



Universitatea Tehnică din Cluj-Napoca
Facultatea de Inginerie Electrică

CURS Master

Tehnologii moderne de proiectare a aplicațiilor multimedia



Curs: **TEHNOLOGII MODERNE DE PROIECTARE A APLICAȚIILOR MULTIMEDIA**

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CAP.4. LIMBAJUL HTML5

CUPRINS

- 4.1.** Introducere
- 4.2.** Tag-uri (etichete) HTML 5
- 4.3.** Inserarea imaginilor. Atribute.Stiluri de fonturi.
- 4.4.** Utilizare culori. Inserare tabele, frame-uri



4.1. Introducere

Limbaje specifice pentru realizarea de interfete grafice web :

- HTML (HyperText Markup Language)
- CSS (Cascading Style Sheets)
- JavaScript
- XML (eXtensible Markup Language)
- XHTML (eXtensible HyperText Markup Language)

<http://www.w3schools.com/>



HTML

Paginile Web

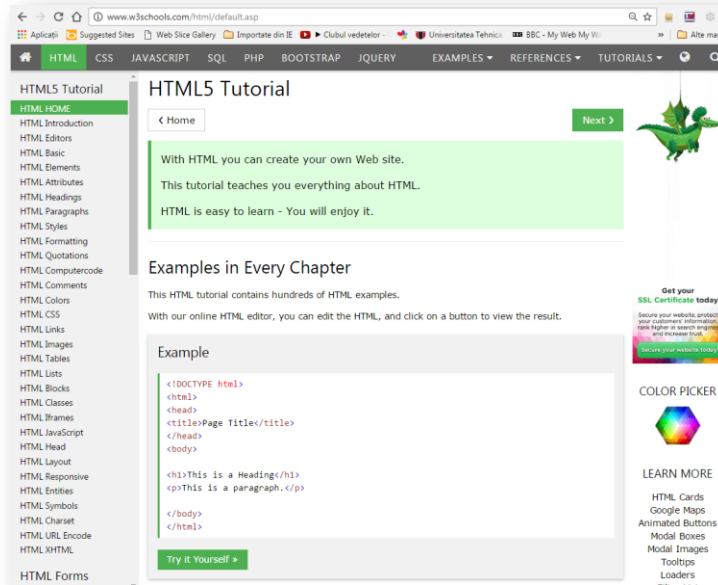
- fișiere cu extensia *.htm* sau *.html*
- dimensiuni mici → reducere trafic de rețea și spațiu pe server
- se pot dezvolta utilizând:
 - editoare de text simple:
 - **Notepad** (Windows) sau
 - **TextEdit** (Mac)
 - **Kompozer**
 - sau editoare comerciale:
 - **Adobe Dreamweaver**, **MS FrontPage**, etc

HTML

- limbaj pentru crearea documentelor web structurate
- are la bază tag-uri /etichete
 - `<nume_tag> text, imagini, ... </nume_tag>`



Tutoriale HTML : <http://www.w3schools.com/html/>



4.2. Tag-uri (etichete) HTML 5

A Simple HTML Document

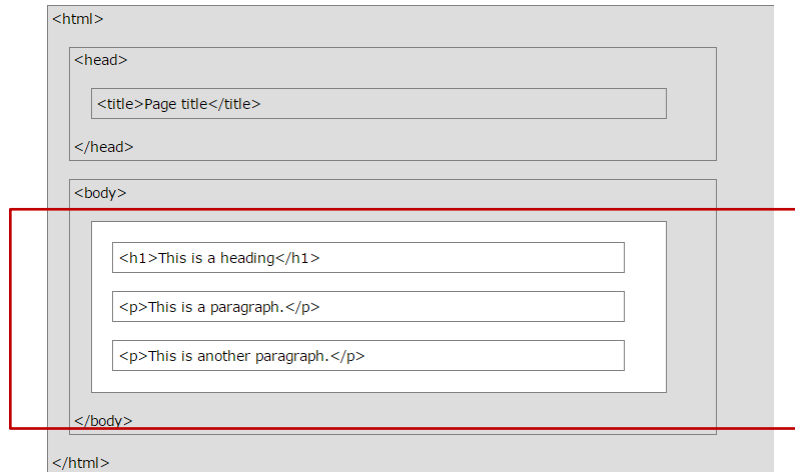
Example	Example Explained
<pre><!DOCTYPE html> <html> <head> <title>Page Title</title> </head> <body> <h1>My First Heading</h1> <p>My first paragraph.</p> </body> </html></pre>	<ul style="list-style-type: none">• The <code><!DOCTYPE html></code> declaration defines this document to be HTML5• The <code><html></code> element is the root element of an HTML page• The <code><head></code> element contains meta information about the document• The <code><title></code> element specifies a title for the document• The <code><body></code> element contains the visible page content• The <code><h1></code> element defines a large heading• The <code><p></code> element defines a paragraph

Try it Yourself »



HTML Page Structure

Below is a visualization of an HTML page structure:



Doar ceea ce este in interiorul `<body>` `</body>` este vizibil in browser



Alte etichete/tag-uri HTML:

Etichetă HTML	Descriere
TITLE	Specifică titlul întregului document și este inclus în secțiunea de antet. Textul din cadrul acestei etichete este utilizat de către navigator pentru a denumi fereastra în care este prezentat documentul.
LINK	Definește o legătură către un document extern (ex. CSS, alt fișier HTML) care poate fi utilizat de către navigator în afișarea informațiilor sau în navigare. Acest element este inclus în secțiunea de antet.
SCRIPT	Permite includerea în cadrul documentului a unor instrucțiuni de programare complexe ce pot fi executate de către navigator. Aceste instrucțiuni pot fi grupate într-un document extern, ce va fi descărcat separat, sau incluse direct în documentul curent. Limbajul de programare cel mai uzual în prezent este JavaScript . Elementele de script pot fi incluse în oricare dintre secțiunile documentului iar execuția lor poate fi imediată (execuția are loc în momentul în care scriptul este complet încărcat, chiar dacă o parte a documentului nu a fost încă primită) sau declanșată de anumite evenimente (acțiuni utilizator, finalizarea încărcării documentului etc.).



Alte etichete/tag-uri HTML:

STYLE	Permite includerea în cadrul documentului a unor instrucțiuni de formatare CSS. Conform recomandărilor de bună practică însă, este indicat ca specificațiile CSS să fie incluse într-un document extern, dedicat.
H1, H2, H3, H4, H5, H6	Sunt etichete de tip bloc, care pot fi incluse numai în corpul documentului și sunt folosite pentru a structura conținutul în secțiuni și sub-secțiuni. Recomandările de bună-practică menționează că un document ar trebui să conțină un singur element de tip H1.
DIV	Element de tip <i>bloc</i> folosit pentru gruparea conținutului într-o secțiune rectangulară.
P	Etichetă de tip <i>bloc</i> pentru separarea paragrafelor din cadrul unui text.
A	Etichetă reprezentată <i>în linie</i> pentru inserarea unei legături externe sau interne documentului curent.



Alte etichete/tag-uri HTML:

SPAN	Etichetă reprezentată <i>în linie</i> pentru formătări specifice conținutului de tip text.
FORM, INPUT, LABEL	Etichete pentru descrierea formularelor în cadrul unui document HTML. <ul style="list-style-type: none">• FORM are rolul de grupare a elementelor de tip INPUT și este o etichetă de tip <i>bloc</i>• INPUT descrie generic fiecare dintre elementele disponibile pentru realizarea unui formular, tipul exact fiind specificat prin atributul TYPE• LABEL specifică un titlu asociat cu un element de tip INPUT



Structura documente HTML

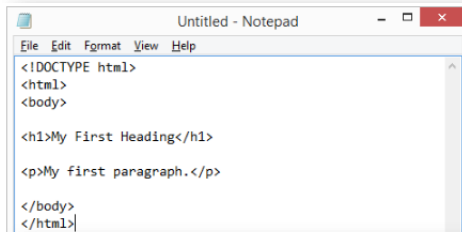
Structura unui document HTML (pagina web) cuprinde:

- Prima linie** –informatii despre versiunea de limbaj utilizata
- Sectiunea antet** – informatii generale despre document
- Corpul documentului** –continut efectiv

```
<!DOCTYPE html>
<HTML>
  <HEAD>
    <TITLE>My first HTML document</TITLE>
  </HEAD>
  <BODY>
    <P>Hello world!</P>
  </BODY>
</HTML>
```

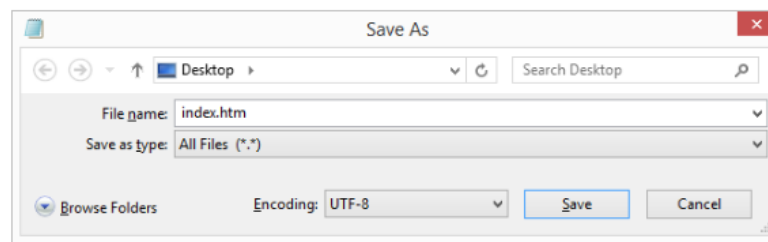


Index.html



Save the file on your computer. Select **File > Save as** in the Notepad menu.

Name the file "**index.htm**" and set the encoding to **UTF-8** (which is the preferred encoding for HTML files).





Exista **4 perechi de elemente obligatorii intr-un document HTML:**

- ❑ **<HTML>...</HTML>** - inceputul si sfarsitul paginii web;
- ❑ **<HEAD>...</HEAD>** - titlul paginii web, afisat in bara de titlu a browser-ului;
- ❑ **<TITLE>...</TITLE>** - delimiteaza antetul paginii web;
- ❑ **<BODY>...</BODY>** - delimiteaza continut propriu-zis al paginii web.

```
<!DOCTYPE html>
<HTML>
  <HEAD>
    <TITLE>My first HTML document</TITLE>
  </HEAD>
  <BODY>
    <P>Hello world!</P>
  </BODY>
</HTML>
```



Hiperlegaturile (Hyperlinks) HTML:

- ❑ **legaturi interne - ancore** (in cadrul aceluiasi document, utile in cazul paginilor de lungimi mari si in care este necesara indicarea exacta a anumitor puncte din document).
- ❑ **legaturi locale** (catre un alt document situat pe acelasi calculator si director)

```
<A HREF="dir/doc.html">apasati aici </A>
```

- ❑ **legaturi externe** realizate intre servere distincte; apelarea se face prin referinta completa:

```
<A href="http://www.upt.ro/"> Text marcat evidentiat</A>
```

- ❑ **legaturi pentru email** (permit deschiderea clientului de email - Outlook, Thunderbird)

```
<A HREF="mailto:webmaster@www.numecompanie.com">Trimite eMail la Webmaster</A>
```



Link-uri

```
<!DOCTYPE html>
<html>
<body>

<p><a href="html_images.asp">HTML
Images</a> is a link to a page on this
website.</p>

<p><a href="http://www.w3.org/">W3C</a>
is a link to a website on the World
Wide Web.</p>

</body>
</html>
```

[HTML Images](#) is a link to a page on this website.
[W3C](http://www.w3.org/) is a link to a website on the World Wide Web.



Link-uri colorate diferit in functie de actiune

```
<!DOCTYPE html>
<html>
<head>
<style>
a:link {
    color: green;
    background-color: transparent;
    text-decoration: none;
}
a:visited {
    color: pink;
    background-color: transparent;
    text-decoration: none;
}
a:hover {
    color: red;
    background-color: transparent;
    text-decoration: underline;
}
a:active {
    color: yellow;
    background-color: transparent;
    text-decoration: underline;
}
</style>
</head>
<body>

<p>You can change the default colors of links</p>

<a href="html_images.asp" target="_blank">HTML Images</a>

</body>
</html>
```

You can change the default colors of links
[HTML Images](#)



Unde se afiseaza link-urile? Attribute target

The **target** attribute specifies where to open the linked document.


The target attribute can have one of the following values:

- `_blank` - Opens the linked document in a new window or tab
- `_self` - Opens the linked document in the same window/tab as it was clicked (this is default)
- `_parent` - Opens the linked document in the parent frame
- `_top` - Opens the linked document in the full body of the window
- `framename` - Opens the linked document in a named frame

<pre><!DOCTYPE html> <html> <body> Visit our HTML tutorial! <p>If you set the target attribute to "_blank", the link will open in a new browser window or tab.</p> </body> </html></pre>	<p>Visit our HTML tutorial!</p> <p>If you set the target attribute to "_blank", the link will open in a new browser window or tab.</p>
--	--

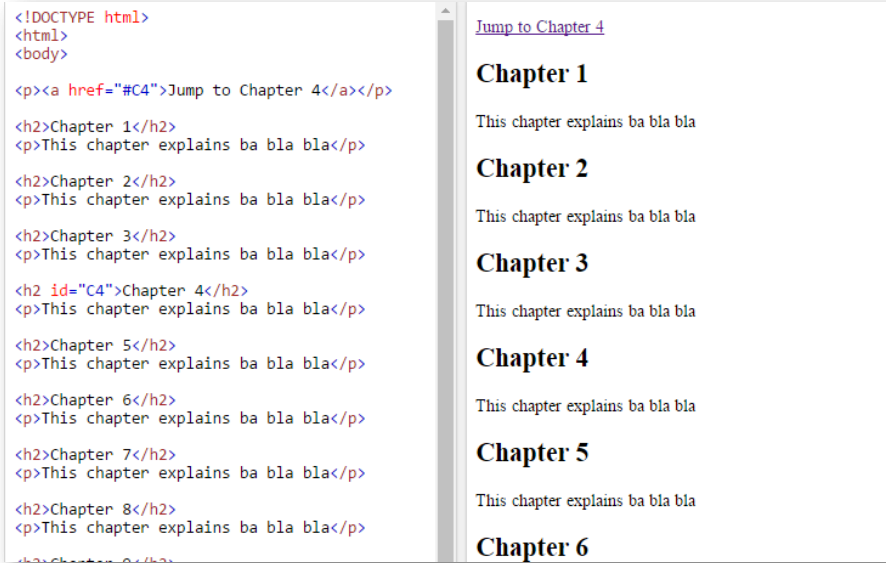


Link pe imagine

<pre><!DOCTYPE html> <html> <body> <p>The image is a link. You can click on it.</p> <p>We have added "border:0" to prevent IE9 (and earlier) from displaying a border around the image.</p> </body> </html></pre>	<p>The image is a link. You can click on it.</p>  <p>We have added "border:0" to prevent IE9 (and earlier) from displaying a border around the image.</p>
--	--



Link tip ancora in document HTML:



4.3. Inserarea imaginilor. Atribute.Stiluri de fonturi

- Daca poza se afla in folderul curent: ``
- Daca poza se afla intr-un alt folder: ``

```
<!DOCTYPE html>
<html>
<body>



</body>
</html>
```



Utilizand style

```
<!DOCTYPE html>
<html>
<body>



</body>
</html>
```



Utilizand width si height



Imagini clickable (image maps) : <map> si <area>

```
<!DOCTYPE html>
<html>
<body>

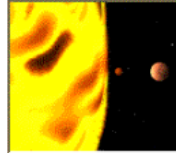
<p>Click on the sun or on one of the planets
to watch it closer:</p>



<map name="planetmap">
  <area shape="rect" coords="0,0,82,126"
alt="Sun" href="sun.htm">
  <area shape="circle" coords="90,58,3"
alt="Mercury" href="mercur.htm">
  <area shape="circle" coords="124,58,8"
alt="Venus" href="venus.htm">
</map>

</body>
</html>
```

Click on the sun or on one of the planets to watch it closer:



Imagini animate

-gif animat

```
<!DOCTYPE html>
<html>
<body>

<p>The GIF standard allows moving images.</p>



</body>
</html>
```

The GIF standard allows moving images.





Imagini ca background: <body background>

```
<!DOCTYPE html>
<html>
<body background="w3s.png">

<h1>Hello world!</h1>
<p><a href="https://www.w3schools.com">Visit W3Schools.com!
</a></p>
</body>
</html>
```

Hello world!

[Visit W3Schools.com!](https://www.w3schools.com)



Atribute - lista completa :

http://www.w3schools.com/tags/ref_attributes.asp

ALIGN

ALIGN = TOP aliniaza imaginea cu partea cea mai de sus a randului;

ALIGN = MIDDLE aliniaza imaginea cu mijlocul randului;

ALIGN = BOTTOM aliniaza imaginea cu partea de jos a randului sau a celei mai mari imagini.

WIDTH="..." si **HEIGHT="..."** dimensiunile imaginilor

ALT - permite afisarea unui sir de caractere in locul imaginii, pentru persoane cu deficiente de vedere care utilizeaza screen readers.



Alte attribute uzuale:

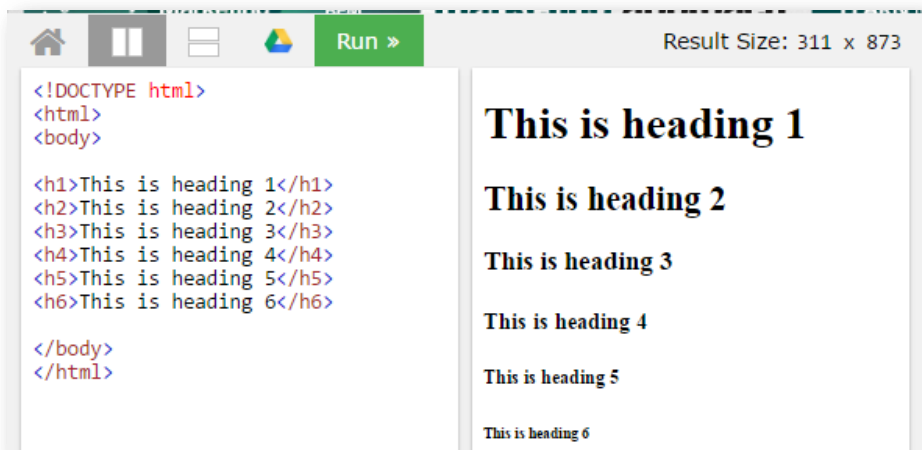
HTML Attributes

Below is an alphabetical list of some attributes often used in HTML:

Attribute	Description
alt	Specifies an alternative text for an image, when the image cannot be displayed
disabled	Specifies that an input element should be disabled
href	Specifies the URL (web address) for a link
id	Specifies a unique id for an element
src	Specifies the URL (web address) for an image
style	Specifies an inline CSS style for an element
title	Specifies extra information about an element (displayed as a tool tip)



Headings: se definesc cu `<h1>` (cel mai important) pana la `<h6>` (cel mai putin important)





Paragrafe: se definesc cu `<p>` `</p>` dar vor fi afisate corect si fara `</p>`

```
<!DOCTYPE html>
<html>
<body>

<p>This is a paragraph.</p>
<p>This is a paragraph.</p>
<p>This is a paragraph.</p>

</body>
</html>
```

Result Size: 311 x 873

This is a paragraph.
This is a paragraph.
This is a paragraph.

Paragraf nou: se poate defini si cu `
` (! fara `</br>`)

```
<!DOCTYPE html>
<html>
<body>

<p>This is<br>a paragraph<br>with line
breaks</p>

</body>
</html>
```

This is
a paragraph
with line breaks



Text preformatat: se definesc cu `<pre>` `</pre>`

```
<!DOCTYPE html>
<html>
<body>

<p>The pre tag preserves both spaces and line
breaks:</p>

<pre>
  My Bonnie lies over the ocean.
  My Bonnie lies over the sea.
  My Bonnie lies over the ocean.
  Oh, bring back my Bonnie to me.
</pre>

</body>
</html>
```

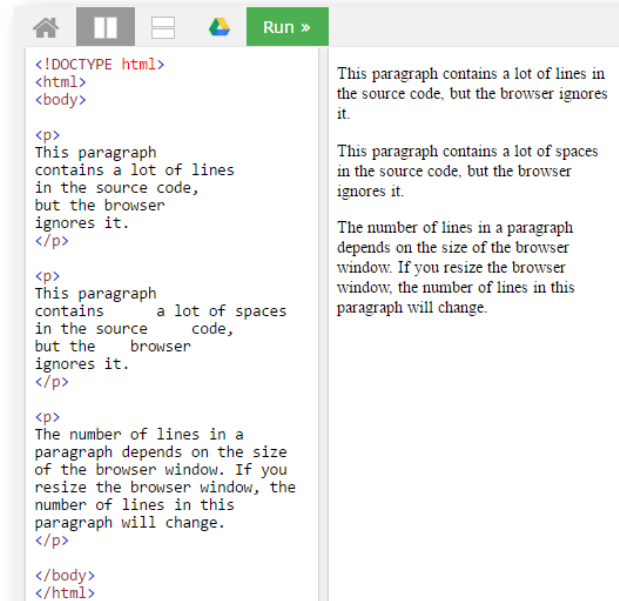
Result Size:

The pre tag preserves both spaces and line breaks:

My Bonnie lies over the ocean.
My Bonnie lies over the sea.
My Bonnie lies over the ocean.
Oh, bring back my Bonnie to me.



Afisare in browser: se ignora spatiile, tab-urile din text si linie noua



Eticheta <hr> - Horizontal rule: linie orizontala de separare a sectiunilor de text





4.4. Utilizare culori

Stiluri pentru culori HTML:



The screenshot shows a web browser window with a toolbar at the top containing a home icon, a refresh icon, a menu icon, a search icon, and a green 'Run »' button. The main content area is split into two panes. The left pane contains the following HTML code:

```
<!DOCTYPE html>
<html>
<body>

<h2 style="color:red;">I am red</h2>
<h2 style="color:blue;">I am blue</h2>

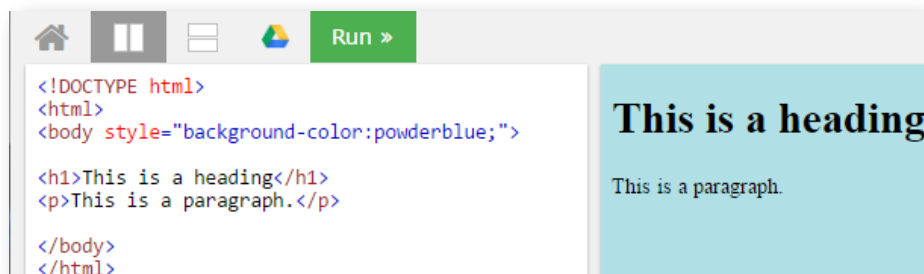
</body>
</html>
```

The right pane shows the rendered output: the text "I am red" is displayed in red, and the text "I am blue" is displayed in blue.



4.4. Utilizare culori

Stiluri pentru culori HTML:



The screenshot shows a web browser window with a toolbar at the top containing a home icon, a refresh icon, a menu icon, a search icon, and a green 'Run »' button. The main content area is split into two panes. The left pane contains the following HTML code:

```
<!DOCTYPE html>
<html>
<body style="background-color:powderblue;">

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

The right pane shows the rendered output: the background of the entire page is a light blue color (powder blue). The text "This is a heading" is displayed in a large, bold, black font, and the text "This is a paragraph." is displayed in a smaller, regular black font below it.



Stiluri pentru culori in HTML:

The screenshot shows a web browser window with a toolbar at the top containing a home icon, a refresh icon, a search icon, and a green 'Run >' button. The main area is split into two panes. The left pane contains the following HTML code:

```
<!DOCTYPE html>
<html>
<body>

<h1 style="color:blue;">This is a heading</h1>
<p style="color:red;">This is a paragraph.</p>

</body>
</html>
```

The right pane shows the rendered output: a blue heading "This is a heading" and a red paragraph "This is a paragraph."



Stiluri pentru Fonturi in HTML:

The screenshot shows a web browser window with a toolbar at the top containing a home icon, a refresh icon, a search icon, and a green 'Run >' button. The main area is split into two panes. The left pane contains the following HTML code:

```
<!DOCTYPE html>
<html>
<body>

<h1 style="font-family:verdana;">This is a
heading</h1>
<p style="font-family:courier;">This is a
paragraph.</p>

</body>
</html>
```

The right pane shows the rendered output: a heading "This is a heading" in a bold, black, sans-serif font (Verdana) and a paragraph "This is a paragraph." in a black, monospaced font (Courier). The text "Result Size:" is visible in the top right corner of the right pane.



Culori de baza in HTML:

Color	Name
	Red
	Orange
	Yellow
	Cyan
	Blue

Alte culori si nuante in HTML:

Color Name	HEX	Color	Shades
AliceBlue	#F0F8FF		Shades
AntiqueWhite	#FAEBD7		Shades
Aqua	#00FFFF		Shades
Aquamarine	#7FFFD4		Shades
Azure	#F0FFFF		Shades
Beige	#F5F5DC		Shades
Bisque	#FFE4C4		Shades
Black	#000000		Shades
BlanchedAlmond	#FFEBCD		Shades
Blue	#0000FF		Shades
BlueViolet	#8A2BE2		Shades
Brown	#A52A2A		Shades
BurlyWood	#DEB887		Shades
CadetBlue	#5F9EA0		Shades
Chartreuse	#7FFF00		Shades
Chocolate	#D2691E		Shades
Coral	#FF7F50		Shades
CornflowerBlue	#6495ED		Shades



Culori de baza in HTML: utilizand numele culorii

```
<!DOCTYPE html>
<html>
<body>

<h2 style="background-color:red">
Background-color set by using red
</h2>

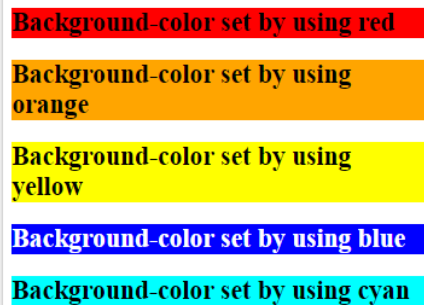
<h2 style="background-color:orange">
Background-color set by using orange
</h2>

<h2 style="background-color:yellow">
Background-color set by using yellow
</h2>

<h2 style="background-color:blue;color:white">
Background-color set by using blue
</h2>

<h2 style="background-color:cyan">
Background-color set by using cyan
</h2>

</body>
</html>
```





Culori de baza in HTML: utilizand codul RGB

```
<!DOCTYPE html>
<html>
<body>

<h2 style="background-color:#FF0000">
Background-color set by using #FF0000
</h2>

<h2 style="background-color:#00FF00">
Background-color set by using #00FF00
</h2>

<h2 style="background-color:#0000FF">
Background-color set by using #0000FF
</h2>

<h2 style="background-color:#0000FF">
Background-color set by using #0000FF
</h2>

<h2 style="background-color:#FFFF00">
Background-color set by using #FFFF00
</h2>

<h2 style="background-color:#FF00FF">
Background-color set by using #FF00FF
</h2>

<h2 style="background-color:#00FFFF">
Background-color set by using #00FFFF
</h2>

</body>
</html>
```

Background-color set by using
#FF0000

Background-color set by using
#00FF00

Background-color set by using
#0000FF

Background-color set by using
#FFFF00

Background-color set by using
#FF00FF

Background-color set by using
#00FFFF



Stiluri pentru dimensiune fonturi in HTML:

The screenshot shows a web browser window with a toolbar at the top containing icons for home, back, forward, and refresh, along with a 'Run' button and a 'Result Size: 412' indicator. The browser's content area is split into two parts: a code editor on the left and a rendered preview on the right. The code editor contains the following HTML code:

```
<!DOCTYPE html>
<html>
<body>

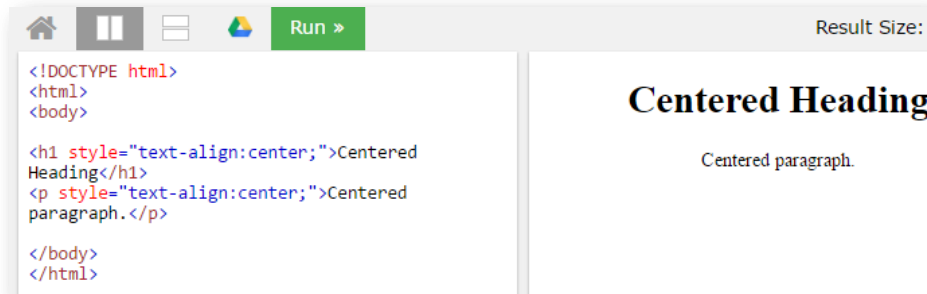
<h1 style="font-size:300%;">This is a
heading</h1>
<p style="font-size:160%;">This is a paragraph.
</p>

</body>
</html>
```

The rendered preview on the right shows the result of this code: a large heading 'This is a heading' and a paragraph 'This is a paragraph.' below it.



Stiluri pentru alinierea textului in HTML:



Stiluri pentru formatarea textului in HTML:



Elemente de formatare HTML:

- - Bold text
- - Important text
- <i> - Italic text
- - Emphasized text
- <mark> - Marked text
- <small> - Small text
- - Deleted text
- <ins> - Inserted text
- <sub> - Subscript text
- <sup> - Superscript text



Elementele `` si `<mark>` in HTML:

```
Result Size:
<!DOCTYPE html>
<html>
<body>

<p>The del element represents deleted (removed)
text.</p>

<p>My favorite color is <del>blue</del> red.</p>

</body>
</html>
```

The del element represents deleted (removed) text.
My favorite color is ~~blue~~ red.

```
Result Size:
<!DOCTYPE html>
<html>
<body>

<h2>HTML <mark>Marked</mark> Formatting</h2>

</body>
</html>
```

HTML Marked Formatting



Citarea unui text in HTML: `<blockquote cite="">` , `</blockquote>`

```
Result Size: 412
<!DOCTYPE html>
<html>
<body>

<p>Here is a quote from WWF's website:</p>
<blockquote
cite="http://www.worldwildlife.org/who/index.htm
l">
For 50 years, WWF has been protecting the future
of nature.
The world's leading conservation organization,
WWF works in 100 countries and is supported by
1.2 million members in the United States and
close to 5 million globally.
</blockquote>

</body>
</html>
```

Here is a quote from WWF's website:

For 50 years, WWF has been protecting the future of nature. The world's leading conservation organization, WWF works in 100 countries and is supported by 1.2 million members in the United States and close to 5 million globally.



Citarea (quote) unui text scurt in HTML: `<q>` `</q>`

```
<!DOCTYPE html>
<html>
<body>

<p>Browsers usually insert quotation marks around the q element.</p>

<p>WWF's goal is to: <q>Build a future where people live in harmony with nature.</q></p>

</body>
</html>
```

Result Size: 412

Browsers usually insert quotation marks around the q element.

WWF's goal is to: "Build a future where people live in harmony with nature."



Abrevieri in HTML: `<abbr>`

```
<!DOCTYPE html>
<html>
<body>

<p>The <abbr title="World Health Organization">WHO</abbr> was founded in 1948.
</p>

<p>Marking up abbreviations can give useful information to browsers, translation systems and search-engines.</p>

</body>
</html>
```

Result Size: 412 x 4

The WHO was founded in 1948.

Marking up **World Health Organization** abbreviations can give useful information to browsers, translation systems and search-engines.



Adrese in HTML: <address> , </address>

```
<!DOCTYPE html>  
<html>  
<body>
```

```
<p>The HTML address element defines contact  
information (author/owner) of a document or  
article.</p>
```

```
<address>  
Written by John Doe.<br>  
Visit us at:<br>  
Example.com<br>  
Box 564, Disneyland<br>  
USA  
</address>
```

```
</body>  
</html>
```

The HTML address element defines contact information (author/owner) of a document or article.

*Written by John Doe.
Visit us at:
Example.com
Box 564, Disneyland
USA*



Text inversat in HTML: <bdo dir="rtl"> </bdo>

```
<!DOCTYPE html>  
<html>  
<body>
```

```
<p>If your browser supports bi-directional  
override (bdo), the next line will be written  
from right to left (rtl):</p>
```

```
<bdo dir="rtl">This line will be written from  
right to left</bdo>
```

```
</body>  
</html>
```

If your browser supports bi-directional override (bdo), the next line will be written from right to left (rtl):

tfeI ot thgIr morf nettIrW eb lliw enil sihT

Comentarii in HTML: <!--...-->

```
<!DOCTYPE html>  
<html>  
<body>
```

```
<!-- This is a comment -->  
<p>This is a paragraph.</p>  
<!-- Comments are not displayed in the  
browser -->
```

```
</body>  
</html>
```

This is a paragraph.



Tabelele : utilizand `<table>`, sunt editate rand cu rand si celula cu celula

```
<!DOCTYPE html>
<html>
<body>

<table style="width:100%">
  <tr>
    <th>Firstname</th>
    <th>Lastname</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Jill</td>
    <td>Smith</td>
    <td>50</td>
  </tr>
  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>94</td>
  </tr>
  <tr>
    <td>John</td>
    <td>Doe</td>
    <td>80</td>
  </tr>
</table>

</body>
</html>
```

Firstname	Lastname	Age
Jill	Smith	50
Eve	Jackson	94
John	Doe	80



Etichete tabele:

Tag	Description
<code><table></code>	Defines a table
<code><th></code>	Defines a header cell in a table
<code><tr></code>	Defines a row in a table
<code><td></code>	Defines a cell in a table
<code><caption></code>	Defines a table caption
<code><colgroup></code>	Specifies a group of one or more columns in a table for formatting
<code><col></code>	Specifies column properties for each column within a <code><colgroup></code> element
<code><thead></code>	Groups the header content in a table
<code><tbody></code>	Groups the body content in a table
<code><tfoot></code>	Groups the footer content in a table



Liste nenumerotata -bullets: si

```
<!DOCTYPE html>
<html>
<body>

<h2>An unordered HTML list</h2>

<ul>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ul>

</body>
</html>
```

An unordered HTML list

- Coffee
- Tea
- Milk



Liste numerotata: si

```
<!DOCTYPE html>
<html>
<body>

<h2>An ordered HTML list</h2>

<ol>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>

</body>
</html>
```

An ordered HTML list

1. Coffee
2. Tea
3. Milk



Attribute liste ordonate :

Ordered HTML List - The Type Attribute

The **type** attribute of the tag, defines the type of the list item marker:

Type	Description
type="1"	The list items will be numbered with numbers (default)
type="A"	The list items will be numbered with uppercase letters
type="a"	The list items will be numbered with lowercase letters
type="I"	The list items will be numbered with uppercase roman numbers
type="i"	The list items will be numbered with lowercase roman numbers



Liste imbricate:

```
<!DOCTYPE html>
<html>
<body>

<h2>A Nested List</h2>

<ul>
  <li>Coffee</li>
  <li>Tea
    <ul>
      <li>Black tea</li>
      <li>Green tea</li>
    </ul>
  </li>
  <li>Milk</li>
</ul>

</body>
</html>
```

A Nested List

- Coffee
- Tea
 - Black tea
 - Green tea
- Milk

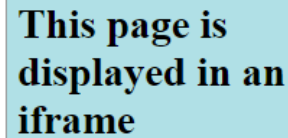


Frame-uri : <iframe>

```
<!DOCTYPE html>
<html>
<body>

<iframe src="demo_iframe.htm" height="200"
width="300"></iframe>

</body>
</html>
```



This page is
displayed in an
iframe



Metadata in <head> :

- Elementul **<head>** contine metadata (date despre date) este plasat intre tag-ul <html> si tag-ul <body>.
- Metadatale nu vor fi afisate in browser.
- Metadata definesc: titlul documentului html (site-ului), setul de caracter utilizat, stilurile, link-urile, script-urile,etc.
- Tag-uri pentru metadata: <title>, <style>, <meta>, <link>, <script>, si <base>.



Metadata in <head> : <title>

Elementul <title> :

- Defineste titlul afisat in browser
- Defineste titlul paginii cu care va fi salvat in Favourites
- Afiseaza titlul paginii in rezultatele furnizate de motoarele de cautare

```
<!DOCTYPE html>
<html>
<head>
  <title>Page Title</title>
</head>
<body>
```



Metadata in <head> : <style>

Elementul <style> este utilizat pentru a defini stilul unei singure pagini html

```
<!DOCTYPE html>
<html>
<head>
  <title>Page Title</title>
  <style>
    body {background-color: powderblue;}
    h1 {color: red;}
    p {color: blue;}
  </style>
</head>
<body>

<h1>This is a Heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

This is a Heading

This is a paragraph.



Metadata in <head> : <link>

Elementul <link> este utilizat pentru a furniza link-ul la fisierul extern css (style sheets)

```
<!DOCTYPE html>
<html>
<head>
  <title>Page Title</title>
  <link rel="stylesheet"
href="mystyle.css">
</head>
<body>

<h1>This is a Heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

This is a Heading

This is a paragraph.



Metadata in <head> : <meta>

Elementul <meta> este utilizat pentru a specifica setul de caractere utilizat descrierea paginii web, cuvinte cheie (keywords), autorul paginii web, etc.

Define the character set used:

```
<meta charset="UTF-8">
```

Define a description of your web page:

```
<meta name="description" content="Free Web tutorials">
```



Metadata in <head> : <meta>

Define keywords for search engines:

```
<meta name="keywords" content="HTML, CSS, XML, JavaScript">
```

Define the author of a page:

```
<meta name="author" content="John Doe">
```

Refresh document every 30 seconds:

```
<meta http-equiv="refresh" content="30">
```



Metadata in <head> : <meta>

Example

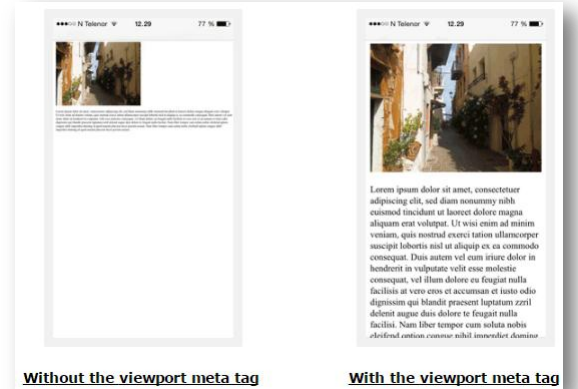
```
<meta charset="UTF-8">  
<meta name="description" content="Free Web tutorials">  
<meta name="keywords" content="HTML,CSS,XML,JavaScript">  
<meta name="author" content="John Doe">
```



Metadata in `<head>` : `<meta>`

“viewport”- permite scalarea informatiei vizibile pe diferite display-uri ale dispozitivelor mobile

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```



Responsive web design:

- Permite afisarea pe orice tip de display pe orice dispozitiv (inclusiv dispozitive mobile): desktop, tablete, telefoane
- Utilizeaza doar HTML si CSS.



Desktop



Tableta



Telefon mobil



Metadata in <head> : <base>

Elementul <base> specifica URL-ul de baza pentru toate link-urile din acea pagina web:

```
<base href="https://www.w3schools.com/images/" target="_blank">
```

In HTML5 tag-urile <html>, <body>, <head> pot fi omise.






```
<!DOCTYPE html>
<title>Page Title</title>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>
```



Meniuri in HTML5 : <menu>, <menuitem>

Deocamdata se pot vizualiza doar in broserie Firefox.

Element					
<menu>	Not supported	Not supported	8.0 (only context menus)	Not supported	Not supported

```
<menu type="context" id="mymenu">
  <menuitem label="Refresh" onclick="window.location.reload();"
  icon="ico_reload.png">
</menuitem>
  <menu label="Share on...">
    <menuitem label="Twitter" icon="ico_twitter.png"
    onclick="window.open('//twitter.com/intent/tweet?
text='+window.location.href);">
</menuitem>
    <menuitem label="Facebook" icon="ico_facebook.png"
    onclick="window.open('//facebook.com/sharer/sharer.php?
u='+window.location.href);">
</menuitem>
  </menu>
  <menuitem label="Email This Page"
  onclick="window.location='mailto:?body='+window.location.href;">
</menuitem>
</menu>
```




Meniuri in HTML5 : <nav>

```
<!DOCTYPE html>
<html>
<body>

<nav>
<a href="/html/">HTML</a> |
<a href="/css/">CSS</a> |
<a href="/js/">JavaScript</a> |
<a href="/jquery/">jQuery</a>
</nav>

<p><strong>Note:</strong> The nav tag is
not supported in Internet Explorer 8 and
earlier versions.</p>

</body>
</html>
```

[HTML](#) | [CSS](#) | [JavaScript](#) | [jQuery](#)

Note: The nav tag is not supported in Internet Explorer 8 and earlier versions.



TEST

Kahoot.it