</li>
      <li>Coca Cola</li>
    </ol>
    <ol class="d">
      <li>Coffee</li>
      <li>Tea</li>
      <li>Coca Cola</li>
    </ol>
  </body>
</html>
```

Lista

Result:

Example of unordered lists:

- Coffee
- Tea
- Coca Cola

- Coffee
- Tea
- Coca Cola

Example of ordered lists:

- I. Coffee
- II. Tea
- III. Coca Cola

- a. Coffee
- b. Tea
- c. Coca Cola

Lista (Imagem como Marcador)

An Image as The List Item Marker

To specify an image as the list item marker, use the `list-style-image` property:

Example

```
ul
{
list-style-image: url('sqpurple.gif');
}
```

The example above does not display equally in all browsers. IE and Opera will display the image-marker a little bit higher than Firefox, Chrome, and Safari.

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      ul{
        list-style-image:url('sqpurple.gif');
      }
    </style>
  </head>
  <body>
    <ul>
      <li>Coffee</li>
      <li>Tea</li>
      <li>Coca Cola</li>
    </ul>
  </body>
</html>
```

Result:

- Coffee
- Tea
- Coca Cola

Lista (Imagem como Marcador)

If you want the image-marker to be placed equally in all browsers, a crossbrowser solution is explained below.

Crossbrowser Solution

The following example displays the image-marker equally in all browsers:

Example

```
ul
{
list-style-type: none;
padding: 0px;
margin: 0px;
}
ul li
{
background-image: url(sqpurple.gif);
background-repeat: no-repeat;
background-position: 0px 5px;
padding-left: 14px;
}
```

Result:

- Coffee
- Tea
- Coca Cola

Source Code:

```
<!DOCTYPE html>
<html>
<head>
<style>
ul{
list-style-type:none;
padding:0px;
margin:0px;
}
ul li{
background-image:url(sqpurple.gif);
background-repeat:no-repeat;
background-position:0px 5px;
padding-left:14px;
}
</style>
</head>
<body>
<ul>
<li>Coffee</li>
<li>Tea</li>
<li>Coca Cola</li>
</ul>
</body>
</html>
```

Lista - *Shorthand Property*

List - Shorthand property

It is also possible to specify all the list properties in one, single property. This is called a shorthand property.

The shorthand property used for lists, is the list-style property:

Example

```
ul
{
list-style: square url("sqpurple.gif");
}
```

When using the shorthand property, the order of the values are:

- list-style-type
- list-style-position (for a description, see the CSS properties table below)
- list-style-image

It does not matter if one of the values above are missing, as long as the rest are in the specified order.

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      ul{
        list-style:square url("sqpurple.gif");
      }
    </style>
  </head>
  <body>
    <ul>
      <li>Coffee</li>
      <li>Tea</li>
      <li>Coca Cola</li>
    </ul>
  </body>
</html>
```

Result:

- Coffee
- Tea
- Coca Cola



Lista - Propriedades

All CSS List Properties

Property	Description
<u>list-style</u>	Sets all the properties for a list in one declaration
<u>list-style-image</u>	Specifies an image as the list-item marker
<u>list-style-position</u>	Specifies if the list-item markers should appear inside or outside the content flow
<u>list-style-type</u>	Specifies the type of list-item marker

Tabela

The look of an HTML table can be greatly improved with CSS:

Company	Contact	Country
Alfreds Futterkiste	Maria Anders	Germany
Berglunds snabbköp	Christina Berglund	Sweden
Centro comercial Moctezuma	Francisco Chang	Mexico
Ernst Handel	Roland Mendel	Austria
Island Trading	Helen Bennett	UK
Königlich Essen	Philip Cramer	Germany
Laughing Bacchus Winecellars	Yoshi Tannamuri	Canada
Magazzini Alimentari Riuniti	Giovanni Rovelli	Italy
North/South	Simon Crowther	UK
Paris spécialités	Marie Bertrand	France
The Big Cheese	Liz Nixon	USA
Vaffeljernet	Palle Ibsen	Denmark

Tabela - Borda Dupla

Table Borders

To specify table borders in CSS, use the border property.

The example below specifies a black border for table, th, and td elements:

Example

```
table, th, td
{
border: 1px solid black;
}
```

Result:

Firstname	Lastname
Peter	Griffin
Lois	Griffin

Notice that the table in the example above has double borders. This is because both the table and the th/td elements have separate borders.

To display a single border for the table, use the border-collapse property.

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      table,th,td{
        border:1px solid black;
      }
    </style>
  </head>
  <body>
    <table>
      <tr>
        <th>Firstname</th>
        <th>Lastname</th>
      </tr>
      <tr>
        <td>Peter</td>
        <td>Griffin</td>
      </tr>
      <tr>
        <td>Lois</td>
        <td>Griffin</td>
      </tr>
    </table>
  </body>
</html>
```



Tabela - Borda Simples

Collapse Borders

The border-collapse property sets whether the table borders are collapsed into a single border or separated:

Example

```
table
{
border-collapse:collapse;
}
table,th, td
{
border: 1px solid black;
}
```

Tabela - Borda Simples

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      table{
        border-collapse:collapse;
      }
      table, td, th{
        border:1px solid black;
      }
    </style>
  </head>
  <body>
    <table>
      <tr>
        <th>Firstname</th>
        <th>Lastname</th>
      </tr>
      <tr>
        <td>Peter</td>
        <td>Griffin</td>
      </tr>
      <tr>
        <td>Lois</td>
        <td>Griffin</td>
      </tr>
    </table>
    <p><b>Note:</b> If a !DOCTYPE is not specified, the border-
collapse property can produce unexpected results in IE8 and earlier
versions.</p>
  </body>
</html>
```

Result:

Firstname	Lastname
Peter	Griffin
Lois	Griffin

Note: If a !DOCTYPE is not specified, the border-collapse property can produce unexpected results in IE8 and earlier versions.



Tabela - Largura e Altura

Table Width and Height

Width and height of a table is defined by the width and height properties.

The example below sets the width of the table to 100%, and the height of the th elements to 50px:

Example

```
table
{
width:100%;
}
th
{
height:50px;
}
```

Tabela - Largura e Altura

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      table,td,th{
        border:1px solid black;
      }
      table{
        width:100%;
      }
      th{
        height:50px;
      }
    </style>
  </head>
  <body>
    <table>
      <tr>
        <th>Firstname</th>
        <th>Lastname</th>
        <th>Savings</th>
      </tr>
      <tr>
        <td>Peter</td>
        <td>Griffin</td>
        <td>$100</td>
      </tr>
      <tr>
        <td>Lois</td>
        <td>Griffin</td>
        <td>$150</td>
      </tr>
```

```
</tr>
<tr>
  <td>Joe</td>
  <td>Swanson</td>
  <td>$300</td>
</tr>
<tr>
  <td>Cleveland</td>
  <td>Brown</td>
  <td>$250</td>
</tr>
</table>
</body>
</html>
```

Result:

Firstname	Lastname	Savings
Peter	Griffin	\$100
Lois	Griffin	\$150
Joe	Swanson	\$300
Cleveland	Brown	\$250



Tabela - Alinhamento de Texto Horizontal

Table Text Alignment

The text in a table is aligned with the `text-align` and `vertical-align` properties.

The `text-align` property sets the horizontal alignment, like `left`, `right`, or `center`:

The `vertical-align` property sets the vertical alignment, like `top`, `bottom`, or `middle`:

Example

```
td
{
text-align:right;
}
```

Tabela - Alinhamento de Texto Horizontal

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      table,td,th{
        border:1px solid black;
      }
      td{
        text-align:right;
      }
    </style>
  </head>
  <body>
    <table>
      <tr>
        <th>Firstname</th>
        <th>Lastname</th>
        <th>Savings</th>
      </tr>
      <tr>
        <td>Peter</td>
        <td>Griffin</td>
        <td>$100</td>
      </tr>
      <tr>
        <td>Lois</td>
        <td>Griffin</td>
        <td>$150</td>
      </tr>
      <tr>
        <td>Joe</td>
```

```
        <td>Swanson</td>
        <td>$300</td>
      </tr>
      <tr>
        <td>Cleveland</td>
        <td>Brown</td>
        <td>$250</td>
      </tr>
    </table>
  </body>
</html>
```

Result:

Firstname	Lastname	Savings
Peter	Griffin	\$100
Lois	Griffin	\$150
Joe	Swanson	\$300
Cleveland	Brown	\$250

Tabela - Alinhamento de Texto Vertical

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      table, td, th{
        border:1px solid black;
      }
      td{
        height:50px;
        vertical-align:bottom;
      }
    </style>
  </head>
  <body>
    <table>
      <tr>
        <th>Firstname</th>
        <th>Lastname</th>
        <th>Savings</th>
      </tr>
      <tr>
        <td>Peter</td>
        <td>Griffin</td>
        <td>$100</td>
      </tr>
      <tr>
        <td>Lois</td>
        <td>Griffin</td>
        <td>$150</td>
      </tr>
    </table>
  </body>
</html>
```

The vertical-align property sets the vertical alignment, like top, bottom, or middle:

Example

```
td
{
  height:50px;
  vertical-align:bottom;
}
```

```
<td>Joe</td>
<td>Swanson</td>
<td>$300</td>
</tr>
<tr>
  <td>Cleveland</td>
  <td>Brown</td>
  <td>$250</td>
</tr>
</table>
</body>
</html>
```

Result:

Firstname	Lastname	Savings
Peter	Griffin	\$100
Lois	Griffin	\$150
Joe	Swanson	\$300
Cleveland	Brown	\$250

Tabela - Espaço entre Borda e Conteúdo

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      table, td, th{
        border:1px solid black;
      }
      td{
        padding:15px;
      }
    </style>
  </head>
  <body>
    <table>
      <tr>
        <th>Firstname</th>
        <th>Lastname</th>
        <th>Savings</th>
      </tr>
      <tr>
        <td>Peter</td>
        <td>Griffin</td>
        <td>$100</td>
      </tr>
      <tr>
        <td>Lois</td>
        <td>Griffin</td>
        <td>$150</td>
      </tr>
      <tr>
        <td>Joe</td>
```

Table Padding

To control the space between the border and content in a table, use the padding property on td and th elements:

Example

```
td
{
padding:15px;
}
```

```
        <td>Swanson</td>
        <td>$300</td>
      </tr>
      <tr>
        <td>Cleveland</td>
        <td>Brown</td>
        <td>$250</td>
      </tr>
    </table>
  </body>
</html>
```

Result:

Firstname	Lastname	Savings
Peter	Griffin	\$100
Lois	Griffin	\$150
Joe	Swanson	\$300
Cleveland	Brown	\$250

Tabela - Cor

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      table, td, th{
        border:1px solid green;
      }
      th{
        background-color:green;
        color:white;
      }
    </style>
  </head>
  <body>
    <table>
      <tr>
        <th>Firstname</th>
        <th>Lastname</th>
        <th>Savings</th>
      </tr>
      <tr>
        <td>Peter</td>
        <td>Griffin</td>
        <td>$100</td>
      </tr>
      <tr>
        <td>Lois</td>
        <td>Griffin</td>
        <td>$150</td>
      </tr>
      <tr>
        <td>Joe</td>
        <td>Swanson</td>
        <td>$300</td>
      </tr>
      <tr>
        <td>Cleveland</td>
        <td>Brown</td>
        <td>$250</td>
      </tr>
    </table>
  </body>
</html>
```

Table Color

The example below specifies the color of the borders, and the text and background color of th elements:

Example

```
table, td, th
{
  border:1px solid green;
}
th
{
  background-color:green;
  color:white;
}
```

```
<td>Joe</td>
<td>Swanson</td>
<td>$300</td>
</tr>
<tr>
  <td>Cleveland</td>
  <td>Brown</td>
  <td>$250</td>
</tr>
</table>
</body>
</html>
```

Result:

Firstname	Lastname	Savings
Peter	Griffin	\$100
Lois	Griffin	\$150
Joe	Swanson	\$300
Cleveland	Brown	\$250



Parte III

CSS Box Model



Box Model

- O conceito de CSS *box model* pode ser entendido como uma estrutura que empacota elementos HTML;
- Esta estrutura permite que você coloque uma borda e espaço também, em volta dos elementos HTML;
- Vejamos uma figura representativa da *box model* no próximo *slide*.

Browsers Compatibility Issue

IE8 and earlier versions of IE, included padding and border in the width property.

To fix this problem, add a <DOCTYPE html> to the HTML page.

Box Model



Explanation of the different parts:

- **Margin** - Clears an area around the border. The margin does not have a background color, it is completely transparent
- **Border** - A border that goes around the padding and content. The border is affected by the background color of the box
- **Padding** - Clears an area around the content. The padding is affected by the background color of the box
- **Content** - The content of the box, where text and images appear

In order to set the width and height of an element correctly in all browsers, you need to know how the box model works.

Box Model - Largura e Altura

 **Important:** When you set the width and height properties of an element with CSS, you just set the width and height of the **content area**. To calculate the full size of an element, you must also add the padding, borders and margins.

The total width of the element in the example below is 300px:

```
width:250px;
padding:10px;
border:5px solid gray;
margin:10px;
```

Let's do the math:

250px (width)
+ 20px (left and right padding)
+ 10px (left and right border)
+ 20px (left and right margin)
= 300px

Assume that you had only 250px of space. Let's make an element with a total width of 250px:

Example

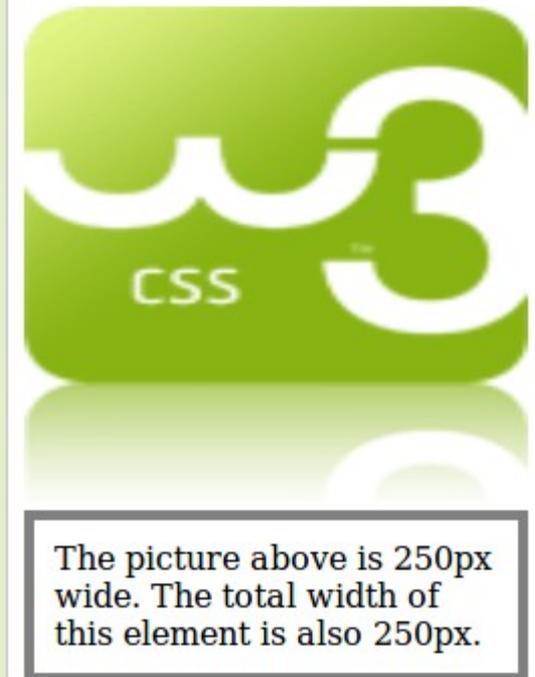
```
width:220px;
padding:10px;
border:5px solid gray;
margin:0px;
```

Box Model - Exemplo

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      #box{
        width:220px;
        padding:10px;
        border:5px solid gray;
        margin:0px;
      }
    </style>
  </head>
  <body>
    
    <div id="box">
      The picture above is 250px wide.
      The total width of this element is also 250px.
    </div>
  </body>
</html>
```

Result:



The total width of an element should be calculated like this:

Total element width = width + left padding + right padding + left border + right border + left margin + right margin

The total height of an element should be calculated like this:

Total element height = height + top padding + bottom padding + top border + bottom border + top margin + bottom margin



Borda

CSS Border Properties

The CSS border properties allow you to specify the style and color of an element's border.

Border Style

The border-style property specifies what kind of border to display.

💡 None of the border properties will have ANY effect unless the **border-style** property is set!



border-style

border-style values:

none: Defines no border

dotted: Defines a dotted border

dashed: Defines a dashed border

solid: Defines a solid border

double: Defines two borders. The width of the two borders are the same as the border-width value

groove: Defines a 3D grooved border. The effect depends on the border-color value

ridge: Defines a 3D ridged border. The effect depends on the border-color value

inset: Defines a 3D inset border. The effect depends on the border-color value

outset: Defines a 3D outset border. The effect depends on the border-color value

Borda - Exemplo

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      p.none {border-style:none;}
      p.dotted {border-style:dotted;}
      p.dashed {border-style:dashed;}
      p.solid {border-style:solid;}
      p.double {border-style:double;}
      p.groove {border-style:groove;}
      p.ridge {border-style:ridge;}
      p.inset {border-style:inset;}
      p.outset {border-style:outset;}
      p.hidden {border-style:hidden;}
    </style>
  </head>
  <body>
    <p class="none">No border.</p>
    <p class="dotted">A dotted border.</p>
    <p class="dashed">A dashed border.</p>
    <p class="solid">A solid border.</p>
    <p class="double">A double border.</p>
    <p class="groove">A groove border.</p>
    <p class="ridge">A ridge border.</p>
    <p class="inset">An inset border.</p>
    <p class="outset">An outset border.</p>
    <p class="hidden">A hidden border.</p>
  </body>
</html>
```

Result:

No border.

A dotted border.

A dashed border.

A solid border.

A double border.

A groove border.

A ridge border.

An inset border.

An outset border.

A hidden border.



Borda - Largura

Border Width

The border-width property is used to set the width of the border.

The width is set in pixels, or by using one of the three pre-defined values: thin, medium, or thick.

Note: The "border-width" property does not work if it is used alone. Use the "border-style" property to set the borders first.

Example

```
p.one
{
border-style:solid;
border-width:5px;
}
p.two
{
border-style:solid;
border-width:medium;
}
```

Borda - Largura - Exemplo

Source Code:

Submit Code

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      p.one {
        border-style:solid;
        border-width:5px;
      }
      p.two {
        border-style:solid;
        border-width:medium;
      }
      p.three {
        border-style:solid;
        border-width:1px;
      }
    </style>
  </head>
  <body>
    <p class="one">Some text.</p>
    <p class="two">Some text.</p>
    <p class="three">Some text.</p>
    <p><b>Note:</b> The "border-width" property does not work if it
is used alone. Use the "border-style" property to set the borders
first.</p>
  </body>
</html>
```

Result:

Some text.

Some text.

Some text.

Note: The "border-width" property does not work if it is used alone. Use the "border-style" property to set the borders first.



Borda - Cor

Border Color

The border-color property is used to set the color of the border. The color can be set by:

- name - specify a color name, like "red"
- RGB - specify a RGB value, like "rgb(255,0,0)"
- Hex - specify a hex value, like "#ff0000"

You can also set the border color to "transparent".

Note: The "border-color" property does not work if it is used alone. Use the "border-style" property to set the borders first.

Example

```
p.one
{
border-style:solid;
border-color:red;
}
p.two
{
border-style:solid;
border-color:#98bf21;
}
```

Borda - Cor - Exemplo

Source Code:

Submit Code >

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      p.one{
        border-style:solid;
        border-color:red;
      }
      p.two{
        border-style:solid;
        border-color:#98bf21;
      }
    </style>
  </head>
  <body>
    <p class="one">A solid red border</p>
    <p class="two">A solid green border</p>
    <p><b>Note:</b> The "border-color" property does not work if it
is used alone. Use the "border-style" property to set the borders
first.</p>
  </body>
</html>
```

Result:

A solid red border

A solid green border

Note: The "border-color" property does not work if it is used alone. Use the "border-style" property to set the borders first.

Borda - Lados Individuais

Border - Individual sides

In CSS it is possible to specify different borders for different sides:

Example

```
p
{
border-top-style:dotted;
border-right-style:solid;
border-bottom-style:dotted;
border-left-style:solid;
}
```

Source Code:

```
<!DOCTYPE html>
<html>
<head>
<style>
p{
border-top-style:solid;
border-right-style:dotted;
border-bottom-style:dotted;
border-left-style:solid;
}
</style>
</head>
<body>
<p>2 different border styles.</p>
</body>
</html>
```

Result:



2 different border styles.



Borda - Lados Individuais

Example

```
border-style:dotted solid;
```

Result:

2 different border styles.

The border-style property can have from one to four values.

- **border-style:dotted solid double dashed;**
 - top border is dotted
 - right border is solid
 - bottom border is double
 - left border is dashed
- **border-style:dotted solid double;**
 - top border is dotted
 - right and left borders are solid
 - bottom border is double
- **border-style:dotted solid;**
 - top and bottom borders are dotted
 - right and left borders are solid
- **border-style:dotted;**
 - all four borders are dotted

The border-style property is used in the example above. However, it also works with border-width and border-color.

Borda - *Shorthand Property*

Border - Shorthand property

As you can see from the examples above, there are many properties to consider when dealing with borders.

To shorten the code, it is also possible to specify all the individual border properties in one property. This is called a shorthand property.

The border property is a shorthand for the following individual border properties:

- border-width
- border-style (required)
- border-color

Example

```
border:5px solid red;
```

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      p{
        border:5px solid red;
      }
    </style>
  </head>
  <body>
    <p>This is some text in a paragraph.</p>
  </body>
</html>
```

Result:

This is some text in a paragraph.

Borda - Todas as Propriedades

All CSS Border Properties

Property	Description
<u>border</u>	Sets all the border properties in one declaration
<u>border-bottom</u>	Sets all the bottom border properties in one declaration
<u>border-bottom-color</u>	Sets the color of the bottom border
<u>border-bottom-style</u>	Sets the style of the bottom border
<u>border-bottom-width</u>	Sets the width of the bottom border
<u>border-color</u>	Sets the color of the four borders
<u>border-left</u>	Sets all the left border properties in one declaration
<u>border-left-color</u>	Sets the color of the left border
<u>border-left-style</u>	Sets the style of the left border
<u>border-left-width</u>	Sets the width of the left border
<u>border-right</u>	Sets all the right border properties in one declaration
<u>border-right-color</u>	Sets the color of the right border
<u>border-right-style</u>	Sets the style of the right border
<u>border-right-width</u>	Sets the width of the right border
<u>border-style</u>	Sets the style of the four borders
<u>border-top</u>	Sets all the top border properties in one declaration
<u>border-top-color</u>	Sets the color of the top border
<u>border-top-style</u>	Sets the style of the top border
<u>border-top-width</u>	Sets the width of the top border
<u>border-width</u>	Sets the width of the four borders

Para detalhar cada propriedade, acesse o *link*:

http://www.w3schools.com/css/css_border.asp



Outline

- É uma linha desenhada por fora da borda. Tem o intuito de destacar o elemento envolvido;
- Possui propriedades para destacar:
 - estilo,
 - cor e
 - largura.



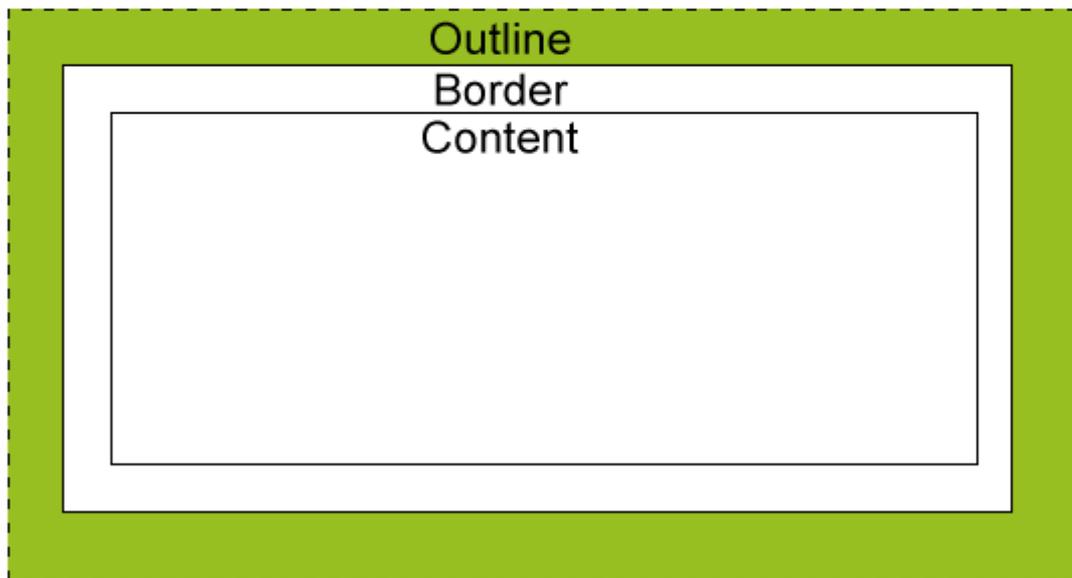
Outline

CSS Outline

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

However, the outline property is different from the border property.

The outline 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 - Propriedades

All CSS Outline Properties

The number in the "CSS" column indicates in which CSS version the property is defined (CSS1 or CSS2).

Property	Description	Values	CSS
<u>outline</u>	Sets all the outline properties in one declaration	<i>outline-color</i> <i>outline-style</i> <i>outline-width</i> inherit	2
<u>outline-color</u>	Sets the color of an outline	<i>color_name</i> <i>hex_number</i> <i>rgb_number</i> invert inherit	2
<u>outline-style</u>	Sets the style of an outline	none dotted dashed solid double groove ridge inset outset inherit	2
<u>outline-width</u>	Sets the width of an outline	thin medium thick <i>length</i> inherit	2



Margens

- Define o espaço ao redor dos elementos.

Margin

The margin clears an area around an element (outside the border). The margin does not have a background color, and is completely transparent.

The top, right, bottom, and left margin can be changed independently using separate properties. A shorthand margin property can also be used, to change all margins at once.

Possible Values

Value	Description
auto	The browser calculates a margin
<i>length</i>	Specifies a margin in px, pt, cm, etc. Default value is 0px
%	Specifies a margin in percent of the width of the containing element
inherit	Specifies that the margin should be inherited from the parent element

💡 It is possible to use negative values, to overlap content.

Margens - Lados Individuais

Margin - Individual sides

In CSS, it is possible to specify different margins for different sides:

Example

```
margin-top:100px;  
margin-bottom:100px;  
margin-right:50px;  
margin-left:50px;
```

Source Code:

[Submit Code »](#)

```
<!DOCTYPE html>  
<html>  
  <head>  
    <style>  
      p{  
        background-color:yellow;  
      }  
      p.margin{  
        margin-top:100px;  
        margin-bottom:100px;  
        margin-right:50px;  
        margin-left:50px;  
      }  
    </style>  
  </head>  
  <body>  
    <p>This is a paragraph with no specified margins.</p>  
    <p class="margin">This is a paragraph with specified margins.</p>  
  </body>  
</html>
```

Result:

This is a paragraph with no specified margins.

This is a paragraph with specified margins.

Margens - *Shorthand Property*

Margin - Shorthand property

To shorten the code, it is possible to specify all the margin properties in one property. This is called a shorthand property.

The shorthand property for all the margin properties is "margin":

Example

```
margin:100px 50px;
```

The margin property can have from one to four values.

- **margin:25px 50px 75px 100px;**
 - top margin is 25px
 - right margin is 50px
 - bottom margin is 75px
 - left margin is 100px
- **margin:25px 50px 75px;**
 - top margin is 25px
 - right and left margins are 50px
 - bottom margin is 75px
- **margin:25px 50px;**
 - top and bottom margins are 25px
 - right and left margins are 50px
- **margin:25px;**
 - all four margins are 25px

Source Code:

[Submit Code »](#)

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      p{
        background-color:yellow;
      }
      p.margin{
        margin:100px 50px;
      }
    </style>
  </head>
  <body>
    <p>This is a paragraph with no specified margins.</p>
    <p class="margin">This is a paragraph with specified margins.</p>
  </body>
</html>
```

Result:

This is a paragraph with no specified margins.

This is a paragraph with specified margins.



Margens - Todas as Propriedades

All CSS Margin Properties

Property	Description
<u>margin</u>	A shorthand property for setting the margin properties in one declaration
<u>margin-bottom</u>	Sets the bottom margin of an element
<u>margin-left</u>	Sets the left margin of an element
<u>margin-right</u>	Sets the right margin of an element
<u>margin-top</u>	Sets the top margin of an element



Padding

- É uma área limpa que existe entre a borda e o elemento. Esta área é afetada diretamente pela cor do fundo de tela (*background color*) do elemento.

The top, right, bottom, and left padding can be changed independently using separate properties. A shorthand padding property can also be used, to change all paddings at once.

Possible Values

Value	Description
<i>length</i>	Defines a fixed padding (in pixels, pt, em, etc.)
%	Defines a padding in % of the containing element

Padding - Lados Individuais

Padding - Individual sides

In CSS, it is possible to specify different padding for different sides:

Example

```
padding-top:25px;  
padding-bottom:25px;  
padding-right:50px;  
padding-left:50px;
```

Source Code:

[Submit Code »](#)

```
<!DOCTYPE html>  
<html>  
  <head>  
    <style>  
      p{  
        background-color:yellow;  
      }  
      p.padding{  
        padding-top:25px;  
        padding-bottom:25px;  
        padding-right:50px;  
        padding-left:50px;  
      }  
    </style>  
  </head>  
  <body>  
    <p>This is a paragraph with no specified padding.</p>  
    <p class="padding">This is a paragraph with specified  
padding.</p>  
  </body>  
</html>
```

Result:

This is a paragraph with no specified padding.

This is a paragraph with specified paddings.

Padding - Shorthand Property

Padding - Shorthand property

To shorten the code, it is possible to specify all the padding properties in one property. This is called a shorthand property.

The shorthand property for all the padding properties is "padding":

Example

```
padding:25px 50px;
```

The padding property can have from one to four values.

- **padding:25px 50px 75px 100px;**
 - top padding is 25px
 - right padding is 50px
 - bottom padding is 75px
 - left padding is 100px
- **padding:25px 50px 75px;**
 - top padding is 25px
 - right and left paddings are 50px
 - bottom padding is 75px
- **padding:25px 50px;**
 - top and bottom paddings are 25px
 - right and left paddings are 50px
- **padding:25px;**
 - all four paddings are 25px

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      p{
        background-color:yellow;
      }
      p.padding{
        padding:25px 50px;
      }
    </style>
  </head>
  <body>
    <p>This is a paragraph with no specified padding.</p>
    <p class="padding">This is a paragraph with specified
padding.</p>
  </body>
</html>
```

Submit

Result:

This is a paragraph with no specified padding.

This is a paragraph with specified paddings.



Parte IV

CSS Advanced



Agrupando Seletores

Grouping Selectors

In style sheets there are often elements with the same style.

```
h1
{
color:green;
}
h2
{
color:green;
}
p
{
color:green;
}
```

To minimize the code, you can group selectors.

Separate each selector with a comma.

In the example below we have grouped the selectors from the code above:

Example

```
h1, h2, p
{
color:green;
}
```



Aninhando Seletores

Nesting Selectors

It is possible to apply a style for a selector within a selector.

In the example below, one style is specified for all p elements, one style is specified for all elements with class="marked", and a third style is specified only for p elements within elements with class="marked":

Example

```
p
{
color:blue;
text-align:center;
}
.marked
{
background-color:red;
}
.marked p
{
color:white;
}
```

Aninhamento de Seletores - Exemplo

Source Code:

Submit C

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      p {
        color:blue;
        text-align:center;
      }
      .marked {
        background-color:red;
      }
      .marked p {
        color:white;
      }
    </style>
  </head>
  <body>
    <p>This is a blue, center-aligned paragraph.</p>
    <div class="marked">
      <p>This p element should not be blue.</p>
    </div>
    <p>p elements inside a "marked" classed element keeps the
alignment style, but has a different text color.</p>
  </body>
</html>
```

Result:

This is a blue, center-aligned paragraph.

This p element should not be blue.

p elements inside a "marked" classed element keeps the alignment style, but has a different text color.

Dimensão

- Propriedade que permite o controle de altura e largura de um elemento HTML.

The number in the "CSS" column indicates in which CSS version the property is defined (CSS1 or CSS2).

Property	Description	Values	CSS
<u>height</u>	Sets the height of an element	<i>auto</i> <i>length</i> <i>%</i> <i>inherit</i>	1
<u>max-height</u>	Sets the maximum height of an element	<i>none</i> <i>length</i> <i>%</i> <i>inherit</i>	2
<u>max-width</u>	Sets the maximum width of an element	<i>none</i> <i>length</i> <i>%</i> <i>inherit</i>	2
<u>min-height</u>	Sets the minimum height of an element	<i>length</i> <i>%</i> <i>inherit</i>	2
<u>min-width</u>	Sets the minimum width of an element	<i>length</i> <i>%</i> <i>inherit</i>	2
<u>width</u>	Sets the width of an element	<i>auto</i> <i>length</i> <i>%</i> <i>inherit</i>	1

Dimensão - Exemplo

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      img.normal{
        height:auto;
      }
      img.big{
        height:120px;
      }
      p.ex{
        height:100px;
        width:100px;
      }
    </style>
  </head>
  <body>
    
  <br>
    
    <p class="ex">The height and width of this paragraph is 100px.</p>
    <p>This is a paragraph with no height and width specified.
This is a paragraph with no height and width specified.
This is a paragraph with no height and width specified.</p>
  </body>
</html>
```

Result:



The height and width of this paragraph is 100px.

This is a paragraph with no height and width specified.
This is a paragraph with no height and width specified.
This is a paragraph with no height and width specified.



Exibição e Visibilidade

- A propriedade *display* especifica se e como um elemento será mostrado;
- A propriedade *visibility* especifica se um elemento deve estar visível ou escondido.

Hiding an Element - `display:none` or `visibility:hidden`

Hiding an element can be done by setting the `display` property to "none" or the `visibility` property to "hidden". However, notice that these two methods produce different results:

`visibility:hidden` hides an element, but it will still take up the same space as before. The element will be hidden, but still affect the layout.

Example

```
h1.hidden {visibility:hidden;}
```

`display:none` hides an element, and it will not take up any space. The element will be hidden, and the page will be displayed as if the element is not there:

Example

```
h1.hidden {display:none;}
```



Exibição e Visibilidade - Exemplo

Source Code:

Submit Code

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      h1.vv {visibility:hidden;}
      h1.dd {display:none;}
    </style>
  </head>
  <body>
    <h1>This is a visible heading</h1>
    <h1 class="vv">This is a hidden heading</h1>
    <p>Notice that the hidden heading still takes up space.</p>

    <h1>This is a visible heading</h1>
    <h1 class="dd">This is a hidden heading</h1>
    <p>Notice that the hidden heading does not take up space.</p>
  </body>
</html>
```

Result:

This is a visible heading

Notice that the hidden heading still takes up space.

This is a visible heading

Notice that the hidden heading does not take up space.



Elementos de Bloco e de Linha

CSS Display - Block and Inline Elements

A block element is an element that takes up the full width available, and has a line break before and after it.

Examples of block elements:

- `<h1>`
- `<p>`
- `<div>`

An inline element only takes up as much width as necessary, and does not force line breaks.

Examples of inline elements:

- ``
- `<a>`



Mudando a Forma de Exibição dos Elementos

Changing How an Element is Displayed

Changing an inline element to a block element, or vice versa, can be useful for making the page look a specific way, and still follow web standards.

The following example displays list items as inline elements:

Example

```
li {display:inline;}
```

The following example displays span elements as block elements:

Example

```
span {display:block;}
```

Mudando a Forma de Exibição dos Elementos - Exemplo

Source Code:

Submit Code

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      li { display:inline; }
      span { display:block; }
    </style>
  </head>
  <body>
    <p>Display this link list as a horizontal menu:</p>
    <ul>
      <li><a href="/html/default.asp" target="_blank">HTML</a></li>
      <li><a href="/css/default.asp" target="_blank">CSS</a></li>
      <li><a href="/js/default.asp" target="_blank">JavaScript</a>
    </li>
      <li><a href="/xml/default.asp" target="_blank">XML</a></li>
    </ul>

    <br><br>

    <h2>Nirvana</h2>
    <span>Record: MTV Unplugged in New York</span>
    <span>Year: 1993</span>
    <h2>Radiohead</h2>
    <span>Record: OK Computer</span>
    <span>Year: 1997</span>

  </body>
</html>
```

Result:

Display this link list as a horizontal menu:

[HTML](#) [CSS](#) [JavaScript](#) [XML](#)

Nirvana

Record: MTV Unplugged in New York
Year: 1993

Radiohead

Record: OK Computer
Year: 1997

Mudando a Forma de Exibição dos Elementos - Mesmo Exemplo sem CSS

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      <!-- MESMO EXEMPLO, PORÉM SEM A APLICAÇÃO DE CSS. -->
    </style>
  </head>
  <body>
    <p>Display this link list as a horizontal menu:</p>
    <ul>
      <li><a href="/html/default.asp" target="_blank">HTML</a></li>
      <li><a href="/css/default.asp" target="_blank">CSS</a></li>
      <li><a href="/js/default.asp" target="_blank">JavaScript</a>
    </li>
      <li><a href="/xml/default.asp" target="_blank">XML</a></li>
    </ul>

    <br><br>

    <h2>Nirvana</h2>
    <span>Record: MTV Unplugged in New York</span>
    <span>Year: 1993</span>
    <h2>Radiohead</h2>
    <span>Record: OK Computer</span>
    <span>Year: 1997</span>

  </body>
</html>
```

Result:

Display this link list as a horizontal menu:

- [HTML](#)
- [CSS](#)
- [JavaScript](#)
- [XML](#)

Nirvana

Record: MTV Unplugged in New York Year: 1993

Radiohead

Record: OK Computer Year: 1997



Posicionamento

- Decide qual elemento virá na frente e qual será sobreposto.

Decide which element to display in front!

Positioning can be tricky sometimes!

Elements can overlap!

Positioning

The CSS positioning properties allow you to position an element. It can also place an element behind another, and specify what should happen when an element's content is too big.

Elements can be positioned using the top, bottom, left, and right properties. However, these properties will not work unless the position property is set first. They also work differently depending on the positioning method.

There are four different positioning methods.



Método 01 de Posicionamento: Estático

Static Positioning

HTML elements are positioned static by default. A static positioned element is always positioned according to the normal flow of the page.

Static positioned elements are not affected by the top, bottom, left, and right properties.



Método 02 de Posicionamento: Fixado

Fixed Positioning

An element with fixed position is positioned relative to the browser window.

It will not move even if the window is scrolled:

Example

```
p.pos_fixed
{
position:fixed;
top:30px;
right:5px;
}
```

Note: IE7 and IE8 support the fixed value only if a !DOCTYPE is specified.

Fixed positioned elements are removed from the normal flow. The document and other elements behave like the fixed positioned element does not exist.

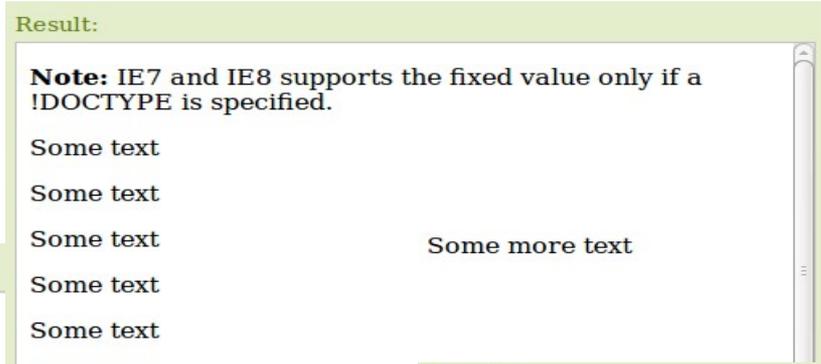
Fixed positioned elements can overlap other elements.



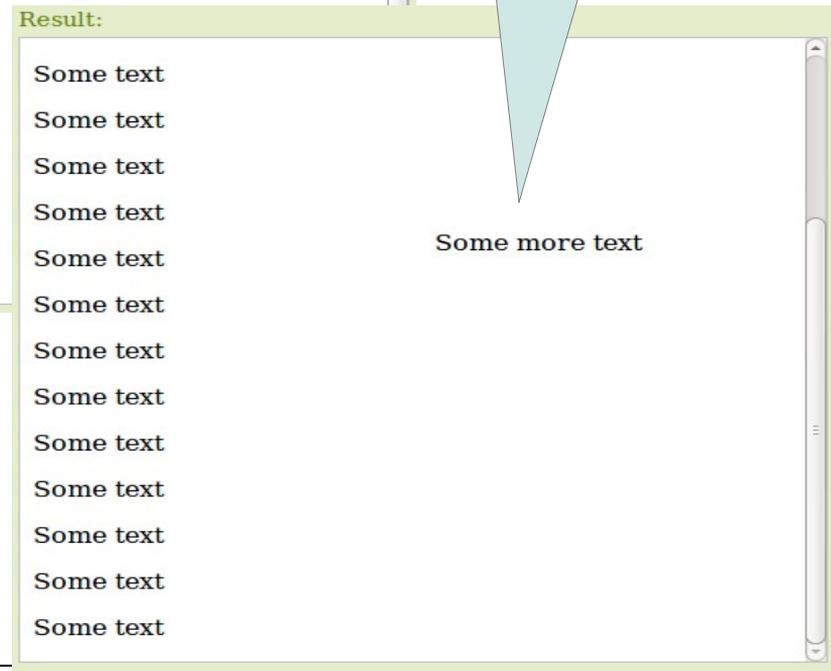
Método 02 de Posicionamento: Fixado - Exemplo

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      p.pos_fixed {
        position:fixed;
        top:130px;
        right:100px;
      }
    </style>
  </head>
  <body>
    <p class="pos_fixed">Some more text</p>
    <p><b>Note:</b> IE7 and IE8 supports the fixed value only if a
!DOCTYPE is specified.</p>
    <p>Some text</p><p>Some text</p><p>Some text</p><p>Some text</p>
    <p>Some text</p><p>Some text</p><p>Some text</p><p>Some text</p>
    <p>Some text</p><p>Some text</p><p>Some text</p><p>Some text</p>
  </body>
</html>
```



Após rolar a tela para baixo, o texto fixado continua no mesmo local.





Método 03 de Posicionamento: Relativo

Relative Positioning

A relative positioned element is positioned relative to its normal position.

Example

```
h2.pos_left
{
position:relative;
left:-20px;
}
h2.pos_right
{
position:relative;
left:20px;
}
```

The content of relatively positioned elements can be moved and overlap other elements, but the reserved space for the element is still preserved in the normal flow.

Método 03 de Posicionamento: Relativo - Exemplo

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      h2.pos_left {
        position:relative;
        left:-20px;
      }
      h2.pos_right {
        position:relative;
        left:20px;
      }
    </style>
  </head>
  <body>
    <h2>This is a heading with no position</h2>
    <h2 class="pos_left">This heading is moved left according to its
normal position</h2>
    <h2 class="pos_right">This heading is moved right according to
its normal position</h2>
    <p>Relative positioning moves an element RELATIVE to its original
position.</p>
    <p>The style "left:-20px" subtracts 20 pixels from the element's
original left position.</p>
    <p>The style "left:20px" adds 20 pixels to the element's original
left position.</p>
  </body>
</html>
```

Result:

This is a heading with no position

**This heading is moved left
according to its normal position**

**This heading is moved right
according to its normal position**

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.

Método 03 de Posicionamento: Relativo - Exemplo 2

Example

```
h2.pos_top
{
position:relative;
top:-50px;
}
```

Result:

This heading is moved upwards according to its normal position

Note: Even if the content of the relatively positioned element is moved, the reserved space for the element is still preserved in the normal flow.

Source Code:

Submit (

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      h2.pos_top{
        position:relative;
        top:-50px;
      }
    </style>
  </head>
  <body>
    <h2>This is a heading with no position</h2>
    <h2 class="pos_top">This heading is moved upwards according to
its normal position</h2>
    <p><b>Note:</b> Even if the content of the relatively positioned
element is moved, the reserved space for the element is still
preserved in the normal flow.</p>
  </body>
</html>
```



Método 04 de Posicionamento: Absoluto

Absolute Positioning

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>:

Example

```
h2
{
position:absolute;
left:100px;
top:150px;
}
```

Absolutely positioned elements are removed from the normal flow. The document and other elements behave like the absolutely positioned element does not exist.

Absolutely positioned elements can overlap other elements.

Método 04 de Posicionamento: Absoluto - Exemplo

Result:

With absolute positioning, an element can be placed anywhere on a page. The heading below is placed 100px from the left of the page and 150px from the top of the page.

This is a heading with an absolute position

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      h2{
        position:absolute;
        left:100px;
        top:150px;
      }
    </style>
  </head>
  <body>
    <h2>This is a heading with an absolute position</h2>
    <p>With absolute positioning, an element can be placed anywhere
on a page. The heading below is placed 100px from the left of the
page and 150px from the top of the page.</p>
  </body>
</html>
```



Sobrepondo Elementos

Overlapping Elements

When elements are positioned outside the normal flow, they can overlap other elements.

The z-index property specifies the stack order of an element (which element should be placed in front of, or behind, the others).

An element can have a positive or negative stack order:

Example

```
img
{
  position: absolute;
  left: 0px;
  top: 0px;
  z-index: -1;
}
```

An element with greater stack order is always in front of an element with a lower stack order.

Note: If two positioned elements overlap, without a z-index specified, the element positioned last in the HTML code will be shown on top.

Sobrepondo Elementos - Exemplo

z-index: -1;

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      img{
        position:absolute;
        left:0px;
        top:0px;
        z-index:-1;
      }
    </style>
  </head>
  <body>
    <h1>This is a heading</h1>
    
    <p>Because the image has a z-index of -1, it will be placed
behind the text.</p>
  </body>
</html>
```

Submit Co

Result:

This is a heading

CSS
Because the image has a z-index of -1, it will be placed behind the text.

Result:

This is a heading

CSS
Because the image has a z-index of -1, it will be placed behind the text.

z-index: 0;

Posicionamento - Propriedades

All CSS Positioning Properties

The number in the "CSS" column indicates in which CSS version the property is defined (CSS1 or CSS2).

Property	Description	Values	CSS
<u>bottom</u>	Sets the bottom margin edge for a positioned box	auto <i>length</i> % inherit	2
<u>clip</u>	Clips an absolutely positioned element	<i>shape</i> auto inherit	2
<u>cursor</u>	Specifies the type of cursor to be displayed	<i>url</i> auto crosshair default pointer move e-resize ne-resize nw-resize n-resize se-resize sw-resize s-resize w-resize text wait help	2



Posicionamento - Propriedades

<u>left</u>	Sets the left margin edge for a positioned box	auto <i>length</i> % inherit	2
<u>overflow</u>	Specifies what happens if content overflows an element's box	auto hidden scroll visible inherit	2
<u>position</u>	Specifies the type of positioning for an element	absolute fixed relative static inherit	2
<u>right</u>	Sets the right margin edge for a positioned box	auto <i>length</i> % inherit	2
<u>top</u>	Sets the top margin edge for a positioned box	auto <i>length</i> % inherit	2
<u>z-index</u>	Sets the stack order of an element	<i>number</i> auto inherit	2



Flutuar

What is CSS Float?

With CSS float, an element can be pushed to the left or right, allowing other elements to wrap around it.

Float is very often used for images, but it is also useful when working with layouts.

How Elements Float

Elements are floated horizontally, this means that an element can only be floated left or right, not up or down.

A floated element will move as far to the left or right as it can. Usually this means all the way to the left or right of the containing element.

The elements after the floating element will flow around it.

The elements before the floating element will not be affected.

If an image is floated to the right, a following text flows around it, to the left:

Example

```
img
{
float:right;
}
```




Flutuar Elementos Lado a Lado

Floating Elements Next to Each Other

If you place several floating elements after each other, they will float next to each other if there is room.

Here we have made an image gallery using the float property:

Example

```
.thumbnail
{
float:left;
width:110px;
height:90px;
margin:5px;
}
```

Flutuar Elementos Lado a Lado - Exemplo

Source Code:

[Submit Code »](#)

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      .thumbnail {
        float:left;
        width:110px;
        height:90px;
        margin:5px;
      }
    </style>
  </head>
  <body>
    <h3>Image Gallery</h3>
    <p>Try resizing the window to see what happens when the images
does not have enough room.</p>
    
    
    
    
    
    
  </body>
</html>
```

Result:

Image Gallery

Try resizing the window to see what happens when the images does not have enough room.





Desabilitando o Flutuar

Turning off Float - Using Clear

Elements after the floating element will flow around it. To avoid this, use the clear property.

The clear property specifies which sides of an element other floating elements are not allowed.

Add a text line into the image gallery, using the clear property:

Example

```
.text_line
{
clear:both;
}
```

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      .thumbnail {
        float:left;
        width:110px;
        height:90px;
        margin:5px;
      }
      .text_line {
        clear:both;
        margin-bottom:2px;
      }
    </style>
  </head>
  <body>
    <h3>Image Gallery</h3>
    <p>Try resizing the window to see what happens when the images
does not have enough room.</p>
    
    
    
    
    <h3 class="text_line">Second row</h3>
    
    
    
    
  </body>
</html>
```

Desabilitando o Flutuar - Exemplo

Result:

Image Gallery

Try resizing the window to see what happens when the images does not have enough room.



Second row





Flutuar - Propriedades

All CSS Float Properties

The number in the "CSS" column indicates in which CSS version the property is defined (CSS1 or CSS2).

Property	Description	Values	CSS
<u>clear</u>	Specifies which sides of an element where other floating elements are not allowed	left right both none inherit	1
<u>float</u>	Specifies whether or not a box should float	left right none inherit	1



Alinhamento

In CSS, several properties are used to align elements horizontally.

Aligning Block Elements

A block element is an element that takes up the full width available, and has a line break before and after it.

Examples of block elements:

- `<h1>`
- `<p>`
- `<div>`

For aligning text, see the [CSS Text](#) chapter.

In this chapter we will show you how to horizontally align block elements for layout purposes.



Usando Margens para Centralizar Elementos

Center Aligning Using the margin Property

Block elements can be aligned by setting the left and right margins to "auto".

Note: Using margin:auto will not work in IE8 and earlier, **unless a !DOCTYPE is declared.**

Setting the left and right margins to auto specifies that they should split the available margin equally. The result is a centered element:

Example

```
.center
{
margin-left:auto;
margin-right:auto;
width:70%;
background-color:#b0e0e6;
}
```

Tip: Aligning has no effect if the width is 100%.

Usando Margens para Centralizar Elementos - Exemplo

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      .center{
        margin:auto;
        width:70%;
        background-color:#b0e0e6;
      }
    </style>
  </head>
  <body>
    <div class="center">
      <p>In my younger and more vulnerable years my father gave me
some advice that I've been turning over in my mind ever since.</p>
      <p>'Whenever you feel like criticizing anyone,' he told me,
'just remember that all the people in this world haven't had the
advantages that you've had.'</p>
    </div>
    <p><b>Note: </b>Using margin:auto will not work in IE8, unless a
!DOCTYPE is declared.</p>
  </body>
</html>
```

Result:

In my younger and more vulnerable years my father gave me some advice that I've been turning over in my mind ever since.

'Whenever you feel like criticizing anyone,' he told me, 'just remember that all the people in this world haven't had the advantages that you've had.'

Note: Using margin:auto will not work in IE8, unless a !DOCTYPE is declared.



Alinhamento à Esquerda e à Direita Usando a Propriedade *position*

Left and Right Aligning Using the position Property

One method of aligning elements is to use absolute positioning:

Example

```
.right
{
  position:absolute;
  right:0px;
  width:300px;
  background-color:#b0e0e6;
}
```

Alinhamento à Esquerda e à Direita Usando a Propriedade *position* - Exemplo

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      .right{
        position:absolute;
        right:0px;
        width:300px;
        background-color:#b0e0e6;
      }
    </style>
  </head>
  <body>
    <div class="right">
      <p>In my younger and more vulnerable years my father gave me
some advice that I've been turning over in my mind ever since.</p>
      <p>'Whenever you feel like criticizing anyone,' he told me,
'just remember that all the people in this world haven't had the
advantages that you've had.'</p>
    </div>
  </body>
</html>
```

Result:

In my younger and more vulnerable years my father gave me some advice that I've been turning over in my mind ever since.

'Whenever you feel like criticizing anyone,' he told me, 'just remember that all the people in this world haven't had the advantages that you've had.'



Questão de Compatibilidade

Crossbrowser Compatibility Issues

When aligning elements like this, it is always a good idea to predefine margin and padding for the <body> element. This is to avoid visual differences in different browsers.

There is a problem with IE8 and earlier, when using the position property. If a container element (in our case <div class="container">) has a specified width, and the !DOCTYPE declaration is missing, IE8 and earlier versions will add a 17px margin on the right side. This seems to be space reserved for a scrollbar. Always set the !DOCTYPE declaration when using the position property:

Example

```
body
{
margin:0;
padding:0;
}
.container
{
position:relative;
width:100%;
}
.right
{
position:absolute;
right:0px;
width:300px;
background-color:#b0e0e6;
}
```

Questão de Compatibilidade - Exemplo

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      body{
        margin:0;
        padding:0;
      }
      .container{
        position:relative;
        width:100%;
      }
      .right{
        position:absolute;
        right:0px;
        width:300px;
        background-color:#b0e0e6;
      }
    </style>
  </head>
  <body>
    <div class="container">
      <div class="right">
        <p><b>Note: </b>When aligning using the position property,
always include the !DOCTYPE declaration! If missing, it can produce
strange results in IE browsers.</p>
      </div>
    </div>
  </body>
</html>
```

Result:

Note: When aligning using the position property, always include the !DOCTYPE declaration! If missing, it can produce strange results in IE browsers.



Alinhamento à Esquerda e à Direita Usando a Propriedade *float*

Left and Right Aligning Using the float Property

One method of aligning elements is to use the float property:

Example

```
.right
{
float:right;
width:300px;
background-color:#b0e0e6;
}
```

Alinhamento à Esquerda e à Direita Usando a Propriedade *float* - Exemplo

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      .right {
        float:right;
        width:300px;
        background-color:#b0e0e6;
      }
    </style>
  </head>
  <body>
    <div class="right">
      <p>In my younger and more vulnerable years my father gave me
some advice that I've been turning over in my mind ever since.</p>
      <p>'Whenever you feel like criticizing anyone,' he told me,
'just remember that all the people in this world haven't had the
advantages that you've had.'</p>
    </div>
  </body>
</html>
```

Result:

In my younger and more vulnerable years my father gave me some advice that I've been turning over in my mind ever since.

'Whenever you feel like criticizing anyone,' he told me, 'just remember that all the people in this world haven't had the advantages that you've had.'



Questão de Compatibilidade

Crossbrowser Compatibility Issues

When aligning elements like this, it is always a good idea to predefine margin and padding for the <body> element. This is to avoid visual differences in different browsers.

There is a problem with IE8 and earlier when using the float property. If the !DOCTYPE declaration is missing, IE8 and earlier versions will add a 17px margin on the right side. This seems to be space reserved for a scrollbar. Always set the !DOCTYPE declaration when using the float property:

Example

```
body
{
margin:0;
padding:0;
}
.right
{
float:right;
width:300px;
background-color:#b0e0e6;
}
```

Questão de Compatibilidade - Exemplo

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      body{
        margin:0;
        padding:0;
      }
      .right{
        float:right;
        width:300px;
        background-color:#b0e0e6;
      }
    </style>
  </head>
  <body>
    <div class="right">
      <p><b>Note: </b>When aligning using the float property, always
        include the !DOCTYPE declaration! If missing, it can produce strange
        results in IE browsers.</p>
    </div>
  </body>
</html>
```

Result:

Note: When aligning using the float property, always include the !DOCTYPE declaration! If missing, it can produce strange results in IE browsers.



Pseudoclasses

- Usada para adicionar efeitos especiais a alguns seletores.

Syntax

The syntax of pseudo-classes:

```
selector:pseudo-class {property:value;}
```

CSS classes can also be used with pseudo-classes:

```
selector.class:pseudo-class {property:value;}
```



Âncora e Pseudoclasses

Anchor Pseudo-classes

Links can be displayed in different ways in a CSS-supporting browser:

Example

```
a:link {color:#FF0000;} /* unvisited link */  
a:visited {color:#00FF00;} /* visited link */  
a:hover {color:#FF00FF;} /* mouse over link */  
a:active {color:#0000FF;} /* selected link */
```

Note: a:hover MUST come after a:link and a:visited in the CSS definition in order to be effective!!

Note: a:active MUST come after a:hover in the CSS definition in order to be effective!!

Note: Pseudo-class names are not case-sensitive.



Âncora e Pseudoclasses - Exemplo

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      a:link {color:#FF0000;} /* unvisited link */
      a:visited {color:#00FF00;} /* visited link */
      a:hover {color:#FF00FF;} /* mouse over link */
      a:active {color:#0000FF;} /* selected link */
    </style>
  </head>
  <body>
    <p><b><a href="default.asp" target="_blank">This is a link</a>
  </b></p>
    <p><b>Note:</b> a:hover MUST come after a:link and a:visited in
the CSS definition in order to be effective.</p>
    <p><b>Note:</b> a:active MUST come after a:hover in the CSS
definition in order to be effective.</p>
  </body>
</html>
```

Result:

[This is a link](#)

Note: a:hover MUST come after a:link and a:visited in the CSS definition in order to be effective.

Note: a:active MUST come after a:hover in the CSS definition in order to be effective.



Classes e Pseudoclasses

Pseudo-classes and CSS Classes

Pseudo-classes can be combined with CSS classes:

```
a.red:visited {color:#FF0000;}  
<a class="red" href="css_syntax.asp">CSS Syntax</a>
```

If the link in the example above has been visited, it will be displayed in red.

classe

pseudoclasse



Classes e Pseudoclasses

Formatar Primeiro Elemento <p>

CSS - The :first-child Pseudo-class

The :first-child pseudo-class matches a specified element that is the first child of another element.

Note: For :first-child to work in IE8 and earlier, a [<!DOCTYPE>](#) must be declared.

Match the first <p> element

In the following example, the selector matches any <p> element that is the first child of any element:

Example

```
<html>
<head>
<style>
p:first-child
{
color:blue;
}
</style>
</head>

<body>
<p>I am a strong man.</p>
<p>I am a strong man.</p>
</body>
</html>
```

Classes e Pseudoclasses Formatar Primeiro Elemento <p> Exemplo

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      p:first-child{
        color:blue;
      }
    </style>
  </head>
  <body>
    <p>This is some text.</p>
    <p>This is some text.</p>
    <p><b>Note:</b> For :first-child to work in IE8 and earlier, a
DOCTYPE must be declared.</p>
  </body>
</html>
```

Result:

This is some text.

This is some text.

Note: For :first-child to work in IE8 and earlier, a DOCTYPE must be declared.



Classes e Pseudoclasses

Formatar Primeiro Subelemento

<i>

Match the first `<i>` element in all `<p>` elements

In the following example, the selector matches the first `<i>` element in all `<p>` elements:

Example

```
<html>
<head>
<style>
p > i:first-child
{
color:blue;
}
</style>
</head>

<body>
<p>I am a <i>strong</i> man. I am a <i>strong</i> man.</p>
<p>I am a <i>strong</i> man. I am a <i>strong</i> man.</p>
</body>
</html>
```

Classes e Pseudoclasses

Formatar Primeiro Subelemento <i>

Exemplo

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      p > i:first-child{
        color:blue;
      }
    </style>
  </head>
  <body>
    <p>I am a <i>strong</i> man. I am a <i>strong</i> man.</p>
    <p>I am a <i>strong</i> man. I am a <i>strong</i> man.</p>
    <p><b>Note:</b> For :first-child to work in IE8 and earlier, a
DOCTYPE must be declared.</p>
  </body>
</html>
```

Result:

I am a *strong* man. I am a *strong* man.

I am a *strong* man. I am a *strong* man.

Note: For :first-child to work in IE8 and earlier, a DOCTYPE must be declared.



Classes e Pseudoclasses Formatar Todos Subelementos <i>

Match all <i> elements in all first child <p> elements

In the following example, the selector matches all <i> elements in <p> elements that are the first child of another element:

Example

```
<html>
<head>
<style>
p:first-child i
{
color:blue;
}
</style>
</head>

<body>
<p>I am a <i>strong</i> man. I am a <i>strong</i> man.</p>
<p>I am a <i>strong</i> man. I am a <i>strong</i> man.</p>
</body>
</html>
```

Classes e Pseudoclasses Formatar Todos Subelementos <i> Exemplo

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      p:first-child i {
        color:blue;
      }
    </style>
  </head>
  <body>
    <p>I am a <i>strong</i> man. I am a <i>strong</i> man.</p>
    <p>I am a <i>strong</i> man. I am a <i>strong</i> man.</p>
    <p><b>Note:</b> For :first-child to work in IE8 and earlier, a
DOCTYPE must be declared.</p>
  </body>
</html>
```

Result:

I am a *strong* man. I am a *strong* man.

I am a *strong* man. I am a *strong* man.

Note: For :first-child to work in IE8 and earlier, a DOCTYPE must be declared.



Pseudoclasse :lang

CSS - The :lang Pseudo-class

The :lang pseudo-class allows you to define special rules for different languages.

Note: IE8 supports the :lang pseudo-class only if a [<!DOCTYPE>](#) is specified.

In the example below, the :lang class defines the quotation marks for q elements with lang="no":

Example

```
<html>
<head>
<style>
q:lang(no) {quotes: "~" "~";}
</style>
</head>

<body>
<p>Some text <q lang="no">A quote in a paragraph</q> Some text.</p>
</body>
</html>
```

Pseudoclasse :lang - Exemplo

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      q:lang(no){
        quotes: "~" "~";
      }
    </style>
  </head>
  <body>
    <p>Some text <q lang="no">A quote in a paragraph</q> Some
text.</p>
    <p>In this example, :lang defines the quotation marks for q
elements with lang="no":</p>
    <p><b>Note:</b> IE8 supports the :lang pseudo class only if a
!DOCTYPE is specified.</p>
  </body>
</html>
```

Result:

Some text ~A quote in a paragraph~ Some text.

In this example, :lang defines the quotation marks for q elements with lang="no":

Note: IE8 supports the :lang pseudo class only if a !DOCTYPE is specified.

Pseudoclasses / Elementos

All CSS Pseudo Classes/Elements

Selector	Example	Example description
<u>:link</u>	a:link	Selects all unvisited links
<u>:visited</u>	a:visited	Selects all visited links
<u>:active</u>	a:active	Selects the active link
<u>:hover</u>	a:hover	Selects links on mouse over
<u>:focus</u>	input:focus	Selects the input element which has focus
<u>:first-letter</u>	p:first-letter	Selects the first letter of every <p> element
<u>:first-line</u>	p:first-line	Selects the first line of every <p> element
<u>:first-child</u>	p:first-child	Selects every <p> elements that is the first child of its parent
<u>:before</u>	p:before	Insert content before every <p> element
<u>:after</u>	p:after	Insert content after every <p> element
<u>:lang(<i>language</i>)</u>	p:lang(it)	Selects every <p> element with a lang attribute value starting with "it"



Pseudoelementos

- São usados para adicionar efeitos especiais a alguns seletores.

Syntax

The syntax of pseudo-elements:

```
selector:pseudo-element {property:value;}
```

CSS classes can also be used with pseudo-elements:

```
selector.class:pseudo-element {property:value;}
```



Pseudoelemento de Primeira Linha

The :first-line Pseudo-element

The "first-line" pseudo-element is used to add a special style to the first line of a text.

In the following example the browser formats the first line of text in a p element according to the style in the "first-line" pseudo-element (where the browser breaks the line, depends on the size of the browser window):

Example

```
p:first-line
{
color:#ff0000;
font-variant:small-caps;
}
```

Note: The "first-line" pseudo-element can only be used with block-level elements.

Note: The following properties apply to the "first-line" pseudo-element:

- font properties
- color properties
- background properties
- word-spacing
- letter-spacing
- text-decoration
- vertical-align
- text-transform
- line-height
- clear

Pseudoelemento de Primeira Linha Exemplo

Source Code:

Submit Code

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      p:first-line {
        color:#ff0000;
        font-variant:small-caps;
      }
    </style>
  </head>
  <body>
    <p>You can use the :first-line pseudo-element to add a special
effect to the first line of a text.</p>
  </body>
</html>
```

Result:

YOU CAN USE THE :FIRST-LINE PSEUDO-ELEMENT TO ADD A
special effect to the first line of a text.



Pseudoelemento - Primeira Letra

The :first-letter Pseudo-element

The "first-letter" pseudo-element is used to add a special style to the first letter of a text:

Example

```
p:first-letter
{
color:#ff0000;
font-size:xx-large;
}
```

Note: The "first-letter" pseudo-element can only be used with block-level elements.

Note: The following properties apply to the "first-letter" pseudo-element:

- font properties
- color properties
- background properties
- margin properties
- padding properties
- border properties
- text-decoration
- vertical-align (only if "float" is "none")
- text-transform
- line-height
- float
- clear

Pseudoelemento - Primeira Letra Exemplo

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      p:first-letter {
        color:#ff0000;
        font-size:xx-large;
      }
    </style>
  </head>
  <body>
    <p>You can use the :first-letter pseudo-element to add a special
effect to the first character of a text!</p>
  </body>
</html>
```

Result:

You can use the :first-letter pseudo-element to add a special effect to the first character of a text!



Classes e Pseudoelementos

Pseudo-elements and CSS Classes

Pseudo-elements can be combined with CSS classes:

```
p.article:first-letter {color:#ff0000;}  
<p class="article">A paragraph in an article</p>
```

The example above will display the first letter of all paragraphs with class="article", in red.



Múltiplos Pseudoelementos

Multiple Pseudo-elements

Several pseudo-elements can also be combined.

In the following example, the first letter of a paragraph will be red, in an xx-large font size. The rest of the first line will be blue, and in small-caps. The rest of the paragraph will be the default font size and color:

Example

```
p:first-letter
{
color:#ff0000;
font-size:xx-large;
}
p:first-line
{
color:#0000ff;
font-variant:small-caps;
}
```

Múltiplos Pseudoelementos Exemplo

Source Code:

Submit Code

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      p:first-letter{
        color:#ff0000;
        font-size:xx-large;
      }
      p:first-line{
        color:#0000ff;
        font-variant:small-caps;
      }
    </style>
  </head>
  <body>
    <p>You can combine the :first-letter and :first-line pseudo-
elements to add a special effect to the first letter and the first
line of a text!</p>
  </body>
</html>
```

Result:

YOU CAN COMBINE THE :FIRST-LETTER AND :FIRST-LINE
pseudo-elements to add a special effect to the first letter
and the first line of a text!



Pseudoelemento :before

CSS - The :before Pseudo-element

The ":before" pseudo-element can be used to insert some content before the content of an element.

The following example inserts an image before each <h1> element:

Example

```
h1:before  
{  
  content:url(smiley.gif);  
}
```

Pseudoelemento :before Exemplo

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      h1:before {content:url(smiley.gif);}
    </style>
  </head>
  <body>
    <h1>This is a heading</h1>
    <p>The :before pseudo-element inserts content before an element.
  </p>
    <h1>This is a heading</h1>
    <p><b>Note:</b> IE8 supports the content property only if a
!DOCTYPE is specified.</p>
  </body>
</html>
```

Result:

 **This is a heading**

The :before pseudo-element inserts content before an element.

 **This is a heading**

Note: IE8 supports the content property only if a !DOCTYPE is specified.



Pseudoelemento :after

CSS - The :after Pseudo-element

The ":after" pseudo-element can be used to insert some content after the content of an element.

The following example inserts an image after each <h1> element:

Example

```
h1:after
{
content:url(smiley.gif);
}
```

Pseudoelemento :after Exemplo

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      h1:after {content:url(smiley.gif);}
    </style>
  </head>
  <body>
    <h1>This is a heading</h1>
    <p>The :after pseudo-element inserts content after an element.</p>
    <h1>This is a heading</h1>
    <p><b>Note:</b> IE8 supports the content property only if a
!DOCTYPE is specified.</p>
  </body>
</html>
```

Result:

This is a heading 😊

The :after pseudo-element inserts content after an element.

This is a heading 😊

Note: IE8 supports the content property only if a !DOCTYPE is specified.

Pseudoclasses / elementos

All CSS Pseudo Classes/Elements

Selector	Example	Example description
<u>.link</u>	a.link	Selects all unvisited links
<u>.visited</u>	a.visited	Selects all visited links
<u>:active</u>	a:active	Selects the active link
<u>:hover</u>	a:hover	Selects links on mouse over
<u>.focus</u>	input.focus	Selects the input element which has focus
<u>.first-letter</u>	p.first-letter	Selects the first letter of every <p> element
<u>.first-line</u>	p.first-line	Selects the first line of every <p> element
<u>.first-child</u>	p.first-child	Selects every <p> elements that is the first child of its parent
<u>:before</u>	p:before	Insert content before every <p> element
<u>:after</u>	p:after	Insert content after every <p> element
<u>:lang(<i>language</i>)</u>	p:lang(it)	Selects every <p> element with a lang attribute value starting with "it"



Barra de Navegação

Navigation Bars

Having easy-to-use navigation is important for any web site.

With CSS you can transform boring HTML menus into good-looking navigation bars.

Navigation Bar = List of Links

A navigation bar needs standard HTML as a base.

In our examples we will build the navigation bar from a standard HTML list.

A navigation bar is basically a list of links, so using the `` and `` elements makes perfect sense:

Example

```
<ul>
<li><a href="default.asp">Home</a></li>
<li><a href="news.asp">News</a></li>
<li><a href="contact.asp">Contact</a></li>
<li><a href="about.asp">About</a></li>
</ul>
```



Barra de Navegação Exemplo 1

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <body>
    <ul>
      <li><a href="#home">Home</a></li>
      <li><a href="#news">News</a></li>
      <li><a href="#contact">Contact</a></li>
      <li><a href="#about">About</a></li>
    </ul>

    <p>Note: We use href="#" for test links. In a real web site this
would be URLs.</p>
  </body>
</html>
```

Result:

- [Home](#)
- [News](#)
- [Contact](#)
- [About](#)

Note: We use href="#" for test links. In a real web site this would be URLs.



Barra de Navegação Sem *Bullets*

Now let's remove the bullets and the margins and padding from the list:

Example

```
ul
{
list-style-type:none;
margin:0;
padding:0;
}
```

Example explained:

- list-style-type:none - Removes the bullets. A navigation bar does not need list markers
- Setting margins and padding to 0 to remove browser default settings

The code in the example above is the standard code used in both vertical, and horizontal navigation bars.

Barra de Navegação Sem *Bullets* *Exemplo*

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      ul{
        list-style-type:none;
        margin:0;
        padding:0;
      }
    </style>
  </head>
  <body>
    <ul>
      <li><a href="#home">Home</a></li>
      <li><a href="#news">News</a></li>
      <li><a href="#contact">Contact</a></li>
      <li><a href="#about">About</a></li>
    </ul>
  </body>
</html>
```

Result:

[Home](#)
[News](#)
[Contact](#)
[About](#)



Barra de Navegação Vertical

Vertical Navigation Bar

To build a vertical navigation bar we only need to style the <a> elements, in addition to the code above:

Example

```
a
{
display:block;
width:60px;
}
```

Example explained:

- `display:block` - Displaying the links as block elements makes the whole link area clickable (not just the text), and it allows us to specify the width
- `width:60px` - Block elements take up the full width available by default. We want to specify a 60 px width

Tip: Also take a look at our [fully styled vertical navigation bar example](#).

Note: Always specify the width for <a> elements in a vertical navigation bar. If you omit the width, IE6 can produce unexpected results.

Barra de Navegação Vertical Exemplo

Source Code:

Submit Code

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      ul{
        list-style-type:none;
        margin:0;
        padding:0;
      }
      a{
        display:block;
        width:60px;
        background-color:#dddddd;
      }
    </style>
  </head>
  <body>
    <ul>
      <li><a href="#home">Home</a></li>
      <li><a href="#news">News</a></li>
      <li><a href="#contact">Contact</a></li>
      <li><a href="#about">About</a></li>
    </ul>

    <p>A background color is added to the links to show the link
area.</p>
    <p>Notice that the whole link area is clickable, not just the
text.</p>
  </body>
</html>
```

Result:

[Home](#)
[News](#)
[Contact](#)
[About](#)

A background color is added to the links to show the link area.

Notice that the whole link area is clickable, not just the text.

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      ul{
        list-style-type:none;
        margin:0;
        padding:0;
      }
      a:link,a:visited{
        display:block;
        font-weight:bold;
        color:#FFFFFF;
        background-color:#98bf21;
        width:120px;
        text-align:center;
        padding:4px;
        text-decoration:none;
        text-transform:uppercase;
      }
      a:hover,a:active{
        background-color:#7A991A;
      }
    </style>
  </head>
  <body>
    <ul>
      <li><a href="#home">Home</a></li>
      <li><a href="#news">News</a></li>
      <li><a href="#contact">Contact</a></li>
      <li><a href="#about">About</a></li>
    </ul>
  </body>
</html>
```

Barra de Navegação Vertical Exemplo 2

Result:





Barra de Navegação Horizontal

Horizontal Navigation Bar

There are two ways to create a horizontal navigation bar. Using **inline** or **floating** list items.

Both methods work fine, but if you want the links to be the same size, you have to use the floating method.

Inline List Items

One way to build a horizontal navigation bar is to specify the `` elements as inline, in addition to the "standard" code above:

Example

```
li
{
display:inline;
}
```

Example explained:

- `display:inline;` - By default, `` elements are block elements. Here, we remove the line breaks before and after each list item, to display them on one line

Barra de Navegação Horizontal Exemplo

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      ul{
        list-style-type:none;
        margin:0;
        padding:0;
      }
      li{
        display:inline;
      }
    </style>
  </head>
  <body>
    <ul>
      <li><a href="#home">Home</a></li>
      <li><a href="#news">News</a></li>
      <li><a href="#contact">Contact</a></li>
      <li><a href="#about">About</a></li>
    </ul>
  </body>
</html>
```

Result:

[Home](#) [News](#) [Contact](#) [About](#)

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      ul{
        list-style-type:none;
        margin:0;
        padding:0;
        padding-top:6px;
        padding-bottom:6px;
      }
      li{
        display:inline;
      }
      a:link,a:visited{
        font-weight:bold;
        color:#FFFFFF;
        background-color:#98bf21;
        text-align:center;
        padding:6px;
        text-decoration:none;
        text-transform:uppercase;
      }
      a:hover,a:active{
        background-color:#7A991A;
      }
    </style>
  </head>
  <body>
    <ul>
      <li><a href="#home">Home</a></li>
      <li><a href="#news">News</a></li>
      <li><a href="#contact">Contact</a></li>
      <li><a href="#about">About</a></li>
    </ul>
    <p><b>Note:</b> If you only set the padding for a elements (and
not ul), the links will go outside the ul element. Therefore, we
have added a top and bottom padding for the ul element.</p>
  </body>
</html>
```

Barra de Navegação Horizontal Exemplo 2

Result:

[HOME](#) [NEWS](#) [CONTACT](#) [ABOUT](#)

Note: If you only set the padding for a elements (and not ul), the links will go outside the ul element. Therefore, we have added a top and bottom padding for the ul element.



Lista Flutuante

Floating List Items

In the example above the links have different widths.

For all the links to have an equal width, float the `` elements and specify a width for the `<a>` elements:

Example

```
li
{
float:left;
}
a
{
display:block;
width:60px;
}
```

Example explained:

- `float:left` - use float to get block elements to slide next to each other
- `display:block` - Displaying the links as block elements makes the whole link area clickable (not just the text), and it allows us to specify the width
- `width:60px` - Since block elements take up the full width available, they cannot float next to each other. We specify the width of the links to 60px

Lista Flutuante Exemplo

Source Code:

Submit Code

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      ul{
        list-style-type:none;
        margin:0;
        padding:0;
        overflow:hidden;
      }
      li{
        float:left;
      }
      a{
        display:block;
        width:60px;
        background-color:#ddddd;
      }
    </style>
  </head>
  <body>
    <ul>
      <li><a href="#home">Home</a></li>
      <li><a href="#news">News</a></li>
      <li><a href="#contact">Contact</a></li>
      <li><a href="#about">About</a></li>
    </ul>
    <p><b>Note:</b> If a !DOCTYPE is not specified, floating items
can produce unexpected results.</p>
    <p>A background color is added to the links to show the link
area. The whole link area is clickable, not just the text.</p>
    <p><b>Note:</b> overflow:hidden is added to the ul element to
prevent li elements from going outside of the list.</p>
  </body>
</html>
```

Result:

[Home](#) [News](#) [Contact](#) [About](#)

Note: If a !DOCTYPE is not specified, floating items can produce unexpected results.

A background color is added to the links to show the link area. The whole link area is clickable, not just the text.

Note: overflow:hidden is added to the ul element to prevent li elements from going outside of the list.

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      ul{
        list-style-type:none;
        margin:0;
        padding:0;
        overflow:hidden;
      }
      li{
        float:left;
      }
      a:link,a:visited{
        display:block;
        width:120px;
        font-weight:bold;
        color:#FFFFFFF;
        background-color:#98bf21;
        text-align:center;
        padding:4px;
        text-decoration:none;
        text-transform:uppercase;
      }
      a:hover,a:active{
        background-color:#7A991A;
      }
    </style>
  </head>
  <body>
    <ul>
      <li><a href="#home">Home</a></li>
      <li><a href="#news">News</a></li>
      <li><a href="#contact">Contact</a></li>
      <li><a href="#about">About</a></li>
    </ul>
  </body>
</html>
```

Lista Flutuante Exemplo 2

Result:





Galeria de Imagens

CSS can be used to create an image gallery.



Image Gallery

The following image gallery is created with CSS:

- Código-fonte da Galeria de Imagens



Imagem: Opaca / Transparente

Example 1 - Creating a Transparent Image

The CSS3 property for transparency is **opacity**.

First we will show you how to create a transparent image with CSS.

Regular image:



The same image with transparency:

Look at the following CSS:

```
img
{
  opacity:0.4;
  filter:alpha(opacity=40); /* For IE8 and earlier */
}
```

IE9, Firefox, Chrome, Opera, and Safari use the property **opacity** for transparency. The opacity property can take a value from 0.0 - 1.0. A lower value makes the element more transparent.

IE8 and earlier use **filter:alpha(opacity=x)**. The x can take a value from 0 - 100. A lower value makes the element more transparent.

Imagem: Opaca / Transparente Exemplo 1.1

Source Code:

Submit C

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      img{
        opacity:0.4;
        filter:alpha(opacity=40); /* For IE8 and earlier */
      }
      img:hover{
        opacity:1.0;
        filter:alpha(opacity=100); /* For IE8 and earlier */
      }
    </style>
  </head>
  <body>
    <h1>Image Transparency</h1>
    
    

    <p><b>Note:</b> In IE, a &lt;!DOCTYPE&gt; must be added for the
: hover selector to work on other elements than the &lt;a&gt; element.
</p>
  </body>
</html>
```

Result:

Image Transparency



Note: In IE, a `<!DOCTYPE>` must be added for the `:hover` selector to work on other elements than the `<a>` element.

Programação para Internet 2

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      div.background{
        width: 500px;
        height: 250px;
        background: url(klematis.jpg) repeat;
        border: 2px solid black;
      }
      div.transbox{
        width: 400px;
        height: 180px;
        margin: 30px 50px;
        background-color: #ffffff;
        border: 1px solid black;
        opacity:0.6;
        filter:alpha(opacity=60); /* For IE8 and earlier */
      }
      div.transbox p{
        margin: 30px 40px;
        font-weight: bold;
        color: #000000;
      }
    </style>
  </head>
  <body>
    <div class="background">
      <div class="transbox">
        <p>This is some text that is placed in the transparent box.
          This is some text that is placed in the transparent box.
          This is some text that is placed in the transparent box.
          This is some text that is placed in the transparent box.
          This is some text that is placed in the transparent box.
        </p>
      </div>
    </div>
  </body>
</html>
```

Imagem: Opaca / Transparente Exemplo 1.2

Result:



Image Sprite

Image Sprites

An image sprite is a collection of images put into a single image.

A web page with many images can take a long time to load and generates multiple server requests.

Using image sprites will reduce the number of server requests and save bandwidth.

Image Sprites - Simple Example

Instead of using three separate images, we use this single image ("img_navsprites.gif"):



With CSS, we can show just the part of the image we need.

In the following example the CSS specifies which part of the "img_navsprites.gif" image to show:

Example

```
img.home
{
width:46px;
height:44px;
background:url(img_navsprites.gif) 0 0;
}
```

Example explained:

- `` - Only defines a small transparent image because the src attribute cannot be empty. The displayed image will be the background image we specify in CSS
- `width:46px; height:44px;` - Defines the portion of the image we want to use
- `background:url(img_navsprites.gif) 0 0;` - Defines the background image and its position (left 0px, top 0px)

Programação para Internet 2

Image Sprites - Create a Navigation List

We want to use the sprite image ("img_navsprites.gif") to create a navigation list.

We will use an HTML list, because it can be a link and also supports a background image:

Example

```
#navlist{position:relative;}
#navlist li{margin:0;padding:0;list-style:none;position:absolute;top:0;}
#navlist li, #navlist a{height:44px;display:block;}

#home{left:0px;width:46px;}
#home{background:url('img_navsprites.gif') 0 0;}

#prev{left:63px;width:43px;}
#prev{background:url('img_navsprites.gif') -47px 0;}

#next{left:129px;width:43px;}
#next{background:url('img_navsprites.gif') -91px 0;}
```

Example explained:

- #navlist{position:relative;} - position is set to relative to allow absolute positioning inside it
- #navlist li{margin:0;padding:0;list-style:none;position:absolute;top:0;} - margin and padding is set to 0, list-style is removed, and all list items are absolute positioned
- #navlist li, #navlist a{height:44px;display:block;} - the height of all the images are 44px

Now start to position and style for each specific part:

- #home{left:0px;width:46px;} - Positioned all the way to the left, and the width of the image is 46px
- #home{background:url('img_navsprites.gif') 0 0;} - Defines the background image and its position (left 0px, top 0px)
- #prev{left:63px;width:43px;} - Positioned 63px to the right (#home width 46px + some extra space between items), and the width is 43px.
- #prev{background:url('img_navsprites.gif') -47px 0;} - Defines the background image 47px to the right (#home width 46px + 1px line divider)
- #next{left:129px;width:43px;} - Positioned 129px to the right (start of #prev is 63px + #prev width 43px + extra space), and the width is 43px.
- #next{background:url('img_navsprites.gif') -91px 0;} - Defines the background image 91px to the right (#home width 46px + 1px line divider + #prev width 43px + 1px line divider)

Image Sprites - Create a Navigation List Exemplo

Source Code:

Submit Code »

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      #navlist{position:relative;}
      #navlist li{
        margin:0;
        padding:0;
        list-style:none;
        position:absolute;
        top:0;
      }
      #navlist li, #navlist a{height:44px;display:block;}

      #home{left:0px;width:46px;}
      #home{background:url('img_navsprites.gif') 0 0;}

      #prev{left:63px;width:43px;}
      #prev{background:url('img_navsprites.gif') -47px 0;}

      #next{left:129px;width:43px;}
      #next{background:url('img_navsprites.gif') -91px 0;}
    </style>
  </head>
  <body>
    <ul id="navlist">
      <li id="home"><a href="default.asp"></a></li>
      <li id="prev"><a href="css_intro.asp"></a></li>
      <li id="next"><a href="css_syntax.asp"></a></li>
    </ul>
  </body>
</html>
```

Result:



Image Sprites - Hover Effect

Image Sprites - Hover Effect

Now we want to add a hover effect to our navigation list.

Our new image ("img_navsprites_hover.gif") contains three navigation images and three images to use for hover effects:



Because this is one single image, and not six separate files, there will be **no loading delay** when a user hovers over the image.

We only add three lines of code to add the hover effect:

Example

```
#home a:hover{background: url('img_navsprites_hover.gif') 0 -45px;}
#prev a:hover{background: url('img_navsprites_hover.gif') -47px -45px;}
#next a:hover{background: url('img_navsprites_hover.gif') -91px -45px;}
```

Example explained:

- Since the list item contains a link, we can use the `:hover` pseudo-class
- `#home a:hover{background: transparent url(img_navsprites_hover.gif) 0 -45px;}` - For all three hover images we specify the same background position, only 45px further down

Image Sprites - Hover Effect Exemplo

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4 <style>
5     #navlist{position:relative;}
6     #navlist li{margin:0;padding:0;list-style:none;position:absolute;top:0;}
7     #navlist li, #navlist a{height:44px;display:block;}
8
9     #home{left:0px;width:46px;}
10    #home{background:url('img_navsprites_hover.gif') 0 0;}
11    #home a:hover{background: url('img_navsprites_hover.gif') 0 -45px;}
12
13    #prev{left:63px;width:43px;}
14    #prev{background:url('img_navsprites_hover.gif') -47px 0;}
15    #prev a:hover{background: url('img_navsprites_hover.gif') -47px -45px;}
16
17    #next{left:129px;width:43px;}
18    #next{background:url('img_navsprites_hover.gif') -91px 0;}
19    #next a:hover{background: url('img_navsprites_hover.gif') -91px -45px;}
20 </style>
21 </head>
22 <body>
23 <ul id="navlist">
24 <li id="home"><a href="default.asp"></a></li>
25 <li id="prev"><a href="css_intro.asp"></a></li>
26 <li id="next"><a href="css_syntax.asp"></a></li>
27 </ul>
28 </body>
29 </html>
```

Result:





Tipos de Mídias

Media Types

Some CSS properties are only designed for a certain media. For example the "voice-family" property is designed for aural user agents. Some other properties can be used for different media types. For example, the "font-size" property can be used for both screen and print media, but perhaps with different values. A document usually needs a larger font-size on a screen than on paper, and sans-serif fonts are easier to read on the screen, while serif fonts are easier to read on paper.

Tipos de Mídias

The @media Rule

The @media rule allows different style rules for different media in the same style sheet.

The style in the example below tells the browser to display a 14 pixels Verdana font on the screen. But if the page is printed, it will be in a 10 pixels Times font. Notice that the font-weight is set to bold, both on screen and on paper:

```
<html>
<head>
<style>
@media screen
{
  p.test {font-family:verdana,sans-serif;font-size:14px;}
}
@media print
{
  p.test {font-family:times,serif;font-size:10px;}
}
@media screen,print
{
  p.test {font-weight:bold;}
}
</style>
</head>

<body>
....
</body>
</html>
```

See it yourself ! Print this page (or open Print Preview), and you will see that the paragraph under "Media Types" will be displayed in another font, and have a smaller font size than the rest of the text.



Outros Tipos de Mídia

Other Media Types

Note: The media type names are not case-sensitive.

Media Type	Description
all	Used for all media type devices
aural	Used for speech and sound synthesizers
braille	Used for braille tactile feedback devices
embossed	Used for paged braille printers
handheld	Used for small or handheld devices
print	Used for printers
projection	Used for projected presentations, like slides
screen	Used for computer screens
tty	Used for media using a fixed-pitch character grid, like teletypes and terminals
tv	Used for television-type devices



Seletores de Atributo

Style HTML Elements With Specific Attributes

It is possible to style HTML elements that have specific attributes, not just class and id.

Note: IE7 and IE8 support attribute selectors only if a !DOCTYPE is specified. Attribute selection is **NOT** supported in IE6 and lower.

Attribute Selector

The example below styles all elements with a title attribute:

Example

```
[title]
{
color:blue;
}
```

Seletores de Atributo Exemplo

Source Code:

Submit Code

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      [title]{
        color:blue;
      }
    </style>
  </head>
  <body>
    <h2>Will apply to:</h2>
    <h1 title="Hello world">Hello world</h1>
    <a title="W3Schools" href="http://w3schools.com">W3Schools</a>
    <hr>
    <h2>Will not apply to:</h2>
    <p>Hello!</p>
  </body>
</html>
```

Result:

Will apply to:

Hello world

[W3Schools](http://w3schools.com)

Will not apply to:

Hello!



Seletores de Atributos e Valores

Attribute and Value Selector

The example below styles all elements with title="W3Schools":

Example

```
[title=W3Schools]
{
border:5px solid green;
}
```

Seletores de Atributos e Valores Exemplo

Source Code:

Submit Code

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      [title=W3Schools]{
        border:5px solid green;
      }
    </style>
  </head>
  <body>
    <h2>Will apply to:</h2>
    
    <br>
    <a title="W3Schools" href="http://w3schools.com">W3Schools</a>
    <hr>
    <h2>Will not apply to:</h2>
    <p title="greeting">Hi!</p>
    <a class="W3Schools" href="http://w3schools.com">W3Schools</a>
  </body>
</html>
```

Result:

Will apply to:



Will not apply to:

Hi!

[W3Schools](http://w3schools.com)

Seletores de Atributo e Valor Múltiplos Valores

Attribute and Value Selector - Multiple Values

The example below styles all elements with a title attribute that contains a specified value. This works even if the attribute has space separated values:

Example

```
[title~="hello"] { color:blue; }
```

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      [title~="hello"]{
        color:blue;
      }
    </style>
  </head>
  <body>
    <h2>Will apply to:</h2>
    <h1 title="hello world">Hello world</h1>
    <p title="student hello">Hello CSS students!</p>
    <hr>
    <h2>Will not apply to:</h2>
    <p title="student">Hi CSS students!</p>
  </body>
</html>
```

Result:

Will apply to:

Hello world

Hello CSS students!

Will not apply to:

Hi CSS students!



Seletores de Atributo e Valor Múltiplos Valores

The example below styles all elements with a lang attribute that contains a specified value. This works even if the attribute has hyphen (-) separated values:

Example

```
[lang|=en] { color:blue; }
```

Source Code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      [lang|=en]{
        color:blue;
      }
    </style>
  </head>
  <body>
    <h2>Will apply to:</h2>
    <p lang="en">Hello!</p>
    <p lang="en-us">Hi!</p>
    <p lang="en-gb">Ello!</p>
    <hr>
    <h2>Will not apply to:</h2>
    <p lang="us">Hi!</p>
    <p lang="no">Hei!</p>
  </body>
</html>
```

Result:

Will apply to:

Hello!

Hi!

Ello!

Will not apply to:

Hi!

Hei!



“Estilando” Formulários

Styling Forms

The attribute selectors are particularly useful for styling forms without class or ID:

Example

```
input[type="text"]
{
width:150px;
display:block;
margin-bottom:10px;
background-color:yellow;
}
input[type="button"]
{
width:120px;
margin-left:35px;
display:block;
}
```

“Estilando” Formulários Exemplo

Source Code:

Submit (

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      input[type="text"]{
        width:150px;
        display:block;
        margin-bottom:10px;
        background-color:yellow;
      }
      input[type="button"]{
        width:120px;
        margin-left:35px;
        display:block;
      }
    </style>
  </head>
  <body>
    <form name="input" action="" method="get">
      Firstname:<input type="text" name="Name" value="Peter"
size="20">
      Lastname:<input type="text" name="Name" value="Griffin"
size="20">
      <input type="button" value="Example Button">
    </form>
  </body>
</html>
```

Result:

Firstname:

Peter

Lastname:

Griffin

Example Button



Unidades de Medida

Measurement Values

Unit	Description
%	percentage
in	inch
cm	centimeter
mm	millimeter
em	1 em is equal to the current font size. 2em means 2 times the size of the current font. E.g., if an element is displayed with a font of 12 pt, then '2em' is 24 pt. The 'em' is a very useful unit in CSS, since it can adapt automatically to the font that the reader uses
ex	one ex is the x-height of a font (x-height is usually about half the font-size)
pt	point (1 pt is the same as 1/72 inch)
pc	pica (1 pc is the same as 12 points)
px	pixels (a dot on the computer screen)



Bibliografia

- W3Schools. **CSS Tutorial**. Disponível em:
<<http://www.w3schools.com/css/default.asp>> Acesso em: 06 jan. 2013.