



Universitatea Tehnică din Cluj-Napoca  
Facultatea de Inginerie Electrică

## Cap.4

### IMPLEMENTARE INTERFETE GRAFICE. LIMBAJUL HTML5



Curs: PIGMC, Master an II, sem I

## 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

- fisiere cu extensia *.htm* sau *.html*
- dimensiuni mici → reducere trafic de retea si spatiu pe server
- se pot dezvolta utilizand:
  - editoare de text simple:
    - **Notepad**, Notepad ++ (Windows), etc sau
    - **TextEdit** (Mac)
    - **Kompozer, Bootstrap,etc**
  - sau editoare comerciale:
    - **Adobe Dreamweaver, MS FrontPage**, etc

### HTML

- limbaj pentru crearea documentelor web structurate
- are la baza tag-uri /etichete
  - <nume\_tag>* text, imagini, ... *</nume\_tag>*



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

The screenshot shows the 'HTML5 Tutorial' section of the w3schools website. The left sidebar contains a navigation menu with links like 'HTML HOME', 'HTML Introduction', 'HTML Editors', etc. The main content area features a green banner with the text: 'With HTML you can create your own Web site.', 'This tutorial teaches you everything about HTML.', and 'HTML is easy to learn - You will enjoy it.' Below the banner, there's a section titled 'Examples in Every Chapter' with a note: 'This HTML tutorial contains hundreds of HTML examples. With our online HTML editor, you can edit the HTML, and click on a button to view the result.' A code example is shown in a code editor window:

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>
<h1>This is a Heading</h1>
<p>This is a paragraph.</p>
</body>
</html>
```

At the bottom of the code editor is a green button labeled 'Try It Yourself >'. To the right of the code editor, there's a 'COLOR PICKER' with a hexagonal color wheel and a 'LEARN MORE' section listing various HTML-related topics.



## 4.2. Tag-uri (etichete) HTML 5

### A Simple HTML Document

#### Example Explained

##### Example

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

<h1>My First Heading</h1>
<p>My first paragraph.</p>

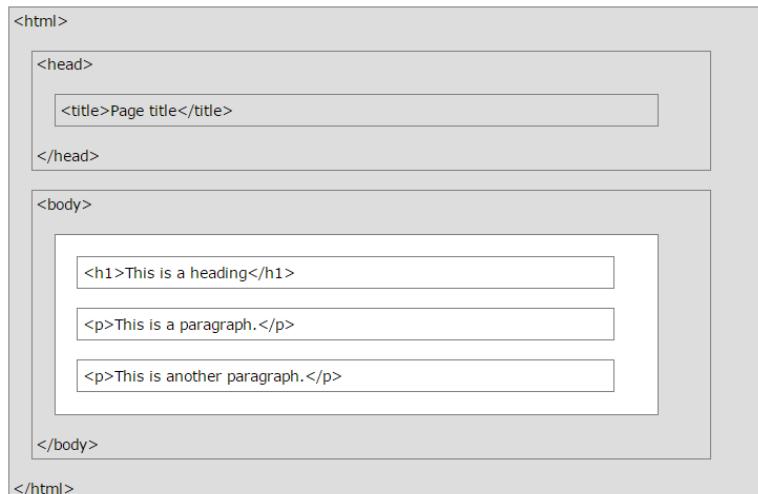
</body>
</html>
```

- The `<!DOCTYPE html>` declaration defines this document to be HTML5
- The `<html>` element is the root element of an HTML page
- The `<head>` element contains meta information about the document
- The `<title>` element specifies a title for the document
- The `<body>` element contains the visible page content
- The `<h1>` element defines a large heading
- The `<p>` element defines a paragraph



## HTML Page Structure

Below is a visualization of an HTML page structure:



**Note:** Only the content inside the <body> section (the white area above) is displayed in a 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 <b>JavaScript</b> . 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 formatări specifice conținutului de tip text.
FORM, INPUT, LABEL	<p>Etichete pentru descrierea formularelor în cadrul unui document HTML.</p> <ul style="list-style-type: none"><li>• FORM are rolul de grupare a elementelor de tip INPUT și este o etichetă de tip <i>bloc</i></li><li>• INPUT descrie generic fiecare dintre elementele disponibile pentru realizarea unui formular, tipul exact fiind specificat prin atributul TYPE</li><li>• LABEL specifică un titlu asociat cu un element de tip INPUT</li></ul>



## Structura documente HTML

Structura unui document HTML (pagina web) cuprinde:

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

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

Pot sa lipseasca dar e indicat sa fie incluse in documente web



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>
```

Linie noua se introduce cu `<br>`

```
<!DOCTYPE html>
<html>
<body>
<p>To break lines<br>in a text,<br>use the br element.
</p>
</body>
</html>
```

To break lines  
in a text,  
use the br element.



## Sectiunea antet: <HEAD>

Elemente componente sectiunea <HEAD>:

- ❑ <title> defineste titlul documentului in toolbar (browser), titlu este adaugat la "Favorites", si este textul afisat in motoarele de cautare
- ❑ <style> defineste stilul de afisare a paginii si obiectelor din pagina in browser
- ❑ <base> specifica URLde baza pentru toate URL-urile relative din document
- ❑ <link> specifica legaturi externe pentru foi de stiluri de ex.
- ❑ <meta> specifica metadate, informatii despre document utile in motoarele de cautare
- ❑ <script> este utilizat pentru definirea unui script client-side (de ex. JavaScript sau PHP pentru manipulare imagini , validare formulare. Poate sa apara si in <BODY>)
- ❑ <noscript> ofera un text alternativ pentru utilizatorii care au dezactivat executarea script-urilor in browser sau au o versiune de browser care nu suporta scriputurile.



## <HEAD><TITLE>

```
<!DOCTYPE html>
<html>
<head>
<title>Title of the document</title>
</head>
<body>
The content of the document.....
</body>
</html>
```

## <HEAD><STYLE>

```
<head>
<style>
h1 {color:red;}
p {color:blue;}
</style>
</head>
```



## <HEAD><BASE HREF>

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

## <HEAD><LINK>

```
<head>
  <link rel="stylesheet" type="text/css" href="theme.css">
</head>
```



## <HEAD><META>

```
<head>
  <meta charset="UTF-8">
  <meta name="description" content="Curs PIGMC">
  <meta name="keywords" content="HTML,CSS,XML,JavaScript">
  <meta name="author" content="Laura Grindei">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
```

## <HEAD><SCRIPT><NOSCRIPT>

```
<script>
document.write("Hello World!")
</script>
<noscript>Your browser does not support JavaScript!</noscript>
```



## <HEAD><VIEWPORT>

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



Without the viewport meta tag

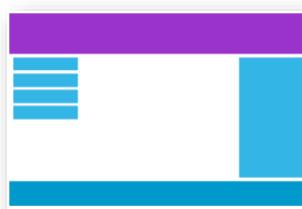


With the viewport meta tag



### 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



## Index.html

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

<h1>My First Heading</h1>

<p>My first paragraph.</p>

</body>
</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 HTM files).



Exista **4 perechi de elemente uzuale 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>** - delimitaaza antetul paginii web;
- <BODY>...</BODY>** - delimitaaza continut propriu-zis al paginii web.

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



## Atribute HTML5

**Atribute:** perechi name/value , sintaxa: name="value"

- ❑ **href**, utilizat cu tagul <a> pentru specificare link

```
<a href="https://www.w3schools.com">This is a link</a>
```

- ❑ **src**, utilizat pentru imagini 

- ❑ **width ,height, dimensiunea imaginii in pixeli**

```

```

- ❑ **alt**, text alternativ pentru screenreadere

```

```

- ❑ **style**, format <p style="color:red">Text</p>

- ❑ **title** <p title="I'm a tooltip">

This is a paragraph.

```
</p>
```



## 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** realizeate intre servere distincte; apelarea se face prin referinta completa:

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

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

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



## Link-uri interne /ancore

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

<h2 id="C1">Chapter 1</h2>
<p>This chapter explains ba bla bla</p>
<p><a href="#C2">Jump to Chapter 2</a></p>

<h2 id="C2">Chapter 2</h2>
<p>This chapter explains ba bla bla</p>
<p><a href="#C3">Jump to Chapter 3</a></p>

<h2 id="C3">Chapter 3</h2>
<p>This chapter explains ba bla bla</p>
<p><a href="#C1">Jump to Chapter 1</a></p>

</body>
</html>
```

### Chapter 1

This chapter explains ba bla bla

[Jump to Chapter 2](#)

### Chapter 2

This chapter explains ba bla bla

[Jump to Chapter 3](#)

### Chapter 3

This chapter explains ba bla bla

[Jump to Chapter 1](#)



## Link-uri externe

```
<!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](#) is a link to a website on the World Wide Web.



## Link-uri la email: mailto

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

<p>
Email Laura:<a href="mailto:Laura.Grindei@ethm.utcluj.ro"
target="_top">Send Mail</a>
</p>
<p>
</body>
</html>
```

Email Laura: [Send Mail](mailto:Laura.Grindei@ethm.utcluj.ro)



## Link-uri colorate

```
<!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>
```

You can change the default colors of links

[HTML Images](#)



## Unde se afiseaza link-urile? Atribute 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

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

<a href="http://www.w3schools.com/html/"
target="_blank">Visit our HTML tutorial!</a>

<p>If you set the target attribute to " _blank",
the link will open in a new browser window or
tab.</p>

</body>
</html>
```

Visit our HTML tutorial!

If you set the target attribute to "`_blank`", the link will open in a new browser window or tab.



## 4.3. Inserarea imaginilor. 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) : utilizand etichete <map> si <area>

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

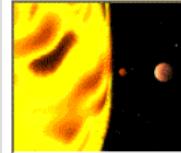
<p>Click on the sun or on one of the planets to watch it closer:</p>



<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:



## Link pe imagine

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

<p>The image is a link. You can click on it.</p>

<a href="default.asp">
  
</a>

<p>We have added "border:0" to prevent IE9 (and earlier)
from displaying a border around the image.</p>

</body>
</html>
```

The image is a link. You can click on it.



We have added "border:0" to prevent IE9 (and earlier) from displaying a border around the image.



## 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 imagini - lista completa :

[http://www.w3schools.com/tags/ref\\_attributes.asp](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="..."** –dimensiuni imagine

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



### Alte atribute 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)

The screenshot shows a code editor interface with a toolbar at the top. The code area contains the following HTML code:

```
<!DOCTYPE html>
<html>
<body>
<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
<h4>This is heading 4</h4>
<h5>This is heading 5</h5>
<h6>This is heading 6</h6>
</body>
</html>
```

The result pane on the right displays the rendered output of the HTML code, showing the following structure:

- This is heading 1
- This is heading 2
- This is heading 3
- This is heading 4
- This is heading 5
- This is heading 6



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

The screenshot shows a code editor interface with a toolbar at the top. The code area contains the following HTML code:

```
<!DOCTYPE html>
<html>
<body>
<p>This is a paragraph.</p>
<p>This is a paragraph.</p>
<p>This is a paragraph.</p>
</body>
</html>
```

The result pane on the right displays the rendered output of the HTML code, showing three separate paragraphs:

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

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

The screenshot shows a code editor interface with a toolbar at the top. The code area contains the following HTML code:

```
<!DOCTYPE html>
<html>
<body>
<p>This is<br>a paragraph<br>with line<br>breaks</p>
</body>
</html>
```

The result pane on the right displays the rendered output of the HTML code, showing a single paragraph with line breaks:

This is  
a paragraph  
with line breaks



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

The screenshot shows a code editor interface with a toolbar at the top. The code in the editor is:

```
<!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>
```

The output on the right side of the editor shows the result of running the code. It includes the explanatory text "The pre tag preserves both spaces and line breaks:" followed by four lines of text: "My Bonnie lies over the ocean.", "My Bonnie lies over the sea.", "My Bonnie lies over the ocean.", and "Oh, bring back my Bonnie to me." Each line is indented by four spaces, demonstrating that the pre tag preserves both spaces and line breaks.



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

The screenshot shows a code editor interface with a toolbar at the top. The code in the editor is:

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

<p>
    This paragraph
    contains a lot of lines
    in the source code,
    but the browser
    ignores it.
</p>

<p>
    This paragraph
    contains a lot of spaces
    in the source code,
    but the browser
    ignores it.
</p>

<p>
    The number of lines in a
    paragraph depends on the size
    of the browser window. If you
    resize the browser window,
    the number of lines in this
    paragraph will change.
</p>

</body>
</html>
```

The output on the right side of the editor shows the result of running the code. It includes three paragraphs. The first two paragraphs each contain several lines of text, but the browser ignores the extra lines and spaces, resulting in only one line of text per paragraph. The third paragraph contains a single line of text, but its content is described as being dependent on the browser window size, with a note stating that the number of lines will change if the window is resized.



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

The screenshot shows a web browser interface with a toolbar at the top. The code editor on the left contains the following HTML:

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

<h1>This is heading 1</h1>
<p>This is some text.</p>
<hr>

<h2>This is heading 2</h2>
<p>This is some other text.</p>
<hr>

<h2>This is heading 2</h2>
<p>This is some other text.</p>

</body>
</html>
```

The browser's result pane on the right displays the rendered content:

This is heading 1

This is some text.

---

This is heading 2

This is some other text.

---

This is heading 2

This is some other text.



#### 4.4. Utilizare culori. Inserare tabele, frame-uri

**Stiluri pentru culori HTML: style**

The screenshot shows a web browser interface with a toolbar at the top. The code editor on the left contains the following HTML:

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

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

</body>
</html>
```

The browser's result pane on the right displays the rendered content:

I am red

I am blue



#### 4.4. Utilizare culori. Inserare tabele, frame-uri

##### Stiluri pentru culori HTML: style

The screenshot shows a web development environment. On the left, there's a code editor window containing 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>
```

On the right, there's a preview window showing the rendered output. The background of the body is powder blue. The heading is black, and the paragraph is also black.



##### Stiluri pentru culori in HTML:

The screenshot shows a web development environment. On the left, there's a code editor window containing 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>
```

On the right, there's a preview window showing the rendered output. The heading is blue, and the paragraph is red.

##### Stiluri pentru Fonturi in HTML:

The screenshot shows a web development environment. On the left, there's a code editor window containing 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>
```

On the right, there's a preview window showing the rendered output. The heading is in Verdana font, and the paragraph is in Courier font.



### Culori de baza in HTML:

Color	Name
Red	
Orange	
Yellow	
Cyan	
Blue	

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

### Alte culori si nuante

### in HTML:



### 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>
```

Background-color set by using red

Background-color set by using orange

Background-color set by using yellow

Background-color set by using blue

Background-color set by using cyan



## 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:#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:

```
<!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>
```

Result Size: 412

This is a heading

This is a paragraph.

## Stiluri pentru alinierea textului in HTML:

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

<h1 style="text-align:center;">Centered
Heading</h1>
<p style="text-align:center;">Centered
paragraph.</p>

</body>
</html>
```

Result Size:

Centered Heading

Centered paragraph.



## Stiluri pentru formatarea textului in HTML:

The screenshot shows a browser-based code editor with the following interface elements:

- Toolbar: Home, Stop, Refresh, Run button.
- Code area:

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

<p><b>This text is bold</b></p>
<p><i>This text is italic</i></p>
<p>This is<sub> subscript</sub> and
<sup>superscript</sup></p>

</body>
</html>
```
- Output area:

This text is bold

*This text is italic*

This is <sub>subscript</sub> and <sup>superscript</sup>
- Bottom right panel: A list of HTML tags with their descriptions.

**Elemente de formatare HTML:**

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



## Elementele <del> si <mark> in HTML:

The screenshot shows a browser-based code editor with the following interface elements:

- Toolbar: Home, Stop, Refresh, Run button.
- Code area:

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

<p>The del element represents deleted (removed) text.</p>
<p>My favorite color is blue red.</p>

</body>
</html>
```
- Output area:

The ~~del~~ element represents deleted (removed) text.

My favorite color is ~~blue~~ red.

The screenshot shows a browser-based code editor with the following interface elements:

- Toolbar: Home, Stop, Refresh, Run button.
- Code area:

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

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

</body>
</html>
```
- Output area: **HTML Marked Formatting**

**Citarea unui text în HTML: <blockquote cite="">, </blockquote>**

The screenshot shows a code editor interface with a toolbar at the top featuring icons for home, back, forward, and run. The main area contains the following HTML code:

```
<!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>
```

The right panel displays the rendered output of the code:

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.

Result Size: 412

**Citarea unui text scurt în HTML: <q>**

The screenshot shows a code editor interface with a toolbar at the top featuring icons for home, back, forward, and run. The main area contains the following HTML code:

```
<!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>
```

The right panel displays the rendered output of the code:

Browsers usually insert quotation marks around the q element.

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

Result Size: 412



## Abrevieri in HTML: <abbr>

The WHO was founded in 1948.  
World Health Organization  
Marking up abbreviations can give useful information to browsers, translation systems and search-engines.

```
<!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>
```



## Adresa in HTML: <address>

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*

```
<!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>
```



## Adrese in HTML: <bdo dir="rtl">

```
<!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):

tfel 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 table:

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



## Liste neordonate -bullets: `<ul>` si `<li>`

```
<!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 ordonate -bullets: `<ol>` si `<li>`

```
<!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



### Atribute liste ordonate :

## Ordered HTML List - The Type Attribute

The **type** attribute of the <ol> 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



### Meniuri in HTML5 : <menu>, <menuitem>

Deocamdata se pot vizualiza doar in brosere 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('http://twitter.com/intent/tweet?
text=' + window.location.href);">
        </menuitem>
        <menuitem label="Facebook" icon="ico_facebook.png"
onclick="window.open('http://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