

Code:

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

<h1>My First Heading</h1>

<p>My first paragraph.</p>

</body>
</html>
```

12/8/2014 12:28 PM - Decupare ecran

Result:

My First Heading

My first paragraph.

12/8/2014 12:28 PM - Decupare ecran

- The DOCTYPE declaration **defines the document type**
- The text between <html> and </html> describes the web page
- The text between <body> and </body> is the visible page content
- The text between <h1> and </h1> is displayed as a heading
- The text between <p> and </p> is displayed as a paragraph

12/8/2014 12:30 PM - Decupare ecran

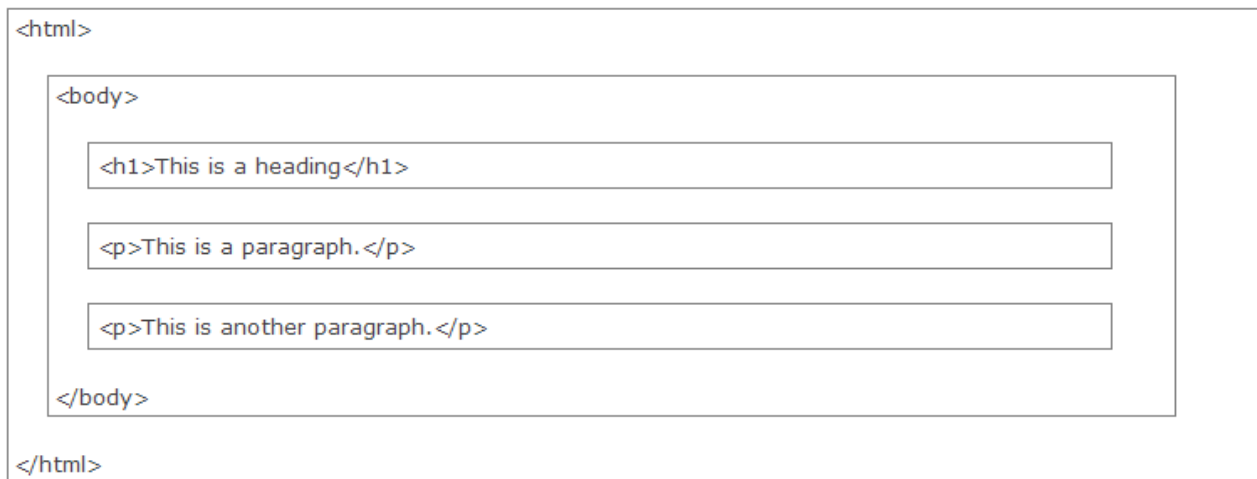


The <!DOCTYPE html> declaration is the doctype for HTML5.

12/8/2014 12:30 PM - Decupare ecran

HTML Page Structure

Below is a visualization of an HTML page structure:



12/8/2014 12:30 PM - Decupare ecran

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

12/8/2014 12:31 PM - Decupare ecran

Result:

[This is a link](http://www.w3schools.com)

12/8/2014 12:31 PM - Decupare ecran

```

```

12/8/2014 12:31 PM - Decupare ecran

Result:



12/8/2014 12:31 PM - Decupare ecran

Attribute	Description
class	Specifies one or more classnames for an element (refers to a class in a style sheet)
id	Specifies a unique id for an element
style	Specifies an inline CSS style for an element
title	Specifies extra information about an element (displayed as a tool tip)

12/8/2014 12:33 PM - Decupare ecran

Tag	Description
<code><html></code>	Defines an HTML document
<code><body></code>	Defines the document's body
<code><h1></code> to <code><h6></code>	Defines HTML headings
<code><hr></code>	Defines a horizontal line
<code><!--></code>	Defines a comment

12/8/2014 12:33 PM - Decupare ecran

`<hr>`

12/8/2014 12:34 PM - Decupare ecran



12/8/2014 12:34 PM - Decupare ecran

<code>
</code>	Inserts a single line break
-------------------------	-----------------------------

12/8/2014 12:34 PM - Decupare ecran

```
<p><code>This is computer output</code></p>
<p>This is<sub> subscript</sub> and <sup>superscript</sup></p>
```

12/8/2014 12:35 PM - Decupare ecran

This is computer output

This is subscript and superscript

12/8/2014 12:35 PM - Decupare ecran

```
<p>My favorite color is <del>blue</del> <ins>red</ins>!</p>
```

12/8/2014 12:36 PM - Decupare ecran

Result:

My favorite color is ~~blue~~ red!

12/8/2014 12:36 PM - Decupare ecran

```
<p>Do not forget to buy <mark>milk</mark> today.</p>
```

12/8/2014 12:37 PM - Decupare ecran

Result:

Do not forget to buy **milk** today.

12/8/2014 12:37 PM - Decupare ecran

HTML Comment Tags

You can add comments to your HTML source code.

```
<!-- Write your comments here -->
```

12/8/2014 12:37 PM - Decupare ecran

Example

```
<!-- Do not display this at the moment  
  
-->
```

12/8/2014 12:37 PM - Decupare ecran

HTML Link Tags

Tag	Description
<code><a></code>	Defines a hyperlink

12/8/2014 12:38 PM - Decupare ecran

```
<head>  
<title>Title of the document</title>  
</head>
```

12/8/2014 12:38 PM - Decupare ecran

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

12/8/2014 12:40 PM - Decupare ecran

```
<head>  
<style type="text/css">  
body {background-color:yellow;}  
p {color:blue;}  
</style>  
</head>
```

12/8/2014 12:40 PM - Decupare ecran

Inline Styles

12/8/2014 12:41 PM - Decupare ecran

```
<p style="color:blue;margin-left:20px;">This is a paragraph.</p>
```

12/8/2014 12:41 PM - Decupare ecran

```
<body style="background-color:yellow;">  
<h2 style="background-color:red;">This is a heading</h2>  
<p style="background-color:green;">This is a paragraph.</p>  
</body>
```

12/8/2014 12:41 PM - Decupare ecran

Result:

This is a heading

This is a paragraph.

12/8/2014 12:41 PM - Decupare ecran

HTML Style Tags

Tag	Description
<code><style></code>	Defines style information for a document
<code><link></code>	Defines the relationship between a document and an external resource

12/8/2014 12:42 PM - Decupare ecran

HTML Image Tags

Tag	Description
<code></code>	Defines an image
<code><map></code>	Defines an image-map
<code><area></code>	Defines a clickable area inside an image-map

12/8/2014 12:42 PM - Decupare ecran

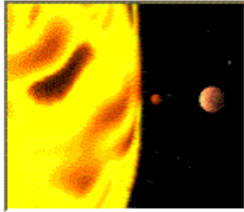
```
<body>
<p>Click on the sun or on one of the planets to watch it closer:</p>

<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>
```

12/8/2014 12:43 PM - Decupare ecran

Result:

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



```
<body>
<table style="width:300px">
<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>
```

12/8/2014 12:46 PM - Decupare ecran

Result:

Jill	Smith	50
Eve	Jackson	94
John	Doe	80

12/8/2014 12:46 PM - Decupare ecran

```
<body>
<table border="10" style="width:300px">
<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>
```

12/8/2014 12:47 PM - Decupare ecran

Result:

Jill	Smith	50
Eve	Jackson	94
John	Doe	80

12/8/2014 12:47 PM - Decupare ecran

HTML Table Headings

12/8/2014 12:48 PM - Decupare ecran


```

</body>
<body>
<table style="width:300px">
<tr>
<th>Firstname</th>
<th>Lastname</th>
<th>Points</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>

```

12/8/2014 12:48 PM - Decupare ecran

Result:

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

12/8/2014 12:48 PM - Decupare ecran

HTML Table Tags

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

12/8/2014 12:49 PM - Decupare ecran

```
<body>
<table>
  <tr>
    <td>Cell A</td>
    <td>Cell B</td>
  </tr>
</table>
</body>
```

12/8/2014 12:49 PM - Decupare ecran

Result:

Cell A	Cell B
--------	--------

12/8/2014 12:49 PM - Decupare ecran

HTML Unordered Lists

12/8/2014 12:50 PM - Decupare ecran

```
<ul>
<li>Coffee</li>
<li>Milk</li>
</ul>
```

12/8/2014 12:50 PM - Decupare ecran

An unordered list:

- List item
- List item
- List item

12/8/2014 12:50 PM - Decupare ecran

HTML Ordered Lists

12/8/2014 12:50 PM - Decupare ecran

```
<ol>
<li>Coffee</li>
<li>Milk</li>
</ol>
```

12/8/2014 12:50 PM - Decupare ecran

An ordered list:

1. The first list item
2. The second list item
3. The third list item

12/8/2014 12:50 PM - Decupare ecran

HTML Grouping Tags

Tag	Description
<code><div></code>	Defines a section in a document (block-level)
<code></code>	Defines a section in a document (inline)

12/8/2014 12:51 PM - Decupare ecran

Example

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

<div id="container" style="width:500px">

<div id="header" style="background-color:#FFA500;">
<h1 style="margin-bottom:0;">Main Title of Web Page</h1</div>

<div id="menu" style="background-color:#FFD700;height:200px;width:100px;float:left;">
<b>Menu</b><br>
HTML<br>
CSS<br>
JavaScript</div>

<div id="content" style="background-color:#EEEEEE;height:200px;width:400px;float:left;">
Content goes here</div>

<div id="footer" style="background-color:#FFA500;clear:both;text-align:center;">
Copyright © W3Schools.com</div>

</div>

</body>
</html>
```

12/8/2014 12:52 PM - Decupare ecran

The HTML code above will produce the following result:



12/8/2014 12:52 PM - Decupare ecran

HTML Forms

HTML forms are used to **pass data to a server.**

12/8/2014 12:53 PM - Decupare ecran

Text Fields

`<input type="text">` defines a one-line input field that a user can

```
<form>
First name: <input type="text" name="firstname"><br>
Last name: <input type="text" name="lastname">
</form>
```

How the HTML code above looks in a browser:

First name:
Last name:

12/8/2014 1:01 PM - Decupare ecran

Password Field

`<input type="password">` defines a password field:

```
<form>
Password: <input type="password" name="pwd">
</form>
```

How the HTML code above looks in a browser:

Password:

12/8/2014 1:02 PM - Decupare ecran

Radio Buttons

`<input type="radio">` defines a radio button. Radio buttons let a

```
<form>
<input type="radio" name="sex" value="male">Male<br>
<input type="radio" name="sex" value="female">Female
</form>
```

How the HTML code above looks in a browser:

- Male
 Female

12/8/2014 1:02 PM - Decupare ecran

Checkboxes

`<input type="checkbox">` defines a checkbox. Checkboxes let a user select ZERO or choices.

```
<form>
<input type="checkbox" name="vehicle" value="Bike">I have a bike<br>
<input type="checkbox" name="vehicle" value="Car">I have a car
</form>
```

How the HTML code above looks in a browser:

- I have a bike
 I have a car

12/8/2014 1:03 PM - Decupare ecran

Submit Button

`<input type="submit">` defines a submit button.

A submit button is used to send form data to a server. The data is sent to the `action` attribute. The file defined in the `action` attribute usually does something with


```
<form name="input" action="demo_form_action.asp" method="get">
Username: <input type="text" name="user">
<input type="submit" value="Submit">
</form>
```




How the HTML code above looks in a browser:

Username:

12/8/2014 1:03 PM - Decupare ecran

HTML Form Tags

 = Tag added in HTML5.

Tag	Description
<code><form></code>	Defines an HTML form for user input
<code><input></code>	Defines an input control
<code><textarea></code>	Defines a multiline input control (text area)
<code><label></code>	Defines a label for an <code><input></code> element
<code><fieldset></code>	Groups related elements in a form
<code><legend></code>	Defines a caption for a <code><fieldset></code> element
<code><select></code>	Defines a drop-down list
<code><optgroup></code>	Defines a group of related options in a drop-down list
<code><option></code>	Defines an option in a drop-down list
<code><button></code>	Defines a clickable button
<code><datalist></code>	 Specifies a list of pre-defined options for input controls
<code><keygen></code>	 Defines a key-pair generator field (for forms)
<code><output></code>	 Defines the result of a calculation

12/8/2014 1:04 PM - Decupare ecran

Example

A form with a keygen field:

```
<form action="demo_keygen.asp" method="get">
  Username: <input type="text" name="usr_name">
  Encryption: <keygen name="security">
  <input type="submit">
</form>
```

12/8/2014 1:07 PM - Decupare ecran

```
<body>

<form action="demo_form.asp" method="get">
<input list="browsers" name="browser">

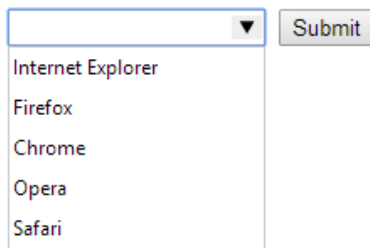
<datalist id="browsers">
  <option value="Internet Explorer">
  <option value="Firefox">
  <option value="Chrome">
  <option value="Opera">
  <option value="Safari">
</datalist>

<input type="submit">
</form>

</body>
```

12/8/2014 1:18 PM - Decupare ecran

Result:

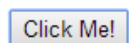


12/8/2014 1:18 PM - Decupare ecran

```
<body>  
<button type="button" onclick="alert('Hello world!')">Click Me!</button>  
</body>
```

12/8/2014 1:18 PM - Decupare ecran

Result:



12/8/2014 1:18 PM - Decupare ecran

The page at www.w3schools.com says: ×

Hello world!

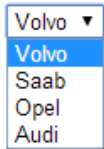
OK

12/8/2014 1:18 PM - Decupare ecran

```
<body>  
<select>  
  <option value="volvo">Volvo</option>  
  <option value="saab">Saab</option>  
  <option value="opel">Opel</option>  
  <option value="audi">Audi</option>  
</select>  
</body>
```

12/8/2014 1:19 PM - Decupare ecran

Result:



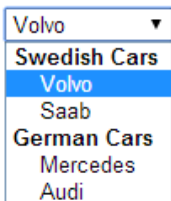
A screenshot of a web browser showing a dropdown menu. The menu is open, displaying the selected item 'Volvo' at the top, followed by the options 'Volvo', 'Saab', 'Opel', and 'Audi'. The 'Volvo' option is highlighted in blue.

12/8/2014 1:19 PM - Decupare ecran

```
<body>
<select>
  <optgroup label="Swedish Cars">
    <option value="volvo">Volvo</option>
    <option value="saab">Saab</option>
  </optgroup>
  <optgroup label="German Cars">
    <option value="mercedes">Mercedes</option>
    <option value="audi">Audi</option>
  </optgroup>
</select>
</body>
```

12/8/2014 1:19 PM - Decupare ecran

Result:



A screenshot of a web browser showing a dropdown menu. The menu is open, displaying the selected item 'Volvo' at the top, followed by the options 'Swedish Cars', 'Volvo', 'Saab', 'German Cars', 'Mercedes', and 'Audi'. The 'Volvo' option is highlighted in blue.

12/8/2014 1:19 PM - Decupare ecran

HTML Iframes

[« Previous](#)

[Next Chapter »](#)

An `iframe` is used to display a web page within a web page.



Syntax for adding an iframe:

```
<iframe src="URL"></iframe>
```

12/8/2014 1:20 PM - Decupare ecran

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

12/8/2014 1:20 PM - Decupare ecran

Result:

This page is displayed in an iframe

12/8/2014 1:20 PM - Decupare ecran

#FFFFFF

12/8/2014 1:21 PM - Decupare ecran

#000000

12/8/2014 1:21 PM - Decupare ecran

16 Million Different Colors

The combination of Red, Green and Blue values with (256 x 256 x 256).

12/8/2014 1:21 PM - Decupare ecran

```
<script>
document.getElementById("demo").innerHTML = "Hello JavaScript!";
</script>
```

12/8/2014 1:23 PM - Decupare ecran

Result:

Hello JavaScript!

12/8/2014 1:23 PM - Decupare ecran

```
<script>
document.getElementById("demo").innerHTML = "Hello JavaScript!";
</script>

<noscript>Sorry, your browser does not support JavaScript!</noscript>

<p>A browser without support for JavaScript will show the text written
inside the noscript element.</p>
```

12/8/2014 1:23 PM - Decupare ecran

Result:

Hello JavaScript!

A browser without support for JavaScript will show the text written inside the noscript element.

12/8/2014 1:23 PM - Decupare ecran

12/8/2014 1:24 PM - Decupare ecran

HTML Encoding (Character Sets)

12/8/2014 1:24 PM - Decupare ecran

For HTML5:

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

12/8/2014 1:25 PM - Decupare ecran

Scheme	Short for....
http	HyperText Transfer Protocol
https	Secure HyperText Transfer Protocol
ftp	File Transfer Protocol

12/8/2014 1:25 PM - Decupare ecran

```
scheme://host.domain:port/path/filename
```

Explanation:

- **scheme** - defines the **type** of Internet service. The most common type is **http**
- **host** - defines the **domain host** (the default host for http is **www**)
- **domain** - defines the Internet **domain name**, like w3schools.com
- **port** - defines the **port number** at the host (the default port number for http is **80**)
- **path** - defines a **path** at the server (If omitted, the document must be stored at the root directory of the web site)
- **filename** - defines the name of a document/resource

12/8/2014 1:26 PM - Decupare ecran

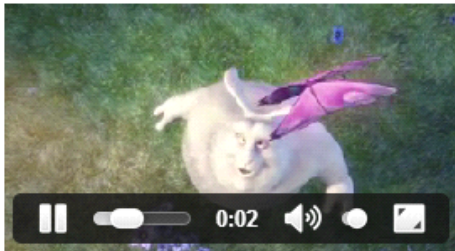


12/8/2014 1:28 PM - Decupare ecran

What is New?

- New Elements
- New Attributes
- Full CSS3 Support
- Video and Audio
- 2D/3D Graphics
- Local Storage
- Local SQL Database
- Web Applications

12/8/2014 1:29 PM - Decupare ecran



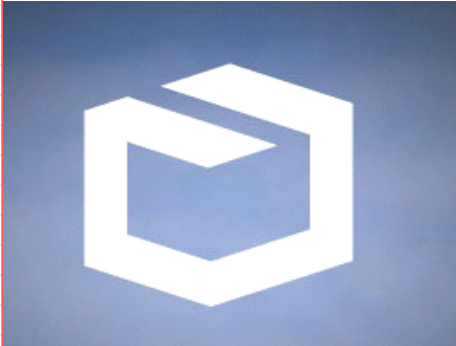
Video courtesy of [Big Buck Bunny](#)

HTML5 Multimedia

With HTML5, playing video and audio is easier than ever.

- HTML5 [<video>](#)
- HTML5 [<audio>](#)

12/8/2014 1:29 PM - Decupare ecran

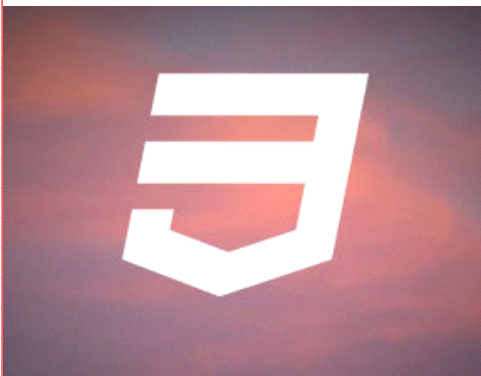


HTML5 Graphics

With HTML5, drawing graphics is easier than ever:

- [Using the <canvas>](#) element
- Using inline [SVG](#)
- Using [CSS3 2D/3D](#)

12/8/2014 1:29 PM - Decupare ecran



HTML5 uses CSS3

- New Selectors
- New Properties
- Animations
- 2D/3D Transformations
- Rounded Corners
- Shadow Effects
- Downloadable Fonts

Read more in our [CSS3 tutorial](#).

12/8/2014 1:30 PM - Decupare ecran

12/8/2014 1:31 PM - Decupare ecran

```
<video width="320" height="240" controls autoplay>  
  <source src="movie.mp4" type="video/mp4">  
</video>
```

12/8/2014 1:31 PM - Decupare ecran

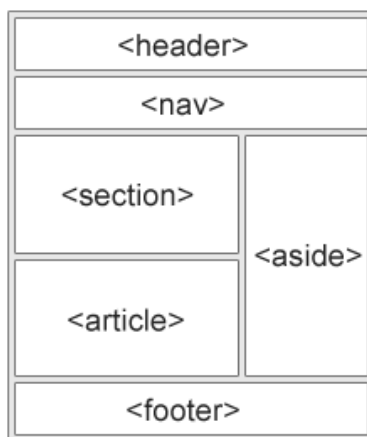
Result:



12/8/2014 1:31 PM - Decupare ecran

HTML5 Semantic Elements

12/8/2014 1:33 PM - Decupare ecran



12/8/2014 1:33 PM - Decupare ecran

HTML5 <footer> Element

12/8/2014 1:33 PM - Decupare ekran

Example

```
<footer>
  <p>Posted by: Hege Refsnes</p>
  <p><time pubdate datetime="2012-03-01"></time></p>
</footer>
```

12/8/2014 1:33 PM - Decupare ekran

```
<form action="demo_form.asp">
  Birthday: <input type="date" name="bday">
  <input type="submit">
</form>
```

12/8/2014 1:34 PM - Decupare ekran

Result:

Birthday:

August 2014 ▾

Mon	Tue	Wed	Thu	Fri	Sat	Sun
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

12/8/2014 1:34 PM - Decupare ekran

12/8/2014 1:40 PM - Decupare ekran

```
<audio controls>
  <source src="horse.mp3" type="audio/mpeg">
</audio>
```

12/8/2014 1:40 PM - Decupare ekran

Result: