



# Atelier

# Creare și pagini web

conf. dr. ing. Radu Damian  
sl. dr. ing. Daniel Mătășaru

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

“I.Like.IT@ETTI.TUIASI.RO”



# Introducere

“I.Like.IT@ETTI.TUIASI.RO”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# Definitii

## • Internet

- O **retea** globala de comunicatii intre calculatoare **si alte dispozitive**, conectate intre ele prin intermediul protocolului TCP/IP
- Nu este o retea proprietara
- Nu este dedicata exclusiv WWW

## • World Wide Web

- Sistem de informatii grafic, interactiv, proiectat pentru a functiona pe orice platforma fizica, care functioneaza prin Internet

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# Istoric Internet

- **ARPANET** 1969
- Proiect experimental al US Department of Defense
- DARPA – Defense Advanced Research Projects Agency
- Conectarea cercetatorilor la resurse comune (supercalculatoare, baze de date)
- Raspandire mai intai in SUA apoi in intreaga lume (Romania 1993)
- TCP/IP – Transport Control Protocol / Internet Protocol
  - TCP/IP v4 – 1981,
  - TCP/IP v6 – 1998

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# Istoric WWW

- 1980, CERN, Centre Europeen de Recherche Nucleaire,
- **Tim Berners Lee**
- Metoda de schimb facil de informatii intre cercetatori
- 1989 – propunere de standardizare pentru HTTP
- HTTP – Hyper Text Transfer Protocol
- 1993 – Mosaic, primul browser grafic, NCSA – National Center for Supercomputing Applications

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

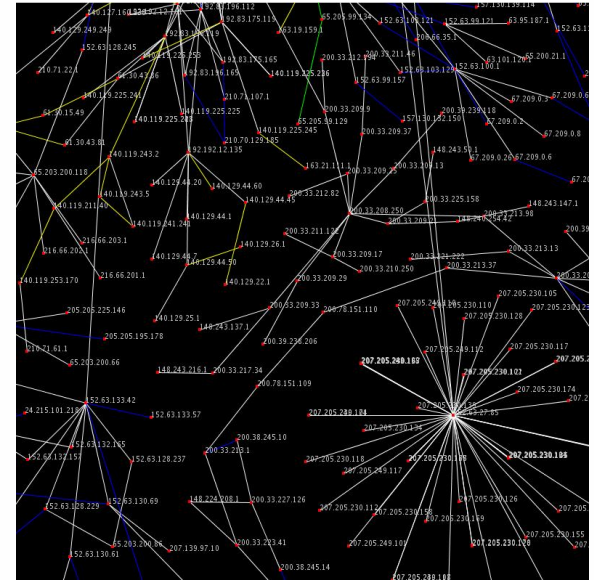
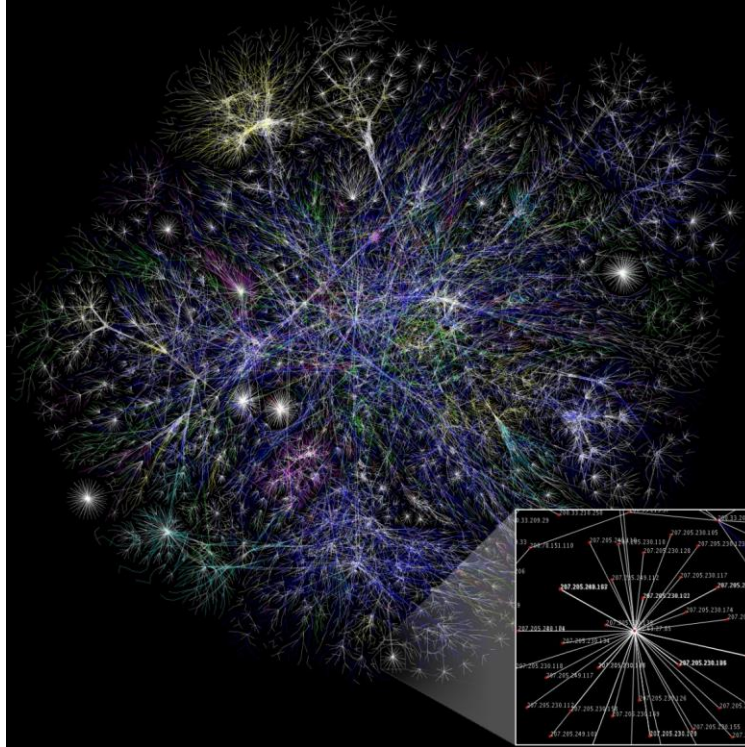
1910

1937

1993



# World Wide Web



[www.tuiasi.ro](http://www.tuiasi.ro)

1813

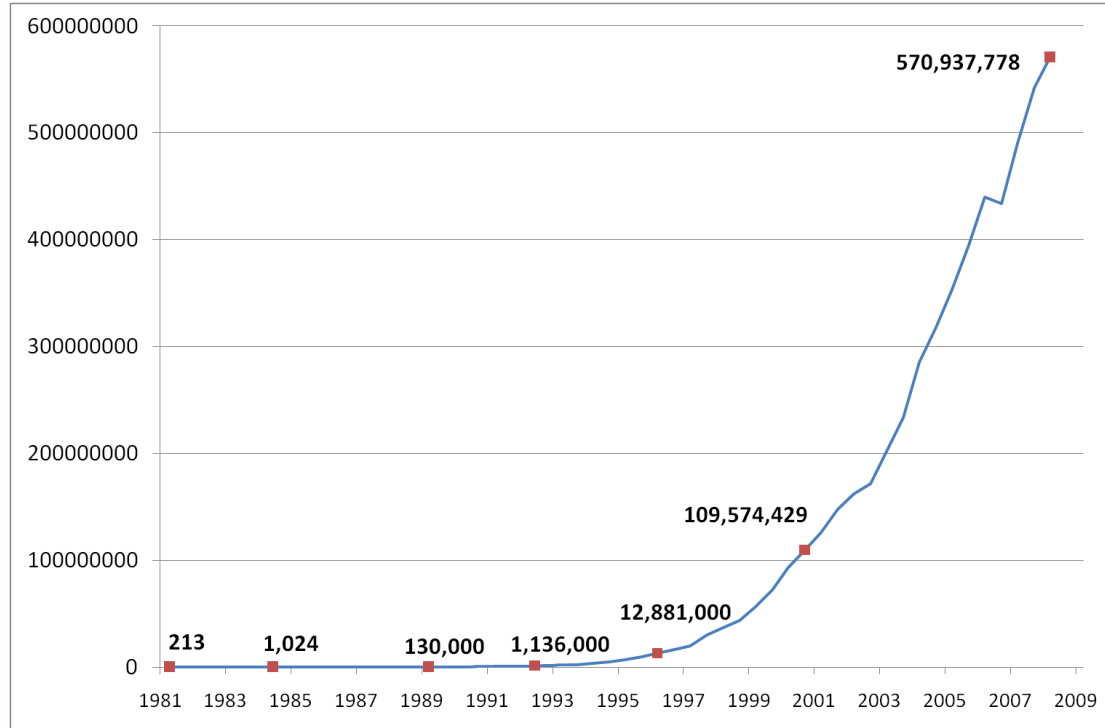
1860

1910

1937

1993

# Numar dispozitive conectate



[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

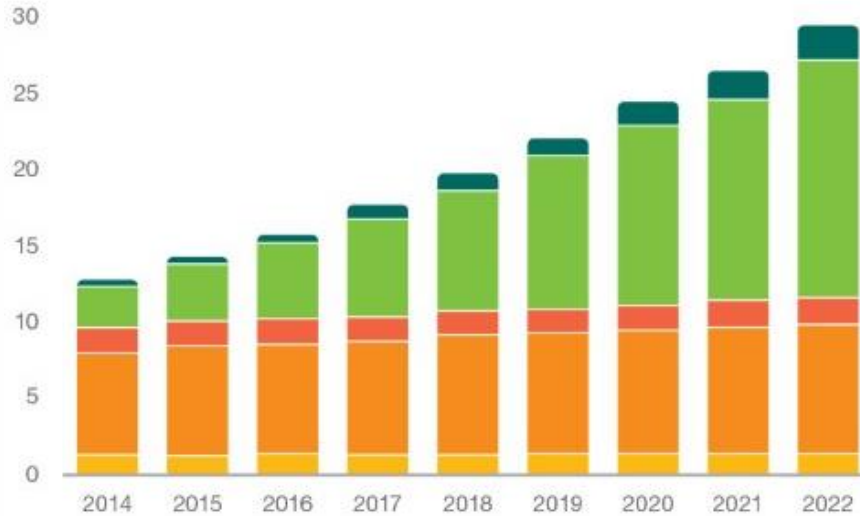
1910

1937

1993

# Numar dispozitive conectate

Connected devices (billions)

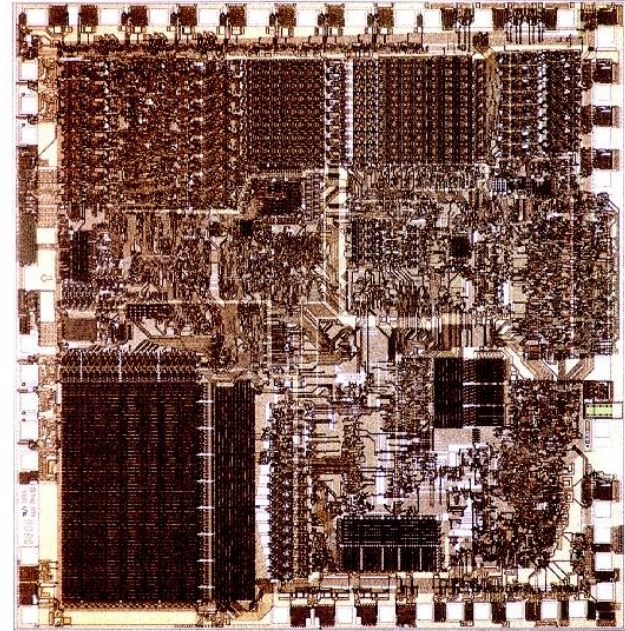


	2016	2022	CAGR
Wide-area IoT	0.4	2.1	30%
Short-range IoT	5.2	16	20%
PC/laptop/tablet	1.6	1.7	0%
Mobile phones	7.3	8.6	3%
Fixed phones	1.4	1.3	0%
	16 billion	29 billion	10%



# Impresionant?

- Intel® 8086
- 29.000 tranzistoare pe CPU
- 1978
- 1 MB date
- 4.7 MHz



[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# Impresionant?

- Intel® Itanium® processors (Tukwila)
- 2009
- 2 miliarde tranzistoare pe CPU
- 16 EB date (16 G GB)
- > 3 GHz

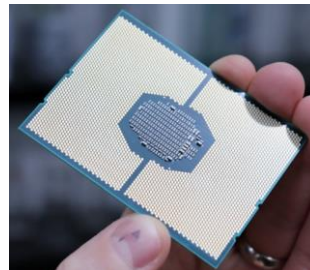


# Impresionant?

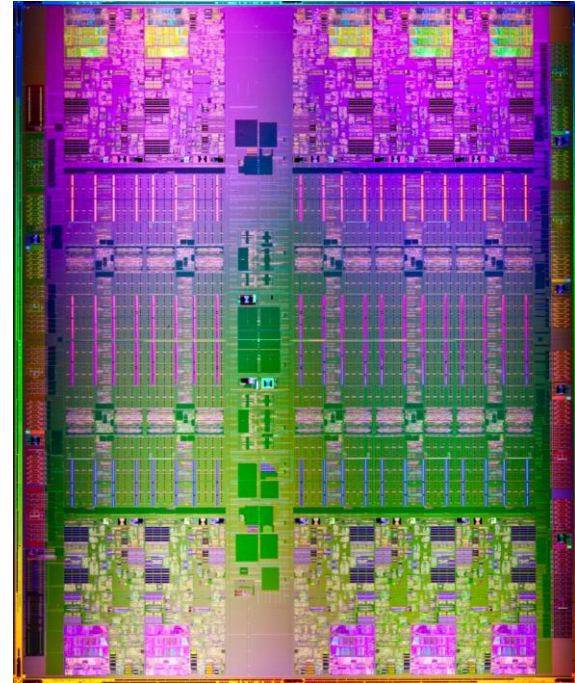
- Intel® Xeon® Platinum 8380 Processor
- 2021
- ~8 miliarde tranzistoare pe CPU
- 40 nuclee (80 fire de executie)
- Sisteme cu 8 microprocesoare (224/448)
- 2.3-3.4 GHz



1813



1860



1910

1937

1993

# Concepte

- Efectuare foarte rapida a unui numar **mic** de instructiuni, de **complexitate redusa**, repetate de un numar foarte mare de ori
- Programare: coborarea rationamentului la nivelul de **complexitate redusa**, cu obtinerea performantei prin structuri repetitive simple efectuate rapid.
- Operatii repetitive / date repetitive

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

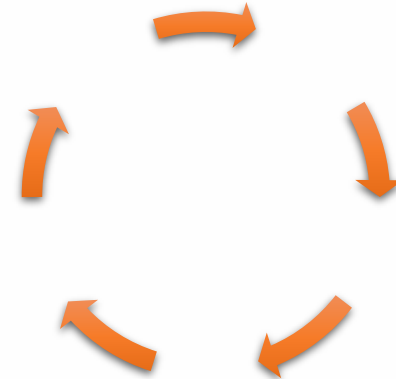
1910

1937

1993

# DA/NU

- Un **programator** n-a venit la servicii de **trei zile**.
- Colegii de servicii au venit la el acasă și-l găsesc pe acesta **chel**, dormind în cadă, ținând în mâini un șampon.
- Au luat șamponul și s-au apucat să citească instrucțiunile de folosire:
  - Clătiți părul cu apă.
  - Aplicați șamponul
  - Frecați
  - Așteptați două minute
  - Clătiți părul cu apă
  - **Repetati procedura.**



# HTML

- Hyper Text Markup Language
- bazat pe SGML - Standard Generalized Markup Language (ISO 8879:1986 SGML)
- **Tim Berners Lee**, 1989
- Mosaic – 1993



[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# HTML

- HTML 2.0 – Noiembrie 1995
  - IETF – Internet Engineering Task Force -> 1996
- HTML 3.0 Draft 1995
- HTML 3.2
  - WWW Consortium <https://www.w3c.org> ->1996
- HTML 4.0 – 18.12.1997
- HTML 5.0 – octombrie 2014
  - HTML 5.2 – decembrie 2017
- HTML Living Standard
  - Web Hypertext Application Technology Working Group (**WHATWG**)  
<https://whatwg.org> -> 2019



www.tuiasi.ro

1813

1860

1910

1937

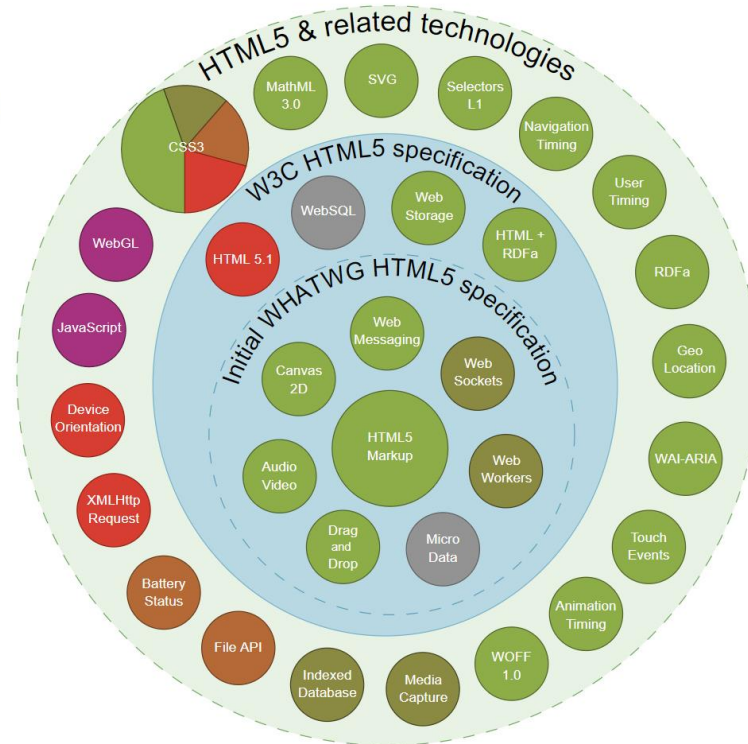
1993

# HTML 5

## HTML5

Taxonomy & Status (October 2014)

- Recommendation/Proposed
- Candidate Recommendation
- Last Call
- Working Draft
- Non-W3C Specifications
- Deprecated or inactive





# HTML 5

- (**Increasing!**) Support in browsers
  - Certain future
- Features
  - **Web Workers**: background threads for processing.
  - **Video**: Video becomes as easy as embedding an image.
  - **Canvas**: allows a web developer to render graphics on the fly.
  - **Application caches**: Web pages will start storing more and more information locally on the visitor's computer.
  - **Geolocation**: Best known for use on mobile devices, geolocation is coming with HTML5.



1993

www.tuiasi.ro

1813

1860

1910

1937

# XHTML

- bazat pe **XML** - Extensible Markup Language
- XHTML 1.0 – Ianuarie 2000 o reformulare a HTML 4.01 cu mici corectii pentru concordanta cu regulile XML
- XHTML 1.1 – Mai 2001
- XHTML 2.0 Draft
  - 2008 – versiunea 9
  - lipsit de suport din partea browser-elor
  - nu mentine compatibilitatea in urma cu HTML
  - “expirat” (abandonat)
- XHTML 5.1 Draft
  - in paralel cu HTML 5.0

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# XML

```

<?xml version="1.0" encoding="UTF-8"?>
- <DataSet xsi:schemaLocation="http://www.bnr.ro/xsd nbrfxrates.xsd" >
  - <Header>
    <Publisher>National Bank of Romania</Publisher>
    <PublishingDate>2017-03-17</PublishingDate>
    <MessageType>DR</MessageType>
  </Header>
  - <Body>
    <Subject>Reference rates</Subject>
    <OrigCurrency>RON</OrigCurrency>
    - <Cube date="2017-03-17">
      <Rate currency="AED">1.1542</Rate>
      <Rate currency="AUD">3.2609</Rate>
      <Rate currency="BGN">2.3342</Rate>
      <Rate currency="BRL">1.3600</Rate>
      <Rate currency="CAD">3.1807</Rate>
      <Rate currency="CHF">4.2598</Rate>
      <Rate currency="CNY">0.6140</Rate>
      <Rate currency="CZK">0.1690</Rate>
      <Rate currency="DKK">0.6141</Rate>
      <Rate currency="EUR">4.5654</Rate>
      <Rate currency="GBP">5.2515</Rate>
      <Rate currency="HKD">7.7556</Rate>
      <Rate currency="HUF" multiplier="100">1.4756</Rate>
      <Rate currency="INR">0.0648</Rate>
      <Rate currency="JPY" multiplier="100">3.7435</Rate>
      <Rate currency="KRW" multiplier="100">0.3752</Rate>
      <Rate currency="MDL">0.2152</Rate>
      <Rate currency="MXN">0.2207</Rate>
      <Rate currency="NOK">0.5016</Rate>
      <Rate currency="NZD">2.9760</Rate>
      <Rate currency="PLN">1.0622</Rate>
      <Rate currency="RSD">0.0368</Rate>
      <Rate currency="RUB">0.0733</Rate>
      <Rate currency="SEK">0.4820</Rate>
      <Rate currency="TRY">0.1674</Rate>
      <Rate currency="UAH">0.1576</Rate>
      <Rate currency="USD">4.2396</Rate>
      <Rate currency="VND">167.40</Rate>
    </Cube>
  </Body>
</DataSet>

```



# HTML/XHTML vs XML

- XML

- proiectat pentru a **descrie** datele
- orientat spre **conținutul** datelor respective
- o metoda de a transmite informațiile **independent** de platforma și hardware

- HTML/XHTML

- proiectat pentru a **afisa** datele
- orientat spre **forma** pe un ecran a datelor respective
- o metoda de a **afisa uniform** datele indiferent de platforma și hardware
- modern: HTML: structura logica a documentului, CSS: forma efectiva

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# HTML vs. CSS

- HTML
  - **structura** logica a documentului,
- CSS
  - **forma** efectiva
- HTML 5
  - Etichete HTML privitoare la **formă** (<font>, color=“red”) au fost introduse in HTML 3.2 si declarate **depreciate** in HTML 4.01
    - dispar in HTML 5
  - Intercalarea intre elementele de structura a celor privitoare la formă in HTML duce la cresterea complexitatii documentului si creste inutil dimensiunea acestuia

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

~1930



[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

~1930



[www.tuiasi.ro](http://www.tuiasi.ro)

1813

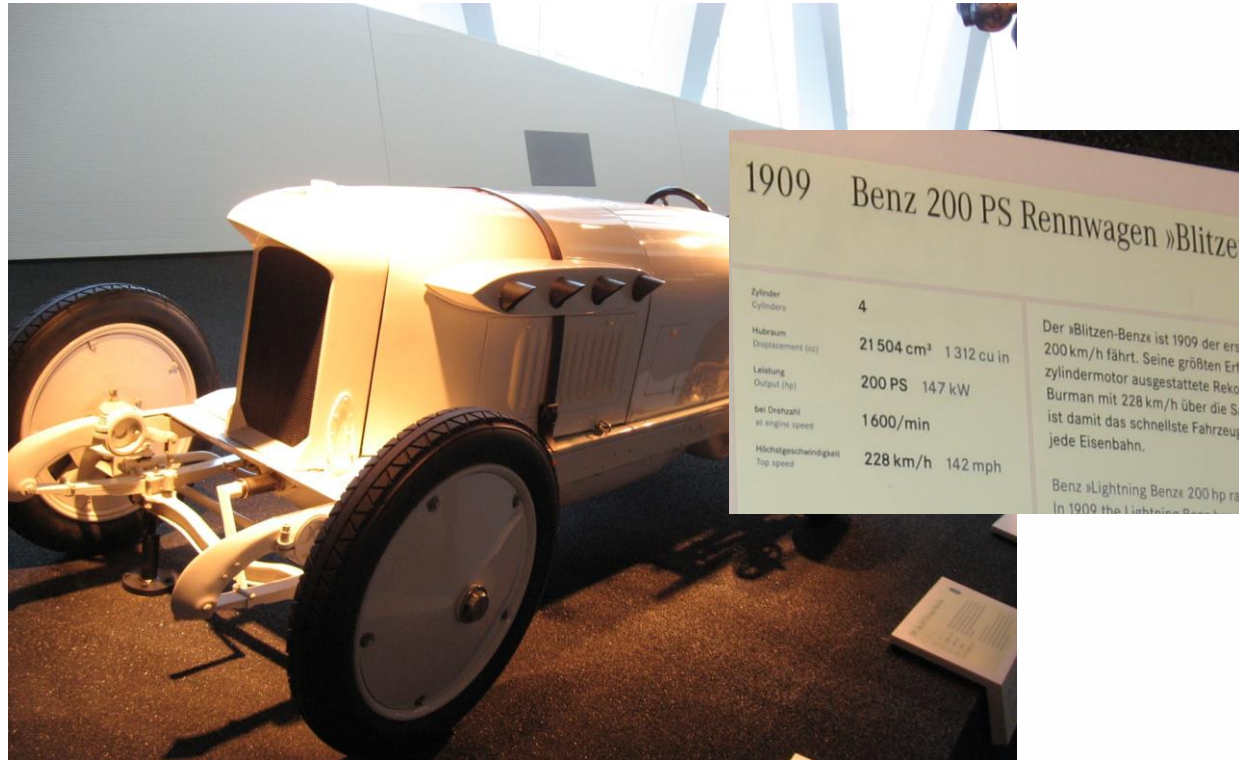
1860

1910

1937

1993

1909



www.tuiasi.ro

1813

1860

1910

1937

1993



# 1930-1950



[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

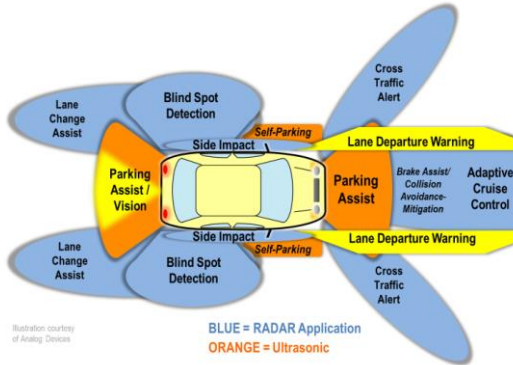
1993

# Tehnologie

> 2010



< 1950



www.tuiasi.ro

1813

1860

1910

1937

1993

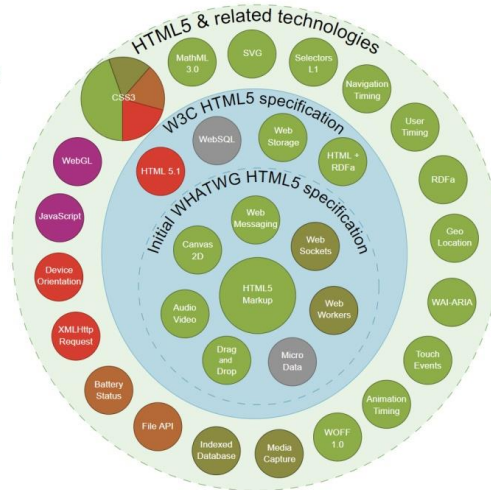
# HTML/XHTML

- HTML 4.01 – 24.12.1999
- XHTML 1.1 – Mai 2001
- CSS 2.1 – 2004-2007

## HTML5

Taxonomy & Status (October 2014)

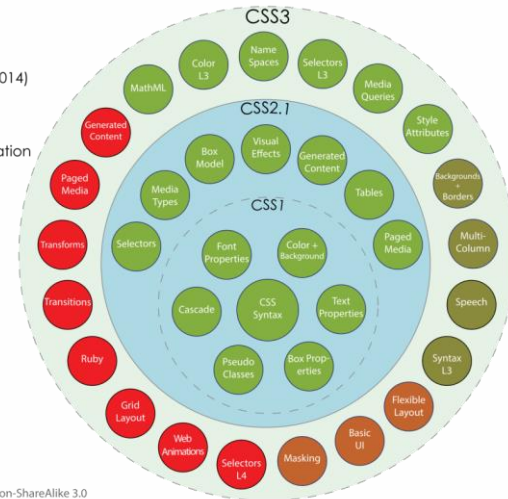
- Recommendation/Proposed
- Candidate Recommendation
- Last Call
- Working Draft
- Non-W3C Specifications
- Deprecated or inactive



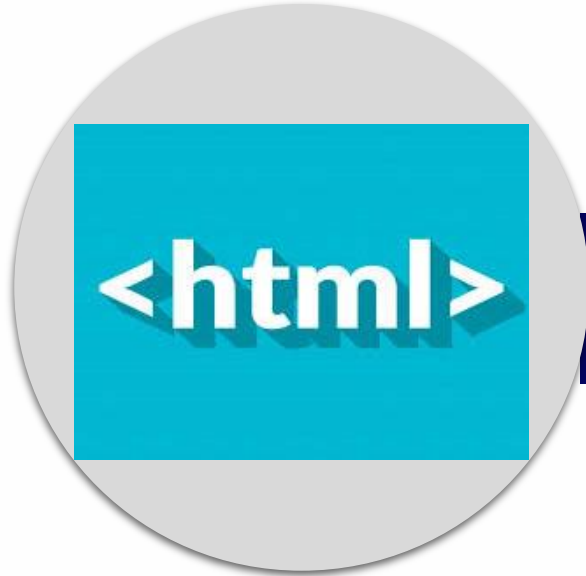
## CSS3

Taxonomy & Status (October 2014)

- W3C Recommendation
- Candidate Recommendation
- Last Call
- Working Draft
- Obsolete or inactive



By Sergey Mavrody 2011-14 | CC Attribution-ShareAlike 3.0



## Concepte HTML

“I.Like.IT@ETTI.TUIASI.RO”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# Principii HTML 1

- Un document HTML e un document **ASCII** (Notepad) care contine **etichete**, interpretat si afisat de browser (View Source)
- **Tags**: etichete, marcaje, **< >**
  - individuale: **<X/>**
    - ex: **<br/>** (**<br>** - HTML)
  - pereche (container): **<X> Continut\_oarecare</X>**
    - ex: **<p>Un paragraf</p>**
    - Eticheta **X** afecteaza cu sensul ei modul in care apare pe ecran **Continut\_oarecare**
    - majoritatea etichetelor sunt pereche

# Principii HTML 2

- Litere mari/mici (Case sensitivity):
  - HTML: indiferent - `<html>` = `<HTML>` = `<HtMl>`
  - XHTML: obligatoriu cu litere mici `<html>`
- Comentarii:
  - `<!-- ..... -->`
  - fara “--” sau “>”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

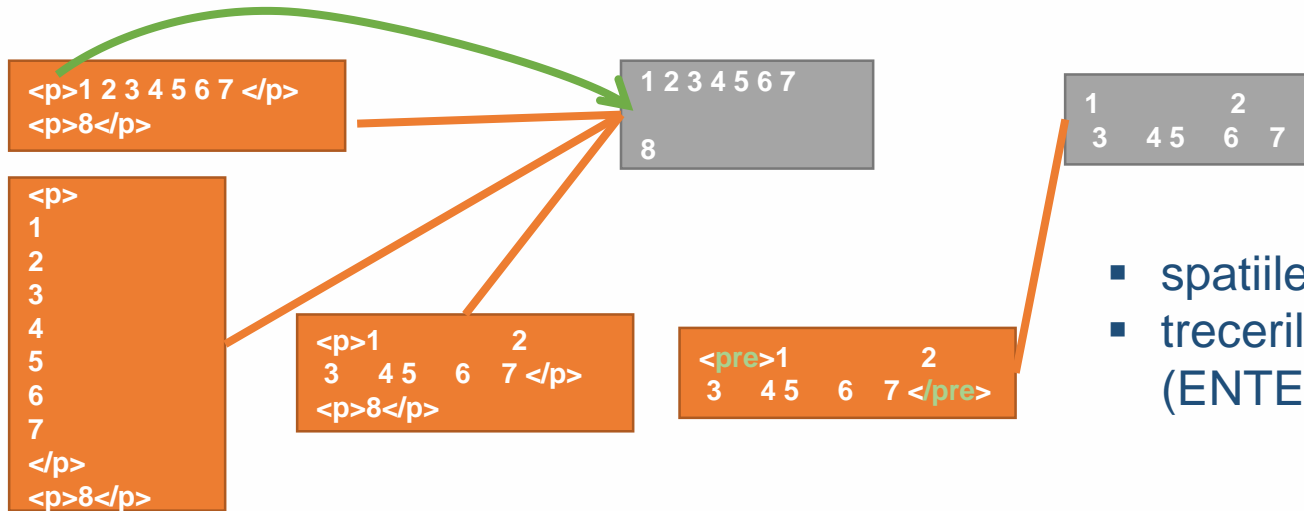
1993

# Atribute

- Optiuni ale etichetelor utilizate pentru detalierea efectului etichetei
- Apar in eticheta de inceput in cazul perechilor
  - `<p id="un_id" align="left">ceva </p>`
- Ca si etichetele sunt cuvinte cheie care trebuie respectate (XML permite definirea atributelor dar HTML si XHTML nu)

# Principii HTML 3

- **Nu** recunoaste aranjarea documentului ASCII sursa
  - singura exceptie: `<pre>...</pre>`



- spatiile se comaseaza
- trecerile la linie noua (ENTER) devin spatii



# Principii HTML 4

$x$   
`<x> Continut afectat de x</x>`

Legal in  
XHTML/HTML

$x$  si **atrib** si **val**

`<x atrib="val"> Continut afectat de x si atrib si val </x>`

Legal in  
XHTML/HTML

$x$   
`<x> Continut <y> Continut afectat de x si y</y> afectat de x</x>`

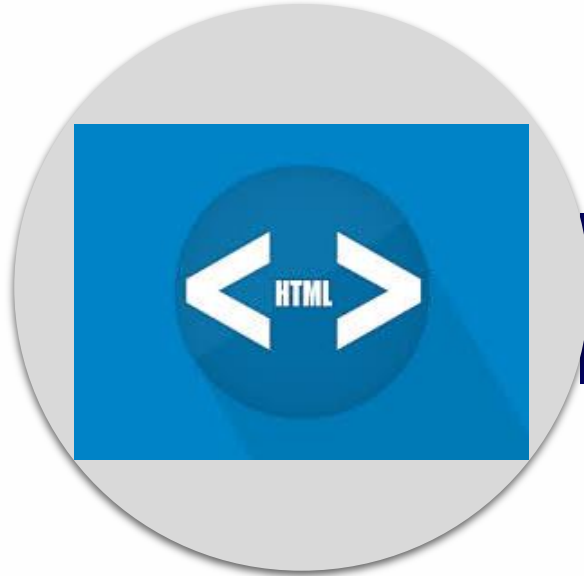
Legal in  
XHTML/HTML

$x$        $y$   
`<x> C. afectat de x <y> C. afectat de x si y </x> C. afectat de y</y>`

Legal **numai** in HTML  
**nerecomandat**

# Diferente majore HTML/XHTML

- Incluziunea etichetelor e obligatorie
  - `<X>....<Y>....</Y>.....</X>` 👍
  - `<X>....<Y>....</X>.....</Y>` 👎
- Etichetele trebuie inchise intotdeauna
  - `<p>....</p><p>.... </p>, <br />, <meta .... />` 👍
  - `<p>....<p>....., <br>, <meta .... >` 👎
- Etichetele trebuie scrise cu litere mici
  - `<p>, <br />, <frameset>` 👍
  - `<P>, <BR />, <FrAmesET>` 👎
- Atributele trebuie scrise cu minuscule si valorile lor intre ghilimele
  - `<p align="left">, <table width="100">, <font color="red">` 👍
  - `<p Align="left">, <table width=100>, <font COLOR=red>` 👎
- Toate informatiile trebuie sa apara in interiorul etichetei `<html>... </html>`



## Etichete HTML

“I.Like.IT@ETTI.TUIASI.RO”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# 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>` (**inexistent** in HTML 5)

www.tuiasi.ro

1813

1860

1910

1937

1993

# Prima linie in orice document HTML

- HTML 5
  - **<!DOCTYPE html>**
- HTML 4: Document Type Definition
  - HTML 4.0 Strict DTD
  - HTML 4.0 Transitional DTD
  - HTML 4.0 Frameset DTD
    - Elemente depreciate – elemente existente in standard dar “pe cale de disparitie” (nu este recomandata utilizarea lor)
    - Exemplu: `<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd"`

# Document HTML minimal

```
<!DOCTYPE .....>
```

```
<html>
```

```
<head>
```

```
....
```

```
</head>
```

```
<body>
```

```
....
```

```
</body>
```

```
</html>
```

<frameset> **inexistent**  
in HTML 5

```
<!DOCTYPE .....>
```

```
<html>
```

```
<head>
```

```
....
```

```
</head>
```

```
<frameset>
```

```
....
```

```
</frameset>
```

```
</html>
```

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

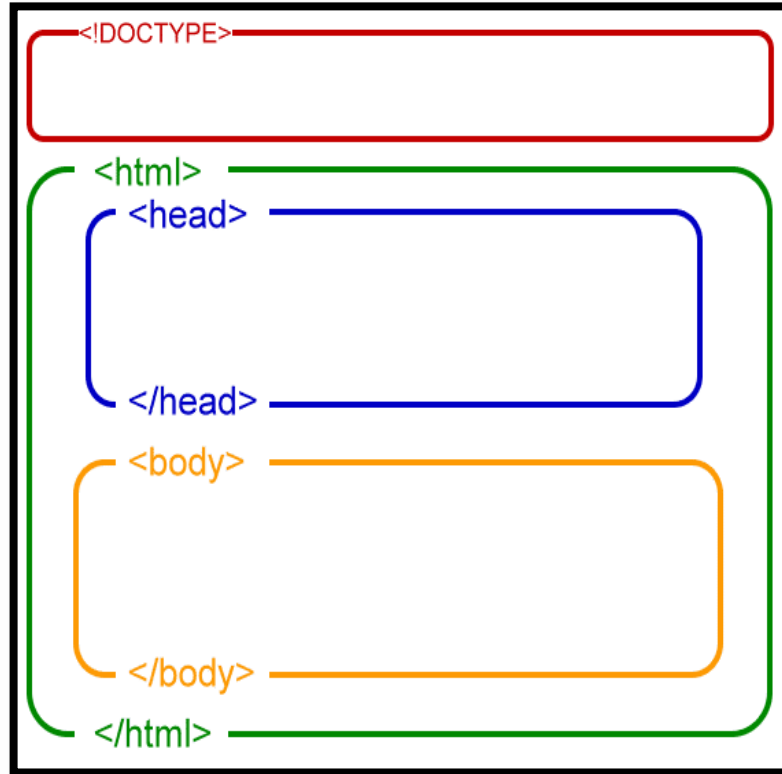
1860

1910

1937

1993

# Document HTML minimal



# Sectiunea Antet

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

www.tuiasi.ro

1813

1860

1910

1937

1993



# 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 fisierele 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 ... />**
- 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

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# Sectiunea Antet - META

- `<meta name="Author" content="Radu Damian" />`
- `<meta http-equiv="Expires" content="Tue, 15 Oct 2019 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>**

- 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”> ...`

www.tuiasi.ro

1813

1860

1910

1937

1993

# Sectiunea Cuprins

- 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')">`

www.tuiasi.ro

1813

1860

1910

1937

1993

# Sectiunea Cuprins

- `<article >...</article >`
- `<section >...</section >`
- `<nav >...</nav >`
- `<header >...</header >`
- `<footer >...</footer >`



[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860


1910


1937


1993


# Culori


- Specificarea culorii:
  - nume (16 - 140):
    - `<font color = “black”>...`
  - cod numeric - # Rosu (**0-256=00-FF**), Verde, Albastru
    - `<font color = “#FF0000”>...`


 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"

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

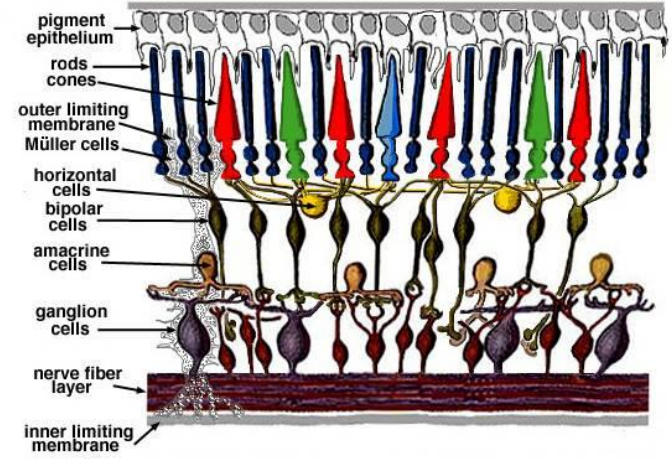
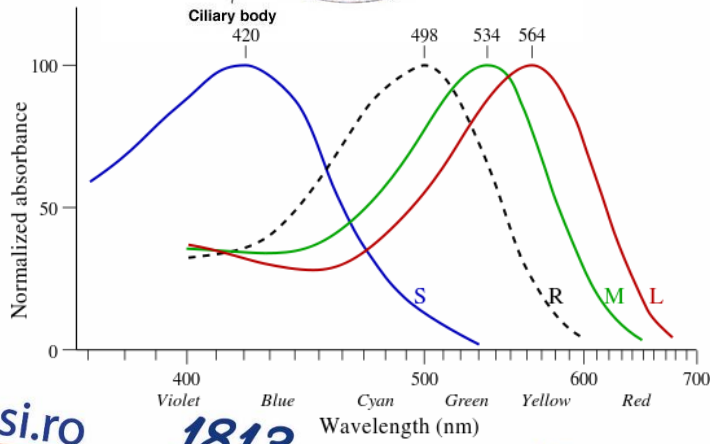
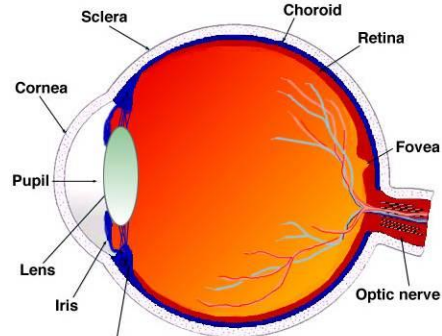
1860

1910

1937

1993

# Ochiul uman



[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993





## Exercitiu

“I.Like.IT@ETTI.TUIASI.RO”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# Notepad ++

- <https://notepad-plus-plus.org/>

```

<table align="center">
  <tr class="lista_titlu">
    <td align="center">Nr.</td>
    <td>Numar</td>
    <td>Data</td>
    <td>Nr. pui</td>
    <td>Gr. pui</td>
  </tr>

```

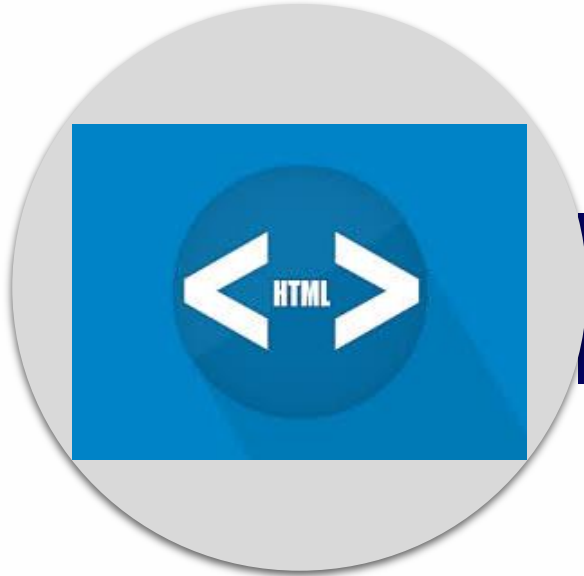
```

E:\Documents\Pagini Web\Safir dep\lista_lot.php - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Win
logfile.php lista_lot.php
539 <?php ?>
540
541 <div id="maincontent"><!-- InstanceBeginEditable name="Conti
542 <p><span class="title">Aadauga</span><br/>
543 <a href="control_lot.php?id=0">Lot nou</a></p>
544 <p class="title">Loturi active</p>
545 <?php
546 $query = "SELECT l.*, c.`nume_user` AS `user_creat`
547 FROM `lot` AS l
548 LEFT JOIN `users` AS c ON (l.`User`=c.`id_user`)
549 WHERE l.`Activ` <> 0 ORDER BY l.`ID_LOT` DESC";
550 $result = mysql_query($query);
551 $total=0;
552 if ($result && (mysql_num_rows($result) > 0))
553 {
554     $total=mysql_num_rows($result);
555     $row = mysql_fetch_assoc($result);
556 }
557 if ($total>0)
558 {
559     <table align="center">
560     <tr class="lista_titlu">
561     <td align="center">Nr.</td>
562     <td>Numar</td>
563     <td>Data</td>
564     <td>Nr. pui</td>
565     <td>Gr. pui</td>
566     <td>Nr. nui morti</td>
567     <td>Gr. pui morti</td>
568     <td>Ferma</td>
569     <td>Documente</td>
570     <td>Creat</td>
571     <td>Comenzi</td>
572     </tr>
573     <?php $index=1;
574     do { ?>

```

# Exercitiu 1

- Utilizati **Notepad ++** pentru a crea un document HTML minimal
  - `<!DOCTYPE html>`
  - `<html>`
  - `<head>`
  - `<body>`
- Introduceți în secțiunea antet etichete specifice
  - `<title>`
  - `<meta>`
- Vizualizați pagina creată în browser (Edge/Internet Explorer/Chrome)



## Etichete HTML

“I.Like.IT@ETTI.TUIASI.RO”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# Titluri in text (HEADINGS)

- importante pentru motoarele de cautare
- 6 nivele (**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 attribute specifice
- **Esentiale** in cooperarea cu **CSS**
- Attribute:
  - id, class
  - align

# Elementul ADDRESS

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

```
<address>  
<a href=" ../People/Raggett/">Dave Raggett</a>,  
<a href=" ../People/Arnaud/">Arnaud Le Hors</a>,  
contact persons for the <a href="Activity">W3C HTML  
Activity</a><br/>  
$Date: 1999/12/24 23:37:50 $  
</address>
```

# Text structurat

- `<em>...</em>`: evidentiere
  - de obicei italic
- `<strong>...</strong>`: evidentiere suplimentara
  - de obicei bold (ingrosat)
- `<cite>...</cite>`: citat
- `<dfn>...</dfn>` : definitii
- `<code>...</code>` : programe
- `<samp>...</samp>` : rezultat al programelor
- `<kbd>...</kbd>` : introducere de la tastatura
- `<var>...</var>` : variabile
- `<abbr>...</abbr>` : abrevieri
- `<acronym>...</acronym>` : acronime
- `<b>...</b>`, `<i>...</i>` : depreciate in HTML 4, valide in HTML 5 dar de importanta redusa

*EM* `<em>`

**STRONG** `<strong>`

*CITE* `<cite>`

*DFN* `<dfn>`

CODE `<code>`

SAMP `<samp>`

KBD `<kbd>`

*VAR* `<var>`

ABBR `<abbr>`

ACRONYM `<acronym>`

www.tuiasi.ro

1813

1860

1910

1937

1993



# Text structurat

- Citate

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

- Indici/puteri

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

## 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>H<sub>2</sub>O</p>
<p>10<sup>3</sup></p>
```

# Linii si paragrafe

- paragraf : **<p>...</p>**
  - attribute:
    - align = “left, center, right, justify”
- linie noua : **<br />**
  - attribute:
    - clear = “none, left, right, all”
  - evitarea aparitiei unei linii noi:
    - nonbreaking space: &nbsp; , &#160; , &#xA0;
- despartire in silabe:
  - Hard: **&#45;** , &#x2D
  - Soft: &shy; , **&#173;** , &#xAD;
- respectarea organizarii sursei: **<pre>...</pre>**

```
*****
|         | -----
| image  | -----
|         | --<br>
|         | -----
*****
```

```
*****
|         | -----
| image  | -----
|         | --<br>
|         | -----
*****
```

# Marcarea modificarilor

- inserare : **<ins>...</ins>**
  - uzual reprezentat subliniat
  - atribute (nonvizuale):
    - cite = “adresa eventualului document care explica corectia”
    - datetime = “data/timpul” la care a aparut modificarea
- eliminare : **<del>...</del>**
  - uzual 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;	&nbsp;	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

# Coduri 2

ASCII		HTML	HTML		
Dec	Hex	Symbol	Number	Name	Description
174	AE	®	&#174;	&reg;	registered trade mark sign
175	AF	ˉ	&#175;	&macr;	spacing macron - overline
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

# Coduri 3

ASCII		HTML		HTML	
Dec	Hex	Symbol	Number	Name	Description
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
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



## Exercitiu

“I.Like.IT@ETTI.TUIASI.RO”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

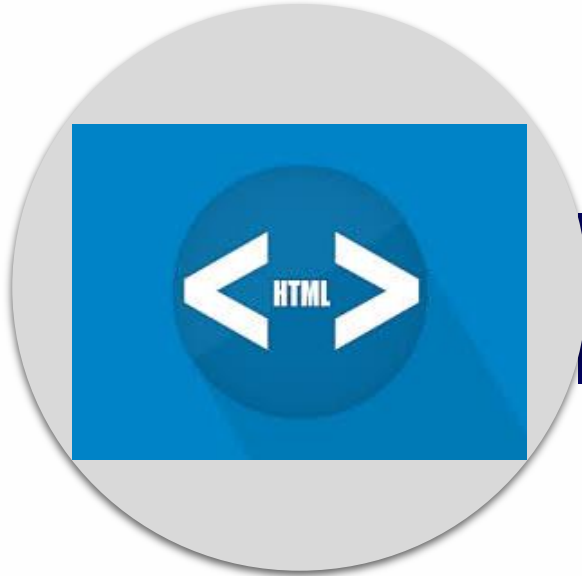
1937

1993

## Exercitiu 2

- Utilizati **Notepad ++** pentru a continua documentul HTML creat la exercitiul 1
- Introduceți cel puțin 2 niveluri de titluri (de exemplu h1 și h2)
  - **<h1>**, **<h2>**
- Introduceți cel puțin 3 paragrafe
  - **<p>...</p>**
- Introduceți cel puțin trei elemente de structurare a textului
  - de exemplu: **<strong>**, **<em>**, **<code>**
- Introduceți cel puțin un caracter special (prin cod)
  - de exemplu ®
- Vizualizați pagina creată în browser (Edge/Internet Explorer/Chrome)





## Etichete HTML

“I.Like.IT@ETTI.TUIASI.RO”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# 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” (**inexistent** in HTML 5)
    - OL tip lista : “1, a, A, i, I”
  - start = “numarul de la care porneste lista” (OL)
  - value = “fortarea numarului curent” (LI)

# Liste neordonate

```
<ul>
```

```
<li>Primul element</li>
```

```
<li>Al doilea element</li>
```

```
<li>Al treilea element</li>
```

```
<li>Al patrulea element</li>
```

```
</ul>
```

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

```
<ul type="circle">
```

```
<li>Primul element</li>
```

```
<li>Al doilea element</li>
```

```
<li>Al treilea element</li>
```

```
<li>Al patrulea element</li>
```

```
</ul>
```

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

# Liste ordonate

```
<ol>
```

```
<li>Primul element</li>
```

```
<li>Al doilea element</li>
```

```
<li>Al treilea element</li>
```

```
<li>Al patrulea element</li>
```

```
</ol>
```

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

```
<ol type="i">
```

```
<li>Primul element</li>
```

```
<li>Al doilea element</li>
```

```
<li>Al treilea element</li>
```

```
<li>Al patrulea element</li>
```

```
</ol>
```

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

# Liste ordonate

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

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

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

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

# Liste: Exemple



English | Romana |

Main Courses **Master** Staff Research Students

Radiocommunication Systems Microwave IC Web Design

Start Societati Servicii Informatii Contact

Informatii | Mediu | Link-uri | Lista paginilor Start | Inapoi

industrie software suport oferta contact

Romana English

- Start
- Didactic
- Master
- Colectiv
- Cercetare
- Studenti
  - Note
  - Laborator
  - Fotografii

industrie

BUN VENIT

Societate  
Prezentare  
Detalii financiare

Contact  
Contact

Telefon/Fax

Telefon:

Fax:

Mobil (recomandat):

Internet

Web:

E-mail:

IM:

www.tuiasi.ro

1813

1860

1910

1937

1993

# Liste de definitii

- Liste de definitii `<dl>...</dl>`
- Termenul definit `<dt>...</dt>`
- Definitia termenului anterior `<dd>...</dd>`
- Atributele standard: id, lang, title, style etc.
- Reprezentare vizuala: definitia e “indent-ata”

```
<dl>  
<dt><strong>Termen 1</strong></dt>  
<dd>Definitia 1</dd>  
<dt><strong>Termen 2</strong></dt>  
<dd>Definitia 2</dd>  
<dt><strong>Termen 3</strong></dt>  
<dd>Definitia 3</dd>  
</dl>
```

**Termen 1**  
Definitia 1

**Termen 2**  
Definitia 2

**Termen 3**  
Definitia 3



## Exercitiu

“I.Like.IT@ETTI.TUIASI.RO”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

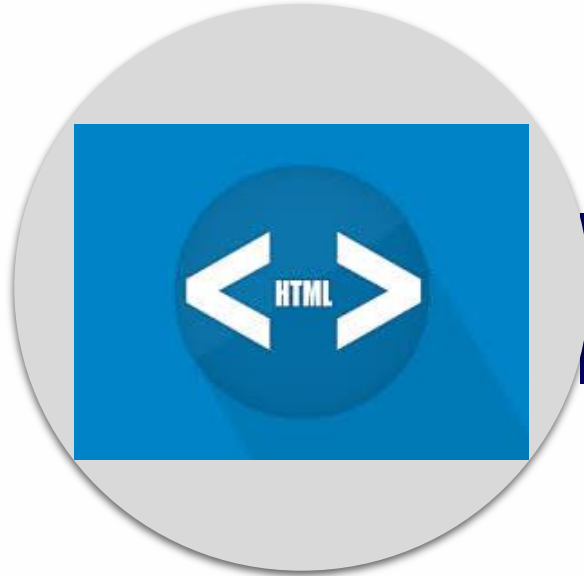
1937

1993



## Exercitiu 3

- Utilizati **Notepad ++** pentru a continua documentul HTML creat la exercitiul 2
- Introduceți cel puțin 2 liste **neordonate** (cu tipuri diferite)
  - `<ul>...</ul>`
- Introduceți cel puțin 2 liste **ordonate** (cu tipuri diferite)
  - `<ol>...</ol>`
- Încercați să introduceți o listă mixtă (un element `<li>...</li>` să conțină în interior o listă de alt tip)
- Vizualizați pagina creată în browser (Edge/Internet Explorer/Chrome)



## Etichete HTML

“I.Like.IT@ETTI.TUIASI.RO”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993



# Aliniere si fundal

- Culoare de fundal
  - valabil pentru body si td (celula de tabel)
  - atribut: bgcolor
    - `<td bgcolor="#232323">...</td>`
- Aliniere
  - valabil pentru toate elementele cu structura bloc
  - atribut align = “left | center | right | justify”
    - `<div align = “right”> ... , <p align = “left”>... , <table align = “center”> ... etc.`

# Font

- Definitie: Font = desenul (forma grafica) a caracterului
- Fonturi
  - Outline font (True type) = desen vectorial, curbe Bezier - scalarea pastreaza calitatea maxima
  - Bitmap font = harta de pixeli – scalarea duce la aparitia artifactelor

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

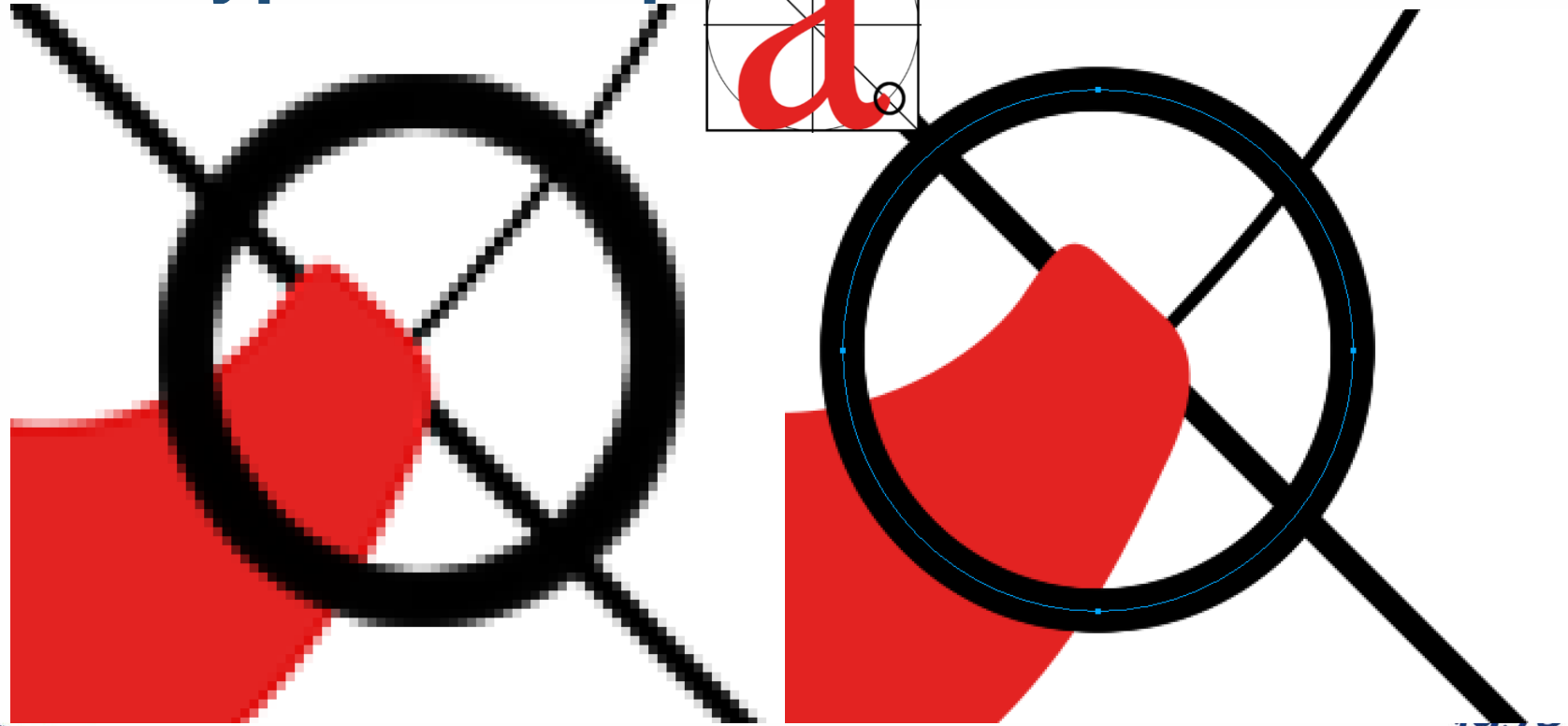
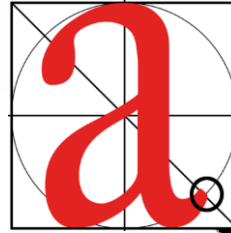
1860

1910

1937

1993

# True Type - Bitmap



[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1990

# Font

- desen de caractere



Sans-serif



Serif

Generic	Familie	Descriere
<b>Serif</b>	Times New Roman Georgia	Apar mici linii la terminatia anumitor caractere
<b>Sans-serif</b>	Arial Verdana	Fara liniute la sfarsit de caracter
<b>Monospace</b>	Courier New Lucida Console	Latime constanta a caracterelor

# Web safe font

- Fonturi definite de CSS
  - sans-serif
  - serif
  - monospace
  - cursive
  - fantasy
- Fonturi safe Microsoft
  - Arial
  - Courier New
  - Georgia
  - Times New Roman
  - Verdana
  - Trebuchet MS
  - Lucida Sans

sans-serif  
serif  
monospace  
cursive  
*fantasy*

Arial  
Courier New  
Georgia  
Times New Roman  
Verdana  
Trebuchet MS  
Lucida Sans



# Web safe font

## • Fonturi Google

- <https://fonts.google.com/>
- 1691 familii de fonturi gratuite (2024)





# Font – elemente de stil

- `<tt>...</tt>` : masina de scris (latime fixa)
- `<i>...</i>` : italic (inclinat)
- `<b>...</b>` : bold (ingrosat)
- `<big>...</big>` : dimensiune ceva mai mare
- `<small>...</small>` : dimensiune ceva mai mica
- `<strike>...</strike>` : taiat : depreciat
- `<u>...</u>` : subliniat: depreciat

```
<p>text normal, <b>bold</b>, <i>italic</i>,
<b><i>bold italic</i></b>,<br/> <tt>teletype
text</tt>, <big>big</big>,
<small>small</small>, <br/>
<strike>strike</strike>, <u>underline</u>.</p>
```



text normal, **bold**, *italic*, ***bold italic***,  
teletype text, **big**, small,  
~~strike~~, underline.

# FONT si BASEFONT

HTML



- `<font>...</font>`, `<basefont />`
- contine modificatori al desenului de caracter
- attribute:
  - size : dimensiunea
    - absolut  $1 \div 7$
    - relativ  $-4 \div +4$  (fata de cea implicita, 3, sau cea indicata cu basefont)
  - color = “culoare”
  - face: desenul de caractere de folosit, in ordinea preferintei
    - fonturile ale caror nume contin spatii (Times New Roman) se scriu intre ghilimele
    - e recomandabil ca macar pe ultima pozitie sa apara unul din fonturile web-safe CSS

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# FONT si BASEFONT

HTML



## • Exemple

- `<basefont size="2">`
- `<font color="red">text rosu</font>`
- `<font size="+1">echiv. cu big</font>`
- `<font size="-1">echiv. cu small</font>`
- `<font face="Arial,'Times New Roman', sans-serif">un text</font>`
  - se utilizeaza Arial
  - daca Arial nu exista se utilizeaza Times New Roman
  - daca nici Times New Roman nu exista se utilizeaza sans-serif
  - daca nici sans-serif nu exista se utilizeaza fontul implicit in browser

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# FONT si BASEFONT

HTML



```
<p><font size="1">size=1</font>
<font size="2">size=2</font>
<font size="3">size=3</font>
<font size="4">size=4</font><br/>
<font size="5">size=5</font>
<font size="6">size=6</font>
<font size="7">size=7</font></p>
```

size=1 size=2 size=3 size=4

size=5 size=6 **size=7**

```
<p><font size="-4">size=-4</font>
<font size="-3">size=-3</font>
<font size="-2">size=-2</font>
<font size="-1">size=-1</font>
<font size="+1">size=+1</font><br/>
<font size="+2">size=+2</font>
<font size="+3">size=+3</font>
<font size="+4">size=+4</font></p>
```

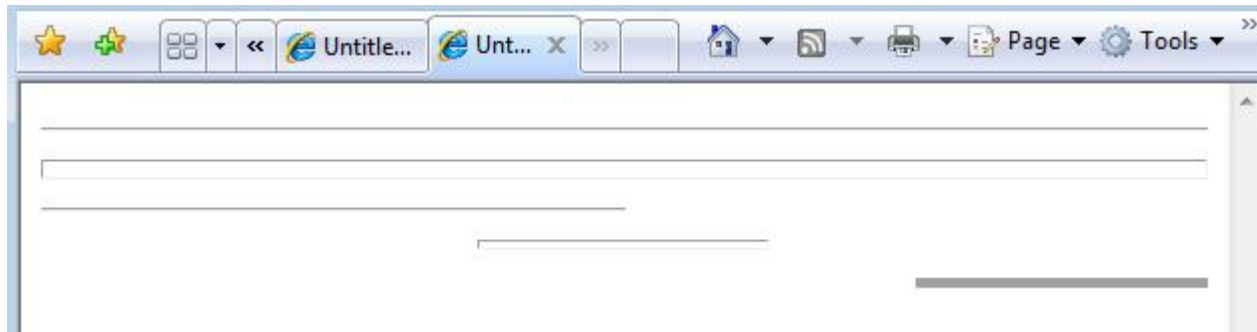
size=4 size=3 size=2 size=-1 size=+1

size=+2 size=+3 **size=+4**

# Linii orizontale

- `<hr />`
- attribute:
  - align = “left | center | right”
  - noshade = “noshade”
  - size: inaltimea in pixeli
  - width: latimea (implicit 100%)

```
<hr />  
<hr size="10" />  
<hr align="left" width="50%" />  
<hr align="center" width="25%"  
size="5" />  
<hr align="right" width="25%"  
noshade="noshade" size="5" />
```



# Imagini

- `<img ... />`
- attribute:
  - **src** = “URI”: adresa imaginii care trebuie introduse
  - **alt** = “text”: descriere alternativa, de multe ori afisat ca tool-tip in browser-ele vizuale, si ca inlocuitor al imaginii in browser-ele tip text
  - **longdesc** = “URI”: adresa unui alt document cu explicatii detaliate: suport minimal in browser-e
  - altele: ismap, usemap (pentru utilizarea ca zona activa), name, id etc.

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# Obiecte

- `<object> ...</object>`
- mai general, pentru incluziunea diferitelor tipuri de obiecte
- in particular se poate folosi pentru a afisa imagini:
  - ``
  - `<object data="poza_pasaport.gif" type="image/gif">Poza de pasaport</object>`
- permite oferirea de indicatii suplimentare browser-ului si eventual initializarea obiectului cu eticheta param>

# Obiecte

- cea mai raspandita utilizare, introducerea continutului multimedia, in special filme sau aplicatii Flash.
- exemplu:

```
<object classid="clsid:d27cdb6e-ae6d-11cf-96b8-444553540000"  
codebase="http://fpdownload.macromedia.com/pub/shockwave/cabs/flash/swflas  
h.cab#version=8,0,0,0" width="224" height="99" id="sigla" align="middle">  
<param name="allowScriptAccess" value="sameDomain" />  
<param name="movie" value="sigla.swf" /><param name="quality" value="high"  
/><param name="bgcolor" value="#585d4b" /><embed src="sigla.swf"  
quality="high" bgcolor="#585d4b" width="224" height="99" name="sigla"  
align="middle" allowScriptAccess="sameDomain" type="application/x-shockwave-  
flash" pluginspage="http://www.macromedia.com/go/getflashplayer" />  
</object>
```



# Media

- HTML 5 imbunatateste semnificativ (cu suport din partea browser-elor) capacitatea de a afisa date multimedia fara aplicatii externe

- **<audio>...</audio>**

- MP3, Wav, Ogg

- **<video>...</video>**

- MP4, WebM, Ogg



```
<video width="320" height="240" controls
autoplay loop>
  <source src="movie.mp4" type="video/mp4">
  <source src="movie.ogg" type="video/ogg">
  Your browser does not support the video tag.
</video>
```



## Exercitiu

“I.Like.IT@ETTI.TUIASI.RO”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

## Exercitiu 4

- Utilizati **Notepad ++** pentru a continua documentul HTML creat la exercitiul 3
- Obtineti o imagine de pe Internet (orice site, right click, save image as) si apoi introduceti-o in document
  - **<img ... />**
  - utilizati referinta locala spre fisierul imagine
    - src="poza.jpg" **nu** src="D:\dir\poza.jpg"
- Vizualizati pagina creata in browser (Edge/Internet Explorer/Chrome)

# Exercitiu 5

- Utilizati **Notepad ++** pentru a continua documentul HTML creat la exercitiul 4
- Obtineti doua fisiere media (mp3,mp4) de pe site-ul laboratorului: [rf-opto.etti.tuiasi.ro](http://rf-opto.etti.tuiasi.ro)
- Exersati cele doua etichete media prezentate
  - **<audio>...</audio>**
  - **<video>...</video>**
  - faceti diverse teste cu **prezenta/absenta** atributelor **controls autoplay loop**
- Vizualizati pagina creata in browser (Edge/Internet Explorer/Chrome)

www.tuiasi.ro

1813

1860

1910

1937

1993

# TABLE

- **<table>...</table>**

- defineste o zona in care alte date vor fi asezate sub forma de tabel (linii si coloane rectangulare)
- attribute (**inexistent** in HTML 5) :
  - summary = “text de descriere”
  - align = “left | center | right”
  - width = “latime in pixeli sau procente”
    - width = “50”
    - width = “75%”
  - border = “latimea liniilor despartitoare in pixeli”
  - altele: id, class, title, bgcolor etc.

# TABLE

- in lipsa indicatiilor relative la dimensionare (width si altele) browser-ul decide dimensiunea tabelului **numai** in functie de datele continute
  - pentru aceasta trebuie sa astepte primirea **tuturor** datelor din tabel
- `<table>` **nu are efect vizual** de sine statator
  - e folosit doar in calitate de container pentru **linii**, care vor contine **celule**, care vor contine efectiv **datele**
- este preferat pentru realizarea impartirii paginii in zone fata de `<frame>... </frame>`
  - `<frame>` dispare in HTML5
  - CSS e conceput pentru a **inlocui** aceasta utilizare a tabelelor

# CAPTION

- `<caption>...</caption>`
- definește titlul tabelului
- poate apare numai:
  - imediat după definirea tabelului `<table>`
  - o singură etichetă pentru fiecare tabel
- attribute:
  - `align = “top | bottom | left | right”` (**inexistent** in HTML 5)

# Grupuri de linii

- `<thead>...</thead>` : antetul tabelului
- `<tfoot >...</tfoot >` : subsolul tabelului
- `<tbody>...</tbody>` : corpul tabelului
- `<tbody>` poate aparea de mai multe ori definind gruparea datelor
- `<thead>` si `<tfoot>` pot aparea o singura data, imediat dupa `<table>` si eventual `<caption>`
- toate grupurile trebuie sa contina macar o singura linie (`<tr>`)
- **scopul** este de a ajuta browser-ul sa afiseze si sa imprime corespunzator tabelele mari
  - suportul browser-elor este **deficitar**



# Grupuri de linii

```
<table>
<caption> </caption>
<thead>
    <tr> ...header information...
</thead>
<tfoot>
    <tr> ...footer information...
</tfoot>
<tbody>
    <tr> ...first row of block one data...
    <tr> ...second row of block one data...
</tbody>
<tbody>
    <tr> ...first row of block two data...
    <tr> ...second row of block two data...
</tbody>
</table>
```

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# Grupuri de coloane

- `<colgroup>...</colgroup>` definește un grup de coloane
- `<col />` definește o coloană individuală
- definesc numărul de coloane și dimensionarea acestora în avans
- **scopul** este de a permite afișarea **incrementală**
- suport limitat în browser-e
- atribute:
  - `span` = “numărul de coloane”, implicit 1
  - `width` = “lățime”
  - `align` = “left | center | right | justify | char”
  - `char` = “caracterul la care se face alinierea”, (‘.’ sau ‘,’)
  - `charoff` = “poziționarea caracterului special”

# Grupuri de coloane

- Latimea coloanelor (si a celulelor)

- pixeli : width = “50”
- procentaj : width = “50%”
- relativ : width = “nr \*”
  - col 1: width = “\*”; col2: width = “2\*”; col3: width = “3\*”
  - browser-ul calculeaza cat va reprezenta “\*” si multiplica corespunzator latimile celorlalte coloane
- “0\*” : minimul necesar pentru reprezentarea datelor

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# Grupuri de coloane

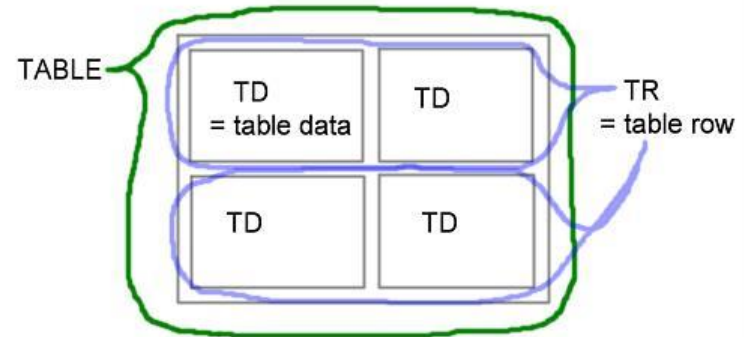
```

<table>
<colgroup>
    <col width="30">
</colgroup>
<colgroup>
    <col width="30">
    <col width="0*">
    <col width="2*">
</colgroup>
<colgroup align="center">
    <col width="1*">
    <col width="3*" align="char"
char=":"> </colgroup>
<thead>
    <tr><td> ... ..rows...
</table>
    
```

- se aloca mai intai 30 px pentru prima si a doua coloana
- apoi minimul necesar pentru coloana 3
- dimensiunea ramasa se imparte la 6 ( $2^*+1^*+3^*$ ) pentru a afla valoarea elementara “\*”
- se calculeaza latimile corespunzatoare ale coloanelor

# Linii

- `<tr>...</tr>` (“table row”)
- definește o linie în tabel
- fără efect vizual, este un container **necesar și obligatoriu** pentru celulele tabelului
- atribute (**inexistent** în HTML 5) :
  - bgcolor = “culoare”
  - align = “left | center | right | justify | char”
  - valign = “top | middle | bottom | baseline”
    - alinierea pe verticală a datelor în celule
    - implicit: “middle”
  - altele: id, class, title, style etc



# Celule

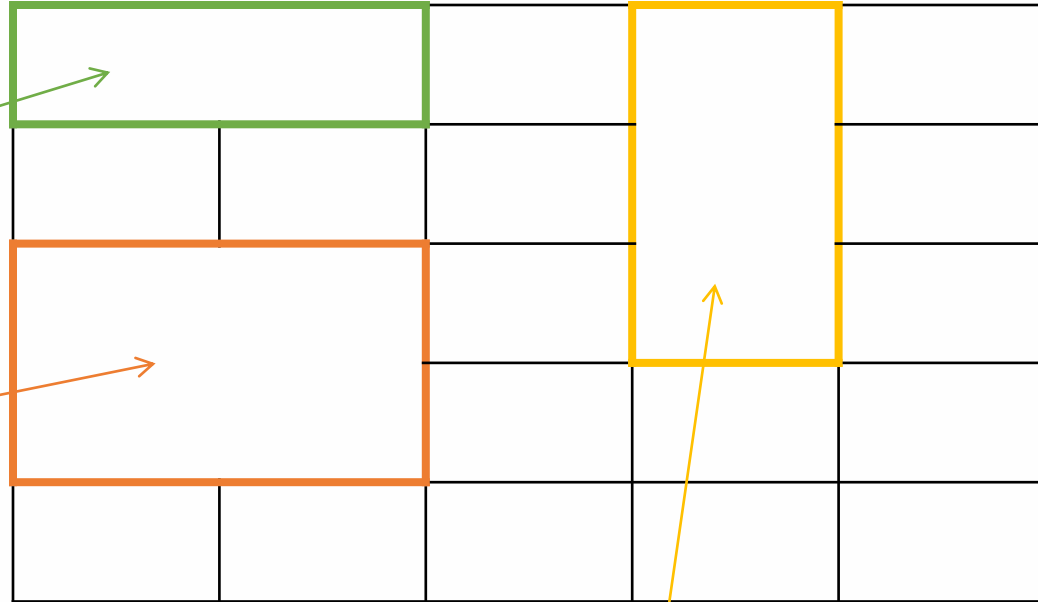
- `<td>...</td>` (“table data”)
  - `<th>...</th>` (“table header”) – bold si align = “center”
- defineste o celula, care va contine **datele** efective
- attribute:
  - **rowspan** = “numar”
    - implicit: 1
    - numarul de linii pe care se intinde celula (“merge cells” pe verticala)
  - **colspan** = “numar”
    - implicit: 1
    - numarul de coloane pe care se intinde celula (“merge cells” pe orizontala)

# Rowspan si colspan



colspan = "2"

rowspan = "2"  
colspan = "2"



rowspan = "3"

# Celule

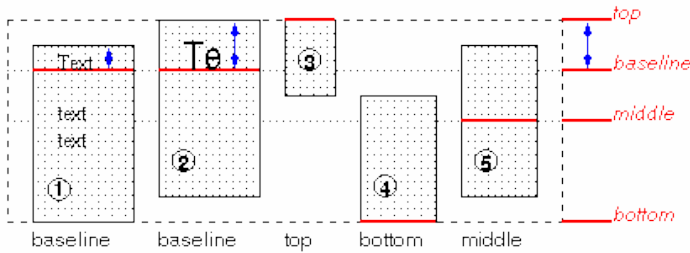
- attribute (**inexistent** in HTML 5):
  - align = “left | center | right | justify | char”
  - char = “character”, implicit: “.”
  - valign = “top | middle | bottom | baseline”
  - nowrap = “nowrap”
  - width = “latime”, height = “inaltime”
  - informatii despre celula – suport limitat
    - headers = “nume (id = ...) separate de spatiu”
    - scope = “row | col | rowgroup | colgroup”
    - abbr = “text scurt”
  - altele: id, class, title, bgcolor , style etc.



# Chenare

- se aplica ca atribut la `<table>...</table>`
- attribute:
  - **frame** = “void | above | below | hside | lside | rside | vside | box | border”; pentru **exterior**
    - void = fara; box, border = toate
    - above/below/lside/rside = o singura linie
    - hside/vside = 2 linii (orizontale/verticale)
  - **rules** = “none | groups | rows | cols | all”; pentru **interior**
    - none = fara; all = toate
    - rows/cols = numai intre linii/coloane
    - groups = intre grupurile de linii/coloane
  - **border** = “latime in pixeli”
    - border = “0” echiv. cu frames = “void” rules = “none”
    - border = “orice inafara de 0” echiv. cu frames = “border” rules = “all”

# Aliniere verticala



```
<table border="1">
<tr valign="aliniere">
<td><font size="+3">rand 1</font></td>
<td><font size="+2">rand 1</font><br />rand 2</td>
<td>rand 1<br />rand 2<br />rand 3</td>
<td>rand 1<br />rand 2<br />rand 3<br />rand
4</td>
</tr>
</table>
```

aliniere	efect			
top	rand 1	rand 1 rand 2	rand 1 rand 2 rand 3	rand 1 rand 2 rand 3 rand 4
middle	rand 1	rand 1 rand 2	rand 1 rand 2 rand 3	rand 1 rand 2 rand 3 rand 4
bottom	rand 1	rand 1 rand 2	rand 1 rand 2 rand 3	rand 1 rand 2 rand 3 rand 4
baseline	rand 1	rand 1 rand 2	rand 1 rand 2 rand 3	rand 1 rand 2 rand 3 rand 4

# Aliniere orizontala

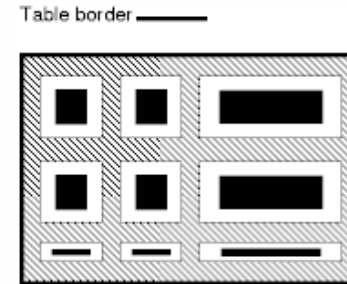
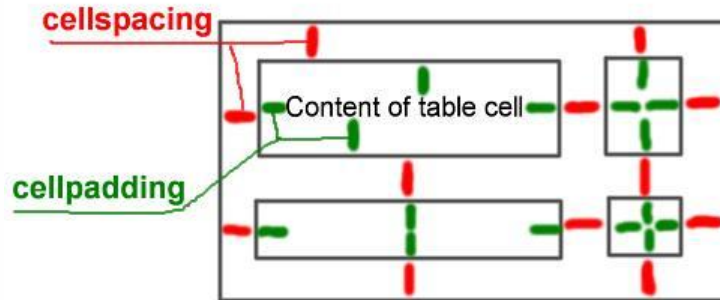
- align = “char” nu este implementat de nici un browser actual
- align = “justify” nu este respectat de Internet Explorer

```
<table border="1"><tr>
<td width="150" align="left">0.1<br />10000<br />0.00005<br />linie_cu_text mai_lung care_se desparte pe_trei_randuri</td>
<td width="150" align="right">_._.</td>
<td width="150" align="center">_._.</td>
<td width="150" align="justify">_._.</td>
<td width="150" align="char" char=".">_._.</td>
</tr></table>
```

0.1	0.1	0.1	0.1	0.1
10000	10000	10000	10000	10000
0.00005	0.00005	0.00005	0.00005	0.00005
linie_cu_text mai_lung care_se desparte pe_trei_randuri	linie_cu_text mai_lung care_se desparte pe_trei_randuri	linie_cu_text mai_lung care_se desparte pe_trei_randuri	linie_cu_text mai_lung care_se desparte pe_trei_randuri	linie_cu_text mai_lung care_se desparte pe_trei_randuri

# Spatierea celulelor

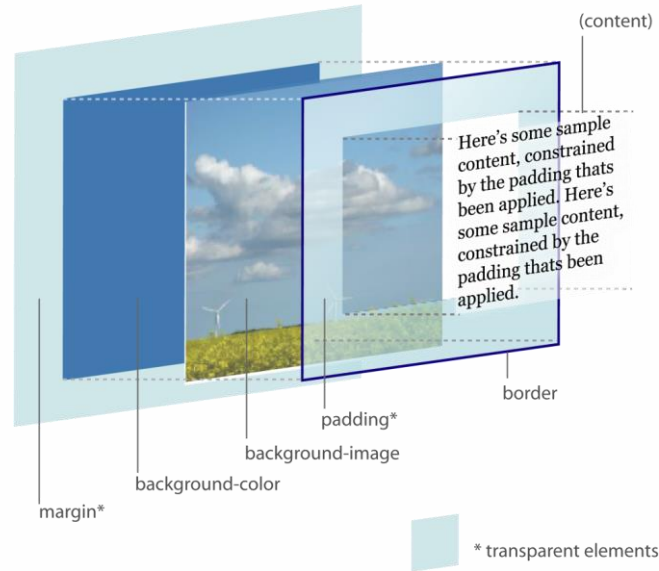
- se aplica ca attribute la `<table>...</table>`
- attribute:
  - `cellspacing` = “lungime”
    - lungime = pixeli
  - `cellpadding` = “lungime”
    - lungime = pixeli sau %



# Afisarea celulelor

- pentru suprapuneri complexe
- similar cu modelul CSS
  - margin ~ cellspacing
  - padding ~ cellpadding

THE CSS BOX MODEL HIERARCHY





## Exercitiu

“I.Like.IT@ETTI.TUIASI.RO”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

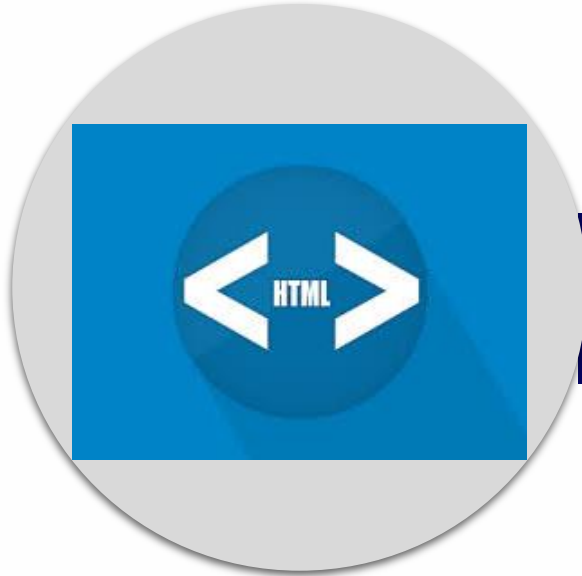
1910

1937

1993

## Exercitiu 6

- Utilizati **Notepad ++** pentru a continua documentul HTML creat la exercitiul 4/5
- Introduceti un **tabel**
  - `<table>...</table>`
- Introduceti cel puțin 4 linii **in interiorul tabelului**
  - `<tr>...</tr>`
- Introduceti celule in interiorul fiecarei **linii** (pot fi in numar egal si inegal intre linii)
  - `<td>...</td>`
- Introduceti date (text) in interiorul liniilor si exersati activarea chenarului pentru tabel
- Vizualizati pagina creata in browser (Edge/Internet Explorer/Chrome)



## Etichete HTML

“I.Like.IT@ETTI.TUIASI.RO”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993



# Link-uri si ancore

- `<a>...</a>`
- poate fi folosita pentru a realiza o legatura intre doua resurse, legatura care are doua capete:
  - **punct de plecare** spre un alt document la activarea cu mouse, tastatura, vocal, etc. (**A ca link**)
    - ex: <https://www.w3.org/TR/html52/links.html> activeaza in browser documentul de la adresa (URI) indicata
  - **punct destinatie** in interiorul unui document, caz in care constituie tinta pentru alte trimiteri (**A ca ancora**)
    - ex: <https://www.w3.org/TR/html52/links.html#links-introduction> activeaza acelasi document, dar cu pozitionare in dreptul zonei identificata de ancora “#links-introduction”

# A

- **atribute:**

- **name** = “text”: numele de identificare la definire de ancora
- **href** = “URI”: adresa tinte la utilizarea ca link
- **target** = “\_blank | \_self | \_parent | \_top”: modalitatea de deschidere a paginii:
  - **\_blank**: o noua fereastră (cu pastrarea paginii anterioare)
  - **\_self**, **\_parent**, **\_top**: la utilizarea frameset, specificarea modalitatii de afisare in pagina curenta: in acelasi frame, in frame-ul parinte sau ca pagina independenta, inlocuind orice alt frame existent
- **type** = “text MIME caracterizand tipul documentului tinta”
  - ex: “text/html”, “text/css”, “application/pdf”, “image/gif”, etc. pentru a permite interpretarea corecta de catre browser a tinte. Implicit este “text/html”
- altele: id, class, title, etc.

www.tuiasi.ro

1813

1860

1910

1937

1993



# A

## • utilizarea tipica:

### • A ca link:

- `<a href="https://www.google.com">Dati click aici pentru a ajunge la Google</a>`
- are efect vizual: Dati click aici pentru a ajunge la Google (afisare diferentiata, tipic albastru subliniat si cu activarea unui cursor diferit pentru mouse la survolare)

### • A ca ancora:

- `<a name="cap_1">Aici incepe capitolul 1</a>`
- fara efect vizual dar cu definire interna a unei tinte pentru alte link-uri de tipul: [http://document.html#cap\\_1](http://document.html#cap_1)
- inlocuit de **id** in HTML5 (la orice element): `<a id="cap_1">` / `<p id="cap_1">` + [http://document.html#cap\\_1](http://document.html#cap_1)

### • A ca link si ancora simultan :

- `<a href="alt document" name="ancora in documentul curent">`

# A – indicarea resursei de accesat

- **absolut**: prin indicarea URL complet.
  - `<a href="https://www.google.com">...</a>`
  - obligatoriu cu specificarea protocolului (e.g. “**https://**”) altfel interpretarea este facuta relativ.
    - exemplu **pozitiv**: daca in documentul de la adresa <http://www.etti.tuiasi.ro/doc/ceva.html> exista un link: `<a href="https://www.google.com">...</a>` va exista o trimitere spre server-ul Google
    - exemplu **negativ**: daca in documentul de la adresa <http://www.etti.tuiasi.ro/doc/ceva.html> exista un link: `<a href="www.google.com">...</a>` va exista o trimitere spre <http://www.etti.tuiasi.ro/doc/www.google.com> ?

www.tuiasi.ro

1813

1860

1910

1937

1993

# A – indicarea resursei de accesat

- **relativ**: la o cale indicata de (se verifica in ordine)
  - eticheta BASE, in sectiunea HEAD: `<base href="http://www.etti.tuiasi.ro">`
  - indicata de server in protocolul utilizat (HTTP in acest caz)
  - adresa documentului curent (cazul cel mai frecvent si recomandat)
    - exemplu 1: daca in documentul de la adresa <http://www.etti.tuiasi.ro/ceva.html> exista un link: `<a href="/images/poza.gif">...</a>` va exista o trimitere spre documentul <http://www.etti.tuiasi.ro/images/poza.gif>
    - exemplu 2: daca in documentul de la adresa <http://www.etti.tuiasi.ro/doc/ceva.html> exista un link: `<a href="../images/poza.gif">...</a>` va exista o trimitere spre documentul <http://www.etti.tuiasi.ro/images/poza.gif>

www.tuiasi.ro

1813

1860

1910

1937

1993



## Exercitiu

“I.Like.IT@ETTI.TUIASI.RO”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

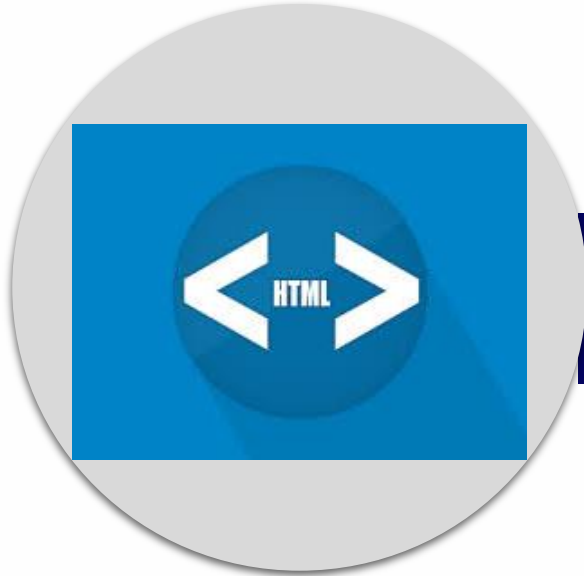
1910

1937

1993

# Exercitiu 7

- Utilizati **Notepad ++** pentru a crea un **al doilea** document HTML minimal, eventual utilizati copy/paste pentru a prelua linii din primul document
- Introduceți în **al doilea** document un link la **primul** document
  - **<a>...</a>**
  - utilizați referința relativă spre primul document
    - href="doc1.html" **nu** href="D:\ilikeit\doc1.html"
- Exersați legătura între cele două pagini în browser (Edge/Internet Explorer/ Chrome)



## Etichete HTML

“I.Like.IT@ETTI.TUIASI.RO”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993



# Forme/Formulare in HTML

- necesare pentru ca utilizatorul sa poate trimite date server-ului
- **<form>...</form>**
- Atribute specifice:
  - action: adresa documentului care preia datele
    - `<form action="<?php echo $_SERVER['PHP_SELF'];?>">`
    - `<form action="actiuni/fisier2.html">`
  - method: modalitatea de transmitere a datelor: post sau get
    - `<form method="post" action= ... >`

# Metode de transmitere

- **post** datele sunt transmise in bloc
- **get** datele sunt atasate adresei documentului de procesare :  
`results.php?prob=81&an=2009`
- **get** trebuie folosit numai cand datele sunt “idempotente”,
  - nu cauzeaza efecte colaterale
  - nu modifica starea server-ului (baze date, etc)
- se poate simula realizarea unei forme (**get**) prin scrierea corespunzatoare a link-urilor

www.tuiasi.ro

1813

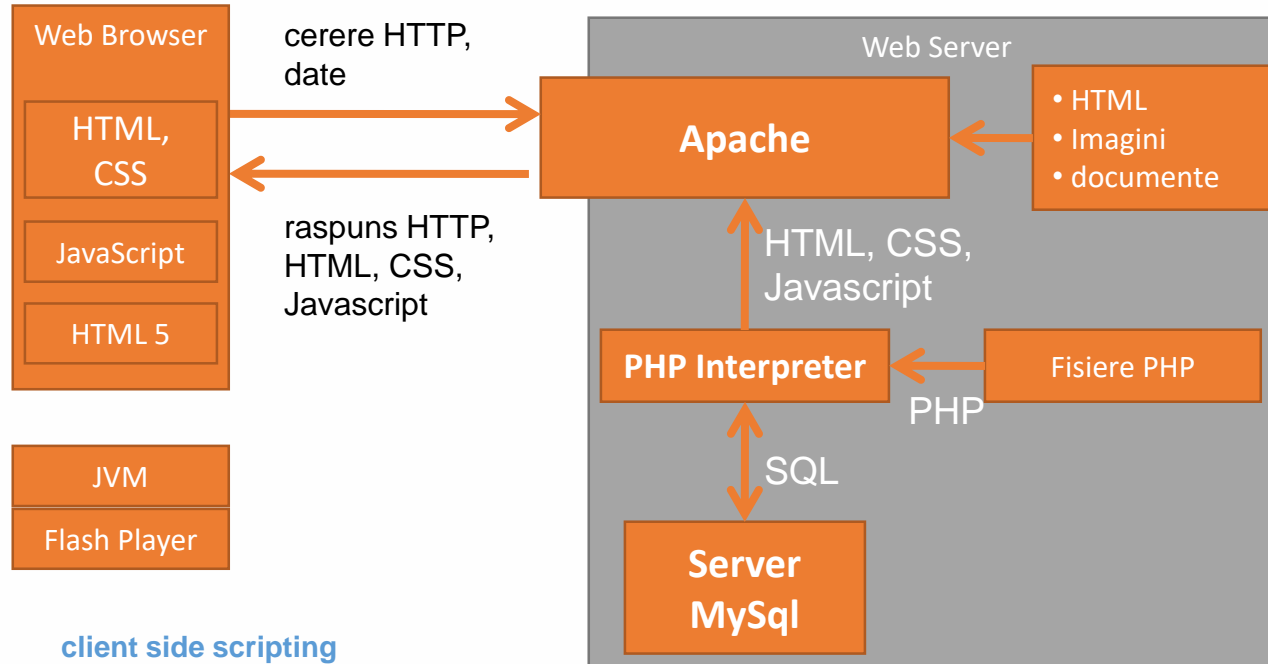
1860

1910

1937

1993

# Client/Server Scripting



client side scripting

server side scripting

# Elemente de interactiune cu utilizatorul

- in interiorul etichetei `<form>...</form>`
  - input
  - select/option
  - textarea
  - button
- **toate** elementele vor avea un nume
  - atribut: `name=""`
  - numele va fi intalnit in uri-ul generat prin get, sau in numele variabilei trimisa prin post
- trimiterea datelor se face prin intermediul unui buton cu tipul **`type="submit"`**

# INPUT

- `<input .../>`
- Atribute:
  - type: text | password | checkbox | radio | submit | reset | file | hidden | image | button
  - name: numele variabilei
  - value: valoarea trimisa server-ului la selectie (valoarea initiala in anumite cazuri)
  - checked/src/size/maxlength in functie de tip

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# Exemple

```
<input name="textfield" type="text" value="ceva" />
```

```
<input name="Ok" type="submit" value="Trimite" />
```

```
<label><input name="check" type="checkbox" value="5" checked />check1</label>
```

```
<label><input name="RG1" type="radio" value="a" checked="checked" />but1</label>
```

```
<label><input name="RG1" type="radio" value="b" />but2</label>
```

```
<input name="hid" type="hidden" value="6" />
```

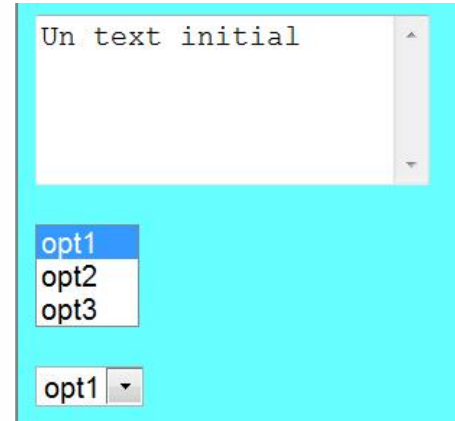
ceva    Trimite     check1     but1     but2

# TEXTAREA/SELECT

```
<textarea name="textarea" cols="20" rows="5">Un text initial</textarea>  
<br /><br />
```

```
<select name="select." size="3">  
  <option value="1" selected="selected">opt1</option>  
  <option value="2">opt2</option>  
  <option value="3">opt3</option>  
</select><br /><br />
```

```
<select name="select...">  
  <option value="1" selected="selected">opt1</option>  
  <option value="2">opt2</option>  
  <option value="3">opt3</option>  
</select>
```



The screenshot shows a web browser interface with a light blue background. At the top, there is a text area containing the text "Un text initial". Below the text area is a select dropdown menu. The dropdown menu is currently open, showing three options: "opt1", "opt2", and "opt3". The "opt1" option is highlighted with a blue background. Below the dropdown menu, there is a small input field containing the text "opt1" and a small downward arrow icon.

# BUTTON

- introdus pentru a oferi posibilitatea introducerii de continut mai complex (text formatat, imagini) in interiorul butoanelor de pe forma

```
<button type="button" onClick="do ( );">Click Here</button>
```


```
<button type="submit" value="infoOnly">Request Info</button>
```

```
<button type="reset">Clear</button>
```


```
<button type="submit" id="sender" value="infoOnly">Request<br />Info<br /></button>
```

```
<button type="submit" id="sender" value="infoOnly"><p>Request</p><p><b><i>Info</i></b></p></button>
```

Click Here

Request Info 

 Clear

Request  
Info  


Request

*Info*  


1993



# HTML 5 – Validare input

- `<input type="email">`
- `<input type="number">`
- `<input type="search">`
- `<input type="tel">`
- `<input type="url">`



[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# HTML 5 – Validare input

```

<label for="email">Email:</label>
<input type="email" id="email" name="email">
<br /><br />
<label for="can">Cantitate (1 - 5):</label>
<input type="number" id="can" name="can" min="1" max="5">
<br /><br />
<label for="gsearch">Cautare Google:</label>
<input type="search" id="gsearch" name="gsearch">
<br /><br />
<label for="phone">Telefon:</label>
<input type="tel" id="phone" name="phone" placeholder="0123.456.789"
pattern="[0-9]{4}.[0-9]{3}.[0-9]{3}" required>
<br /><br />
<label for="server">Server:</label>
<input type="url" id="server" name="server">
    
```

Email:

Cantitate (1 - 5):

Cautare Google:

Telefon:

Server:



# HTML 5 – Validare input

Email:

Please include an '@' in the email address. 'ceva' is missing an '@'.

ceva@server

Email:

! Please include an '@' in the email address. 'ceva' is missing an '@'.

Cantitate (1 - 5):

Telefon:

Server: ! Please fill out this field.

Telefon:

! Please match the requested format.

Telefon:

! Please match the requested format.

Server:

! Please enter a URL.

Server:



# HTML 5 – Interfata nativa browser

- `<input type="color">`
- `<input type="date">`
- `<input type="datetime-local">`
- `<input type="month">`
- `<input type="range">`
- `<input type="time">`
- `<input type="week">`



# HTML 5 – Interfata nativa browser

```

<label for="culoare">Culoare:</label>
<input type="color" id="culoare" name="culoare" value="#ff0000">
<br /><br />
<label for="nastere">Data nastere:</label>
<input type="date" id="nastere" name="nastere">
<br /><br />
<label for="examen">Examen (data si ora):</label>
<input type="datetime-local" id="examen" name="examen">
<br /><br />
<label for="fin">Finalizare (luna si an):</label>
<input type="month" id="fin" name="fin">
<br /><br />
<label for="vol">Volum (0 - 50):</label>
<input type="range" id="vol" name="vol" min="0" max="50">
<br /><br />
<label for="ora">Ora intalnire:</label>
<input type="time" id="ora" name="ora">
<br /><br />
<label for="sap">Saptamana:</label>
<input type="week" id="sap" name="sap">
    
```

Culoare:

Data nastere:

Examen (data si ora):

Finalizare (luna si an):

Volum (0 - 50):

Ora intalnire:

Saptamana:



1937

1993

1860

1910

1013

www.tuiasi.ro

# HTML 5 – Interfata nativa browser

Culoare:

Data nastere:

Examen (data):

Finalizare (luna):

Volum (0 - 50):

Ora intalniri:

Saptamana: R G B ↕

Culoare:

Data nastere:

Examen (data): **March 2023** ↑ ↓

Su	Mo	Tu	We	Th	Fr	Sa
26	27	28	1	2	3	4
5	<b>6</b>	7	<b>8</b>	9	10	11
12	13	14	15	16	17	18

Finalizare (luna):

Volum (0 - 50):

Ora intalniri:



# HTML 5 – Interfata nativa browser



Examen (data si ora):

Finalizare (luna si an)

Volum (0 - 50):

Ora intalnire:

Saptamana:

Su	Mo	Tu	We	Th	Fr	Sa	02	21	<input type="button" value="PM"/>
26	27	28	1	2	3	4	03	22	AM
5	6	7	8	9	10	11	04	23	
12	<input type="text" value="13"/>	14	15	16	17	18	<input type="text" value="05"/>	<input type="text" value="24"/>	
19	20	21	22	23	24	25	06	25	
26	27	28	29	30	31	1	07	26	
2	3	4	5	6	7	8	08	27	
Clear			Today						

Finalizare (luna si an):

Volum (0 - 50):

Ora intalnire:

Saptamana:

2023

Jan	Feb	<input type="text" value="Mar"/>	Apr
May	<input type="text" value="Jun"/>	Jul	Aug
Sep	Oct	<input type="text" value="Nov"/>	Dec



# HTML 5 – Interfata nativa browser

Volum (0 - 50): 

Ora intalnire: 05:30 PM 


Saptamana: W

Trimite

02	25	PM
03	26	AM
04	27	
05	28	
06	29	
07	30	
08	31	

Saptamana: Week 13, 2023 

Trimite

March 2023 

Week	Su	Mo	Tu	We	Th	Fr	Sa
9	26	27	28	1	2	3	4
10	5	6	7	8	9	10	11
11	12	13	14	15	16	17	18
12	19	20	21	22	23	24	25
13	26	27	28	29	30	31	1
14	2	3	4	5	6	7	8

Clear

This week





# Exemplu – forma

- Mic magazin online
- Formular de comanda cu procesarea comenzii

```

<html>
<head>
<title>Magazin online XXX SRL</title>
</head>
<body>
<h1>Magazin online XXX SRL</h1>
<h2>Realizati comanda</h2>
<form action="rezultat.html" method="post">
<table border="0">
<tr bgcolor="#cccccc"><td width="150">Produs</td><td width="15">Cantitate</td></tr>
<tr><td>Carti</td><td align="center"><input type="text" name="carti_cant" size="3" maxlength="3" /></td></tr>
<tr><td>Caiete</td><td align="center"><input type="text" name="caiete_cant" size="3" maxlength="3" /></td></tr>
<tr><td>Penare</td><td align="center"><input type="text" name="penare_cant" size="3" maxlength="3" /></td></tr>
<tr><td colspan="2" align="center"><input type="submit" value="Trimite" /></td></tr>
</table>
</form>
</body>
</html>
    
```

## Magazin online XXX SRL

### Realizati comanda

Produs	Cantitate
Carti	<input type="text" value="1"/>
Caiete	<input type="text" value="2"/>
Penare	<input type="text" value="3"/>

# Exemplu – raspuns static

- fisier html
- fisierele HTML sunt doar “servite” de server
- in aparenta a existat o procesare, real **nu**

```
<html>
<head>
<title>Magazin online XXX SRL</title>
</head>
<body>
<h1>Magazin online XXX SRL</h1>
<h2>Rezultate comanda</h2>
<p>Comanda receptionata</p>
</body>
</html>
```

## **Magazin online XXX SRL**

### **Rezultate comanda**

Comanda receptionata

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

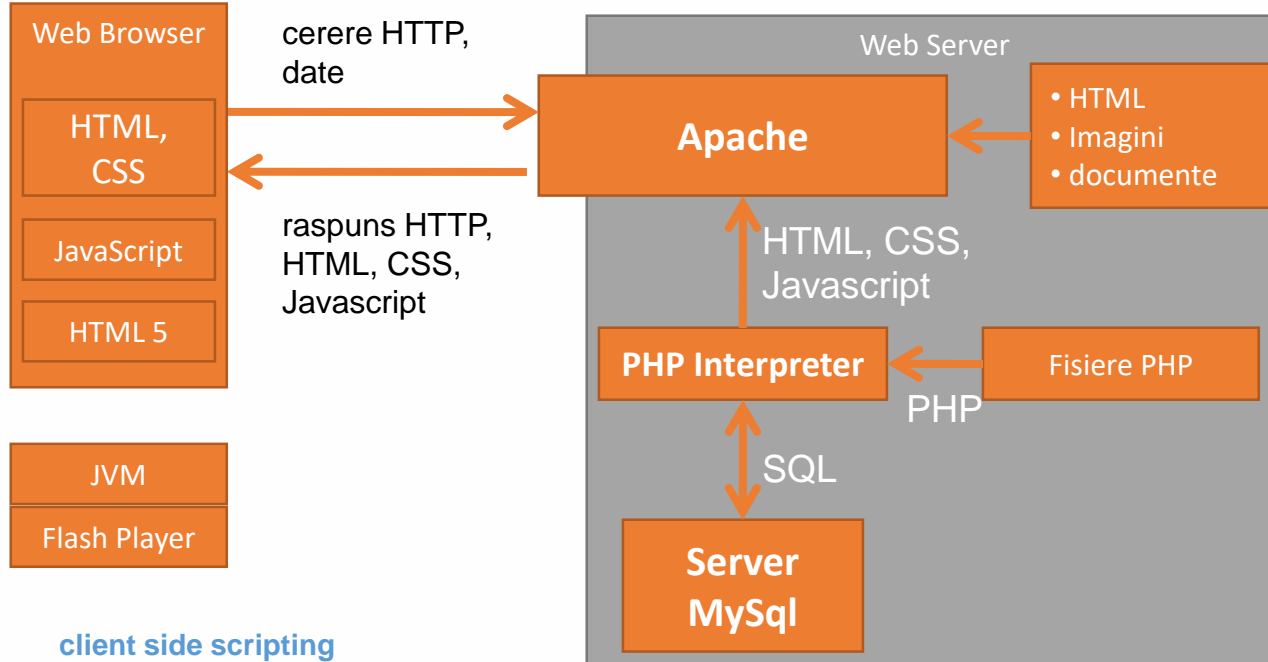
1860

1910

1937

1993

# Client/Server Scripting



client side scripting

server side scripting



## Exercitiu

“I.Like.IT@ETTI.TUIASI.RO”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

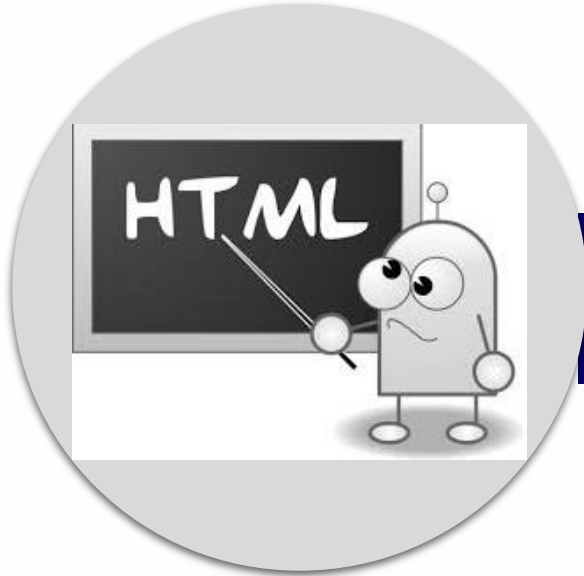
1910

1937

1993

# Exercitiu 8

- Utilizati **Notepad ++** pentru a crea **doua** documente HTML, utilizati copy/paste pentru a prelua linii din documentele anterioare
- Introduceti in **primul** document un formular
  - **<form>...</form>**
  - utilizati modalitatea de transmisie **get** pentru a transmite informatiile spre **al doilea** document
    - `<form method= "get" action="doc2.html" >`
  - exersati introducerea in formular a diferitelor elemente de interactiune cu utilizatorul
    - exemplu: **<input>**, **<select>** etc.
    - nu uitati introducerea atributului **name** pentru elemente
    - nu uitati introducerea unui buton de trimitere: **<input type="submit" ...**
- Exersati legatura intre cele doua pagini in browser (Edge/Internet Explorer/ Chrome)
  - verificati aparitia in adresa din browser a datelor introduse in formular **doc2.html?name1=dat1&name2=dat2&name3=dat3**



## Bibliografie HTML

“I.Like.IT@ETTI.TUIASI.RO”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# Bibliografie HTML

- Web Hypertext Application Technology Working Group (WHATWG) HTML Living Standard
  - <https://html.spec.whatwg.org/>
- World Wide Web Consortium (W3C), HTML 5.2 Recommendation
  - <https://www.w3.org/TR/html52/index.html>
- W3Schools Online Web Tutorials
  - <https://www.w3schools.com/html/>
- W3Schools HTML Element Reference
  - <https://www.w3schools.com/tags/>

www.tuiasi.ro

1813

1860

1910

1937

1993



# Web Design

“I.Like.IT@ETTI.TUIASI.RO”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993



# Concepte generale Web Design

- Steve Krug: “**Don't Make Me Think**”
- Utilizatorii scaneaza pagina, nu o citesc
- Informatia trebuie redusa la minimul necesar in majoritatea locurilor
- “Daca ceva e greu de utilizat, mai bine nu o utilizez”
- Utilizatorii au comportament de **rechin**
- Originalitatea nu e intotdeauna recomandata

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# Test – F Shape Reading Pattern

- Obisnuinta utilizatorilor de a urmari anumite zone de pe ecran



# Microsoft



www.tuiasi.ro

1813

1860

1910

1937

1993

# Intel



Work Play Support About Intel Change Location Search

Products Technology Communities Downloads Reseller

**Products**

**Server**

- Server Processors
- Chipsets
- Systems
- Boards
- Network Adapters
- Server Chassis
- Intel® RAID Controllers
- Intel® Storage Systems
- Server Software
- Intel® Modular Server
- Solid-State Drives and Caching

Home > Products > Server > **Server Processors**

## Intel® Server Processors

Intel® server processors deliver enhanced, energy-efficient performance for data-intensive business applications. Powering a range of multi-core 64-bit servers, Intel server processors enable you to optimize and scale computing environments to maximize server utilization to workload, while providing you with headroom for growth.

**Robust performance for the enterprise data center**

**Intel® Xeon® processor 5500 series**

- Faster performance enabled by Intel® microarchitecture, codenamed Nehalem
- Automatically increase processor frequency and utilize Intel® Hyper-Threading Technology (Intel® HT Technology) as needed
- Efficiently manage energy expense by scaling power consumption to workload, enabled by Intel® Intelligent Power Technology
- Next generation Intel® Virtualization Technology enables best-in-class virtualization performance, superb scalability, enhanced flexibility, and simplified server management
- Intel® Data Center Manager (Intel® DCM) software development kit provides power and thermal monitoring and management for servers, racks, and groups of servers in data centers. Management Console Vendors (MSVs) and System Integrators (SIs) can integrate Intel® DCM into their console or command-line applications and provide high-value power management features to IT organizations.

**Live online seminar**

Join industry experts for a live webinar showcasing breakthrough features of the new Intel® Xeon® processor.

[Take part](#)

**Virtualization ROI**

Use this tool to see the potential ROI for using virtualization in your data center.

[ROI calculator](#)

Large-scale enterprise computing and server consolidation

www.tuiasi.ro

1813

1860

1910

1937

1993

# Mozilla



The screenshot shows the Mozilla Firefox Features page. At the top, there is a navigation bar with 'mozilla' and links for 'Products', 'Add-ons', 'Support', 'Community', and 'About'. The main heading is 'Firefox Features' with the subtext 'See what's new, what's been improved and what's just as awesome as ever.' Below this, there are several feature sections: 'Awesome Bar' (improved), 'One-Click Bookmarking', 'Super Speed' (new), 'Easy Customization' (improved), 'Private Browsing' (new), 'Anti-Phishing & Anti-Malware' (improved), 'Tabs' (improved), 'Password Manager', 'Session Restore' (improved), and 'Instant Web Site ID'. A 'Browse By Category' list includes Security & Privacy, Performance, Customization, Personal, Productivity, Tabs, Search, Universal Access, The Cutting Edge, and Help. At the bottom, there is a 'Get Firefox 3.5' section with a download button and release notes link.

www.tuiasi.ro

1813

1860


1910

1937

1993

# Wikipedia





**WIKIPEDIA**  
The Free Encyclopedia

[Try Beta](#)
[Log in](#) / [create account](#)

**Please read:**  
**A personal appeal from Wikipedia founder Jimmy Wales**

**navigation**

- [Main page](#)
- [Contents](#)
- [Featured content](#)
- [Current events](#)
- [Random article](#)

**search**

**interaction**

- [About Wikipedia](#)
- [Community portal](#)
- [Recent changes](#)
- [Contact Wikipedia](#)
- [Donate to Wikipedia](#)
- [Help](#)

**toolbox**

- [What links here](#)
- [Related changes](#)
- [Upload file](#)
- [Special pages](#)
- [Printable version](#)
- [Permanent link](#)
- [Cite this page](#)

**languages**

- [Afrikaans](#)
- [Alemannisch](#)
- [العربية](#)
- [Aragonés](#)
- [Azərbaycan](#)
- [Беларуская \(тарашкевіца\)](#)
- [Boarisch](#)
- [Bosanski](#)
- [Brezhoneg](#)
- [Български](#)
- [Català](#)

## HTML

From Wikipedia, the free encyclopedia

*For the use of HTML on Wikipedia, see [Help:HTML in wikitext](#).*

**HTML**, which stands for **Hyper Text Markup Language**, is the predominant markup language for web pages. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists etc. as well as for links, quotes, and other items. It allows images and objects to be embedded and can be used to create interactive forms. It is written in the form of HTML elements consisting of "tags" surrounded by angle brackets within the web page content. It can include or can load scripts in languages such as JavaScript which affect the behavior of HTML processors like Web browsers; and Cascading Style Sheets (CSS) to define the appearance and layout of text and other material. The W3C, maintainer of both HTML and CSS standards, encourages the use of CSS over explicit presentational markup.<sup>[1]</sup>

**Contents** (hide)

- 1 History
  - 1.1 Origins
  - 1.2 First specifications
  - 1.3 Version history of the standard
    - 1.3.1 HTML version timeline
    - 1.3.2 HTML draft version timeline
    - 1.3.3 XHTML versions
- 2 Markup
  - 2.1 Elements
    - 2.1.1 Attributes
  - 2.2 Character and entity references
  - 2.3 Data types
  - 2.4 Document type declaration
- 3 Semantic HTML
- 4 Delivery
  - 4.1 HTTP
  - 4.2 HTML e-mail
  - 4.3 Naming conventions
  - 4.4 HTML Application
- 5 Current variations
  - 5.1 SGML-based versus XML-based HTML
  - 5.2 Transitional versus strict
  - 5.3 Frameset versus transitional

**HTML**  
**(HyperText Markup Language)**

<b>Filename extension</b>	.html, .htm
<b>Internet media type</b>	text/html
<b>Type code</b>	TEXT
<b>Uniform Type Identifier</b>	public.html
<b>Developed by</b>	World Wide Web Consortium & WHATWG
<b>Type of format</b>	Markup language
<b>Extended from</b>	SGML
<b>Extended to</b>	XHTML
<b>Standard(s)</b>	ISO/IEC 15445 W3C HTML 4.01 <a href="#">[P]</a> W3C HTML 5 <a href="#">[P]</a> (draft)

www.tuiasi.ro

1813

1860

1910

1937

1993

02.07.2024

150

# Wikipedia 2017



Wikipedia, the free encyclopedia that anyone can edit. 5,334,393 articles in English.

**From today's featured article**

**Marvel Science Stories** was a U.S. pulp magazine with fifteen issues in two separate runs, both edited by Robert O. Erisman and published by Abraham and Martin Goodman. The first issue, dated August 1938, carried stories with more sexual content than was usual for the genre, including several stories by Henry Kuttner. Reader reaction was generally negative; one referred to Kuttner's story "The Time Trap" as "trash". The magazine was cancelled after the April 1941 issue, but when a boom in science fiction magazines began in 1950, the publishers revived it. The first issue of the new series was dated November 1950; a further six issues appeared, with the last dated May 1952. Contributors to the first run included Arthur J. Burks and Jack Williamson; the second run published stories by better-known writers, including Arthur C. Clarke, Isaac Asimov, Jack Vance and L. Sprague de Camp. The second incarnation of the magazine did not succeed in the more competitive market of the 1950s; even the writers who sold to *Marvel Tales* were publishing their best work elsewhere. (Full article...)

**In the news**

- Mohamed Abdullahi Mohamed (pictured) is elected President of Somalia.
- In association football, the Africa Cup of Nations concludes with Cameroon defeating Egypt in the final.
- Protests in Romania grow over the Romanian government's proposals to decriminalize certain corruption cases.
- In American football, the New England Patriots defeat the Atlanta Falcons to win Super Bowl LI, the first to go into overtime.
- The United Nations releases a report stating that the Myanmar Army has committed serious human rights violations against the Rohingya people.

**On this day...**

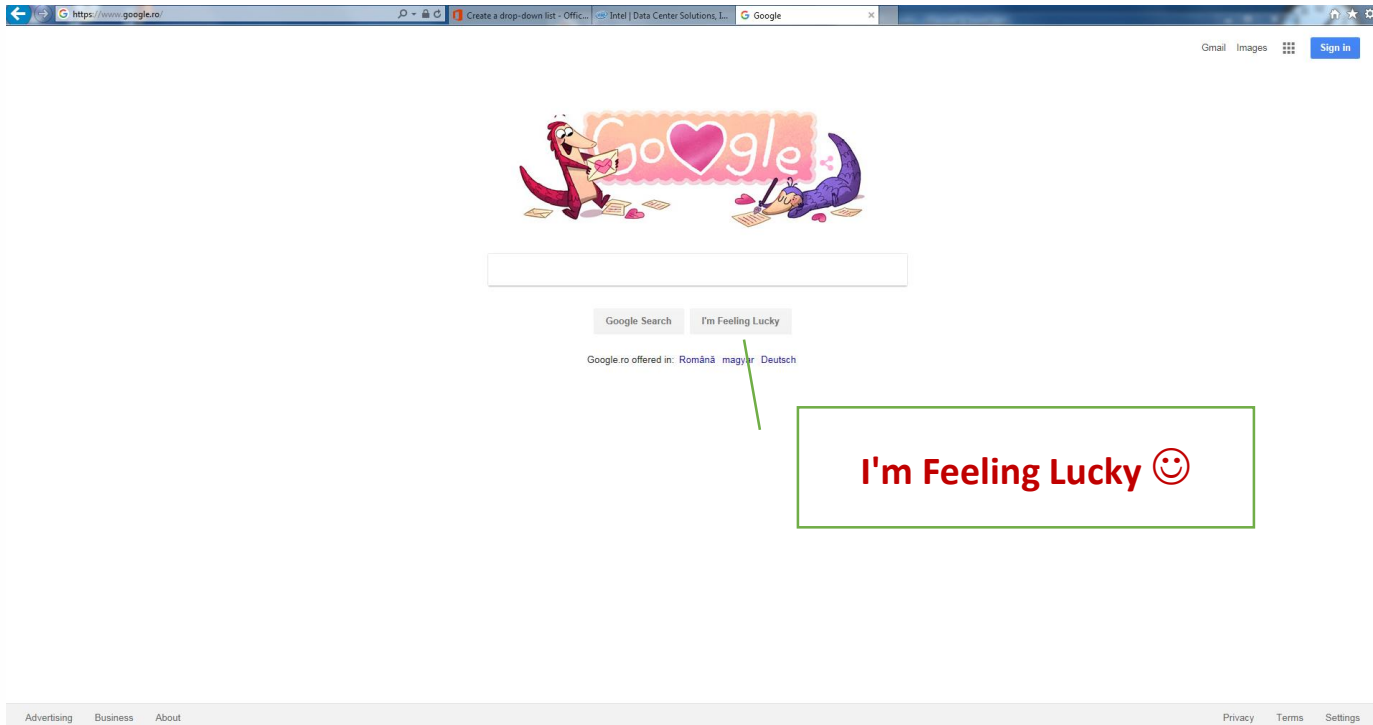
**February 13**

- 1689 – Glorious Revolution: Mary Stuart and her husband William III of Orange were proclaimed co-rulers of England and Ireland.
- 1867 – Work began on the covering of the Senne (pictured), burying the polluted main waterway in Brussels to allow urban renewal in the centre of the city.
- 1913 – Thubten Gyatso, the 13th Dalai Lama, declared the independence of Tibet from Qing China.
- 1960 – African American college students staged the first of the Nashville sit-ins at three lunch counters in Nashville, Tennessee, part of a nonviolent direct action campaign to end racial segregation.
- 2012 – The first Vega rocket was launched by the European Space Agency.

**From today's featured list**

award for Best Rock Instrumental Performance was an award presented at the Grammy Awards to recording artists for quality instrumental rock performances. The honor was first presented to Paul McCartney and Wings at the 22nd

# Google 2019



I'm Feeling Lucky 😊

www.tuiasi.ro

1813

1860

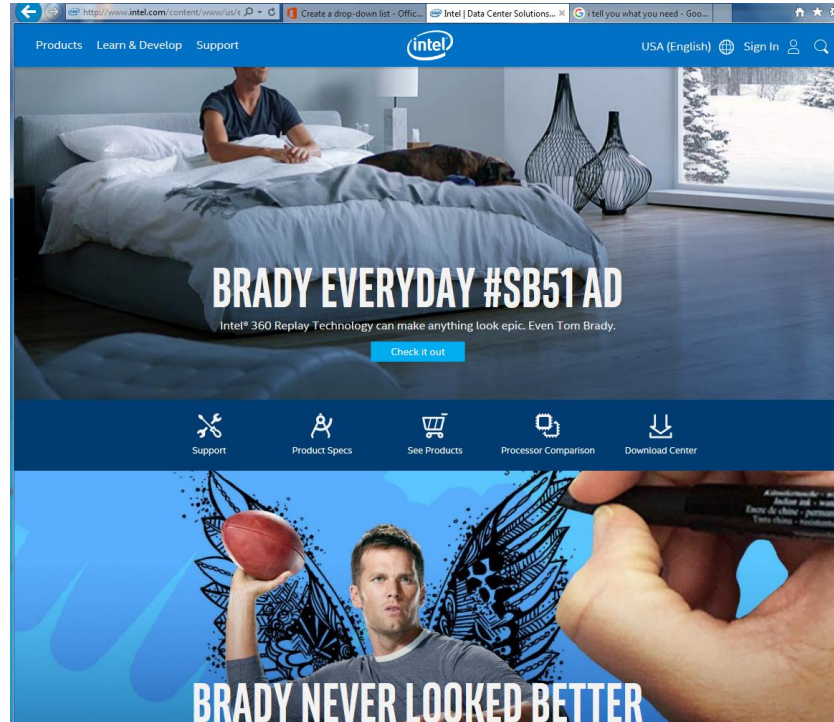
1910

1937

1993



# Intel 2017



www.tuiasi.ro

1813

1860

1910

1937

1993

# Intel

The screenshot shows the Intel Support page for 'Intel® PROSet/Wireless Software and Drivers for Windows 7\*'. The page includes a navigation bar with 'Products', 'Learn & Develop', and 'Support'. The main content area features a download icon, the product name, and version information (Version: 19.20.3 [Latest], Date: 12/5/2016). There are two main sections: 'Available Downloads' and 'Detailed Description'. The 'Available Downloads' section lists two options: 'Windows 7, 64-bit\*' and 'Windows 7, 32-bit\*', each with language, size, MD5 hash, and a download button. The 'Detailed Description' section includes a 'Purpose' paragraph, a 'Not sure what to download?' section with instructions to confirm the operating system and determine the file type, an 'Intel® Wireless Adapter driver versions' section, and a 'Software and drivers' section listing the specific driver files.



# Intel 2021

intel PRODUCTS SUPPORT SOLUTIONS DEVELOPERS PARTNERS

USA (ENGLISH) Search Intel.com

## Intel Welcomes Pat Gelsinger as CEO

Gelsinger is an accomplished CEO and industry veteran with more than four decades of technology and leadership experience, including 30 years at Intel where he began his career. Welcome, Pat!

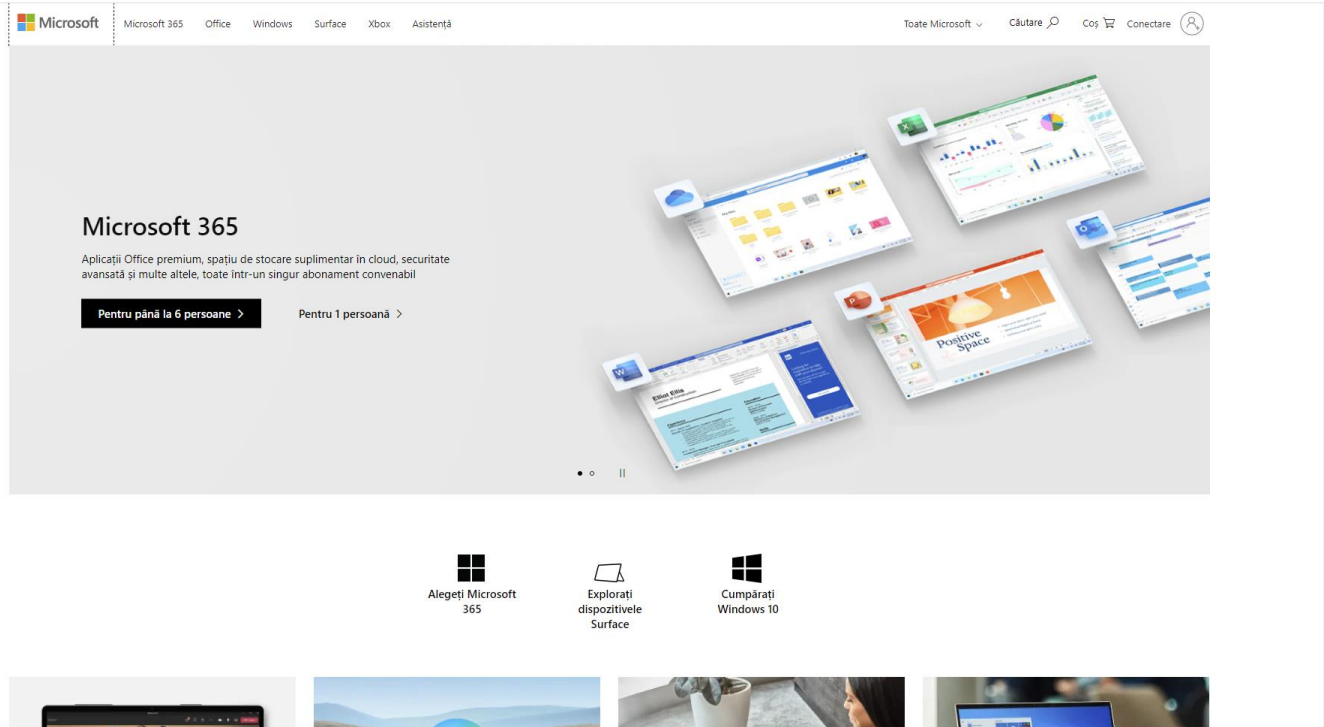
[Learn more →](#)

[Get Support](#) [Product Specs](#) [See Products](#) [Compare Processors](#) [Download Center](#)

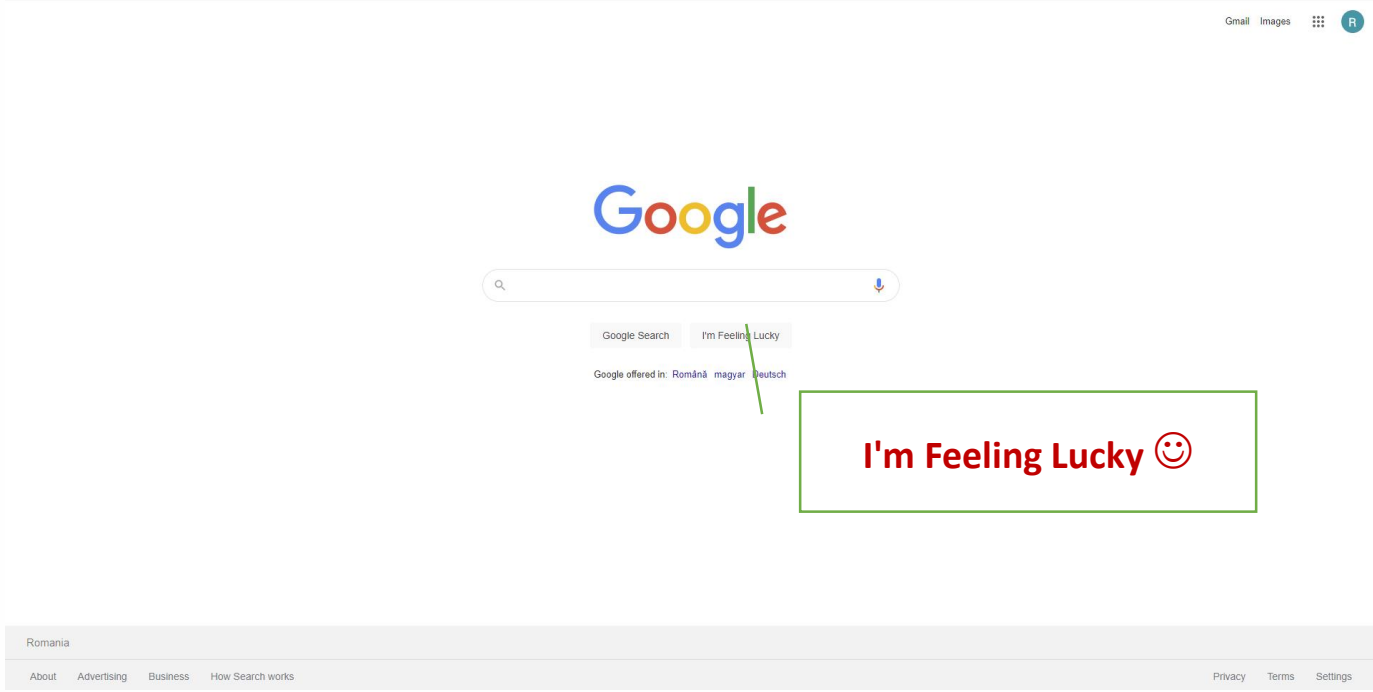
intel evo

intel vPRO PLATFORM

# Microsoft 2021



# Google 2021



www.tuiasi.ro

1813

1860

1910

1937

1993


# Wikipedia 2021



The screenshot shows the Wikipedia article for HTML. At the top, it says "From Wikipedia, the free encyclopedia". The article text includes:
 

- "*.htm*" and "*.html*" redirect here. For other uses, see *HTML*.
- For the use of HTML on Wikipedia, see *Help:HTML* in *wikitext*.
- Hypertext Markup Language (HTML)** is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.
- Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.
- HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as `<img />` and `<input />` directly introduce content into the page. Other tags such as `<p>` surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page.
- HTML can embed programs written in a scripting language such as JavaScript, which affects the behavior and content of web pages. Inclusion of CSS defines the look and layout of content. The World Wide Web Consortium (W3C), former maintainer of the HTML and current maintainer of the CSS standards, has encouraged the use of CSS over explicit presentational HTML since 1997.<sup>[2]</sup>

 The right sidebar contains a table with the following information:
 

HTML	
(Hypertext Markup Language)	
	
<span>The official logo of the latest version, HTML5<sup>[1]</sup></span>	
Filename extension	.html .htm
Internet media type	text/html
Type code	TEXT
Developed by	WHATWG
Initial release	1993; 28 years ago
Latest release	Living Standard@ (2021)
Type of format	Document file format
Container for	HTML elements
Contained by	Web browser
Extended from	SGML
Extended to	XHTML
Open format?	Yes
Website	html.spec.whatwg.org@

 Below the table is a list of links:
 

- Dynamic HTML · HTML5 (audio · canvas · video) · XHTML (Basic · Mobile Profile · C-HTML) · HTML element (span and div) · HTML attribute · HTML frame · HTML editor · Character encodings (Unicode) · Language code · Document Object Model · Browser Object Model · Style sheets (CSS) · Font family · Web colors · HTML scripting · JavaScript (WebGL · WebGL) · W3C (Validator) · WHATWG · Quirks mode ·

 The left sidebar contains navigation links such as Main page, Contents, Current events, Random article, About Wikipedia, Contact us, Donate, Contribute, Help, Learn to edit, Community portal, Recent changes, Upload file, Tools, What links here, Related changes, Special pages, Permanent link, Page information, Cite this page, Wikidata item, Print/export, Download as PDF, Printable version, In other projects, Wikimedia Commons, Wikibooks, Wikiversity, Languages (with a dropdown menu showing Български, Deutsch, Ελληνικά, Español, Français, Magyar, Română).

www.tuiasi.ro

1813

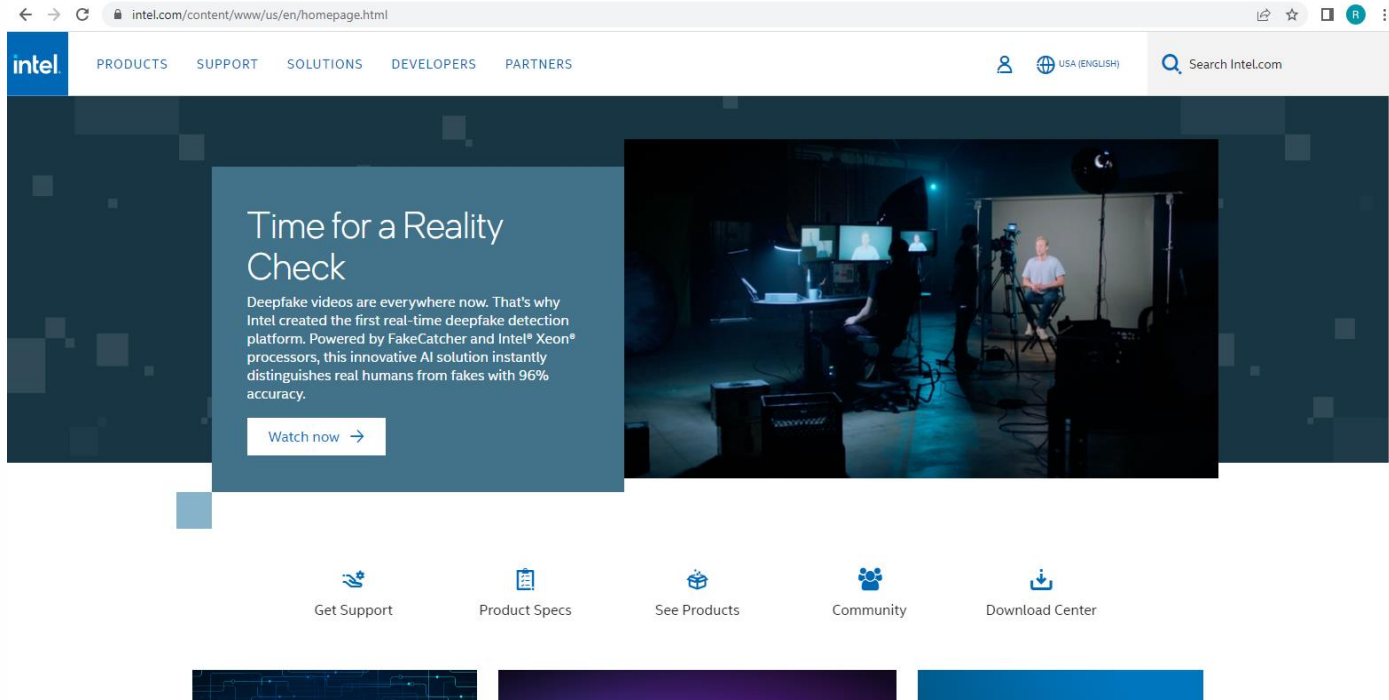
1860

1910

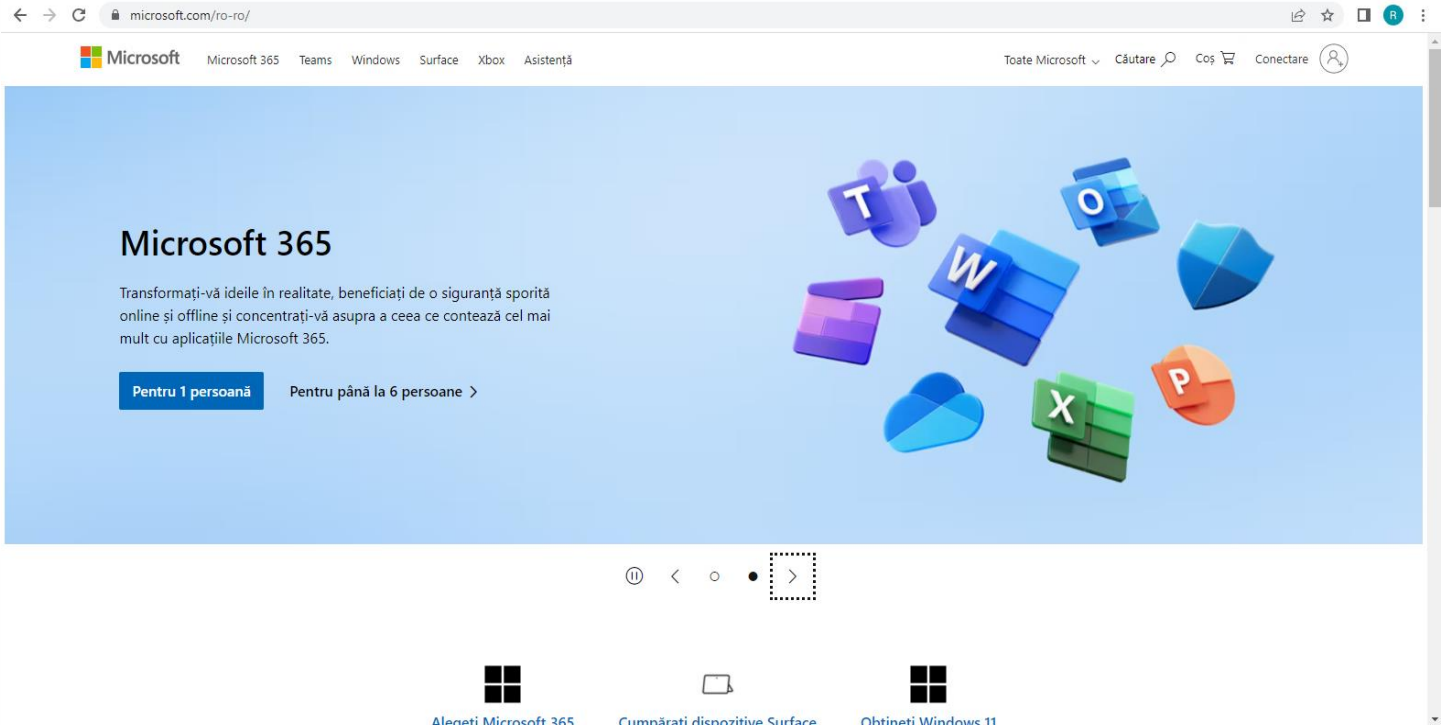
1937

1993

# Intel 2023

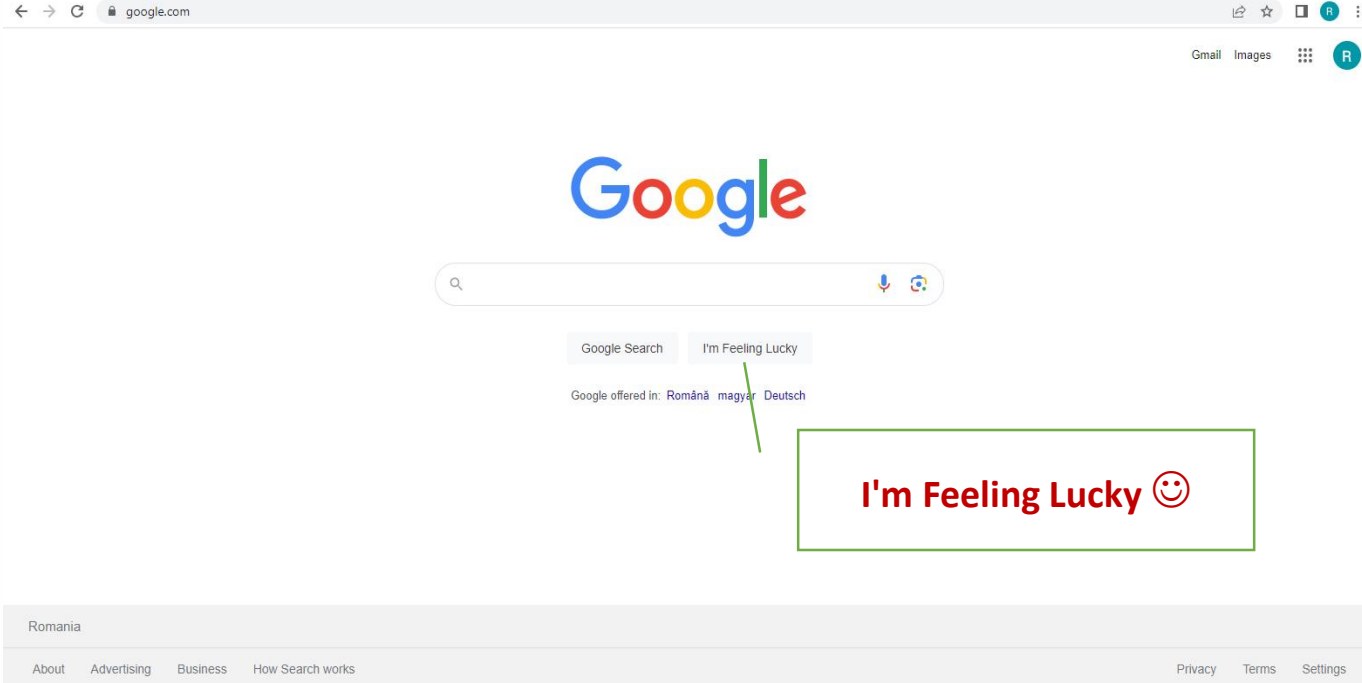


# Microsoft 2023





# Google 2023



www.tuiasi.ro

1813

1860

1910

1937

1993

# Wikipedia 2023

en.wikipedia.org/wiki/HTML

WIKIPEDIA The Free Encyclopedia

Search Wikipedia

## HTML

129 languages

Article Talk

From Wikipedia, the free encyclopedia

*"htm" and "html" redirect here. For other uses, see HTML. For the use of HTML on Wikipedia, see Help:HTML in wikitext.*

The **HyperText Markup Language** or **HTML** is the standard markup language for documents designed to be displayed in a web browser. It is often assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for its appearance.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes, and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as `<img />` and `<input />` directly introduce content into the page. Other tags such as `<p>` and `</p>` surround and provide information about document text and may include sub-element tags. Browsers do not display the HTML tags but use them to interpret the content of the page.

HTML can embed programs written in a scripting language such as JavaScript, which affects the behavior and content of web pages. The inclusion of CSS defines the look and layout of content. The World Wide Web Consortium (W3C), former maintainer of the HTML and current maintainer of the CSS standards, has encouraged the use of CSS over explicit presentational HTML since 1997.<sup>[2]</sup> A form of HTML, known as HTML5, is used to display video and audio, primarily using the `<canvas>` element, together with JavaScript.

<b>HTML</b> (HyperText Markup Language)																				
The official logo of the latest version, HTML5 <sup>[1]</sup>																				
<table border="1"> <tr> <td>Filename extension</td> <td>.html .htm</td> </tr> <tr> <td>Internet media type</td> <td>text/html</td> </tr> <tr> <td>Type code</td> <td>TEXT</td> </tr> <tr> <td>Uniform Type Identifier (UTI)</td> <td>public.html</td> </tr> <tr> <td>Developed by</td> <td>WHATWG</td> </tr> <tr> <td>Initial release</td> <td>1993; 30 years ago</td> </tr> <tr> <td>Latest release</td> <td>Living Standard<sup>ⓘ</sup></td> </tr> <tr> <td>Type of format</td> <td>Document file format</td> </tr> <tr> <td>Container for</td> <td>HTML elements</td> </tr> <tr> <td>Contained by</td> <td>Web browser</td> </tr> </table>	Filename extension	.html .htm	Internet media type	text/html	Type code	TEXT	Uniform Type Identifier (UTI)	public.html	Developed by	WHATWG	Initial release	1993; 30 years ago	Latest release	Living Standard <sup>ⓘ</sup>	Type of format	Document file format	Container for	HTML elements	Contained by	Web browser
Filename extension	.html .htm																			
Internet media type	text/html																			
Type code	TEXT																			
Uniform Type Identifier (UTI)	public.html																			
Developed by	WHATWG																			
Initial release	1993; 30 years ago																			
Latest release	Living Standard <sup>ⓘ</sup>																			
Type of format	Document file format																			
Container for	HTML elements																			
Contained by	Web browser																			



- Contents [hide]
- (Top)
- > History
- > Markup
  - Semantic HTML
- > Delivery
- > HTML4 variations
  - WHATWG HTML versus HTML5
  - WYSIWYG editors
  - See also
  - References
  - External links

# Intel 2023

intel PRODUCTS SUPPORT SOLUTIONS DEVELOPERS PARTNERS USA (ENGLISH) Search Intel.com

Product Support / Graphics / Intel® Iris® Graphics Family / Intel® Iris® Graphics 5100

## Support for Intel® Iris® Graphics 5100

This product has been discontinued. [Read more](#)

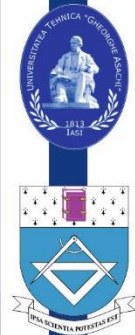
Articles Drivers & Software

Find support information for Intel® Iris® Graphics 5100 including featured content, downloads, specifications, warranty and more.

Filter Articles Popular All 100 Articles Sort by Popularity

- All Article Categories**
- Compatibility
- Error Messages
- Product Information & Documentation
- Identify My Product
- Install & Setup
- Maintenance & Performance
- Troubleshooting
- Warranty & RMA

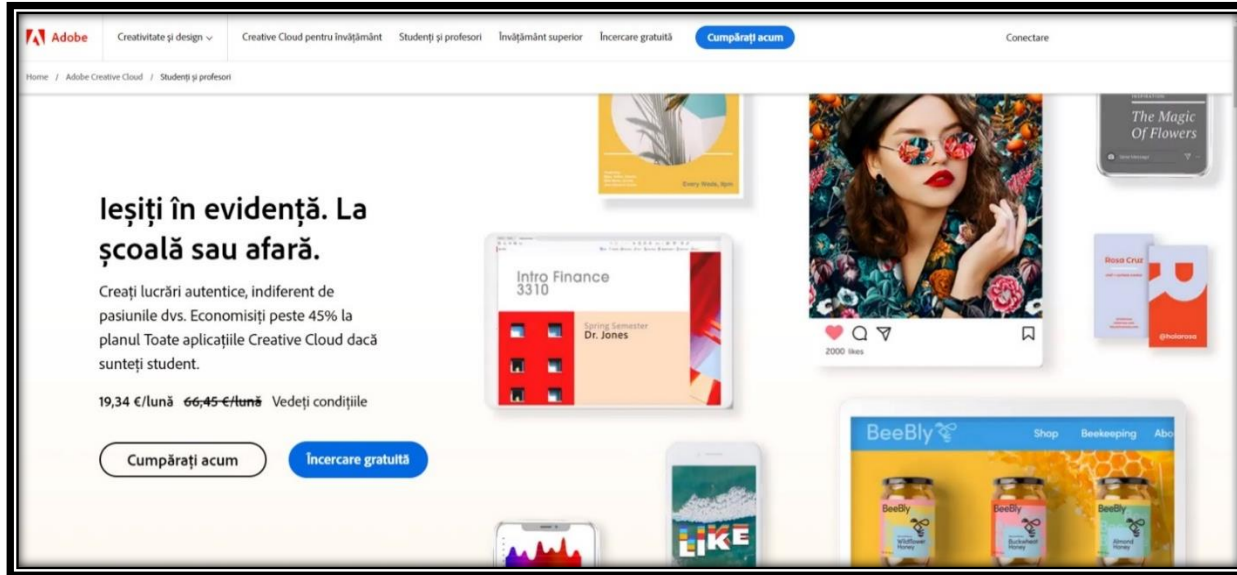
PRODUCT INFORMATION & DOCUMENTATION	List of Drivers for Intel Graphics	Last Reviewed 06/14/2023
ERROR MESSAGES	Error Message: Computer Manufacturer Graphics Driver Detected	Last Reviewed 12/09/2022
INSTALL & SETUP	Clean Installation of Intel® Graphics Drivers in Windows*	Last Reviewed 03/27/2023
IDENTIFY MY PRODUCT	How to Identify Your Intel® Graphics in Windows® 10 and Windows 11*	Last Reviewed 09/27/2022
COMPATIBILITY	How to Identify & Find Graphics Drivers for Linux*	Last Reviewed 11/30/2022





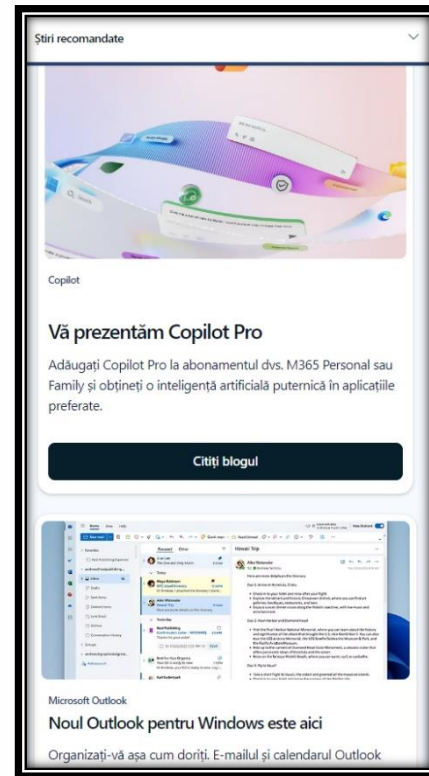
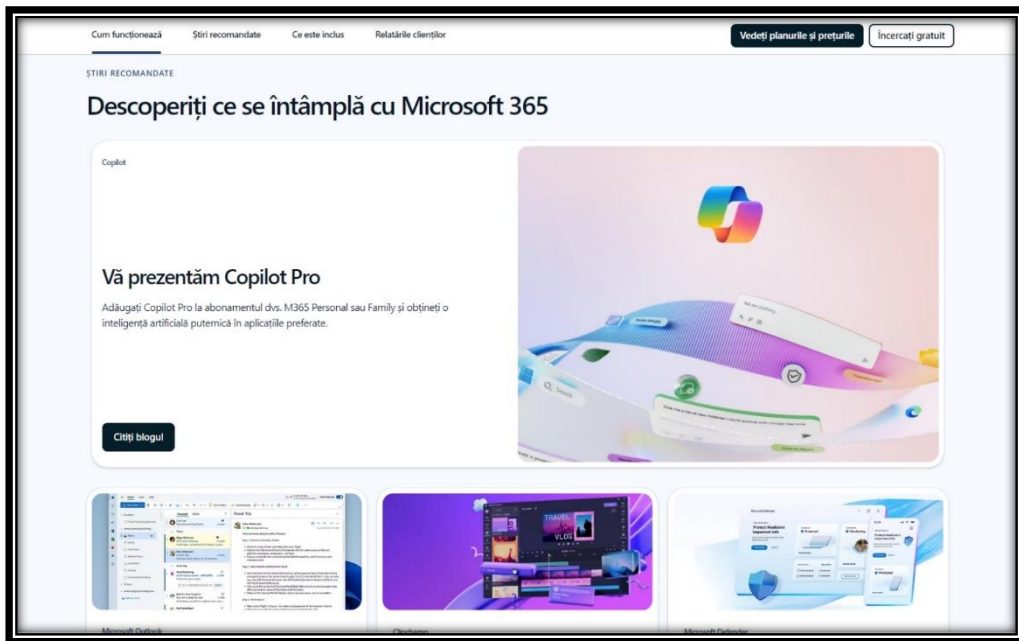
# Adobe 2024

- UX, responsive



# Microsoft 2024

- UX, responsive



# Design 2024

- Dispozitive
  - Mobile
  - Ecran mic
  - UI / **UX / Responsive**
- Nu pentru lucrurile importante
  - Retur la F-Shape
- “I know better what you need, please don’t think”
  - I’m feeling lucky

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993

# Regula nr. 1



# Don't Make Me Think

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993



## Intrebari

“I.Like.IT@ETTI.TUIASI.RO”

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993



# Contact

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

[www.tuiasi.ro](http://www.tuiasi.ro)

1813

1860

1910

1937

1993