

HTML

INF1802

Profa. Melissa Lemos



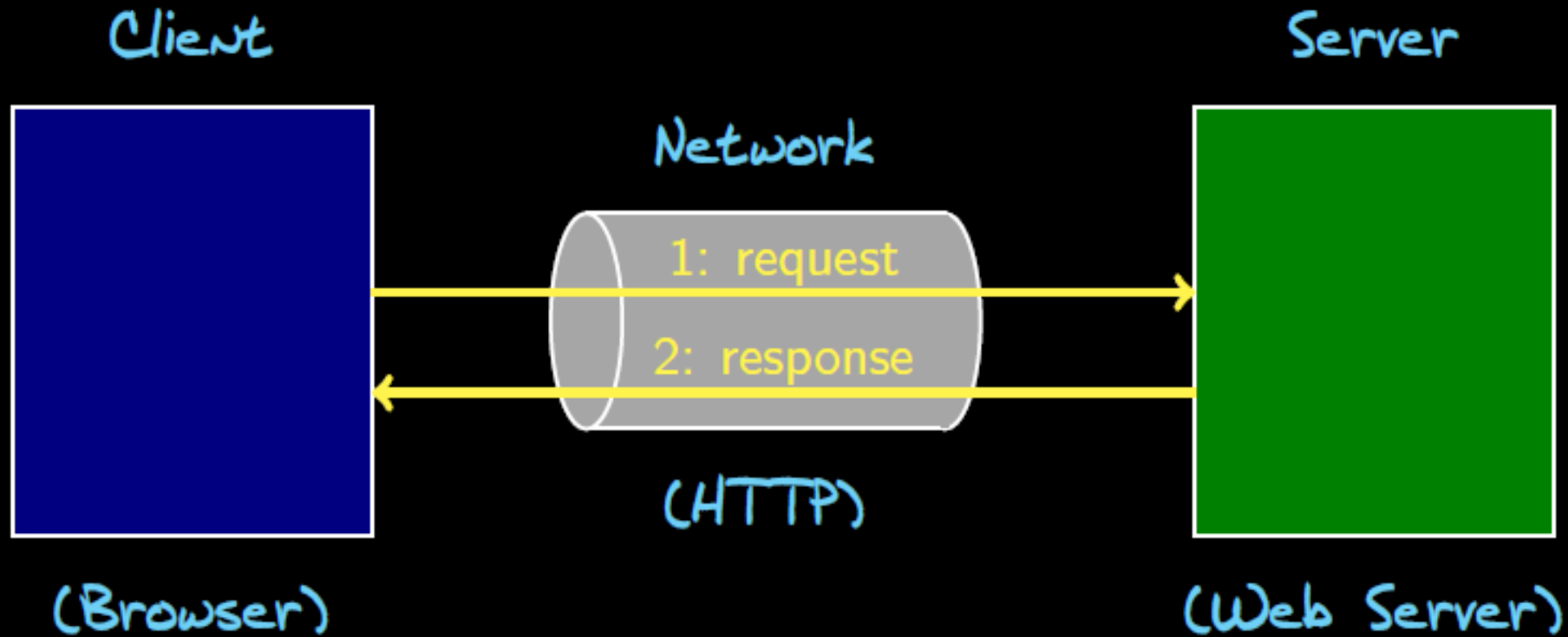
Outline

- HTML – The language
- Hello World
- Main tags

Reference

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

Client-Server Model





client



server



WEB PAGE

What most people see?
The rendered page.

What programmers see?
The source code.



O INSTITUTO

TRÊS DÉCADAS DE INOVAÇÃO NA RELAÇÃO UNIVERSIDADE-EMPRESA

[SAIBA MAIS](#)



CLOUDSCAPE BRAZIL 2015

O Cloudscape Brazil 2015 ocorrerá no Rio de

SEMINÁRIO - MIDDLEWARE PARA A INTERNET DAS

Prof. Markus Endler do Departamento de

SEMINÁRIO - DESAFIOS DE PESQUISA NAS ÁREAS DE

Profa. Silvana da UFRI apresenta seminário no

```
www.tecgraf.puc-rio.br/pt X view-source:www.tecgraf.puc-rio.br/pt/index.html
view-source:www.tecgraf.puc-rio.br/pt/index.html
1 <!DOCTYPE HTML>
2 <!--
3     Catalyst by Pixelarity
4     pixelarity.com @pixelarity
5     License: pixelarity.com/license
6 -->
7 <html>
8     <head>
9         <title> </title>
10        <meta http-equiv="content-type" content="text/html; charset=utf-8" />
11        <meta name="description" content="" />
12        <meta name="keywords" content="" />
13        <!--[if lte IE 8]><script src="../css/ie/html5shiv.js"></script><![endif]-->
14        <script src="../js/jquery.min.js"></script>
15        <script src="../js/jquery.dropotron.min.js"></script>
16        <script src="../js/flickity.pkgd.min.js"></script>
17        <script src="../js/skel.min.js"></script>
18        <script src="../js/skel-layers.min.js"></script>
19        <script src="../js/wrapText.js"></script>
20        <script src="../js/email.js"></script>
21        <script src="../js/init.js"></script>
22
23        <!--<noscript>-->
24            <link rel="stylesheet" href="../css/skel.css" />
25            <link rel="stylesheet" href="../css/style.css" />
26            <link rel="stylesheet" href="../css/style-wide.css" />
27        <!--</noscript>-->
28            <link rel="stylesheet" href="../css/flickity.css" />
29
30        <!--[if lte IE 8]><link rel="stylesheet" href="../css/ie/v8.css" /><![endif]-->
31    </head>
32    <body>
33
34        <!-- Header -->
35        <header id="header" class="small">
36            <div class="container">
37                <h1><a href="index.html"></a></h1>
38                <nav id="nav">
39                    <ul>
40                        <li>
41                            <a href="index-instituto.html">O Instituto</a>
42                        </li>
43                        <li>
44                            <a href="index-produtos-tecnologia.html">Produtos e Tecnologias</a>
45                    </ul>
46                </nav>
47            </div>
48        </header>
49    </body>
50 </html>
```


How to display contents on a
web page?

How to make that content look
good?

How to make that content
interactive?

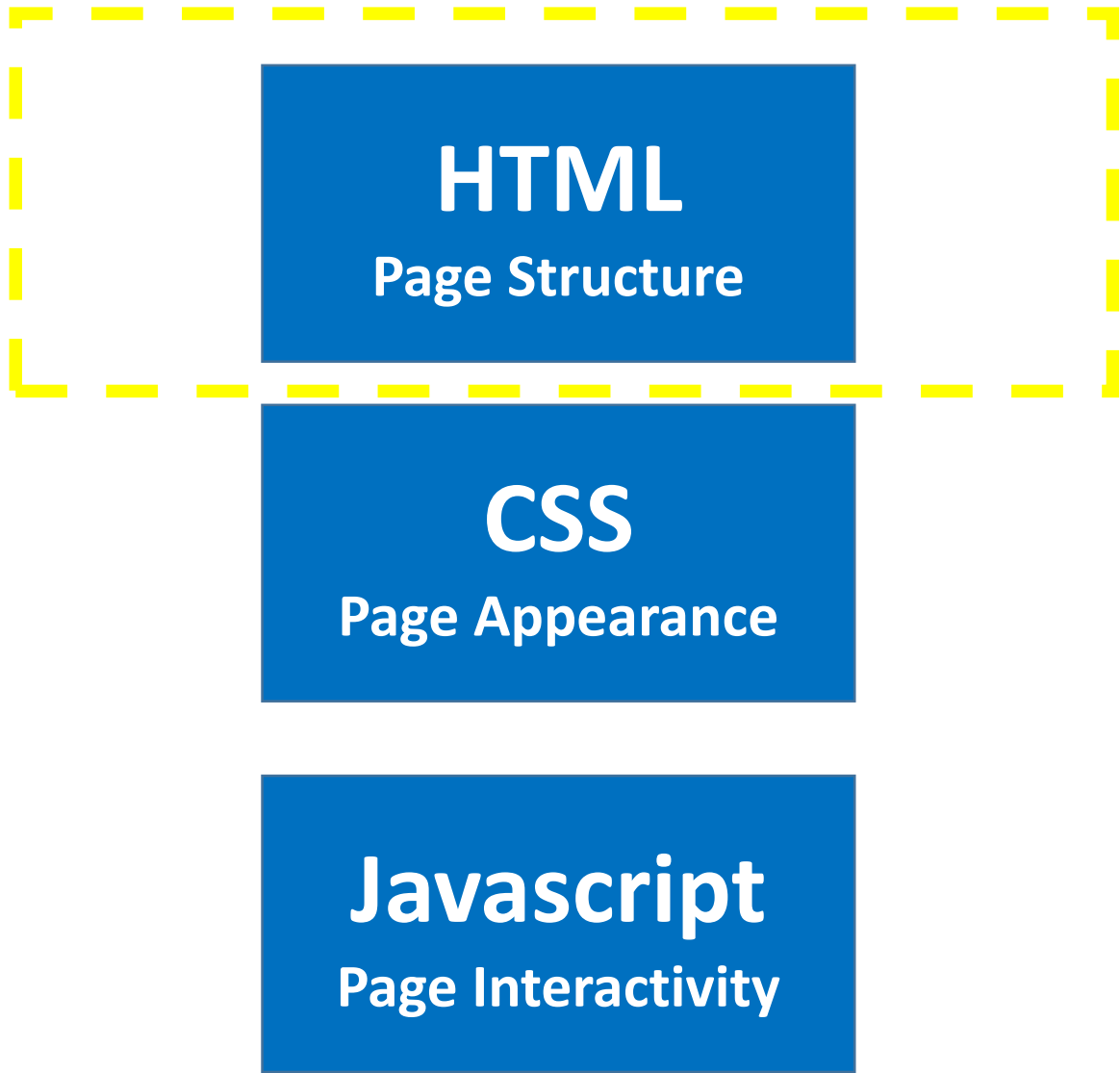
Technologies

HTML
Page Structure

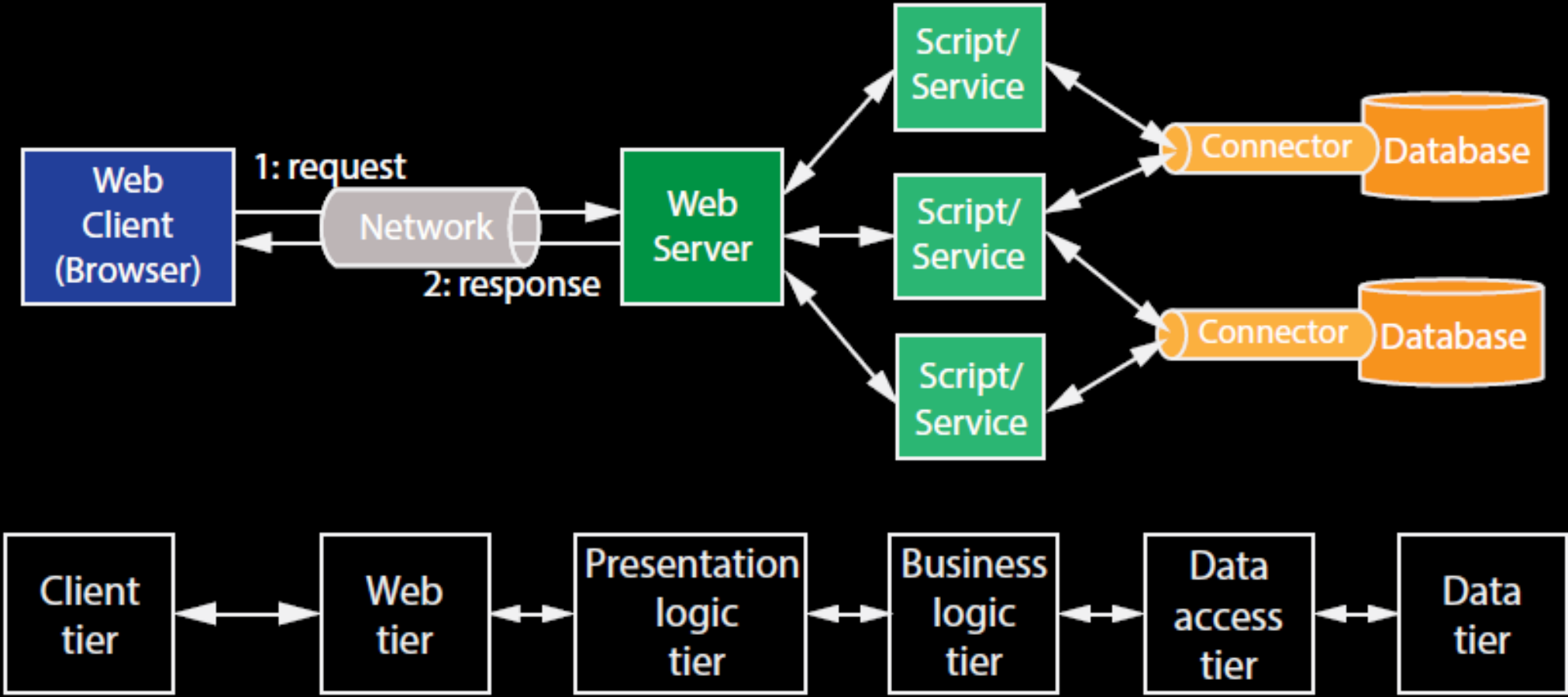
CSS
Page Appearance

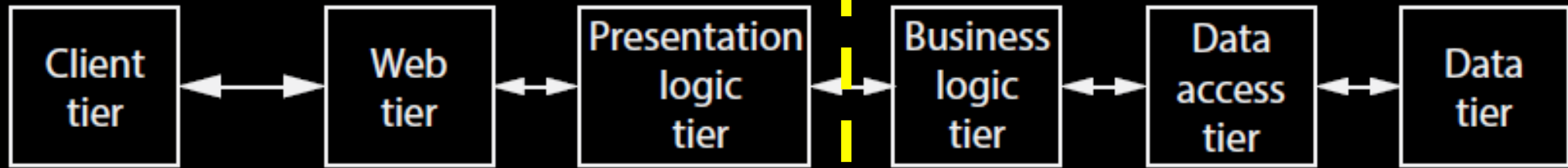
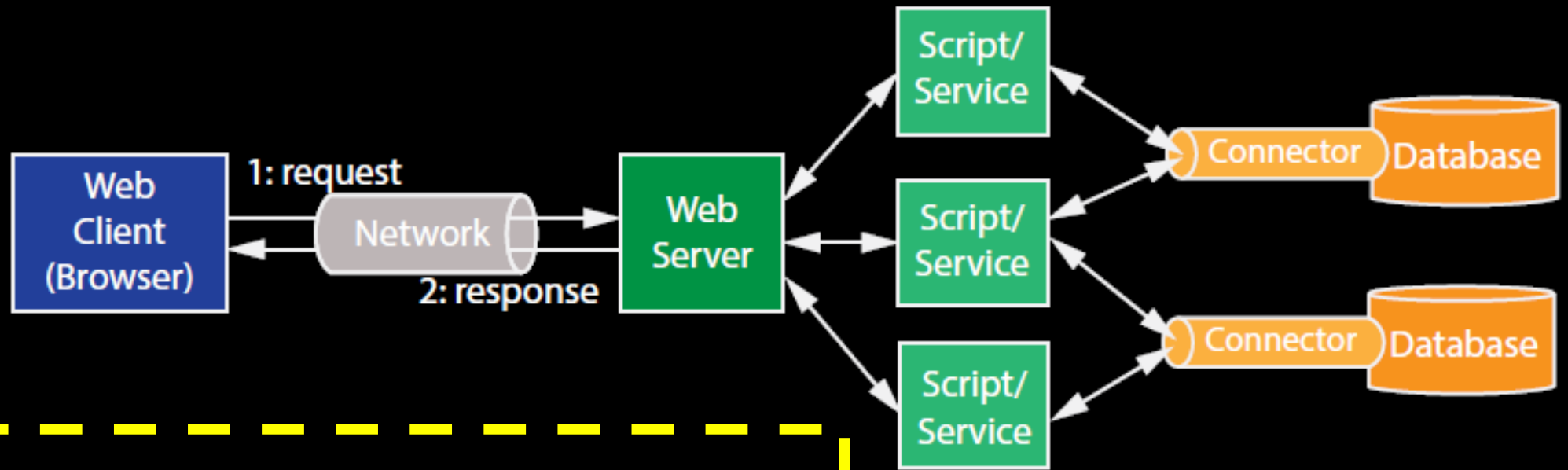
Javascript
Page Interactivity

Technologies



Architecture





Our Focus in this module: HTML

HTML

- Hyper Text Markup Language
- Text file containing small markup tags
- .html or .htm file extension

Versions

Version	Year
HTML	1991
HTML 2.0	1995
HTML 3.2	1997
HTML 4.01	1999
XHTML	2000
HTML5	2014

W3 The World Wide Web proj x

← → ↻ <https://www.w3.org/History/19921103-hypertext/hypertext/WWW/TheProject.html> ☆ ☰

World Wide Web

The WorldWideWeb (W3) is a wide-area [hypermedia](#) information retrieval initiative aiming to give universal access to a large universe of documents.

Everything there is online about W3 is linked directly or indirectly to this document, including an [executive summary](#) of the project, [Mailing lists](#) , [Policy](#) , November's [W3 news](#) , [Frequently Asked Questions](#) .

[What's out there?](#)
Pointers to the world's online information, [subjects](#) , [W3 servers](#), etc.

[Help](#)
on the browser you are using

[Software Products](#)
A list of W3 project components and their current state. (e.g. [Line Mode](#) ,X11 [Viola](#) , [NeXTStep](#) , [Servers](#) , [Tools](#) , [Mail robot](#) , [Library](#))

[Technical](#)
Details of protocols, formats, program internals etc

[Bibliography](#)
Paper documentation on W3 and references.

[People](#)
A list of some people involved in the project.

[History](#)
A summary of the history of the project.

[How can I help ?](#)
If you would like to support the web..

[Getting code](#)
Getting the code by [anonymous FTP](#) , etc.

- Tim Berners-Lee – 26 years ago
- <https://www.w3.org/History/19921103-hypertext/hypertext/WWW/TheProject.html>

The development environment

- Text files
- Use a plain text editor
 - TextWrangler (Mac)
 - Notepad++ (PC)
 - Sublime Text (OSX, Windows, Linux)

Browser

- To be able to view our web page we need to use a browser
- Current the most widely-used browser is Google Chrome.
- Pay attention ! There is no uniformity across browsers

The image shows a web browser window with the URL `www.tecgraf.puc-rio.br/pt/index-productos-tecnologia.html`. The website content includes a header with the PUC RIO logo and navigation links for 'PRODUTOS E TECNOLOGIAS' and 'DIVULGAÇÃO'. A main green banner features the text 'PRODUTOS E TECNOLOGIAS' and 'SISTEMAS COMPUTACIONAIS TÉCNICOS-CIENTÍFICOS APLICADOS A ENGENHARIA, GEOCIÊNCIAS E MEDICINA'. Below the banner, there are sections for 'ÁREAS DE ATUAÇÃO' and 'INDÚSTRIA DE ÓLEO E'. The browser's developer tools are open on the right, showing the 'Console' tab with a message: '5 messages are hidden by filters. Show all messages.' A green callout box is overlaid on the bottom right of the browser window.

www.tecgraf.puc-rio.br/pt

www.tecgraf.puc-rio.br/pt/index-productos-tecnologia.html

PUC RIO

PRODUTOS E TECNOLOGIAS

DIVULGAÇÃO

PESQUISA E PUBLICAÇÕES

PRODUTOS E TECNOLOGIAS

SISTEMAS COMPUTACIONAIS TÉCNICOS-CIENTÍFICOS APLICADOS A ENGENHARIA, GEOCIÊNCIAS E MEDICINA

ÁREAS DE ATUAÇÃO


INDÚSTRIA DE ÓLEO E

- Developer tools.
- Source code

The Structure

```
<html>  
  <head>  
    <title>Page title</title>  
  </head>  
  <body>  
    <h1>This is a heading</h1>  
    <p>This is a paragraph.</p>  
    <p>This is another paragraph.</p>  
  </body>  
</html>
```

“Hello World !”



```
1 <html>
2   <body>
3
4     <h1>This is my first web page</h1>
5
6     <h2>
7       This is the sub-title.
8     </h2>
9
10    <p>
11      the first paragraph
12    </p>
13
14    <p>
15      the second paragraph
16    </p>
17  </body>
18 </html>
19
```

Line 2, Column 1

Tab Size: 4

HTML

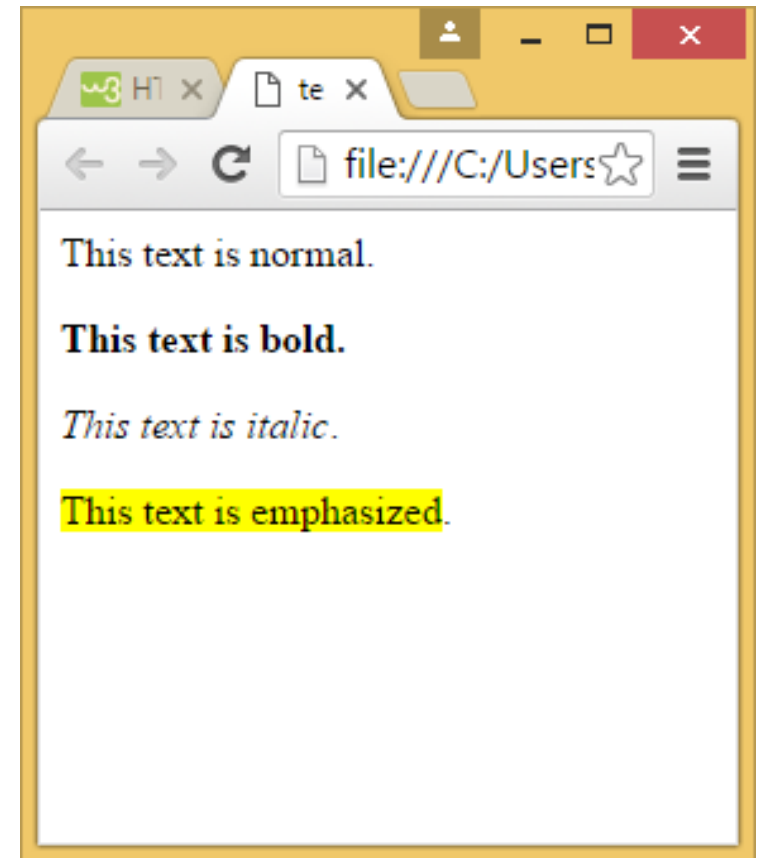
```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\20161-INF1802\conteudo\...
File Edit Selection Find View Goto Tools Project Preferences Help
contact.html x index.html aboutme.html x
1 <html>
2   <head>
3     <title>This is my first web page</title>
4   </head>
5   <body>
6
7     <h1>This is my first web page</h1>
8
9     <h2>
10      This is the sub-title.
11    </h2>
12
13    <p>
14      the first paragraph
15    </p>
16
17    <p>
18      the second paragraph
19    </p>
20  </body>
21 </html>
22
23
Line 6, Column 1 Tab Size: 4 HTML
```

Tags H1, H2, P

```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\20161-INF1802\conteudo\...
File Edit Selection Find View Goto Tools Project Preferences Help
contact.html x index.html aboutme.html x
1 <html>
2   <head>
3     <title>This is my first web page</title>
4   </head>
5   <body>
6     |
7     <a href="contact.html"> Contact me </a>
8
9     <h1>This is my first web page</h1>
10
11    <h2>
12      This is the sub-title.
13    </h2>
14
15    <p>
16      the first paragraph
17    </p>
18
19    <p>
20      the second paragraph
21    </p>
22  </body>
23 </html>
24
Line 6, Column 9 Tab Size: 4 HTML
```

Head
Title

```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\20...
File Edit Selection Find View Goto Tools Project Preferences Help
text.html index.html aboutme.html
1 <html>
2   <head>
3     <title></title>
4   </head>
5   <body>
6
7   <p>This text is normal.</p>
8
9   <p><b>This text is bold.</b></p>
10
11  <p><i>This text is italic</i>.</p>
12
13  <p><mark>This text is emphasized</mark>.</p>
14
15
16  </body>
17 </html>
18
19
20
21
22
7 lines, 151 characters selected Tab Size: 4 HTML
```




```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\20161-INF1802\conteudo\CursoWebResponsive\week1...
File Edit Selection Find View Goto Tools Project Preferences Help
contact.html index.html aboutme.html x
1 <html>
2   <head>
3     <title></title>
4   </head>
5   <body>
6     <a
7       href="index.html">
8       Home
9     </a>
10
11   <h1>
12     Contact details
13   </h1>
14
15   Here is my address:
16   <ul>
17     <li>133, my street</li>
18     <li>My town</li>
19     <li>My nation</li>
20     <li>Final item in the list</li>
21   </ul>
22
23   </body>
24 </html>
25
26
Line 10, Column 1 Tab Size: 4 HTML
```

Link
Tag A

```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\201...
File Edit Selection Find View Goto Tools Project Preferences Help
contact.html index.html aboutme.html
1 <html>
2   <head>
3     <title>This is my first web page</title>
4   </head>
5   <body>
6     <a
7       href="index.html">
8       Home
9     </a>
10    &nbsp;
11    <a
12      href="aboutme.html">
13      About me
14    </a>
15    &nbsp;
16    <a
17      href="contact.html">
18      Contact me
19    </a>
20
21    <hr></hr>
22
23    <h1>This is my first web page</h1>
24
16 lines, 173 characters selected Tab Size: 4 HTML
```

Navegation Bar
Tag HR

```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinam... - [X]
File Edit Selection Find View Goto Tools Project Preferences Help
contact.html index.html x aboutme.html
5 <body>
6   <a
7     href="index.html">
8     Home
9   </a>
10  &nbsp;
11  <a
12    href="aboutme.html">
13    About me
14  </a>
15  &nbsp;
16  <a
17    href="contact.html">
18    Contact me
19  </a>
20
21  <hr></hr>
22
23  <h1>All about me</h1>
24
25  <a href="myphoto.png">
26    
30  </a>
31  <h3>This is me !</h3>
32
33 </body>
Line 27, Column 26 Tab Size: 4 HTML
```

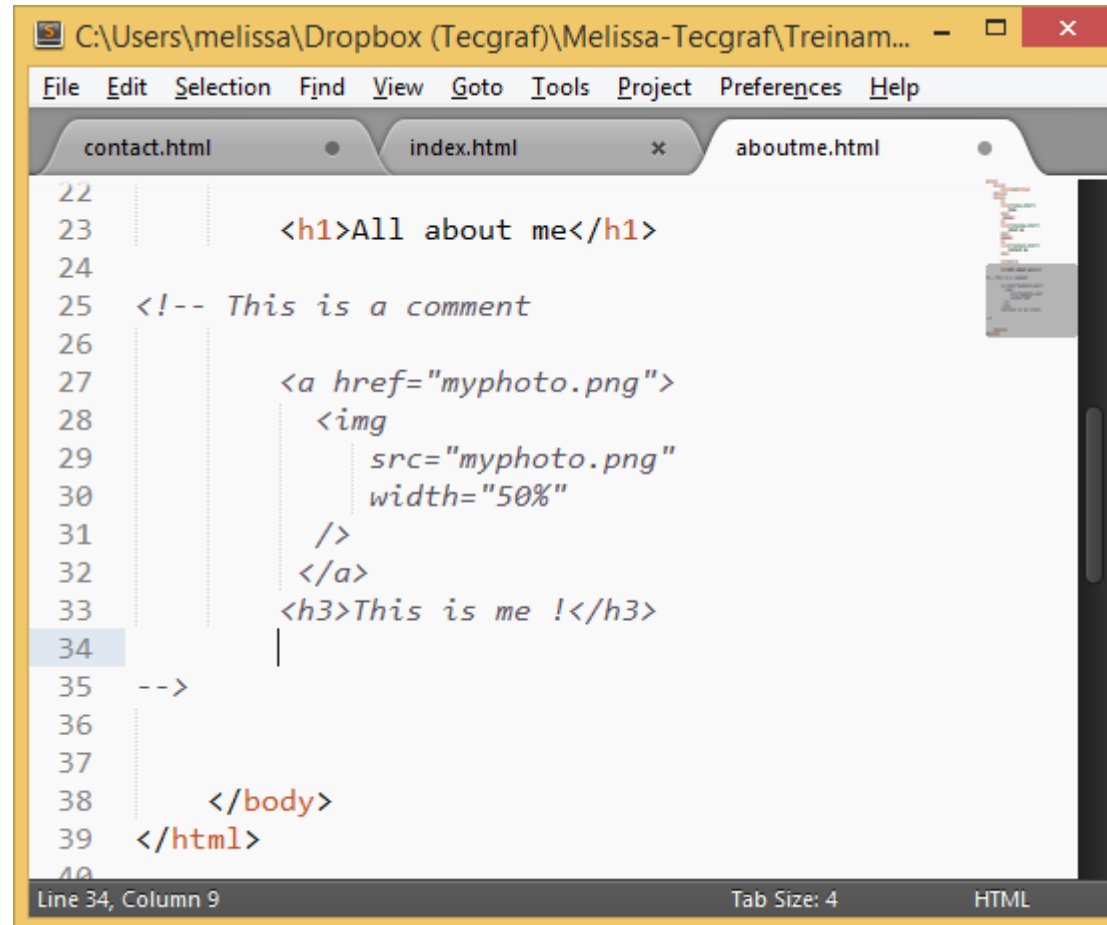
Images

Tag IMG

```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\20161-INF1802\conteudo\Aulas\02-HTML\cod... - [ ] [X]
File Edit Selection Find View Goto Tools Project Preferences Help
code.html x index.html x aboutme.html x
1 <html>
2   <head>
3     <title></title>
4   </head>
5   <body>
6     <code>
7     var x = 5;
8     var y = 6;
9     document.getElementById("demo").innerHTML = x + y;
10    </code>
11
12   </body>
13 </html>
14
15
Line 10, Column 20
```

Computer code

```
HTML Computer C x code.html x
file:///C:/Users/melissa/Dropbox%20(Te...
var x = 5; var y = 6;
document.getElementById("demo").innerHTML = x + y;
```



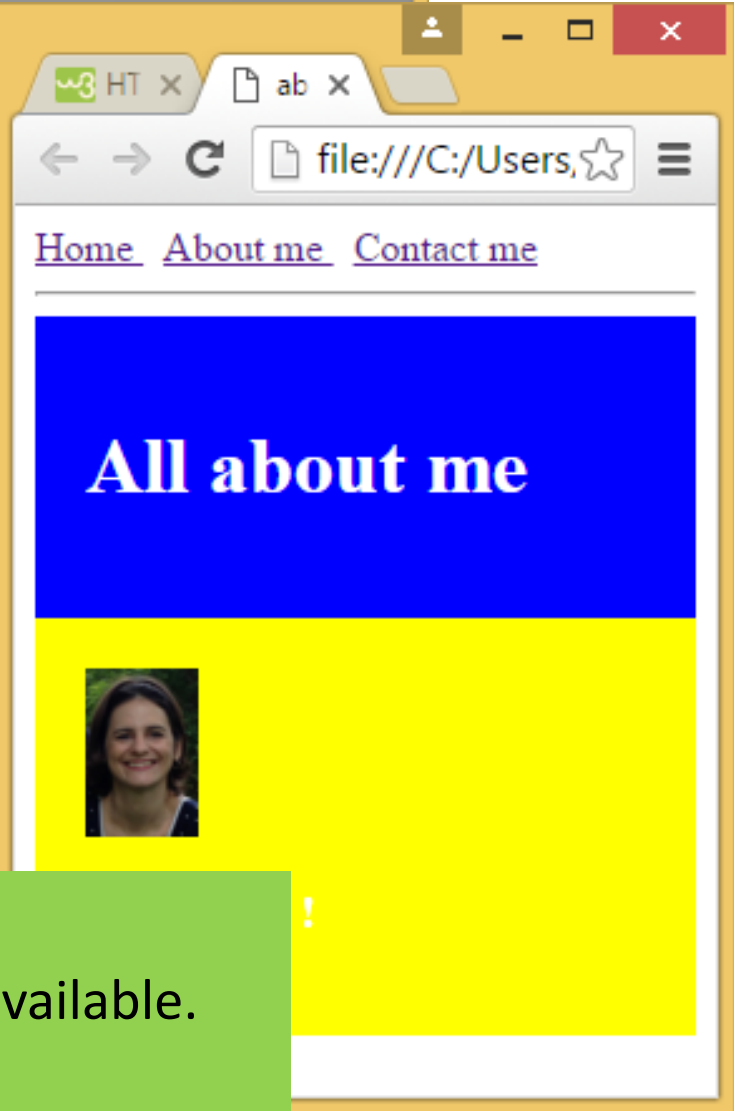
The image shows a code editor window with the following content:

```
22
23     <h1>All about me</h1>
24
25     <!-- This is a comment
26
27     <a href="myphoto.png">
28         
32     </a>
33     <h3>This is me !</h3>
34
35 -->
36
37
38 </body>
39 </html>
40
```

The status bar at the bottom indicates "Line 34, Column 9", "Tab Size: 4", and "HTML".

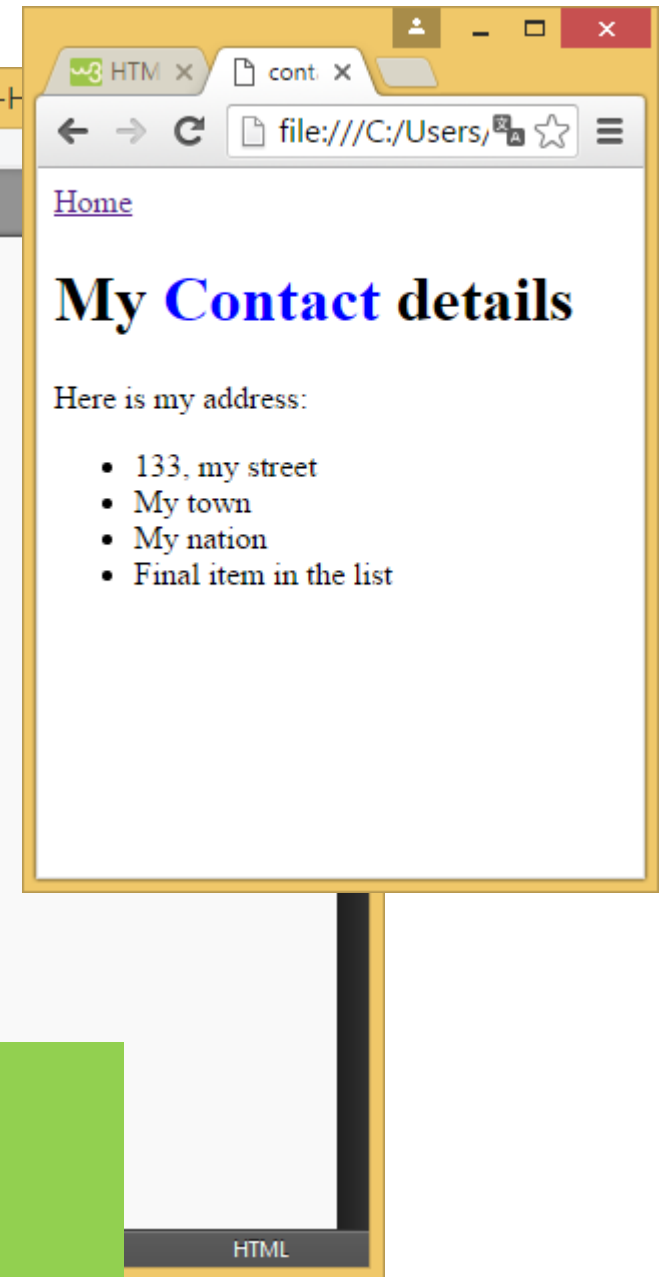
Comments

```
19     </a>
20
21     <hr></hr>
22
23     <div style="background-color:blue; color:white; padding:20px;">
24
25         <h1>All about me</h1>
26
27     </div>
28
29     <div style="background-color:yellow; color:white; padding:20px;">
30
31         <a href="myphoto.png">
32             
36         </a>
37         <h3>This is me !</h3>
38
39     </div>
40
```



Div defines a section in a document.
It is block level = starts on a new line and takes up the full width available.
It is often used as a container for other HTML elements.

```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\20161-INF1802\conteudo\Aulas\02-H
File Edit Selection Find View Goto Tools Project Preferences Help
contact.html x index.html x aboutme.html x
1 <html>
2   <head>
3     <title></title>
4   </head>
5   <body>
6     <a
7       href="index.html">
8       Home
9     </a>
10
11
12   My <span style="color:blue">Contact</span> details
13   </h1>
14
15   Here is my address:
16   <ul>
17     <li>133, my street</li>
18     <li>My town</li>
19     <li>My nation</li>
20     <li>Final item in the list</li>
21   </ul>
```



Span defines a section in a document (inline).
An inline element does not start on a new line and only takes up as much width as necessary.
It is often used as a container for some text..

```
C:\Users\melissa\Dropbox (Tecgraf)\Melissa-Tecgraf\Treinamento\20161-INF1802\conteudo\Aulas\...
File Edit Selection Find View Goto Tools Project Preferences Help
index.html x inf1802.html x
25 <hr></hr>
26
27 <table border=1 width="100%">
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
51 </body>
52 </html>
53
54
```

Tables

The image shows a web browser window with a single tab titled "This is my first web page". The address bar contains the file path: `file:///C:/Users/melissa/Dropbox%20(Tecgraf)/Melissa-Tecgraf/Treinamento/20161-INF1802/conteudo/Aulas/02-HTML/codigo/int`. Below the address bar, there are navigation links: [Home](#), [About me](#), and [Contact me INF1802-2016.1](#). The main content area features a table with three columns: "Data", "Aula", and "PDF".

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