

■ **CSS**

INF1802

Profa. Melissa Lemos



Outline

- CSS - Main Features

Reference

- W3Schools
 - <http://www.w3schools.com/css/>
- Coursera
 - www.coursera.org
 - Responsive Website Basics: Code with HTML, CSS, and JavaScript
 - University of London
 - Prof. Dr Matthew Yee-King

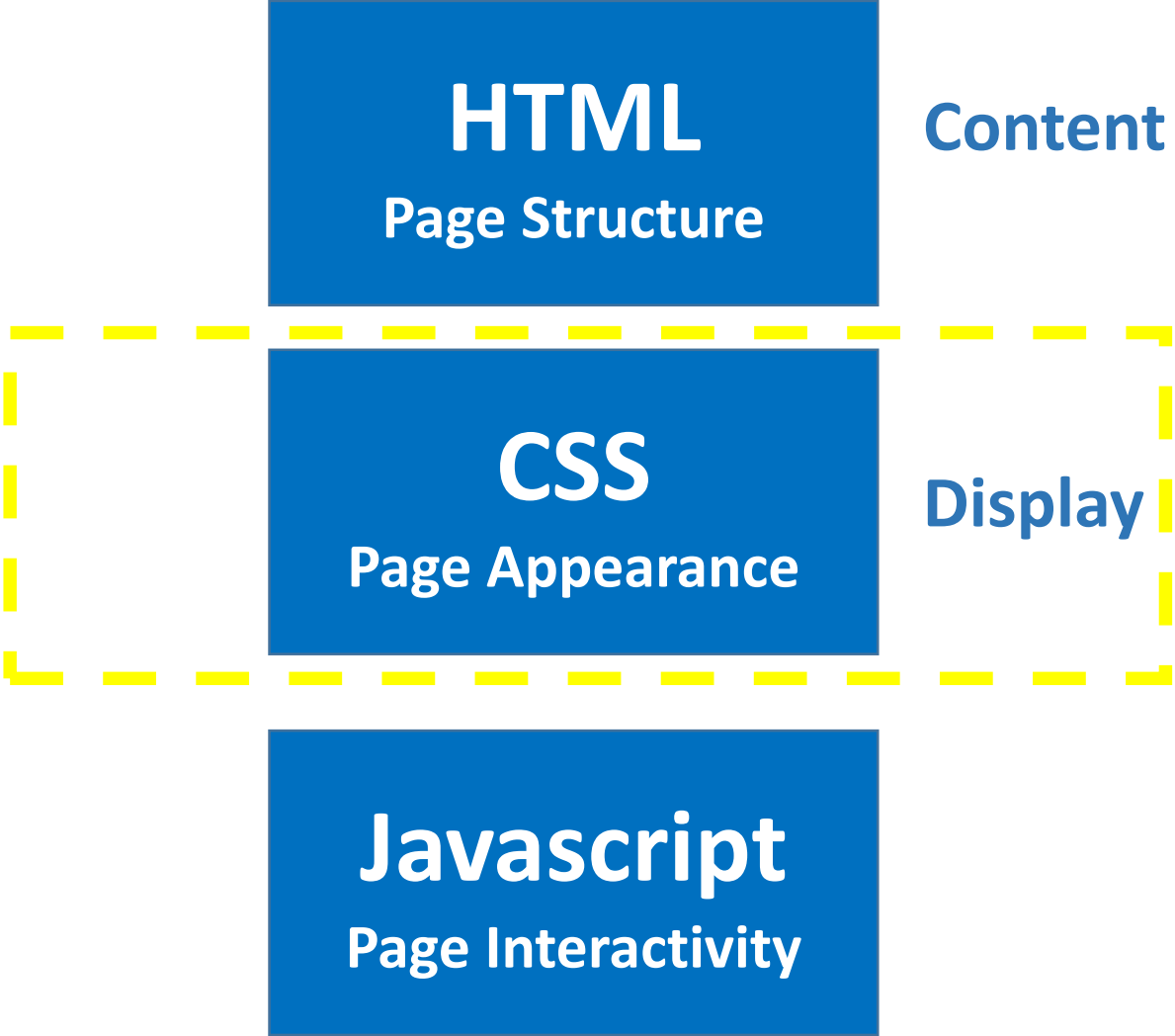
Technologies

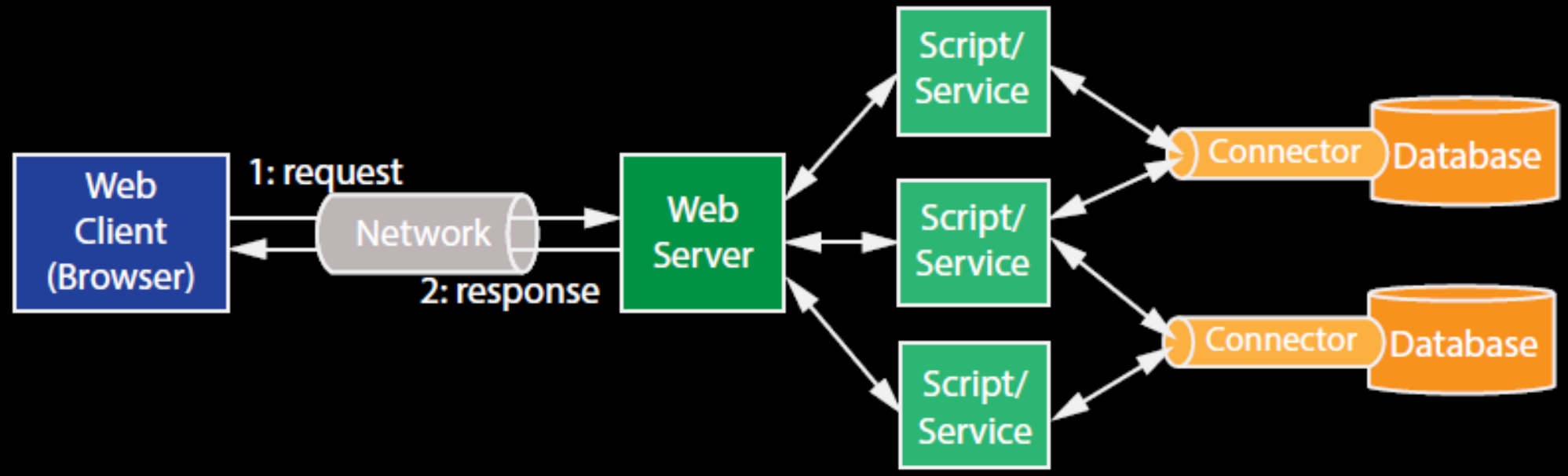
HTML
Page Structure

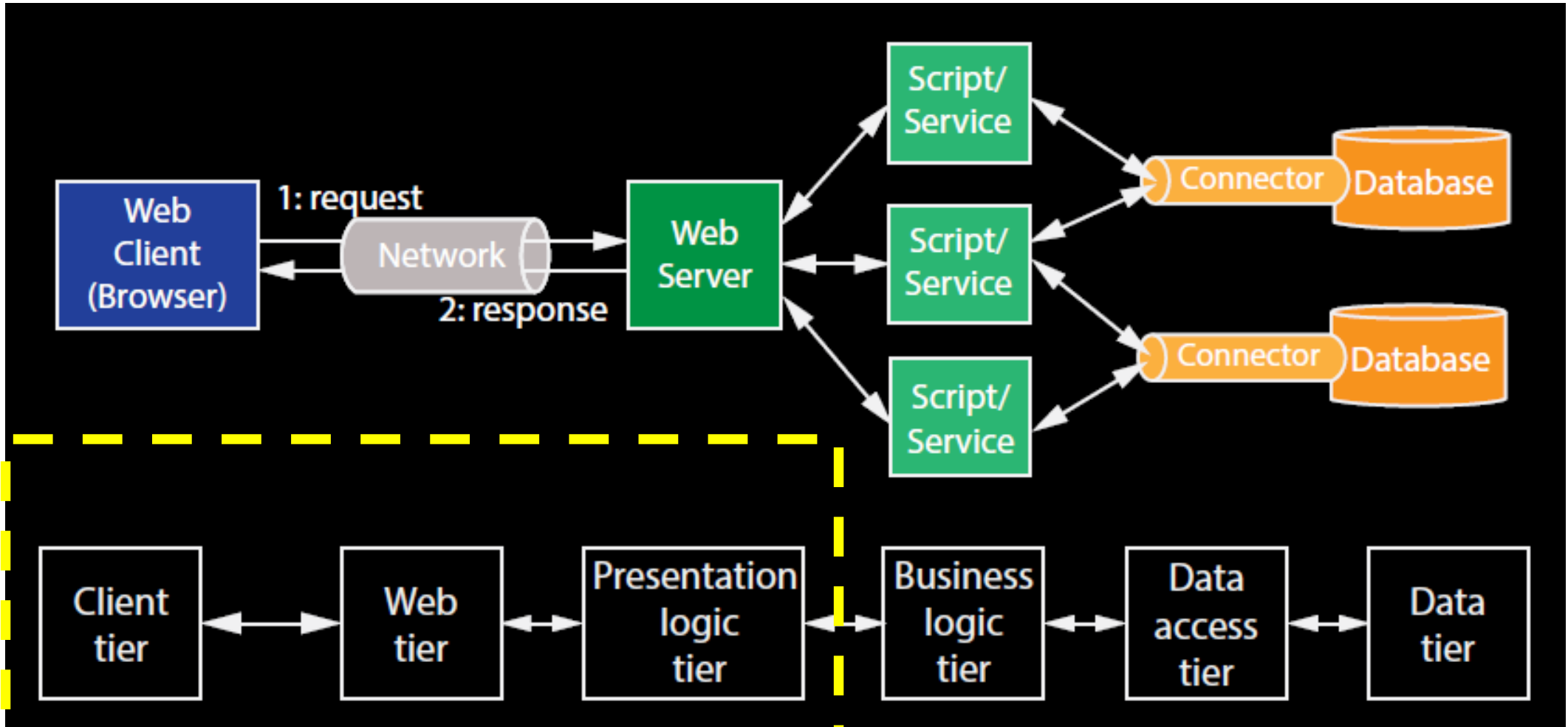
CSS
Page Appearance

Javascript
Page Interactivity

Technologies







Our Focus in this module: CSS

CSS

- CSS is a stylesheet language that describes the presentation of an HTML document.
- CSS describes how elements must be rendered on screen, on paper, or in other media.


```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\20161-INF1802\cont...
File Edit Selection Find View Goto Tools Project Preferences Help
helloworld.html *
1 <html>
2 <head>
3 <style>
4 body {
5     background-color: #d0e4fe;
6 }
7
8 h1 {
9     color: orange;
10    text-align: center;
11 }
12
13 p {
14     font-family: "Times New Roman";
15     font-size: 20px;
16 }
17 </style>
18 </head>
19 <body>
20
21 <h1>My First CSS Example</h1>
22 <p>This is a paragraph.</p>
23
24 </body>
25 </html>
26
Line 11, Column 2 Tab Size: 4 HTML
```

“Hello World !”

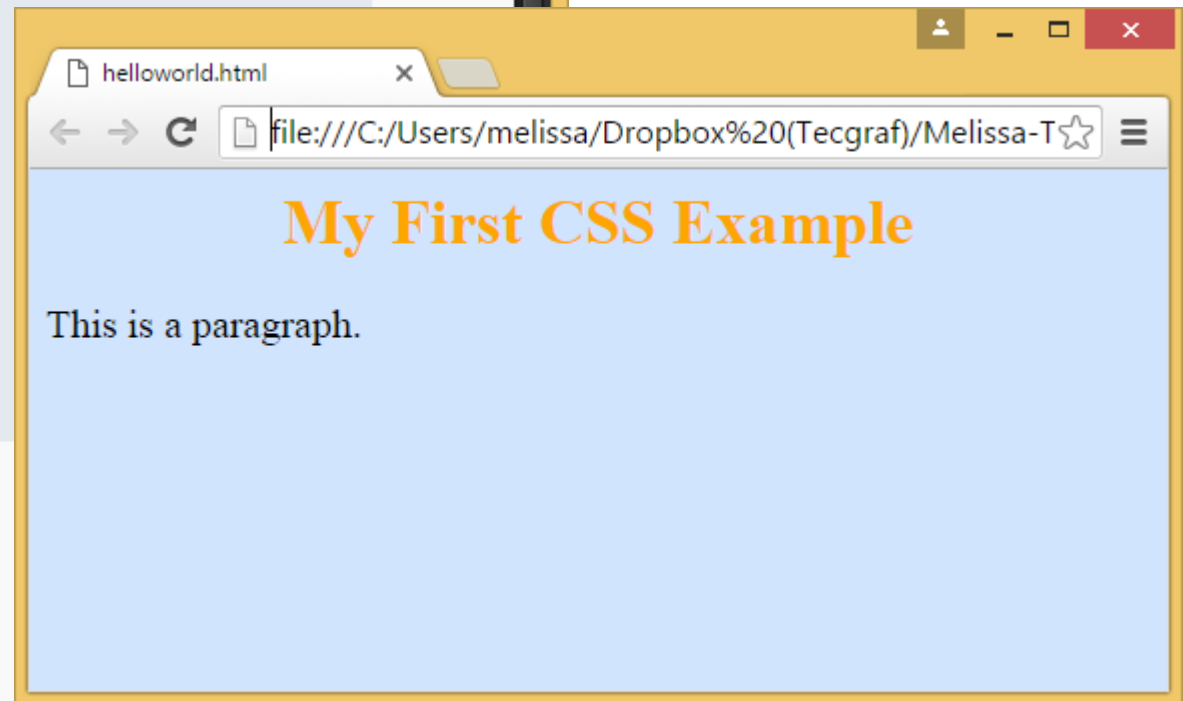
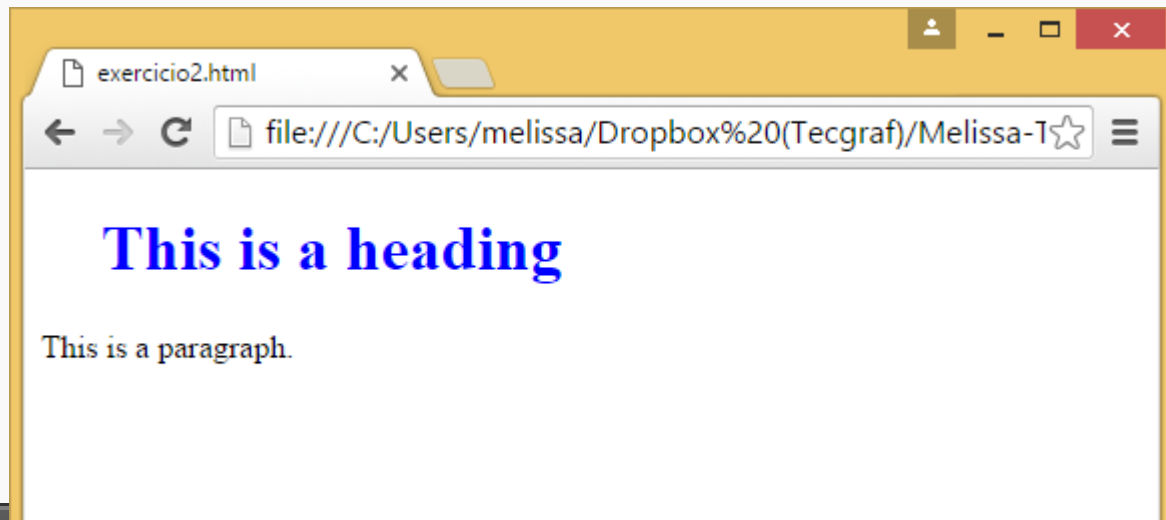


Tabela Hexadecimal de Cores
<http://erikasarti.net/html/tabela-cores/>

Three Ways to Insert CSS

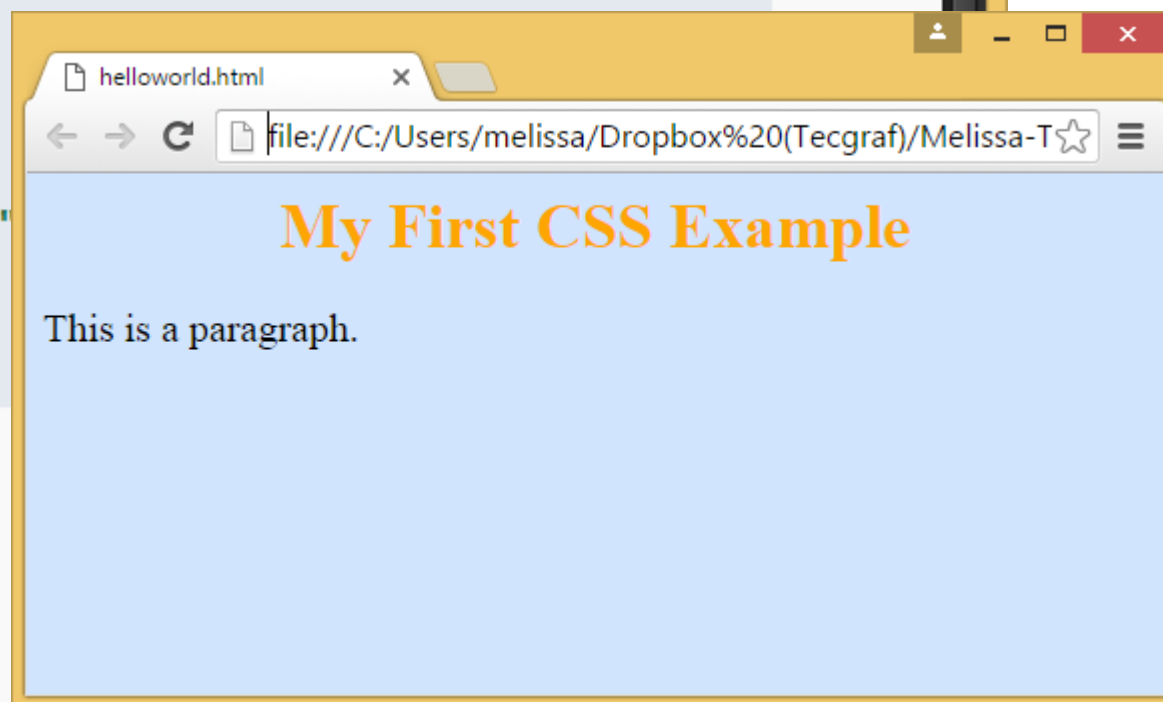
- There are three ways of inserting a style sheet:
 - Inline style
 - Internal style sheet
 - External style sheet

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4 </head>
5 <body>
6
7 <h1 style="color:blue;margin-left:30px;">This is a heading</h1>
8 |
9 <p>This is a paragraph.</p>
10
11 </body>
12 </html>
```



e sheet

```
1 <html>
2 <head>
3 <style>
4 body {
5     background-color: #d0e4fe;
6 }
7
8 h1 {
9     color: orange;
10    text-align: center;
11 }
12
13 p {
14     font-family: "Times New Roman";
15     font-size: 20px;
16 }
17 </style>
18 </head>
19 <body>
20
21 <h1>My First CSS Example</h1>
22 <p>This is a paragraph.</p>
23
24 </body>
25 </html>
26
```

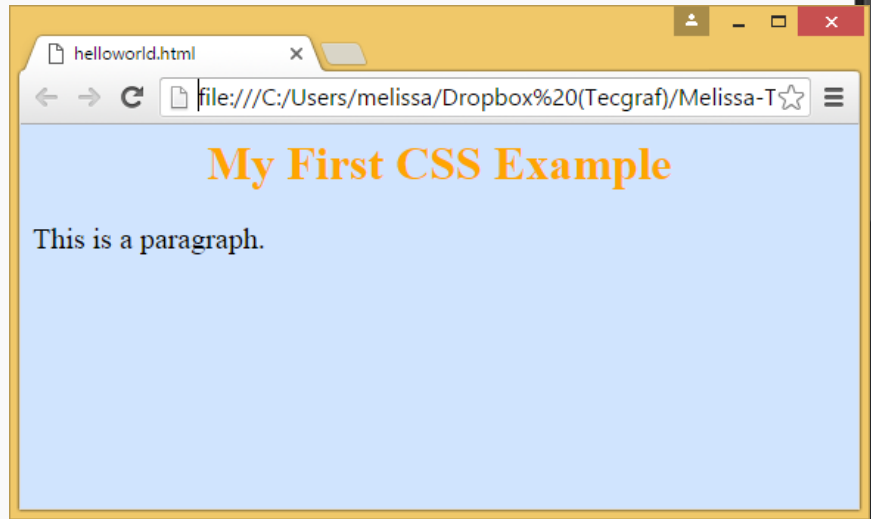


External style sheet

```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\20161-INF1802\...  
File Edit Selection Find View Goto Tools Project Preferences Help  
helloworld.html x mystyle.css x exercicio1.html  
1 <!DOCTYPE html>  
2 <html>  
3  
4 <head>  
5 <link rel="stylesheet" type="text/css" href="mystyle.css">  
6 </head>  
7  
8 <body>  
9  
10 <h1>This is a heading</h1>  
11 <p>This is a paragraph.</p>  
12  
13 </body>  
14 </html>  
3 lines, 73 characters selected
```

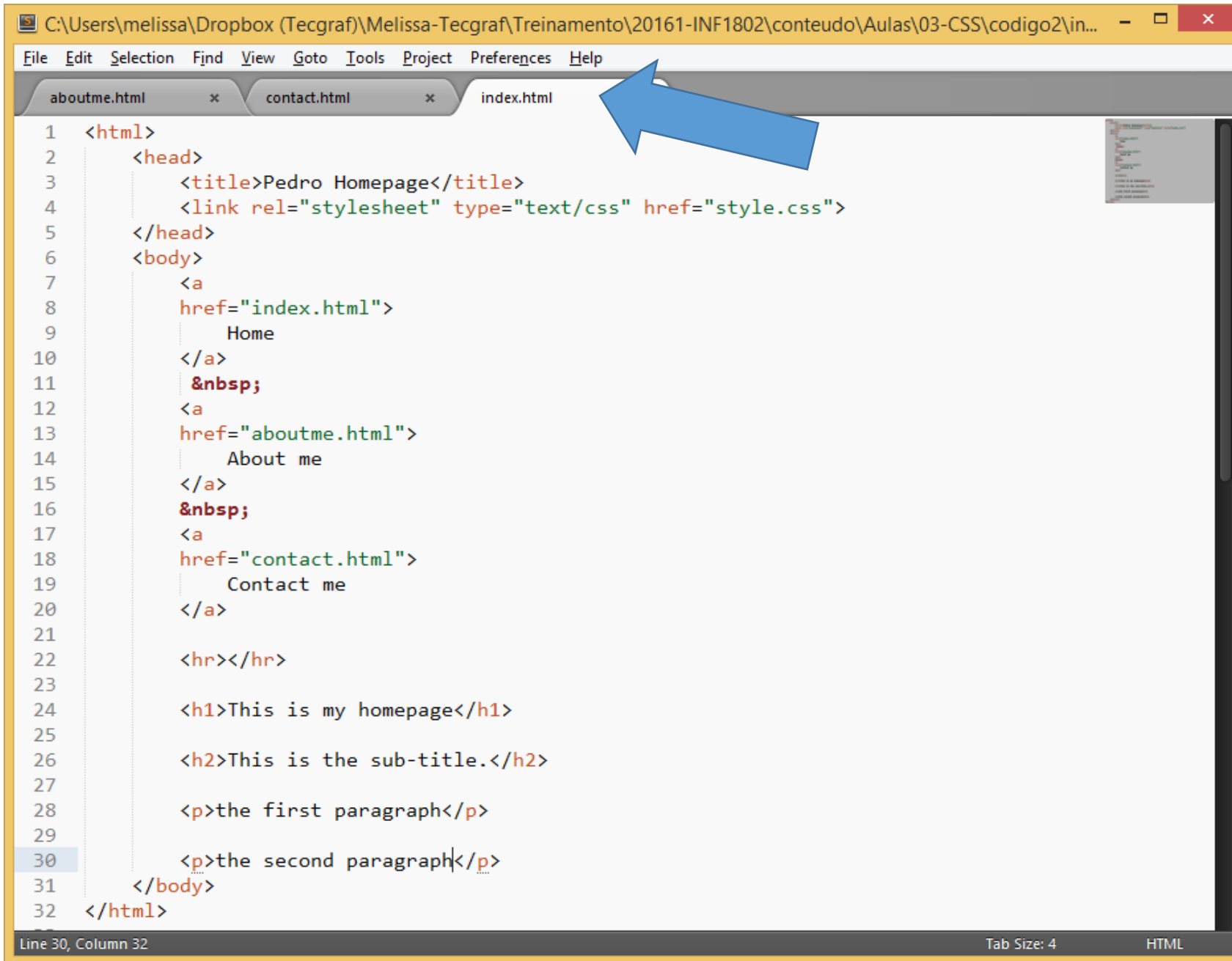
```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\20161-INF1802\...  
File Edit Selection Find View Goto Tools Project Preferences Help  
helloworld.html x mystyle.css x exercicio1.html  
1 body {  
2     background-color: #d0e4fe;  
3 }  
4  
5 h1 {  
6     color: orange;  
7     text-align: center;  
8 }  
9  
10 p {  
11     font-family: "Times New  
12     font-size: 20px;  
13 }
```

Line 13, Column 2 Tab Size: 4 CSS



ONE CSS, MANY HTML Files !

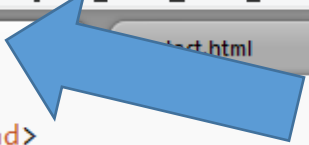
Example

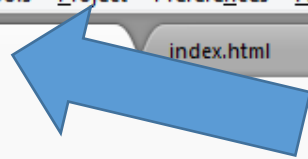


```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\20161-INF1802\conteudo\Aulas\03-CSS\codigo2\in... - □ ×
File Edit Selection Find View Goto Tools Project Preferences Help
aboutme.html × contact.html × index.html
1 <html>
2   <head>
3     <title>Pedro Homepage</title>
4     <link rel="stylesheet" type="text/css" href="style.css">
5   </head>
6   <body>
7     <a
8     href="index.html">
9       Home
10    </a>
11    &nbsp;
12    <a
13    href="aboutme.html">
14      About me
15    </a>
16    &nbsp;
17    <a
18    href="contact.html">
19      Contact me
20    </a>
21
22    <hr></hr>
23
24    <h1>This is my homepage</h1>
25
26    <h2>This is the sub-title.</h2>
27
28    <p>the first paragraph</p>
29
30    <p>the second paragraph</p>
31  </body>
32 </html>
```

Line 30, Column 32 Tab Size: 4 HTML

```
1 <html>
2   <head>
3     <title>Pedro Homepage</title>
4     <link rel="stylesheet" type="text/css" href="style.css">
5   </head>
6   <body>
7     <a
8       href="index.html">
9       Home
10    </a>
11    &nbsp;
12    <a
13      href="aboutme.html">
14      About me
15    </a>
16    &nbsp;
17    <a
18      href="contact.html">
19      Contact me
20    </a>
21    <hr></hr>
22  <div>
23    <h1>All about me</h1>
24  </div>
25  <div>
26    <a href="pedro.png">
27      
31    </a>
32    <h3>This is me !</h3>
```





```
1 <html>
2   <head>
3     <title>Pedro Homepage</title>
4     <link rel="stylesheet" type="text/css" href="style.css">
5   </head>
6   <body>
7     <a
8     href="index.html">
9       Home
10    </a>
11    &nbsp;
12    <a
13    href="aboutme.html">
14      About me
15    </a>
16    &nbsp;
17    <a
18    href="contact.html">
19      Contact me
20    </a>
21    <hr>
22    <h1>
23    My Contact details
24    </h1>
25
26    Here is my address:
27    <ul>
28      <li>133, my street</li>
29      <li>My town</li>
30      <li>My nation</li>
31      <li>Final item in the list</li>
32    </ul>
```


The image shows a code editor window with a menu bar (File, Edit, Selection, Find, View, Goto, Tools, Project, Preferences, Help) and several tabs (aboutme.html, contact.html, style.css, index.html). The main area contains CSS code for a body element. The code is as follows:

```
1  body {  
2      background-color: black;  
3      color:white;  
4  }  
5  
6
```

The status bar at the bottom left indicates "Line 6, Column 1".

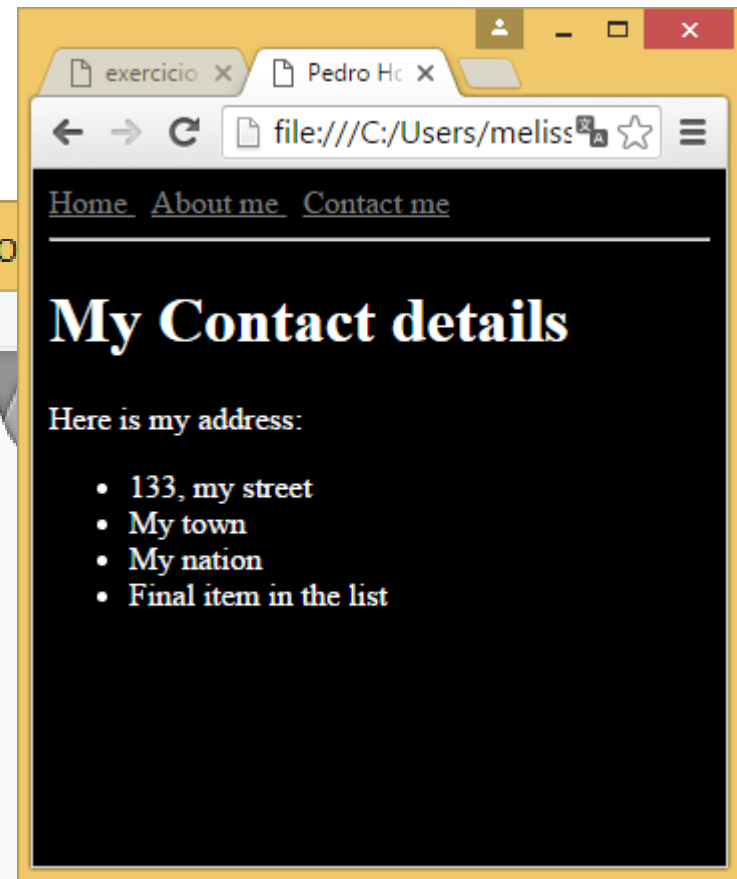
Colors

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

Backgrounds

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

```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento
File Edit Selection Find View Goto Tools Project Preferences Help
aboutme.html contact.html style.css
1 body {
2     background-color: black;
3     color:white;
4 }
5
6 a {
7     color:gray;
8 }
Line 6, Column 1 Tab Size: 4 CSS
```

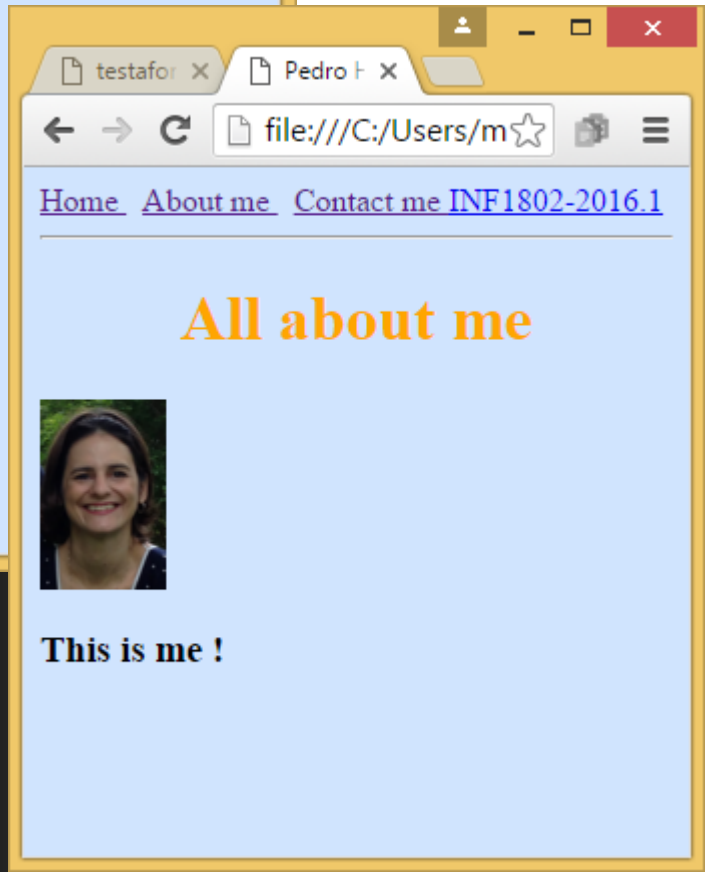
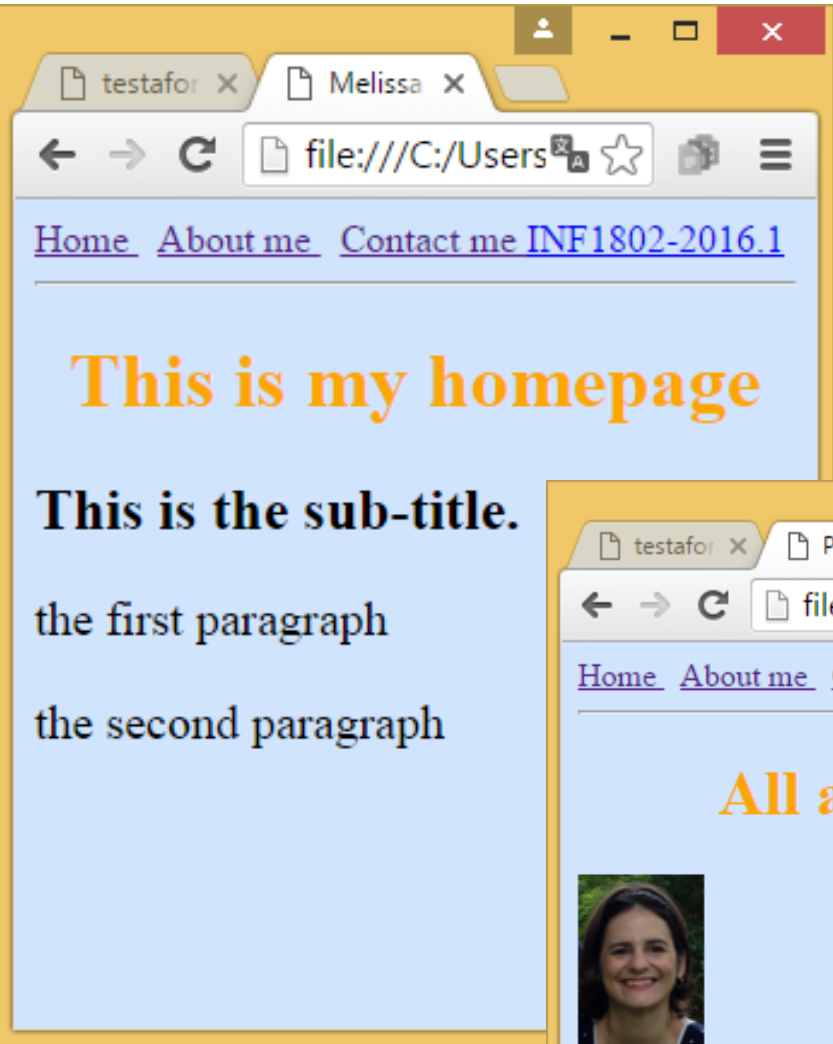


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File Edit Selection Find View Goto Tools F

aboutme.html contact.html style.c

```
1 body {
2     background-color: #d0e4f1;
3 }
4
5 h1 {
6     color: orange;
7     text-align: center;
8 }
9
10 p {
11     font-family: "Times New Roman";
12     font-size: 20px;
13 }
```



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File Edit Selection Find View Goto Tools Project Preferences Help

aboutme.html contact.html style.css * index.html

```
1 body {
2     background-color: white;
3 }
4
5 h1 {
6     color: black;
7     text-align: center;
8 }
9
10 p {
11     font-family: "Times New Roman";
12     font-size: 20px;
13 }
```

Line 2, Column 28 Tab Size: 4 CSS



```
1  body {
2      background-color: white;
3  }
4
5  h1 {
6      color: black;
7      text-align: center;
8  }
9
10 p {
11     font-family: "Arial";
12     font-size: 20px;
13 }
14
15 a {
16
17     color: gray;
18 }
```

This is my homepage

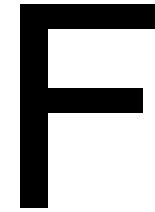
This is the sub-title.

the first paragraph

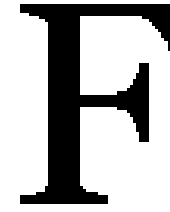
the second paragraph

Fonts

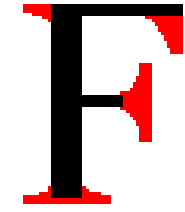
- Sans-serif
- Serif
- Monospaced



Sans-serif



Serif



Serif
(red serifs)

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

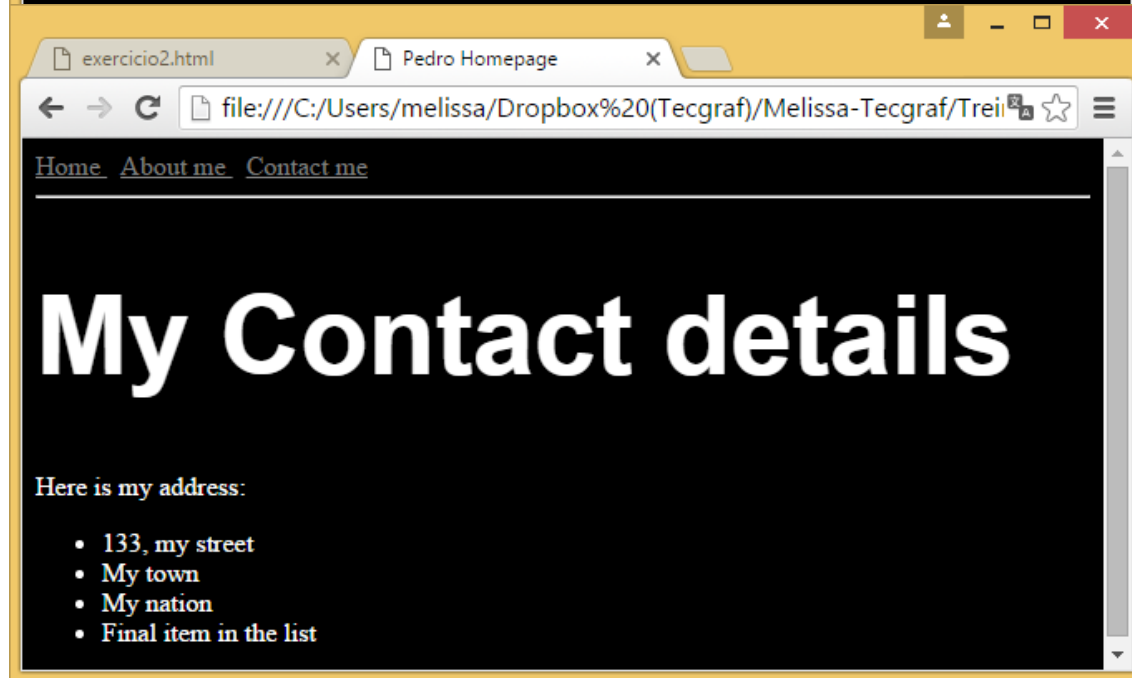
From http://www.w3schools.com/css/css_font.asp

```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\2016...
File Edit Selection Find View Goto Tools Project Preferences Help
aboutme.html contact.html style.css index.html
1 body {
2     background-color: black;
3     color:white;
4 }
5
6 a {
7     color:gray;
8 }
9
10 h1{
11     font-family: serif;
12     font-size: 100pt;
13 }
```



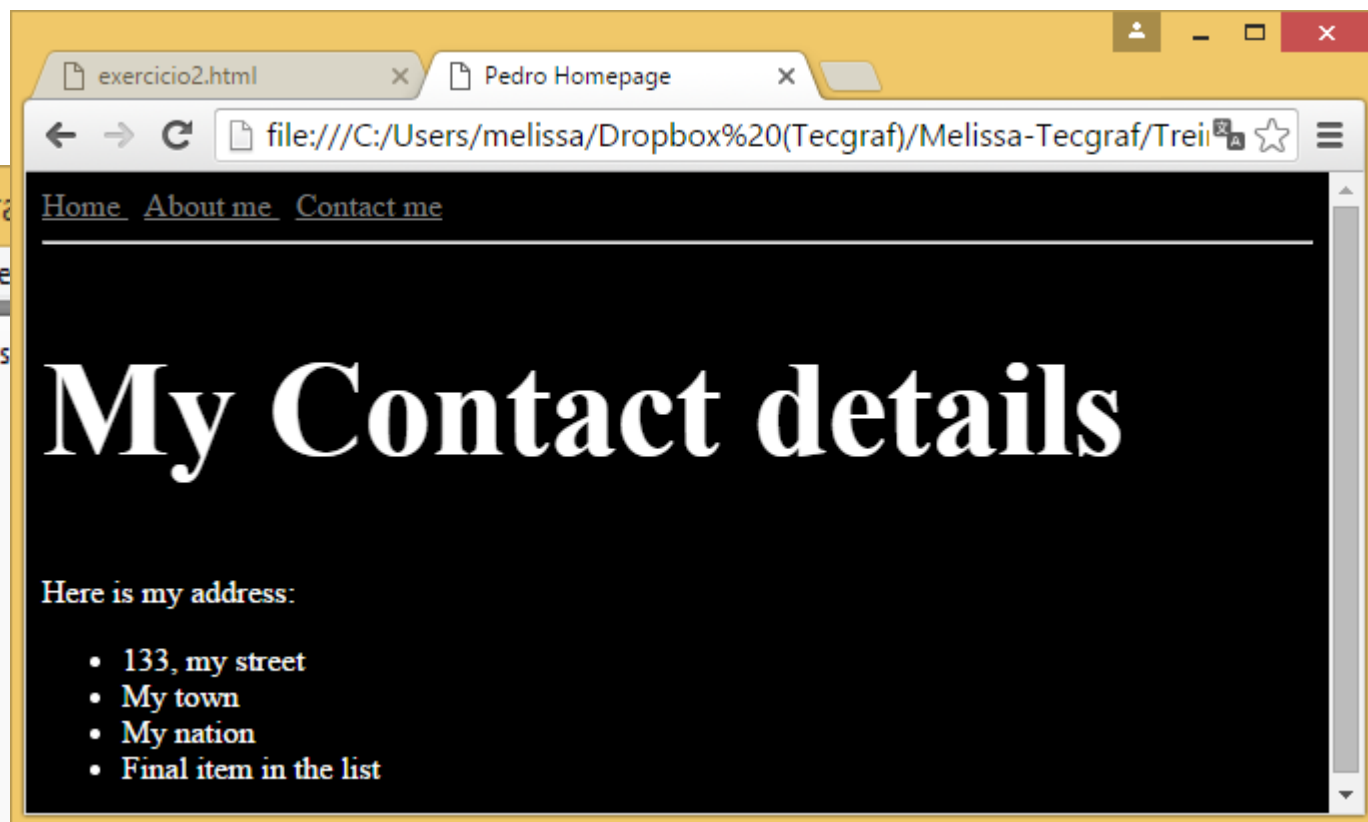
```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\2016...
File Edit Selection Find View Goto Tools Project Preferences Help
aboutme.html contact.html style.css index.html
1 body {
2     background-color: black;
3     color:white;
4 }
5
6 a {
7     color:gray;
8 }
9
10 h1{
11     font-family: sans-serif;
12     font-size: 50pt;
13 }
```

11 characters selected Tab Size: 4 CSS



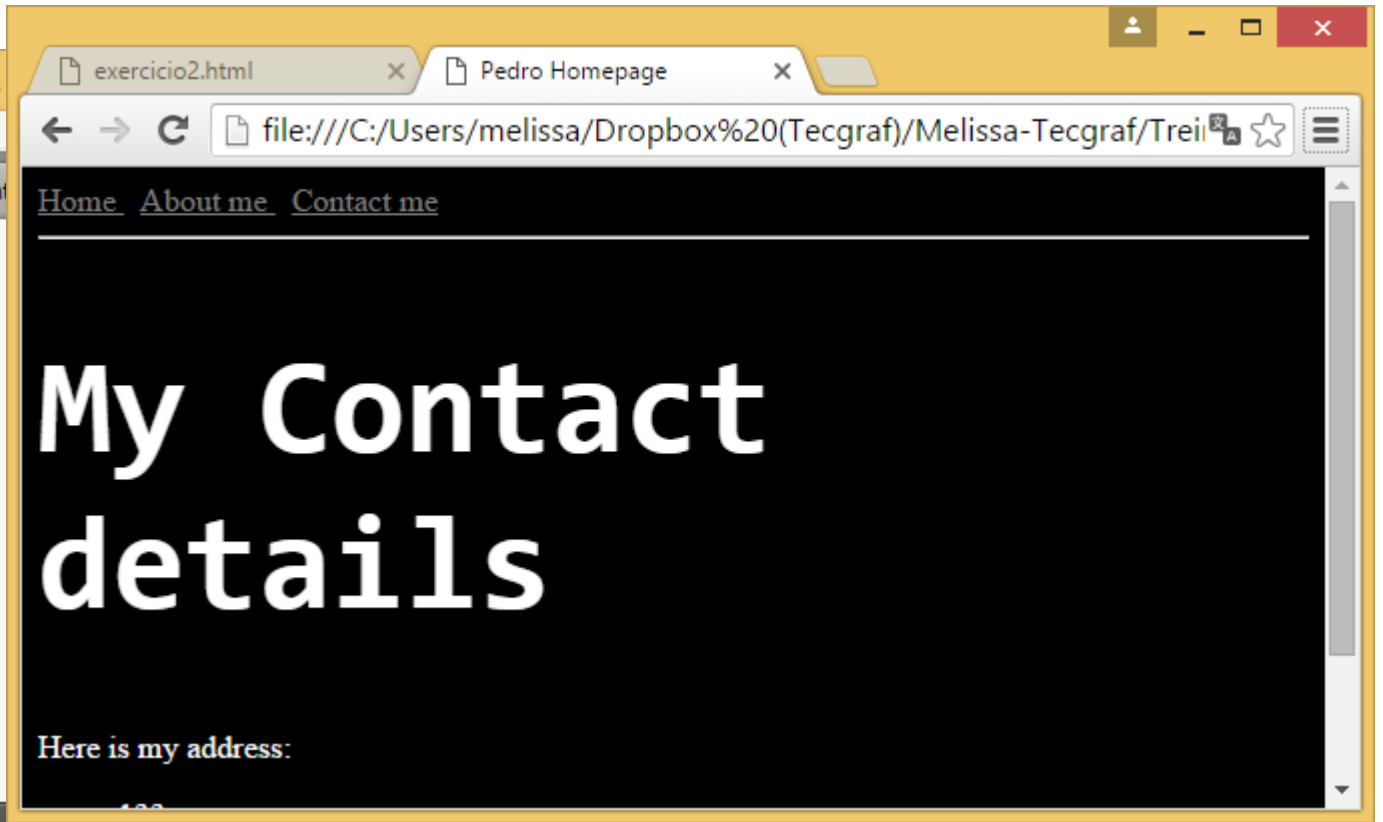
```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf
File Edit Selection Find View Goto Tools Project Pre
aboutme.html contact.html style.cs
1 body {
2     background-color: black;
3     color:white;
4 }
5
6 a {
7     color:gray;
8 }
9
10 h1{
11     font-family: "Times new roman" sans-serif;
12     font-size: 50pt;
13 }
```

Line 11, Column 36 Tab Size: 4 CSS




```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\2016...
File Edit Selection Find View Goto Tools Project Preferences Help
aboutme.html contact.html style.css index.html
1 body {
2     background-color: black;
3     color:white;
4 }
5
6 a {
7     color:gray;
8 }
9
10 h1{
11     font-family: monospace;
12     font-size: 50pt;
13 }
```

23 characters selected Tab Size: 4



Monospace: Every letter has the same width.

Font

- 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, and so on.
- 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: "Times New Roman".

testafonte.html

x

```
1 <html>
2 <head>
3 <style>
4 p.serif {
5     font-family: "Times New Roman", Times, serif;
6 }
7
8 p.sansserif {
9     font-family: Arial, Helvetica, sans-serif;
10 }
11 </style>
12 </head>
13 <body>
14
15 <h1>CSS font-family</h1>
16 <p class="serif">This is a paragraph, shown
17 </p>
18 <p class="sansserif">This is a paragraph, s
19 </body>
20 </html>
```

Line 20, Column 8

testafonte.html

x

file:///C:/Users/melissa/Dropbox%20(

CSS font-family

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

This is a paragraph, shown in the Arial font.

Links

```
style.css
1 body {
2     background-color: black;
3     color:white;
4 }
5
6 a {
7     color:gray;
8     text-decoration: none;
9 }
10
11 a:hover{
12
13     color:black;
14     background:white;
15 }
16
17 h1{
18     font-family: monospace;
19     font-size: 50pt;
20 }
```



Links
http://www.w3schools.com/css/css_link.asp

Tables

Before (without table definition in css file)

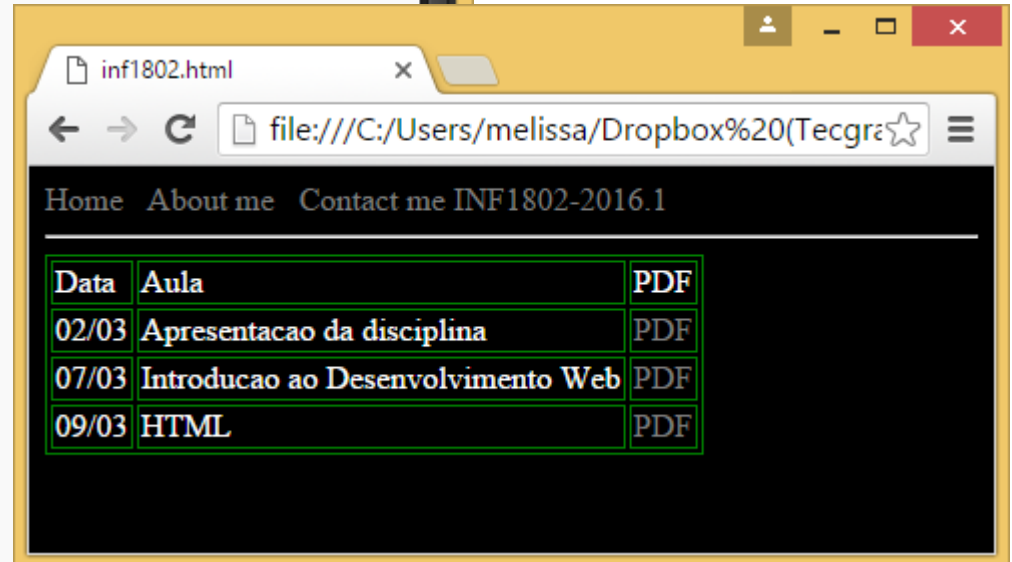
```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\20161-INF1802\contedo
File Edit Selection Find View Goto Tools Project Preferences Help
aboutme.html contact.html index.html inf1802.html x
25 <hr></hr>
26
27 <table>
28 <tr>
29 <td>Data</td>
30 <td>Aula</td>
31 <td>PDF</td>
32 </tr>
33 <tr>
34 <td>02/03</td>
35 <td>Apresentacao da disciplina</td>
36 <td><a href="aula1.pdf">PDF</a></td>
37 </tr>
38 <tr>
39 <td>07/03</td>
40 <td>Introducao ao Desenvolvimento Web</td>
41 <td><a href="aula2.pdf">PDF</a></td>
42 </tr>
43 <tr>
44 <td>09/03</td>
45 <td>HTML</td>
46 <td><a href="aula3.pdf">PDF</a></td>
47 </tr>
48 </table>
49
50
```

Home About me Contact me INF1802-2016.1

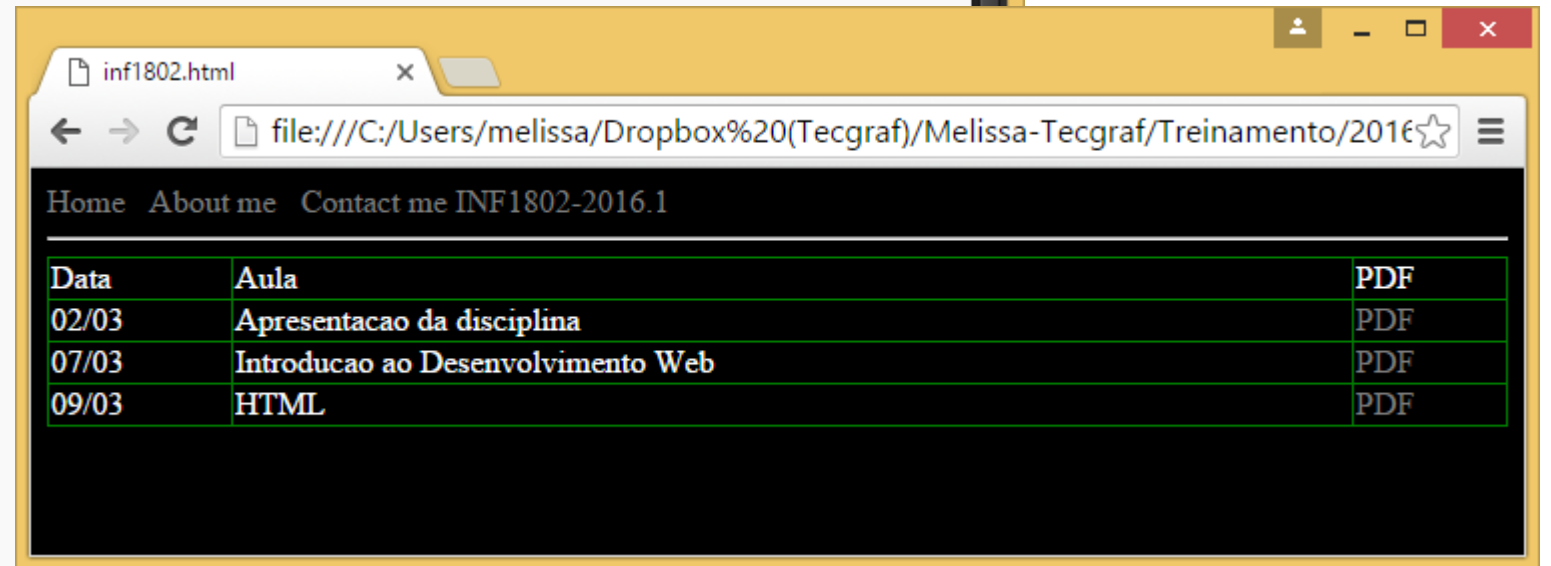
Data	Aula	PDF
02/03	Apresentacao da disciplina	PDF
07/03	Introducao ao Desenvolvimento Web	PDF
09/03	HTML	PDF

```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\20161-INF1802\conteudo\Aulas\...
File Edit Selection Find View Goto Tools Project Preferences Help
aboutme.html contact.html index.html inf1802.html style.css
1 body {
2     background-color: black;
3     color:white;
4 }
5
6 a {
7     color:gray;
8     text-decoration: none;
9 }
10
11 a:hover{
12
13     color:black;
14     background:white;
15 }
16
17 h1{
18     font-family: monospace;
19     font-size: 50pt;
20 }
21
22 table, th, td {
23     border: 1px solid green;
24 }
```

After (with table definition in css file)

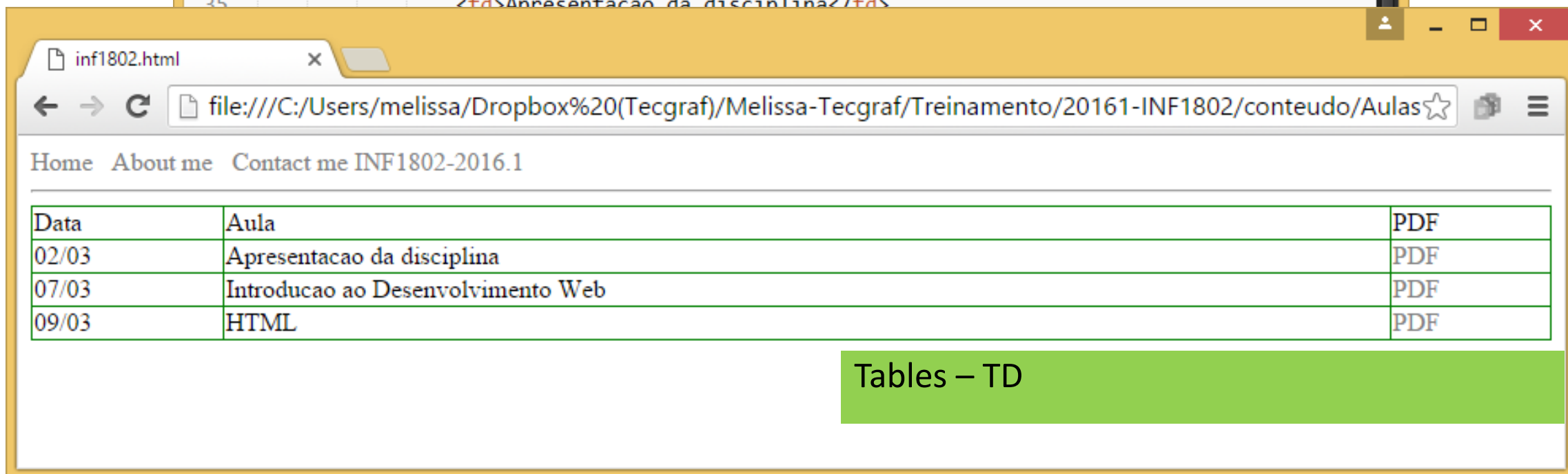



```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\20161-INF1802\conteudo\Aulas\...
File Edit Selection Find View Goto Tools Project Preferences Help
aboutme.html contact.html index.html inf1802.html style.css
11 a:hover{
12
13     color:black;
14     background:white;
15 }
16
17 h1{
18     font-family: monospace;
19     font-size: 50pt;
20 }
21
22 table, td, th {
23     border: 1px solid green;
24 }
25
26 table {
27     border-collapse: collapse;
28     width: 100%;
29 }
30
31 th {
32     height: 50px;
33 }
34
35
8 lines, 83 characters selected
```



Tables – more !!! ***
http://www.w3schools.com/css/css_table.asp

```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\20161-INF1802\conteudo\Aulas\04-CSS\codi...
File Edit Selection Find View Goto Tools Project Preferences Help
inf1802.html * style.css *
25 <hr></hr>
26
27 <table>
28 <tr>
29 <td>Data</td>
30 <td>Aula</td>
31 <td>PDF</td>
32 </tr>
33 <tr>
34 <td>02/03</td>
35 <td>Apresentacao da disciplina</td>
```



Tables – TD

C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\20161-INF1802\conteudo\Aulas\04-CSS\codi...

File Edit Selection Find View Goto Tools Project Preferences Help

inf1802.html style.css

```
25 <hr></hr>
26
27 <table>
28   <tr>
29     <th>Data</th>
30     <th>Aula</th>
31     <th>PDF</th>
32   </tr>
33   <tr>
34     <td>02/03</td>
35     <td>Apresentacao da disciplina
36     <td>PDF
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
```

5 lines, 84 characters selected

Tab Size: 4 HTML

inf1802.html

file:///C:/Users/melissa/Dropbox%20(Tecgraf)/Melissa-Tecgraf/Treinamento/20161-INF1802/conteudo/Aulas

Home About me Contact me INF1802-2016.1

Data	Aula	PDF
02/03	Apresentacao da disciplina	PDF
07/03	Introducao ao Desenvolvimento Web	PDF
09/03	HTML	PDF

Tables – TH

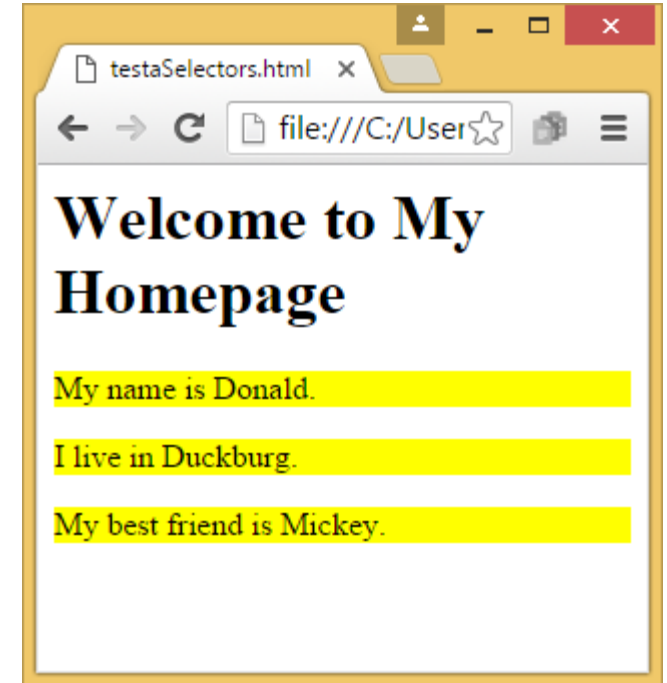
Exercício

- Faça uma página em HTML com estilo CSS para organização do material entregue em seu projeto.
- As colunas devem ter um número sequencial, uma descrição do material e um link que permita fazer download do arquivo.
- Cada linha da tabela terá um material. Ex: Apresentação em PPT do projeto; Storyboards; Mindmaps; Mockups digitais.

Selectors

In CSS, selectors are patterns used to select the element(s) you want to style.

```
1 <html>
2 <head>
3 <style>
4 p {
5     background-color: yellow;
6 }
7 </style>
8 </head>
9 <body>
10
11 <h1>Welcome to My Homepage</h1>
12
13 <div>
14     <p>My name is Donald.</p>
15     <p>I live in Duckburg.</p>
16 </div>
17
18 <p>My best friend is Mickey.</p>
19
20 </body>
21 </html>
```



element

Example: p

Selects all <p> elements

```
1 <html>
2 <head>
3 <style>
4 .center {
5     text-align: center;
6     color: red;
7 }
8
9 </style>
10 </head>
11 <body>
12
13 <h1 class="center">This heading will be affected</h1>
14 <p class="center">This paragraph will be red and center-aligned.</p>
15 <p>This paragraph will not be affected.</p>
16
17 </body>
18 </html>
19
```

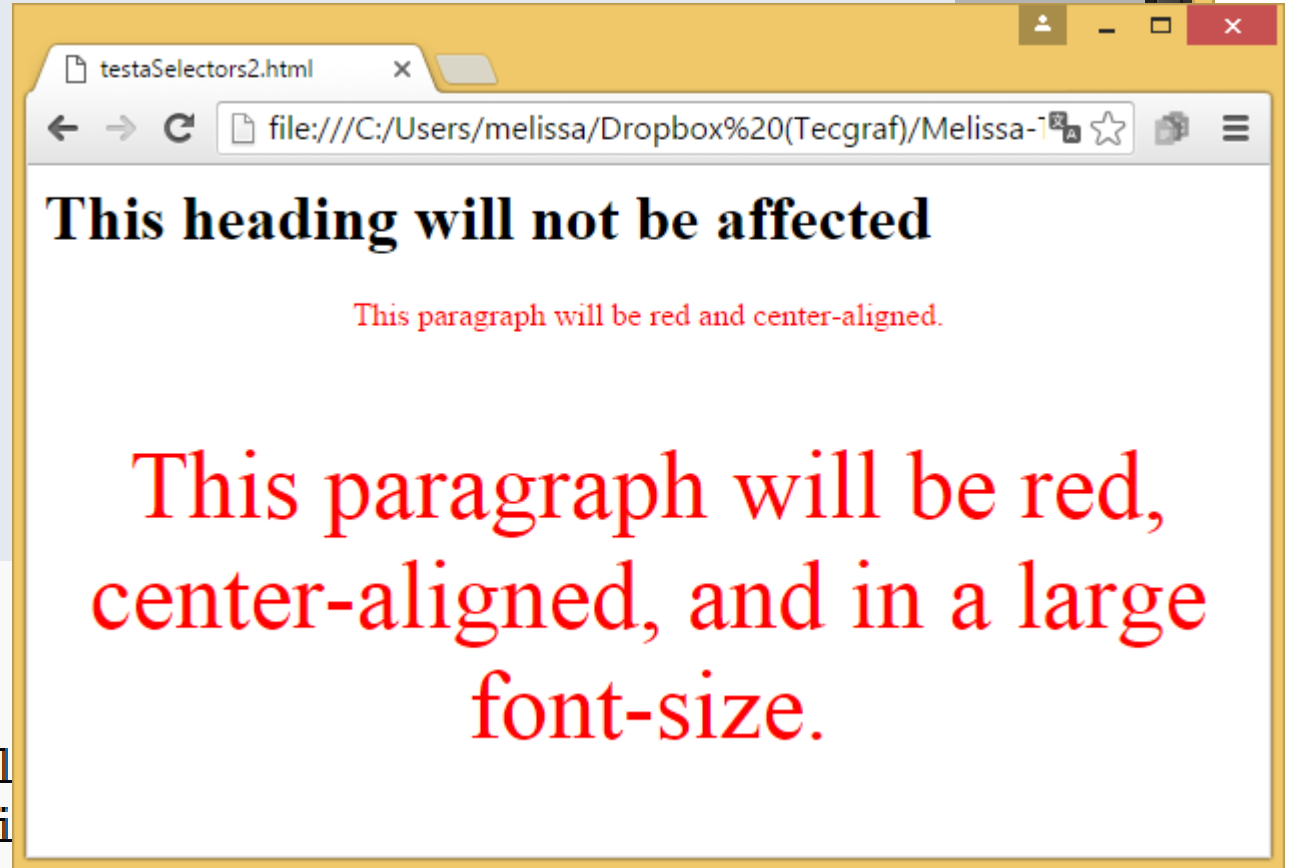


.class

Example: .intro

Selects all elements with class="intro"

```
1 <html>
2 <head>
3 <style>
4 p.center {
5     text-align: center;
6     color: red;
7 }
8
9 p.large {
10    font-size: 300%;
11 }
12 </style>
13 </head>
14 <body>
15
16 <h1 class="center">This heading wil
17 <p class="center">This paragraph wi
18 <p class="center large">This paragraph will be red, center-aligned,
    and in a large font-size.</p>
19
20 </body>
21 </html>
22
```

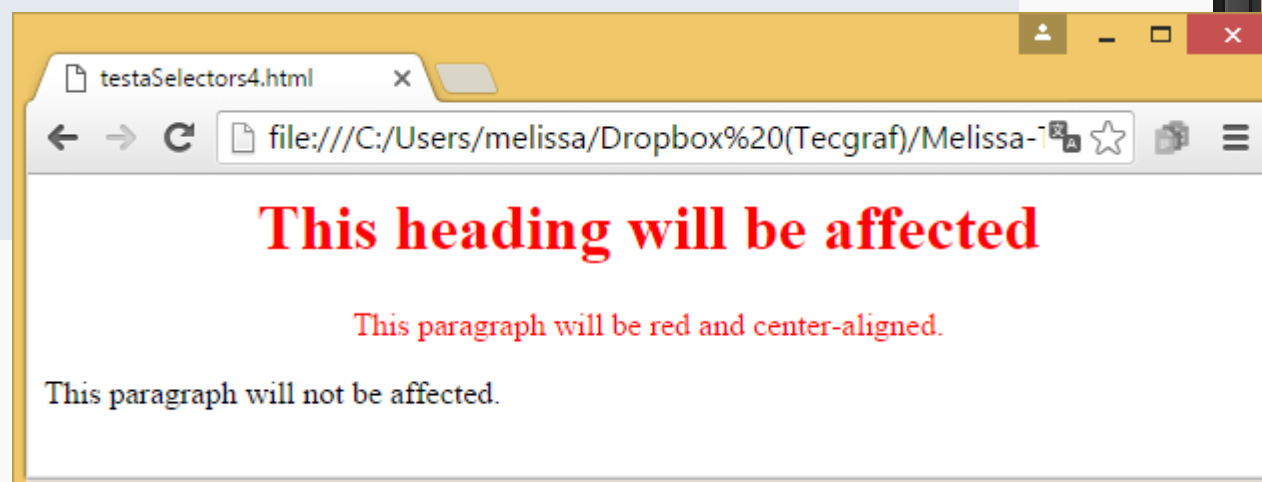


.class

You can use more than one class !!!

testaSelectors4.html

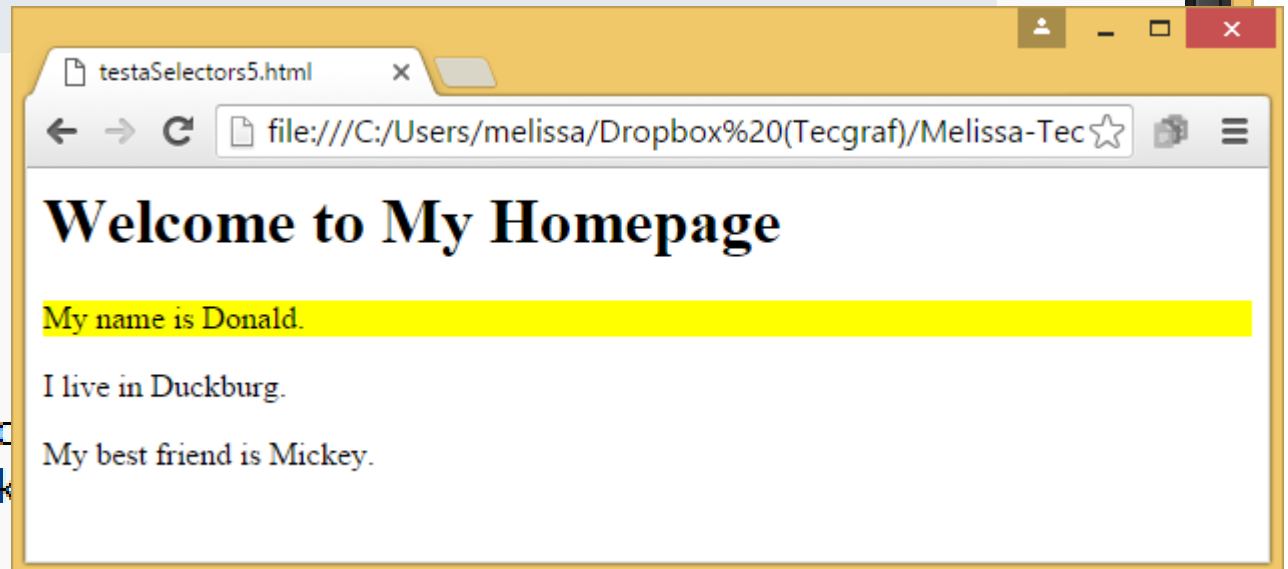
```
1 <html>
2 <head>
3 <style>
4 .center {
5     text-align: center;
6     color: red;
7 }
8
9 </style>
10 </head>
11 <body>
12
13 <div class="center">
14 <h1>This heading will be affected</h1>
15 <p>This paragraph will be red and center-aligned.</p>
16 </div>
17 <p>This paragraph will not be affected.</p>
18
19 </body>
20 </html>
21
```



.class

Apply to DIV tag

```
1 <html>
2 <head>
3 <style>
4 #firstname {
5     background-color: yellow;
6 }
7 </style>
8 </head>
9 <body>
10
11 <h1>Welcome to My Homepage</h1>
12
13 <div class="intro">
14     <p id="firstname">My name is Donald.</p>
15     <p id="hometown">I live in Duckburg.</p>
16 </div>
17
18 <p>My best friend is Mickey.</p>
19
20 </body>
21 </html>
22
```



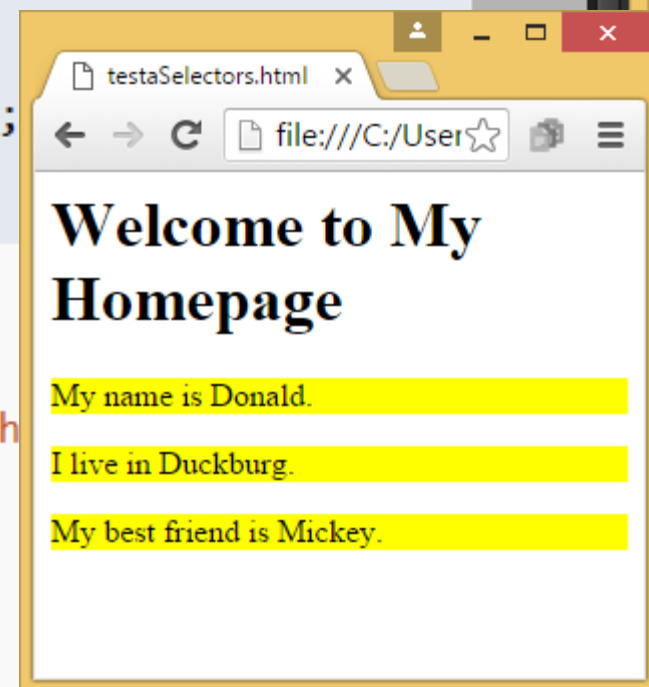
#id

Example: #firstname

Selects the element with id="firstname"

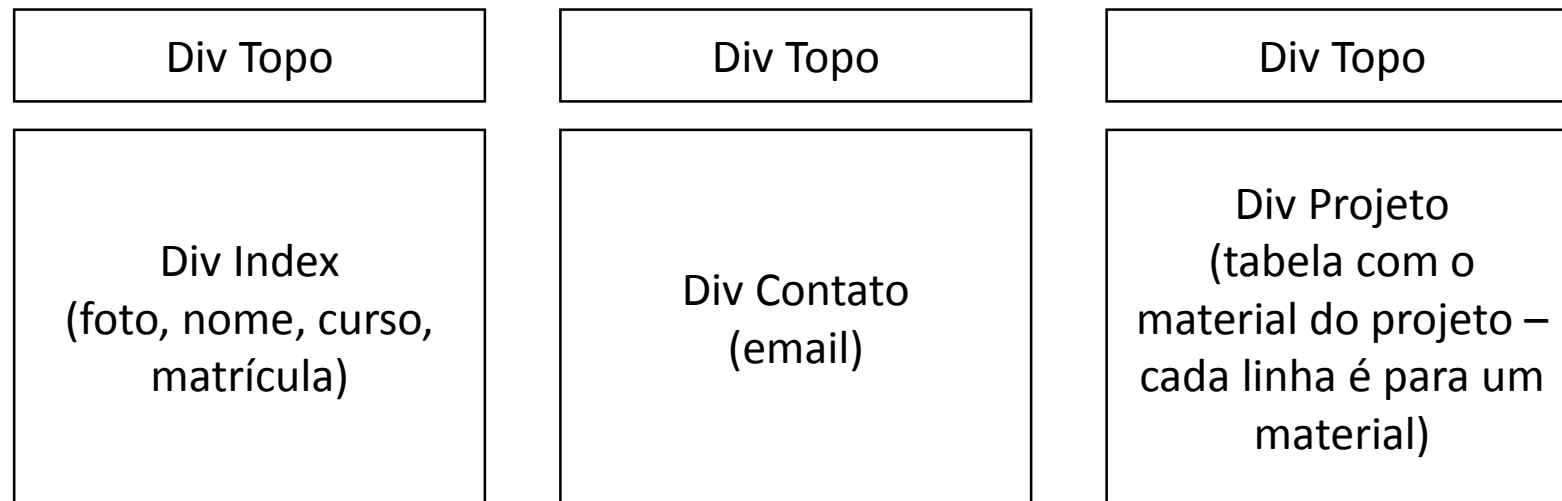
```
1 <html>
2 <head>
3 <style>
4 p {
5     background-color: yellow;
6 }
7 </style>
8 </head>
9 <body>
10
11 <h1>Welcome to My Homepage</h1>
12
13 <div>
14     <p id="firstname">My name is
15     <p id="hometown">I live in D
16 </div>
17
18 <p>My best friend is Mickey.</p>
19
20 </body>
21 </html>
```

```
1 <html>
2 <head>
3 <style>
4 p {
5     background-color: yellow;
6 }
7 </style>
8 </head>
9 <body>
10
11 <h1>Welcome to My Homepage</h1>
12
13 <div>
14     <p>My name is Donald.</p>
15     <p>I live in Duckburg.</p>
16 </div>
17
18 <p>My best friend is Mickey.</p>
19
20 </body>
21 </html>
```



Exercício

- No exercício da sua homepage, coloque a navbar em um div e o conteúdo de cada página em outro div.
- Defina 4 classes: uma para cada div (topo – navbar, conteúdo do index, conteúdo do contato, conteúdo do projeto).
- Defina o estilo para as fontes (body), os links (tratando do hover), os parágrafos, os headings e para a table



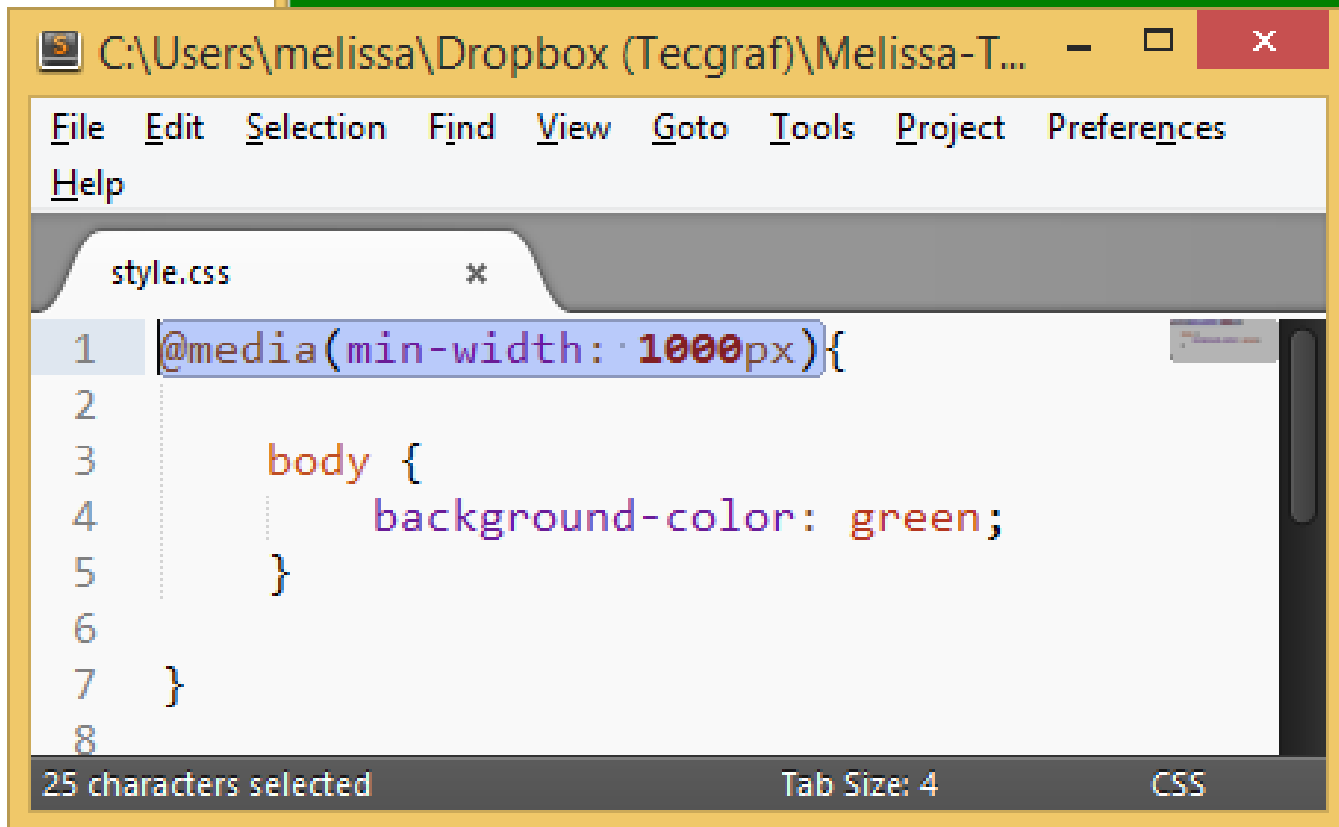
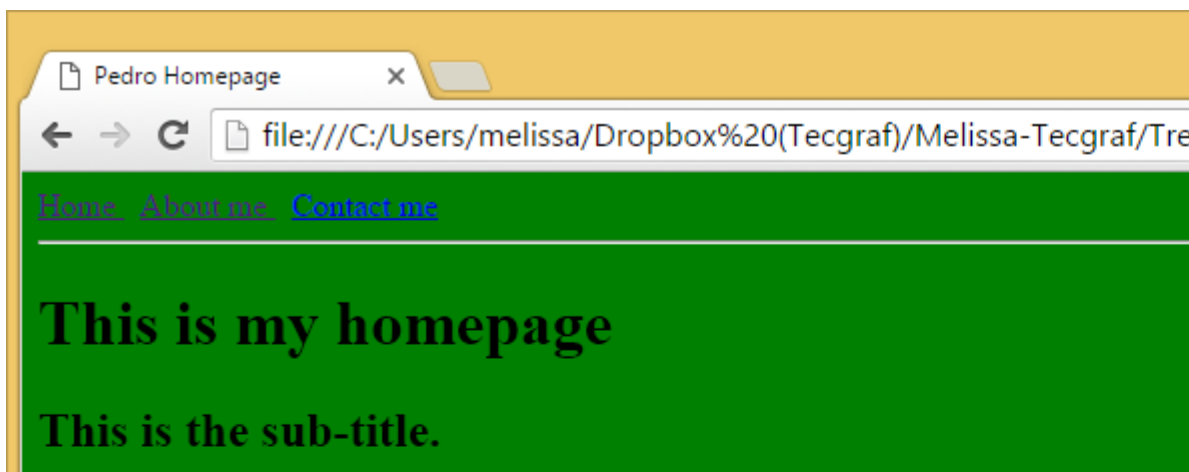
More ...

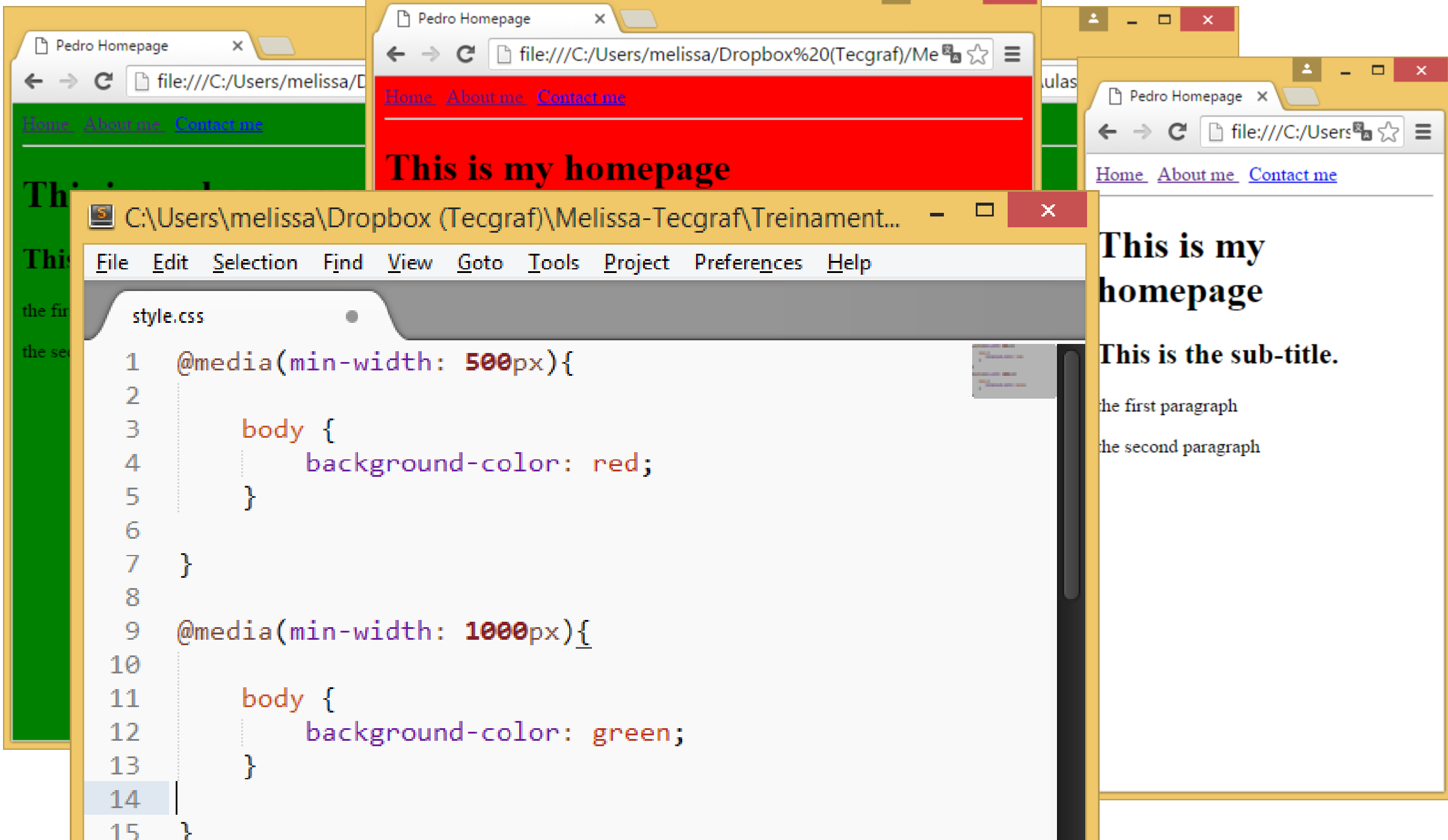
- Margins
 - http://www.w3schools.com/css/css_margin.asp
- Padding
 - http://www.w3schools.com/css/css_padding.asp
- Height and Width
 - http://www.w3schools.com/css/css_dimension.asp
- Lists
 - http://www.w3schools.com/css/css_list.asp
- Box/ Div
 - http://www.w3schools.com/css/tryit.asp?filename=trycss_boxmodel
- Classes

Responsive

Responsive web page

- Responsive web page aims to make the best use of the available screen space.
- Ex. <http://www.londoninternational.ac.uk/>





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

This is my homepage

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

This is my homepage

This is the sub-title.

the first paragraph

the second paragraph

File Edit Selection Find View Goto Tools Project Preferences Help

style.css

```
1 @media(min-width: 500px){
2
3     body {
4         background-color: red;
5     }
6
7 }
8
9 @media(min-width: 1000px){
10
11     body {
12         background-color: green;
13     }
14
15 }
```

C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treiname

Edit Selection Find View Goto Tools Project Preferences Help

style.css

index.html

```
href="contact.html">
```

```
  Contact me
```

```
</a>
```

```
<hr></hr>
```

```
<div class="responsive">column 1</div>
```

```
<div class="responsive">column 2</div>
```

```
</body>
```

```
</html>
```

4, Column 1

Tab Size: 4

HTML

style.css

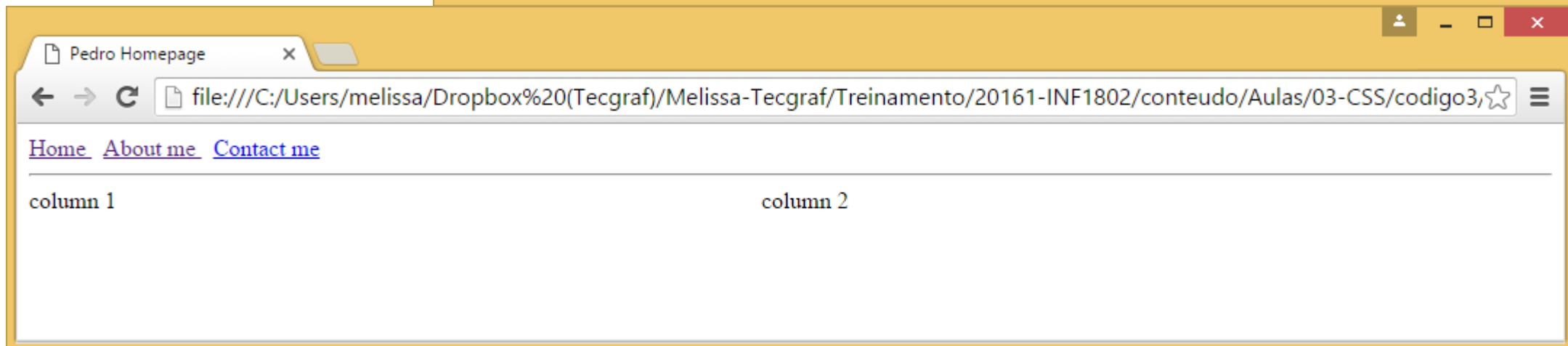
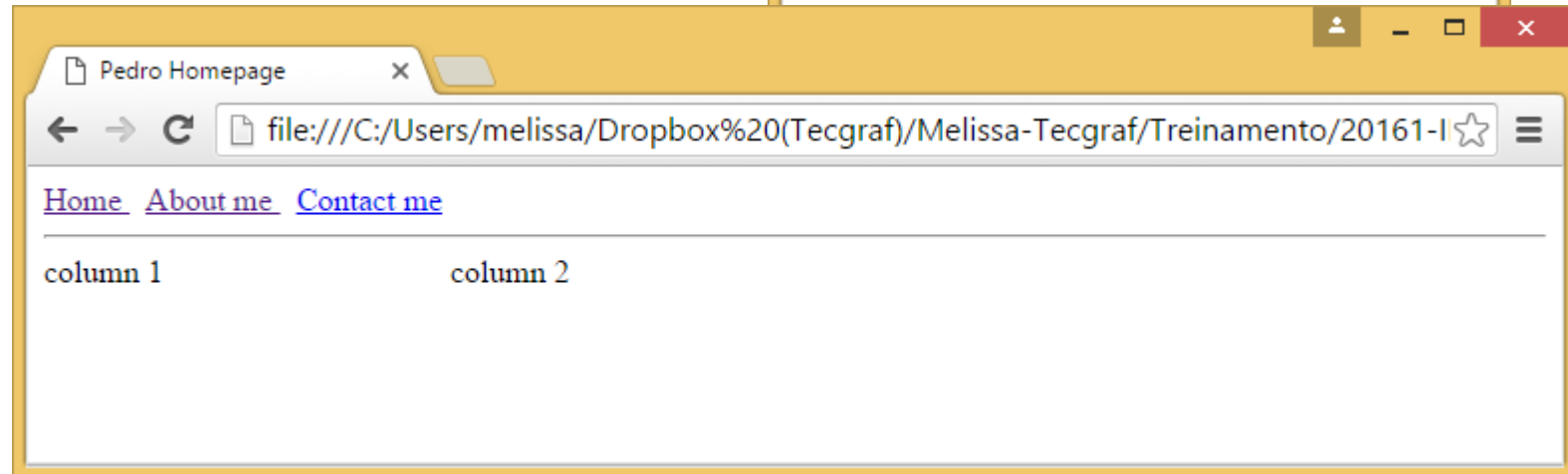
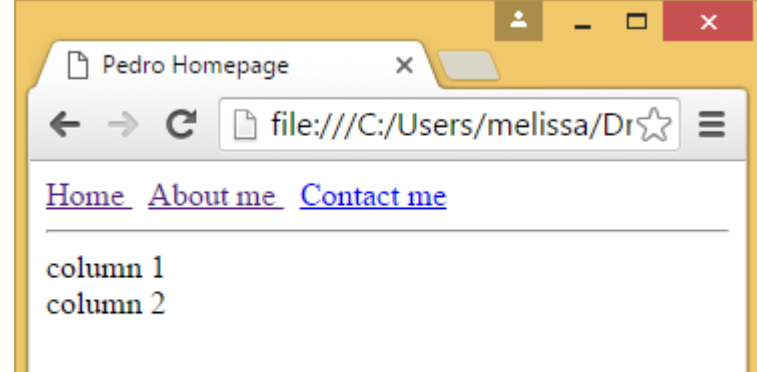
index.html

```
1 @media(min-width: 750px){
2     .responsive{
3         display:inline-block;
4         width: 200px;
5     }
6 }
7
8 @media(min-width: 1000px){
9     .responsive{
10        display:inline-block;
11        width: 500px;
12    }
13
14 }
15
```

Line 1, Column 21

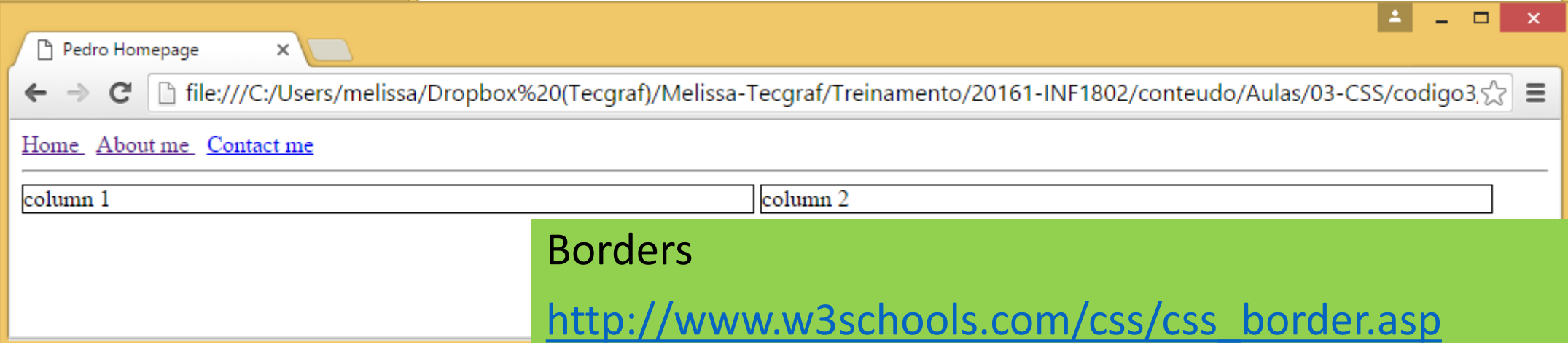
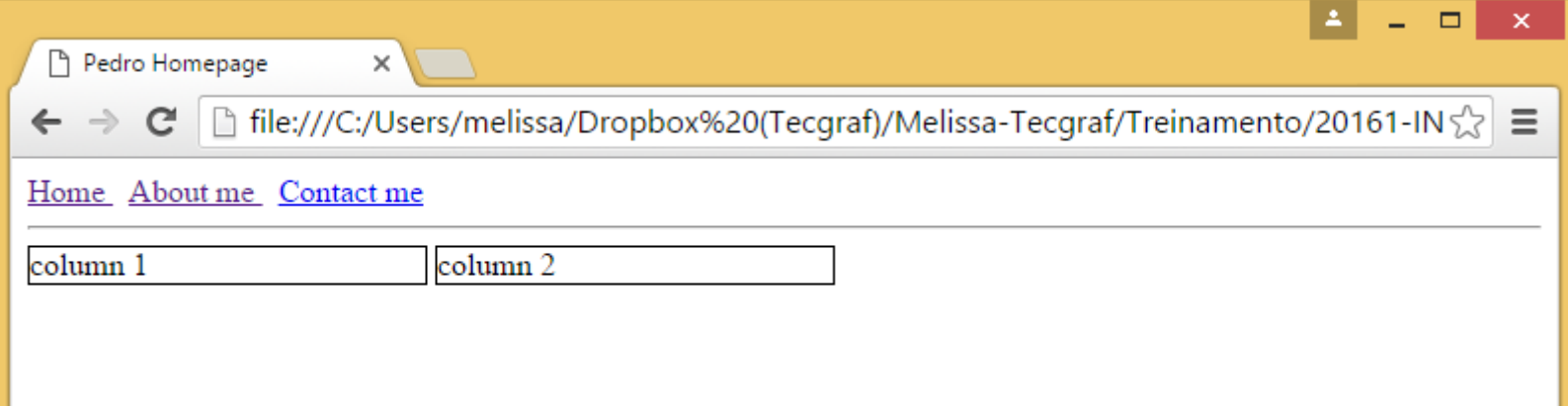
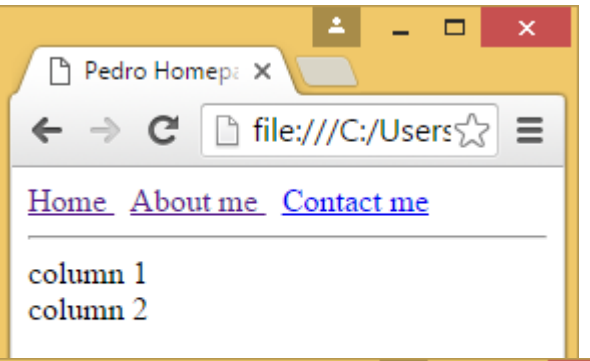
Tab Size: 4

CSS



```
1 @media(min-width: 750px){
2   .responsive{
3     display:inline-block;
4     width: 200px;
5     border:1px solid black;
6   }
7 }
8
9 @media(min-width: 1000px){
10  .responsive{
11    display:inline-block;
12    width: 500px;
13    border:1px solid black;
14  }
15
```

23 characters selected



Borders

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

Exercício

- Continue o exercício anterior fazendo com que sua homepage fique *responsive*.