

Curs 5

Tehnologii Web

HTML

1. Structura documentului

Structura unui document HTML

- 1 linie cu informatii despre document
- Documentul: inserat intre <html> si </html>
 - Antet
 - sectiune declarativa, in general fara efect vizual
 - <head> </head>
 - Cuprins
 - datele ce se afiseaza pe ecran
 - <body> </body>
 - <frameset> </frameset>

DTD

- Document Type Definition
- Prima linie in orice document HTML conform
 - **HTML 4.0 Strict DTD**
 - <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN"
"http://www.w3.org/TR/html4/strict.dtd">
 - fara elemente depreciate
 - **HTML 4.0 Transitional DTD**
 - <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
 - cu elemente depreciate
 - **HTML 4.0 Frameset DTD**
 - <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Frameset //EN"
"http://www.w3.org/TR/html4/frameset.dtd">
 - cu elemente deprecate si cadre (frames)

Document HTML minimal

```
<!DOCTYPE .....>  
<html>  
<head>  
....  
</head>  
<body>  
....  
</body>  
</html>
```

```
<!DOCTYPE .....>  
<html>  
<head>  
....  
</head>  
<frameset>  
....  
</frameset>  
</html>
```

Sectiunea Antet – HEAD

- <head>...</head>
- Atribute:
 - lang: limba documentului <head lang="ro"> ...
 - dir: directia de afisare a textului
 - RTL <head dir="RTL">
 - LTR: implicit
- Contine
 - Obligatoriu
 - TITLE: <title>...</title>
 - META: <meta ... />
 - Uzual
 - LINK: <link ... />
 - SCRIPT: <script>...</script>

Sectiunea Antet

- **TITLE**
 - <title>...</title>
 - in mod normal **NU** apare pe pagina
 - browser-ele afiseaza tipic titlul respectiv
 - Extrem de important pentru motoarele de cautare
 - Untitled document = 😞
- **LINK**
 - <link ... />
 - defineste fisierile suport ale documentului necesare pentru afisare corecta: css (stiluri), js (JavaScript)
 - <link rel="stylesheet" type="text/css" href="ea.css" />
 - <link rel="icon" href="favicon.ico" type="image/x-icon" />
- **SCRIPT**
 - <script>...</script>
 - introducerea “on-line” a script-urilor
 - ```
<script language="JavaScript1.2" type="text/javascript">
<!--
function MM_swapImgRestore() { //v3.0
 var i,x,a=document.MM_sr; for(i=0;a&&i<a.length&&(x=a[i])&&x.oSrc;i++) x.src=x.oSrc;
}
//-->
</script>
```

# Sectiunea Antet - META

- <meta ... />
- Specificarea a diverse informatii despre document
- Atribute
  - name:
    - defineste tipul informatiei
    - standard / nestandard
  - http-equiv
    - controlul protocolului HTTP
  - scheme
    - scheme standard
  - content
    - defineste continutul informatiei denumite anterior prin unul din cele trei atribute anterioare

# Sectiunea Antet - META

- <meta name="Author" content="Radu Damian" />
- < meta http-equiv="Expires" content="Tue, 15 Oct 2008 14:25:27 GMT" />
- <meta scheme="ISBN" name="identifier" content="0-8230-2355-9" />
- <meta name="keywords" content="ceva1, ceva2, ceva3, Romania">
- <meta name="description" content="Pagina cu ceva-uri">
- <meta name="robots" content="index,follow" />
- <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
- <meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-5" />
- <meta http-equiv="Content-Type" content="image/jpeg" />
- <meta http-equiv="Content-Type" content="text/plain" />

# Sectiunea Cuprins – BODY

- <body>...</body>
- Atribute specifice:
  - background: imagine fundal
    - <body background = “/images/ceva.jpg”>...
  - bgcolor: culoare uniforma de fundal
    - <body bgcolor=“white” > ...
  - text: culoarea textului
    - <body text= “red”>...
  - link, vlink, alink: culoare legaturi (general, vizitata, activa)
    - < body link=“red” alink=“fuchsia” vlink=“maroon”> ...

# Sectiunea Cuprins – BODY

- Atribute generale:
  - lang
  - dir
  - id: nume individual al elementului
    - utilizat cu script-uri in general, modelul DOM
    - <p id="un nume dupa care sa il gasesc la nevoie">...
  - title: informatii despre element
    - tooltip in browser-e
    - <p title = "ceva despre element">...
  - class: apartenenta la o clasa cu caracteristici comune
    - utilizat in combinatie cu stiluri: CSS
    - <p class="numele clasei ale carei caracteristici vizuale le folosesc">...
  - Evenimente
    - specifice: onload, onunload
    - generale: onclick, ondblclick, onmousedown, onmouseup, onmouseover, onmousemove, onmouseout, onkeypress, onkeydown, onkeyup
    - <body onload="preloadImages('images/about\_f2.gif')">

# Culori

## ■ Specificarea culorii:

- nume:
  - <p color= "black">...
- cod numeric - # Rosu (0-256=oo-FF), Verde, Albastru
  - <font color = "#FFoooo">...

 Black = "#000000"

 Silver = "#C0C0C0"

 Gray = "#808080"

 White = "#FFFFFF"

 Maroon = "#800000"

 Red = "#FF0000"

 Purple = "#800080"

 Fuchsia = "#FF00FF"

 Green = "#008000"

 Lime = "#00FF00"

 Olive = "#808000"

 Yellow = "#FFFF00"

 Navy = "#000080"

 Blue = "#0000FF"

 Teal = "#008080"

 Aqua = "#00FFFF"

# Titluri in text (HEADINGS)

- foarte importante pentru motoarele de cautare
- 6 nivale (h1 ÷ h6)
- Atribute:
  - align: alinierea textului = left, center, right, justify
    - <h1 align = "center">...

```
<h1>Titlu H1</h1>
<p>paragraf text normal</p>
<h2>Titlu H2</h2>
<p>paragraf text normal</p>
<h3>Titlu H3</h3>
<p>paragraf text normal</p>
<h4>Titlu H4</h4>
<p>paragraf text normal</p>
<h5>Titlu H5</h5>
<p>paragraf text normal</p>
<h6>Titlu H6</h6>
<p>paragraf text normal</p>
```

**Titlu H1**

paragraf text normal

**Titlu H2**

paragraf text normal

**Titlu H3**

paragraf text normal

**Titlu H4**

paragraf text normal

**Titlu H5**

paragraf text normal

**Titlu H6**

paragraf text normal

# Elemente de grupare

- utilizate pentru gruparea unor elemente in scopul aplicarii unei actiuni comune
- <span>...</span>
  - actiune “in-line” : grupul e tratat similar cu un caracter
- <div>...</div>
  - actiune “block-level” : grupul e tratat similar cu un paragraf
- nu ofera formatare proprie si nici atribute specifice
- Atribute:
  - id, class
  - align

# Elementul ADDRESS

- <address>...</address>
- specificarea posibilitatilor de contact ale autorilor
- de obicei reprezentat *italic* (inclinat)

```
< address >
Dave Raggett,
Arnaud Le Hors,
contact persons for the W3C HTML
Activity

$Date: 1999/12/24 23:37:50 $
</ address >
```

HTML

## 2. Aranjarea textului

## 2.1. Text structurat

- <em>...</em>: evidențiere *EM* <*em*>
  - de obicei italic
- <strong>...</strong>: evidențiere suplimentara **STRONG** <**strong**>
  - de obicei bold (ingrosat)
- <cite>...<cite>: citat *CITE* <*cite*>
- <dfn>...</dfn> : definitii *DFN* <*dfn*>
- <code>...</code> : programe *CODE* <*code*>
- <samp>...</samp> : rezultat al programelor *SAMP* <*samp*>
- <kbd>...</kbd> : introducere de la tastatura *KBD* <*kbd*>
- <var>...</var> : variabile *VAR* <*var*>
- <abbr>...</abbr> : abrevieri *ABBR* <*abbr*>
- <acronym>...</acronym> : acronime *ACRONYM* <*acronym*>
- **depreciate**: <b>...</b>, <i>...</i>

# 2.1. Text structurat

## Citate

- <blockquote>...</blockquote>: citat la nivel de bloc
  - de obicei reprezentat cu marginie (indent)
- <q>...</q> : citat in-line
  - de obicei incadrat in ghilimele sau apostroafe
- Atribut: cite =“adresa la care se gaseste documentul citat”

### Paragraf Normal

They went in single file, running like hounds on a strong scent, and an eager light was in their eyes. Nearly due west the broad swath of the marching Orcs tramped its ugly slot; the sweet grass of Rohan had been bruised and blackened as they passed.

John said, “I saw Lucy at lunch, she told me ‘Mary wants you to get some ice cream on your way home.’ I think I will get some at Ben and Jerry’s, on Gloucester Road.”

H<sub>2</sub>O

10<sup>3</sup>

```
<p>Paragraf Normal</p>
<blockquote cite="http://www.mycom.com/tolkien/twotowers.html">
<p>They went in single file, running like hounds on a strong scent,
and an eager light was in their eyes. Nearly due west the broad
swath of the marching Orcs tramped its ugly slot; the sweet grass
of Rohan had been bruised and blackened as they passed.</p>
</blockquote>
<p>John said, <q lang="en-us">I saw Lucy at lunch, she told me
<q lang="en-us">Mary wants you to get some ice cream on your way
home.</q> I think I will get some at Ben and Jerry's, on Gloucester
Road.</q></p>
<p>H₂O</p>
<p>10³</p>
```

## Indici/puteri

- <sub>...</sub> : indici
- <sup>...</sup> : puteri

## 2.2. Linii si paragrafe

- paragraf : <p>...</p>
  - atribut:
    - align = "left, center, right, justify"
- linie noua : <br />
  - atribut:
    - clear = "none, left, right, all"
  - evitarea aparitiei unei linii noi:
    - nonbreaking space: &nbsp;, &#160;, &#xA0;
- despartire in silabe:
  - Hard: &#45;, &#xD
  - Soft: &shy;, &#173;, &#xAD;
- respectarea organizarii sursei: <pre>...</pre>

```
***** -----
| | -----
| image | --

| | |-----
***** -----

```

```
***** -----
| | -----
| image | --

| | |-----
***** -----

```

## 2.3. Marcarea modificarilor

- inserare : <ins>...</ins>
  - uzuial reprezentat subliniat
  - atribute (nonvizuale):
    - cite = "adresa eventualului document care explica corectia"
    - datetime = "data/timpul" la care a aparut modificarea
- eliminare : <del>...</del>
  - uzuial reprezentat taiat
  - aceleasi atribute

<p>O grupa poate avea <del>25</del> <ins>45</ins> studenti.</p>

O grupa poate avea 25 45 studenti.

# Coduri 1

ASCII			HTML	HTML	
Dec	Hex	Symbol	Number	Name	Description
160	A0		&#160;	&ampnbsp	non-breaking space
161	A1	¡	&#161;	&iexcl;	inverted exclamation mark
162	A2	¢	&#162;	&cent;	cent sign
163	A3	£	&#163;	&pound;	pound sign
164	A4	¤	&#164;	&curren;	currency sign
165	A5	¥	&#165;	&yen;	yen sign
166	A6	¦	&#166;	&brvbar;	broken vertical bar
167	A7	§	&#167;	&sect;	section sign
168	A8	΅	&#168;	&uml;	spacing diaeresis - umlaut
169	A9	©	&#169;	&copy;	copyright sign
170	AA	ª	&#170;	&ordf;	feminine ordinal indicator
171	AB	«	&#171;	&laquo;	left double angle quotes
172	AC	¬	&#172;	&not;	not sign
173	AD	-	&#173;	&shy;	soft hyphen
174	AE	®	&#174;	&reg;	registered trade mark sign
175	AF	-	&#175;	&macr;	spacing macron - overline

# Coduri 2

ASCII			HTML	HTML	
Dec	Hex	Symbol	Number	Name	Description
176	B0	°	&#176;	&deg;	degree sign
177	B1	±	&#177;	&plusmn;	plus-or-minus sign
178	B2	²	&#178;	&sup2;	superscript two - squared
179	B3	³	&#179;	&sup3;	superscript three - cubed
180	B4	'	&#180;	&acute;	acute accent - spacing acute
181	B5	µ	&#181;	&micro;	micro sign
182	B6	¶	&#182;	&para;	pilcrow sign - paragraph sign
183	B7	.	&#183;	&middot;	middle dot - Georgian comma
184	B8	,	&#184;	&cedil;	spacing cedilla
185	B9	¹	&#185;	&sup1;	superscript one
186	BA	º	&#186;	&ordm;	masculine ordinal indicator
187	BB	»	&#187;	&raquo;	right double angle quotes
188	BC	¼	&#188;	&frac14;	fraction one quarter
189	BD	½	&#189;	&frac12;	fraction one half
190	BE	¾	&#190;	&frac34;	fraction three quarters
191	BF	¿	&#191;	&iquest;	inverted question mark

# Coduri 3

ASCII			HTML	HTML	
Dec	Hex	Symbol	Number	Name	Description
34	22	"	&#34;	&quot;	double quotes
38	26	&	&#38;	&amp;	ampersand
60	3C	<	&#60;	&lt;	less than sign
63	3E	>	&#62;	&gt;	greater than sign

HTML

# 3. Liste

## 3.1. Liste neordonate/ordonate, elemente

- Liste neordonate <ul>...</ul>
- Liste ordonate <ol>...</ol>
- Element in lista <li>...</li>
- Atribute:
  - type = “tip lista”
    - UL tip lista : “disc, circle, square”
    - OL tip lista : “1, a, A, i, I”
  - start = “numarul de la care porneste lista” (OL)
  - value = “fortarea numarului curent” (LI)

## 3.1. Liste neordonate

```

- Primul element
- Al doilea element
- Al treilea element
- Al patrulea element


```

- Primul element
- Al doilea element
- Al treilea element
- Al patrulea element

```
<ul type="circle">
- Primul element
- Al doilea element
- Al treilea element
- Al patrulea element


```

- Primul element
- Al doilea element
- Al treilea element
- Al patrulea element

## 3.1. Liste ordonate

```

- Primul element
- Al doilea element
- Al treilea element
- Al patrulea element


```

1. Primul element
2. Al doilea element
3. Al treilea element
4. Al patrulea element

```
<ol type="i">
- Primul element
- Al doilea element
- Al treilea element
- Al patrulea element


```

- i. Primul element
- ii. Al doilea element
- iii. Al treilea element
- iv. Al patrulea element

## 3.1. Liste ordonate

```
<ol type="A" start="5">
Primul element
Al doilea element
Al treilea element
Al patrulea element

```

- E. Primul element
- F. Al doilea element
- G. Al treilea element
- H. Al patrulea element

```
<ol type="I" start="5">
Primul element
Al doilea element
<li value="15">Al treilea element
Al patrulea element

```

- V. Primul element
- VI. Al doilea element
- XV. Al treilea element
- XVI. Al patrulea element

# Contact

- Laboratorul de microunde si optoelectronica
- <http://rf-opto/etc.tuiasi.ro>
- [rdamian@etc.tuiasi.ro](mailto:rdamian@etc.tuiasi.ro)