

Box Model

Valor inicial das propriedades CSS

- Todos os elementos de Marcação HTML possuem um valor inicial para as propriedades CSS.
- Ex. Elemento h1

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <meta charset="UTF-8">
5   <title> Box Model CSS</title>
6 </head>
7 <body>
8   <h1>Box Model</h1>
9 </body>
10</html>
```



Box Model

CSS padrão do elemento H1
No Google Chrome

The screenshot shows the Chrome DevTools interface. The 'Elements' panel on the left displays the HTML document structure, with the `<h1>Box Model</h1>` element selected. The 'Styles' panel on the right, highlighted with a red box, shows the default user agent styles for the `h1` element. The styles include:

- `display: block;`
- `font-size: 2em;`
- `-webkit-margin-before: 0.67em;`
- `-webkit-margin-after: 0.67em;`
- `-webkit-margin-start: 0px;`
- `-webkit-margin-end: 0px;`
- `font-weight: bold;`

The 'Matched CSS Rules' section indicates these styles are from the 'user agent stylesheet'.

Valor inicial das propriedades CSS

- Os valores iniciais podem variar de acordo com os navegadores e isso pode acarretar quebra de layout;
- *CSS Reset*
 - *Yahoo CSS Reset*
 - *Eric Meyer CSS Reset*
 - <http://www.pinceladasdawe.com.br/blog/2008/11/10/10-tecnicas-para-reset-css/>

```
1. * {  
2. padding: 0;  
3. margin: 0;  
4. border: 0;  
5. }
```



Box Model

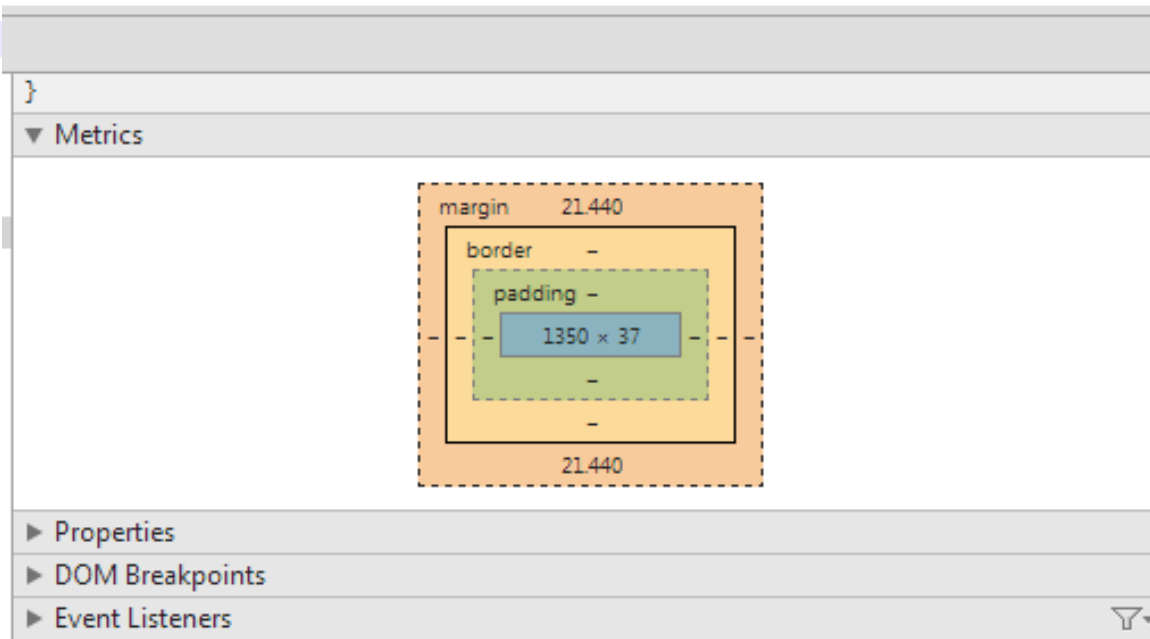
- O layout de um documento é construído a partir da transformação de cada elemento da árvore do documento em um *box*, cujas as dimensões são definidas pelos valores das propriedades CSS.



Box Model

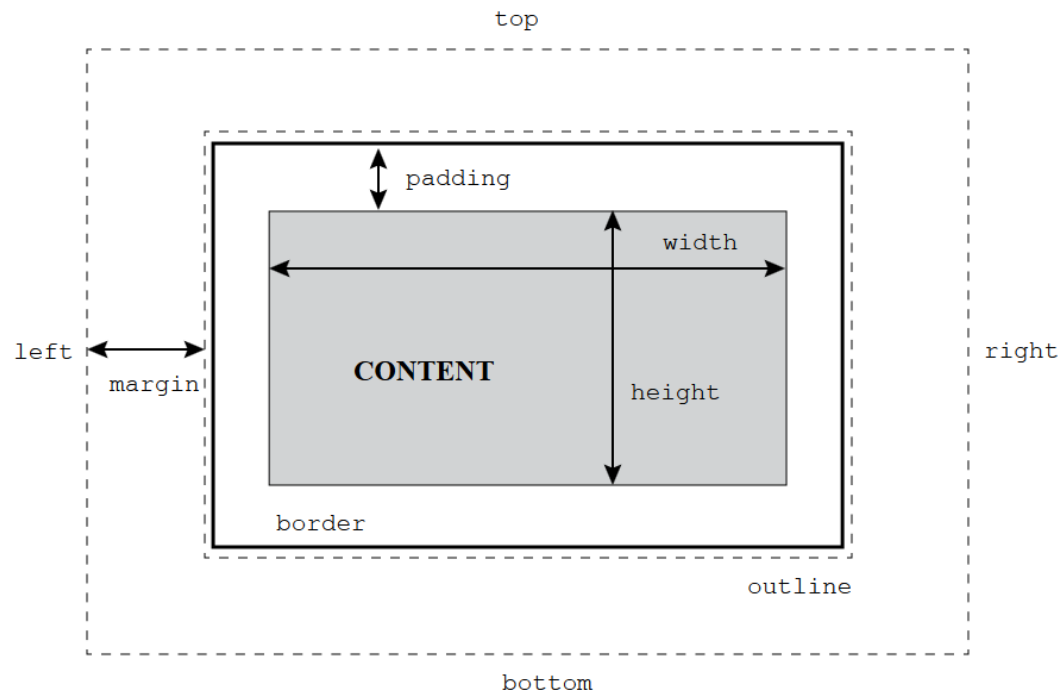
- Representação do Elemento H1 como um box no Google Chrome

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <meta charset="UTF-8">
5   <title> Box Model CSS</title>
6 </head>
7 <body>
8   <h1>Box Model</h1>
9 </body>
10</html>
```



Box Model

- As propriedades CSS que determinam as dimensões dos boxes são: ***margin, border, padding, width e height***;
- As palavras para referência aos quatro lados dos boxes são: ***top, right, bottom e left***;



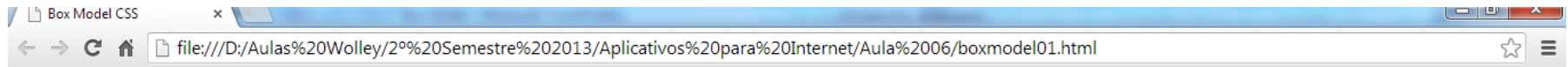
Box Model

- **Boder**

- Essa propriedade define a espessura, o estilo e a cor da borda de um box.
- **boder-style**: declara o estilo da borda;
- **border-color**: declara a cor da borda;
- **border-width**: declara a espessura da borda;

Box Model

- Boder-style
 - Declarar o estilo da borda individualmente:



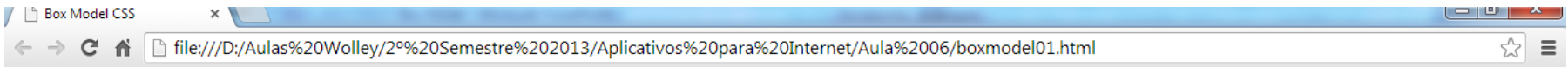
Box Model

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4 <meta charset="UTF-8">
5 <title> Box Model CSS</title>
6 <link rel="stylesheet" type="text/css" href="boxmodel.css" />
7 </head>
8 <body>
9 <h1>Box Model</h1>
10 </body>
11 </html>
```

```
1 h1{
2     border-top-style: solid;
3     border-right-style:dashed;
4     border-bottom-style:dotted;
5     border-left-style:ridge;
6 }
```


Box Model

- Boder-style
 - Declarar o estilo da borda de forma abreviada:



Box Model

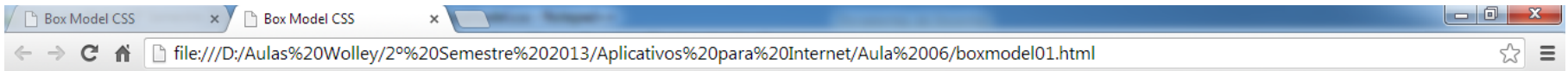
```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <meta charset="UTF-8">
5   <title> Box Model CSS</title>
6   <link rel="stylesheet" type="text/css" href="boxmodel.css" />
7 </head>
8 <body>
9   <h1>Box Model</h1>
10 </body>
11 </html>
```

```
1 h1 {
2     border-style: solid dashed dotted ridge;
3 }
```

Top Right Bottom Left

Box Model

- **Border-color**
 - Declarar a cor da borda individualmente:



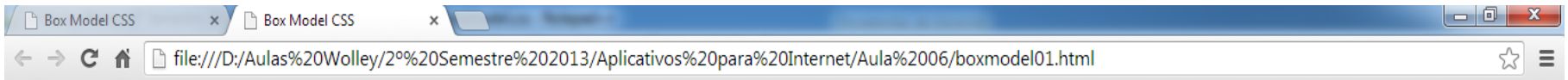
```
1 <!DOCTYPE html>
2 <html>
3 <head>
4 <meta charset="UTF-8">
5 <title> Box Model CSS</title>
6 <link rel="stylesheet" type="text/css" href="boxmodel.css" />
7 </head>
8 <body>
9 <h1>Box Model</h1>
10 </body>
11 </html>
```

```
4 h1{
5     border-top-color: #f00; /*vermelho*/
6     border-right-color: #0f0; /*verde*/
7     border-bottom-color: #00f; /*azul*/
8     border-left-color: #000; /*preto*/
9
10 }
```

Box Model

- **Border-color**

– Declarar a cor da borda de forma abreviada:



Box Model

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4 <meta charset="UTF-8">
5 <title> Box Model CSS</title>
6 <link rel="stylesheet" type="text/css" href="boxmodel.css" />
7 </head>
8 <body>
9 <h1>Box Model</h1>
10 </body>
11 </html>
```

```
4
5 h1 {
6
7 }
```

`border-color: #f00 #0f0 #00f #000;`

Top

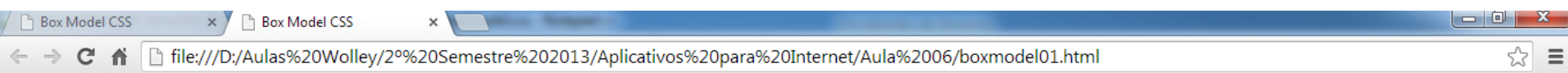
Right

Bottom

Left

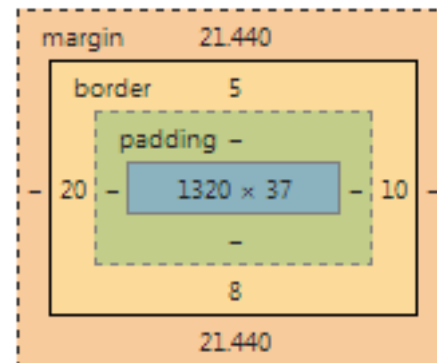
Box Model

- **Border-width**
 - Propriedade declara a espessura da borda:



Box Model

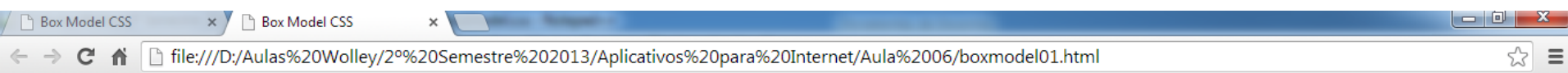
```
9  h1{  
10  
11      border-top-width: 5px;  
12      border-right-width: 10px;  
13      border-bottom-width: 8px;  
14      border-left-width: 20px;  
15  }
```



Box Model

- **Border-width**

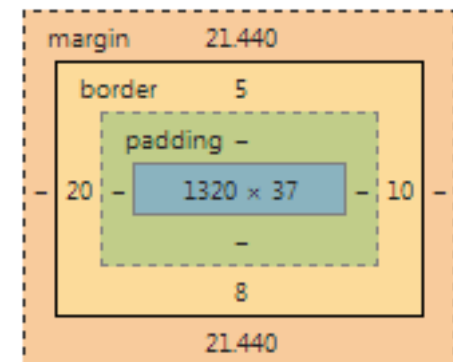
- Propriedade declara a espessura da borda de formar abreviada:



Box Model

```
9  h1{  
10  border-width: 5px 10px 8px 20px;  
11  }
```

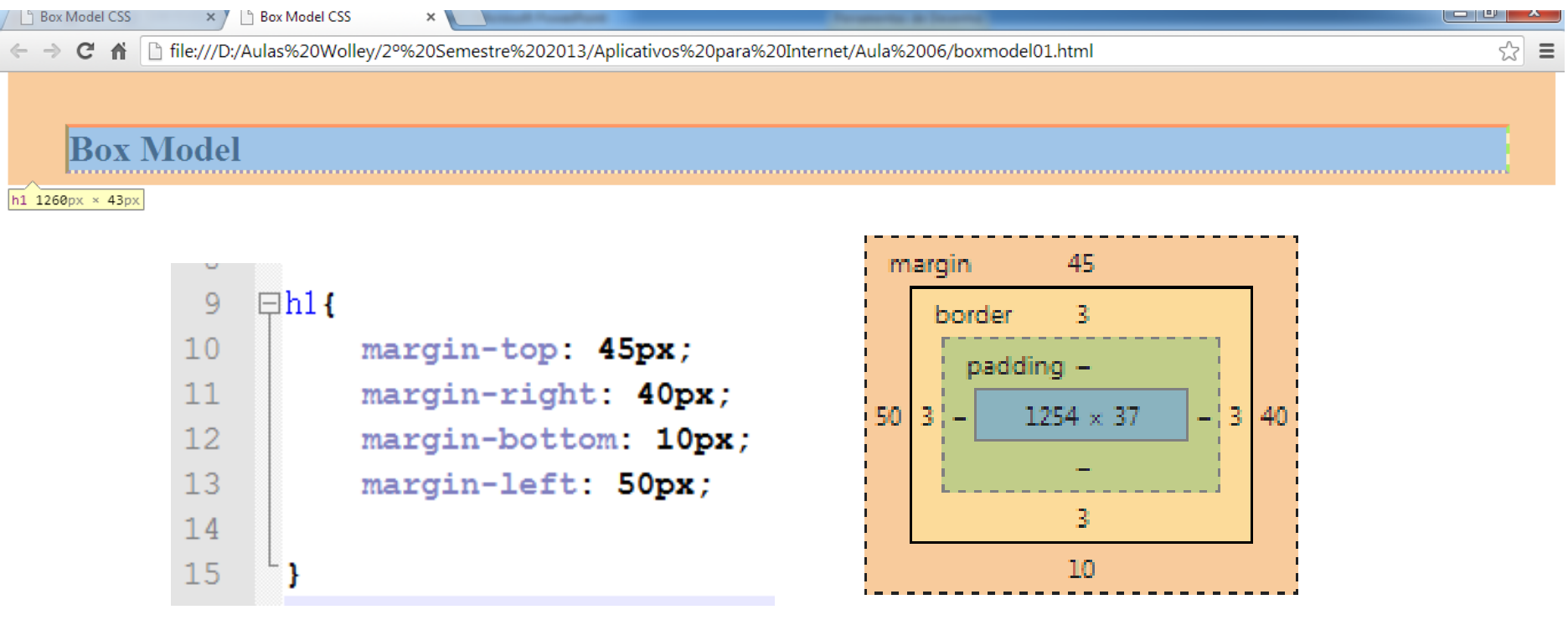
Top Right Bottom Left



Box Model

- **Margin**

- Essa propriedade define a espessura das margens de box.



The image shows a web browser window with a single tab titled "Box Model CSS". The address bar displays the file path: `file:///D:/Aulas%20Wolley/2º%20Semestre%202013/Aplicativos%20para%20Internet/Aula%2006/boxmodel01.html`. The main content area features a blue header bar with the text "Box Model". Below the header, a yellow tooltip indicates the dimensions of the header: `h1 1260px x 43px`.

To the left of the browser window, a code editor displays the following CSS code for the `h1` selector:

```
9 h1{  
10     margin-top: 45px;  
11     margin-right: 40px;  
12     margin-bottom: 10px;  
13     margin-left: 50px;  
14 }  
15
```

To the right of the code editor, a diagram illustrates the box model for the `h1` element. The diagram consists of three nested rectangles:

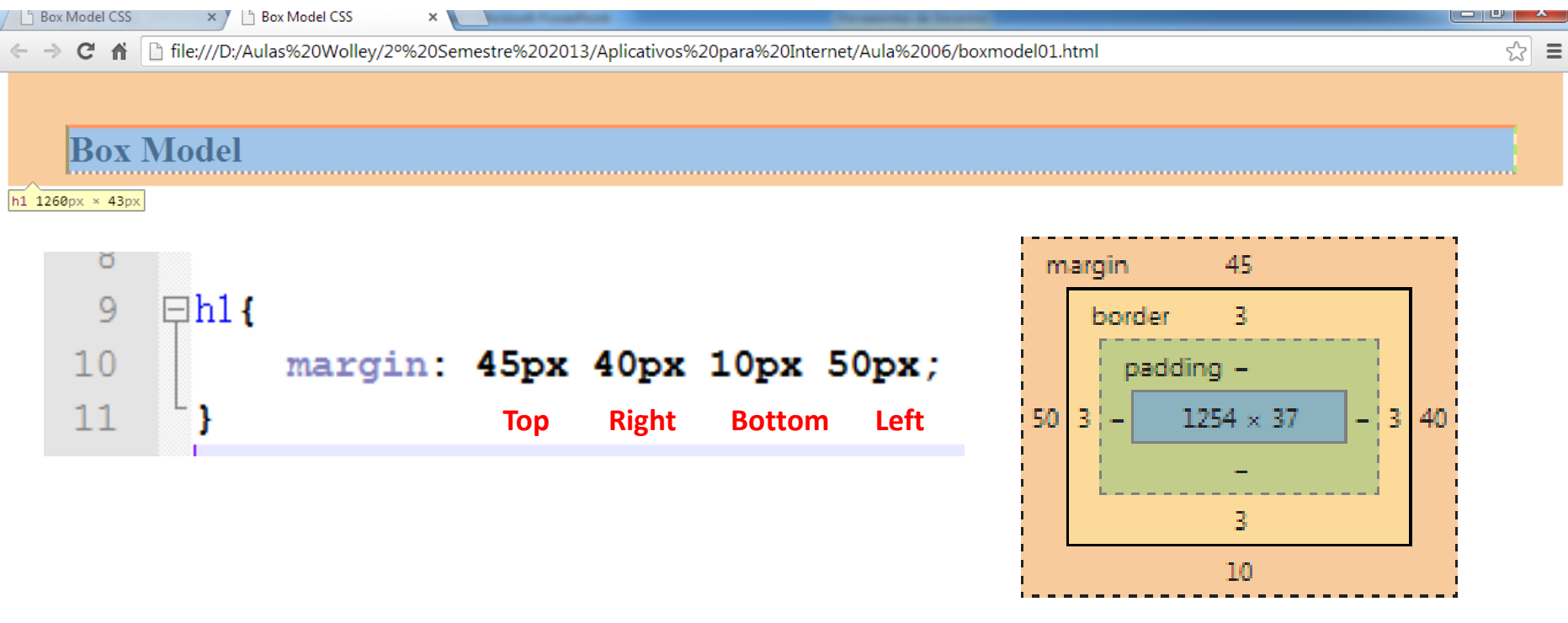
- Margin:** The outermost rectangle, colored orange, with a dashed border. It has a width of 10 and a height of 45. The label "margin" is placed to its left, and the value "45" is to its right.
- Border:** The middle rectangle, colored yellow, with a solid border. It has a width of 3 and a height of 3. The label "border" is placed to its left, and the value "3" is to its right.
- Padding:** The innermost rectangle, colored green, with a dashed border. It has a width of 1254 and a height of 37. The label "padding" is placed to its left, and the value "3" is to its right.

The diagram also shows the dimensions of the content area (1254 x 37) and the overall dimensions of the box (10 x 40).

Box Model

- **Margin**

- Declaração de margens de forma abreviada:



The image shows a web browser window with a file path: `file:///D:/Aulas%20Wolley/2º%20Semestre%202013/Aplicativos%20para%20Internet/Aula%2006/boxmodel01.html`. The browser displays a blue box with the text "Box Model" and a tooltip indicating its dimensions: `h1 1260px x 43px`.

Below the browser window, a CSS code snippet is shown:

```
8  
9 h1 {  
10     margin: 45px 40px 10px 50px;  
11 }
```

The margins are labeled: **Top** (45px), **Right** (40px), **Bottom** (10px), and **Left** (50px).

To the right of the code, a diagram illustrates the box model for the `h1` element. The diagram shows three nested boxes:

- Margin:** The outermost box, colored orange, with a total width of 10 and a total height of 50. The top margin is 45.
- Border:** The middle box, colored yellow, with a width of 3 and a height of 3.
- Padding:** The innermost box, colored green, with a width of 3 and a height of 3.

The content of the box is `1254 x 37`.

Box Model

- **Margin**

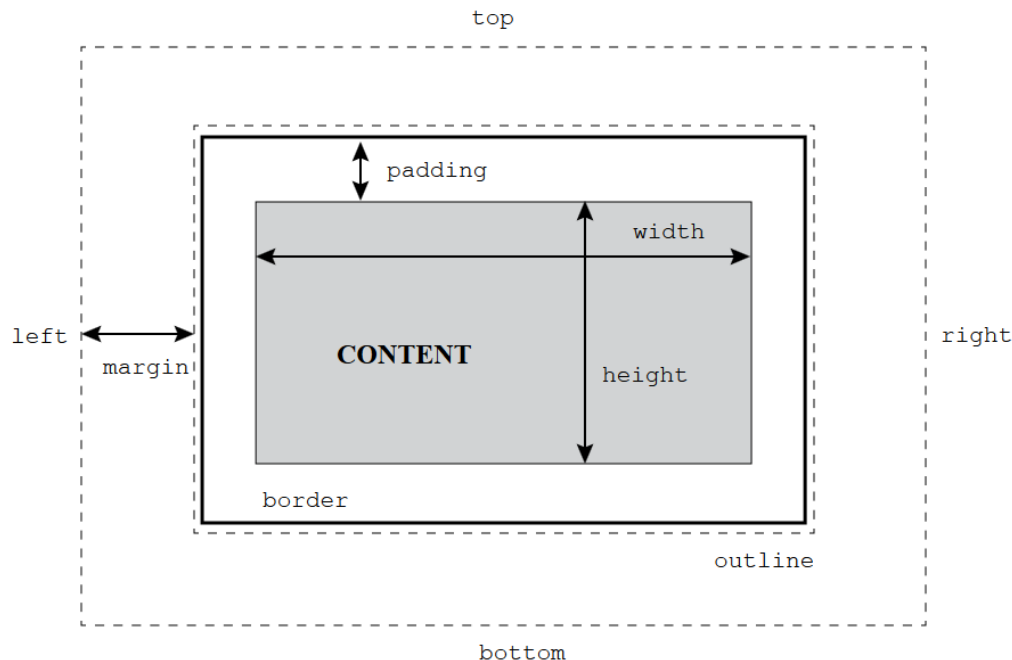
- Regras para as declarações abreviadas:

- **Um valor:** o valor único é válido para os quatro lados do box, top, right, bottom e left;
 - **Dois valores:** o primeiro é válido para os lados top e bottom, e o segundo para right e left;
 - **Três valores:** o primeiro é válido para o lado top, o segundo, para os lados right e left, e o terceiro, para o lado bottom;
 - **Quatro valores:** os valores são válidos, respectivamente, para os lados top, right, bottom e left do box.

Box Model

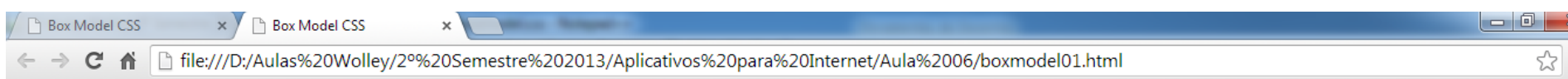
- **Padding**

- Essa propriedade define a espessura do enchimento de um box.
- Chamamos de enchimento (ou padding) a espessura da área que separa a borda do conteúdo.

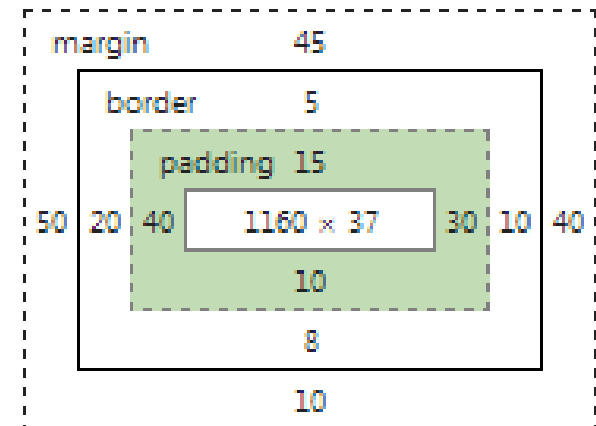


Box Model

- **Padding**
 - Declara padding individualmente:

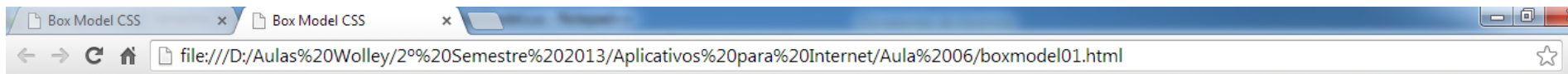


```
17 h1{
18   padding-top: 15px;
19   padding-right: 30px;
20   padding-bottom: 10px;
21   padding-left: 40px;
22 }
```



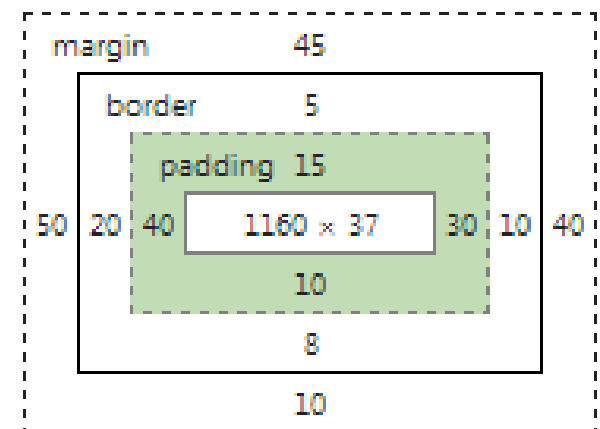
Box Model

- **Padding**
 - Declara padding de forma abreviada:



```
17 h1{  
18   padding: 15px 30px 10px 40px;  
19 }
```

Top Right Bottom Left

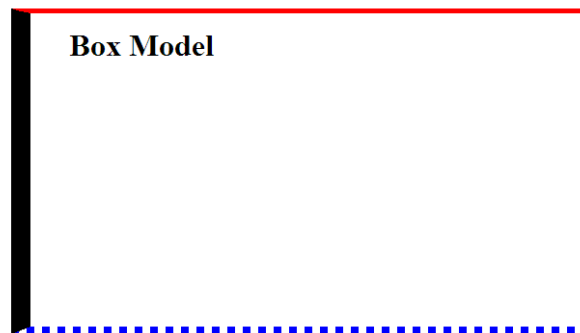
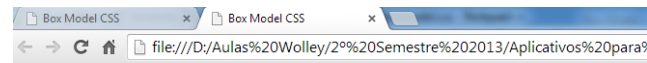


Box Model

- **Width**
 - Essa propriedade define a largura de um box.
- **Height**
 - Essa propriedade define a altura de um box.

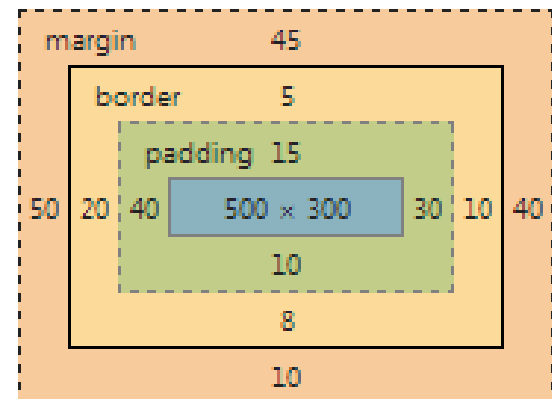
Box Model

- Width e Height



```
21 h1 {  
22  
23  
24 }
```

```
width: 500px;  
height: 300px;
```



Para consulta:

- CSS3 Desenvolva aplicações web profissionais com uso dos poderosos recursos das CSS3. Maurício Samy Silva. Ed. Novatec, 2012.
- http://www.w3schools.com/css/css_boxmodel.asp
- <https://www.youtube.com/watch?v=snO54D5xlxs>
- https://www.youtube.com/watch?v=u_U1Aui_gU-w