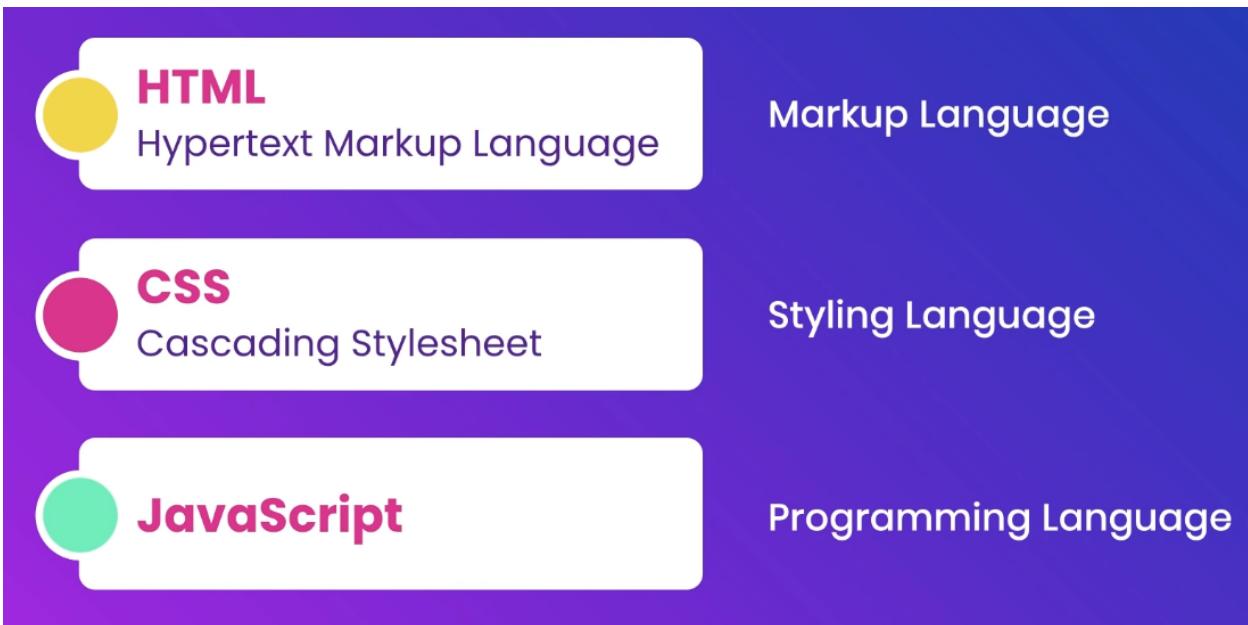




Web development



💡 How to create a project ?

✓ First step:

! type “!” the result:

```
<!DOCTYPE html>
```

Result on the

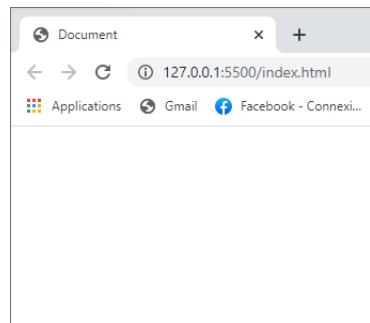
```

<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
  </head>
  <body>

  </body>
</html>

```

browser



Document informations : <head></head>

Content on the browser : <body></body>

head content:

meta elements:

```

<!-- meta author (name and surname of the webpage author) -->
<meta name="author" content="Mona LAROUSSI,Aymen SELLAOUTI">

<!-- meta keywords (max: 500 characters) -->
<meta name="keywords" content="cours html, balise meta, formulaires, listes, tableaux, cadres">

<!-- meta category-->
<meta name="Category" content= "Webmastering, Gestion de sites">

<!-- meta language : fr, en, de, es, it,... -->
<meta name="language" content="fr">

<!-- meta description (100->1000 characters) -->
<meta name="Description" content="Cette description est faite dans notre cours de Technologies Web">

<!-- Copyright - Generator - Date -->
<meta name="Copyright" content="© 1999 Hugo ETIEVANT">
<meta name="Generator" content="HomeSite v1.2,Paint Shop Pro 5.0,Animation Shop,Netscape Communicator 4.0">
<meta name="Date" content="Mon, 14 Sep 1998 08:00:00">

<!-- meta http-equiv -->

<!-- charset choice for language -->
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8" />
<!-- for arabic: charset=ISO-8859-6 -->

<!-- meta refresh & redirection -->
<meta http-equiv="Refresh" content="10">
<meta http-equiv="Refresh" content="10; URL=http://www.fst.rnu.tn">

```

body content:

heading elements: <hn></hn>

```
<h1>Hello World!</h1>
<h2>This is my first website</h2>
<h3>My name is ...</h3>
<h4>Contact: ...</h4>
```

Hello World!

This is my first website

My name is ...

Contact: ...

Paragraphs & texts

```
<p>This is a paragraph</p>
<p>This text is <strong>important</strong></p>
<p>This text is <b>bold</b></p>
<p>This text is <em>emphasised</em></p>
<p>This text is <i>italic</i></p>
<p>We just need to <span>target this text</span></p>
<time datetime="10-25">25th October</time>
<time datetime="10:00">Ten O'clock</time>
```

This is a paragraph

This text is **important**

This text is **bold**

This text is *emphasised*

This text is *italic*

We just need to target this text

25th October Ten O'clock

```
<!-- ligne break -->
<br/>
```

List elements

- unordered list:
- ordered list:
 - the only child element: : list item
- description list: <dl></dl>
 - children elements:
 - <dt></dt>: definition term
 - <dd></dd>: description definition

```
<h3>Colors</h3>
```

```

<ul>
  <li>Black</li>
  <li>White</li>
  <li>Red</li>
</ul>

<h3>Shopping</h3>
<ol>
  <li>Fruits</li>
  <li>Vegetables</li>
</ol>

<h3>Dictionary</h3>
<dl>
  <dt>Term to define in here</dt>
  <dd>First definition</dd>
  <dd>Second defintion</dd>
</dl>

```

Colors

- Black
- White
- Red

Shopping

1. Fruits
2. Vegetables

Dictionary

Term to define in here
 First definition
 Second defintion

Anchor elements (Links)

```

<h1 ip="top">Top of the website</h1>
<a href="http://www.google.com">go to google</a>
<br/>
<a href="index.html">this is my website</a>
<p>go to the <a href="#top">top</a> of the website</p>

```

Top of the website

[go to google](http://www.google.com)

[this is my website](index.html)

go to the [top](#top) of the website

Button element

```

<h2>this is a button</h2>
<button>Play</button>

```

this is a button

[Play](#)

Images element

```

<h2>This is an image</h2>


```

Header element <header></header>

Footer element <footer></footer>

Navigation element <nav></nav>

example: the navigation element contents list of links

Article element <article></article>

group article's header + image + content + footer

Section element <section></section>

encapsulate different area of contents within the webpage → section element : for contents itself

example: article's title + content

Division element <div></div>

group parts of content → div section: for stylistic purposes

example: divide content on the left and the right

Main element <main></main>

only one main element → the focus of the page

Aside element <aside></aside>

- can be used more than once
- related to the main
- can be used within other sectioning elements

Figure element <figure></figure>

encapsulate media in the webpage: images + videos

- child element : figure caption element : <figcaption>Text</figcaption>

Form element <form></form>

```
<header>
  <div>
    <h1>HTML basics: form</h1>
    <h2>Fill the form:</h2>
  </div>
</header>
<form>
  <fieldset>
    <legend>Form section 1</legend>
```

```

        </fieldset>
        <fieldset>
            <legend>Form section 2</legend>
        </fieldset>
    </form>
    <footer>
        <p>Made by ... ©</p>
    </footer>

```

HTML basics: form

Fill the form:

Form section 1

Form section 2

Made by ... ©

Input element <label></label> <input></input>

```

<form>
    <fieldset>
        <legend>Form section 1</legend>
        <label for="username">Username</label>
        <input type="text" id="username" name="user">
    </fieldset>
    <fieldset>
        <legend>Form section 2</legend>
    </fieldset>
</form>

```

Form section 1

Username

Form section 2

Input types: text, password, email, date, file, checkbox, radio...

```

<form>
    <fieldset>
        <legend>Form section 1</legend>
        <label for="username">Username</label>
        <input type="text" id="username" name="user">
        <p></p>
        <label for="password">Password</label>
        <input type="password" id="password" name="password">
        <p></p>
        <label for="email">Email</label>
        <input type="email" id="email" name="email">
        <p></p>
        <label for="date">Date</label>
        <input type="date" name="date" id="date">
        <p></p>
        <label for="file">File</label>
        <input type="file" name="file" id="file">
        <p></p>
        <label for="check">Tick to confirm</label>
        <input type="checkbox" name="check" id="check">
        <p></p>
        <label for="one">Option1</label>
        <input type="radio" name="selectone" id="one">
        <br>
        <label for="two">Option2</label>
        <input type="radio" name="selectone" id="two">
        <br>
        <label for="three">Option3</label>

```

Form section 1

Username

Password

Email

Date

File Aucun fichier choisi

Tick to confirm

Option1

Option2

Option3

- “**checked**” is an attribute for the input type *radio*: choose a default option

```

        <input type="radio" name="selectone" id="three">
    </fieldset>
</form>

```

- more input types: url, tel, number, range, date, time, week, month,...
- input attributs: required, autofocus, placeholder, pattern,...

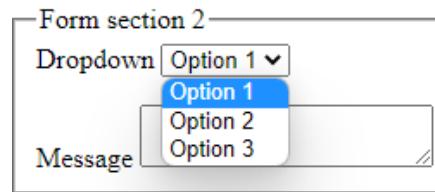
Select & Textarea elements <select></select> <textarea></textarea>

```

<fieldset>
    <legend>Form section 2</legend>

    <label for="idd">Dropdown</label>
    <select id="idd">
        <option value="optOne">Option 1</option>
        <option value="optTwo">Option 2</option>
        <option value="optThree">Option 3</option>
    </select>
    <p></p>
    <label for="tarea">Message</label>
    <textarea id="tarea" ></textarea>
</fieldset>

```



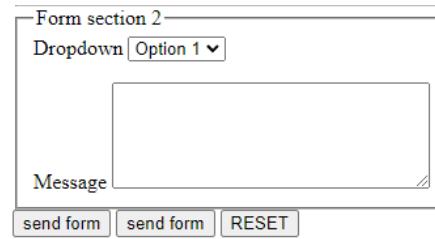
- “size” is a attribute for the select element

Submitting and Resetting a form

```

<!-- Submitting a form -->
<!--First methode-->
<input type="submit" value="send form">
<!--Second methode-->
<!-- Resetting a form -->
<button type="submit">send form</button>
<input type="reset" value="RESET">

```



Made by ... ©

Video element <video></video>

```

<header>
    <h1>Trip vlog</h1>
    <h2>*Enjoy the nature*</h2>
</header>
<figure>
    <video src="videos/rando_26_12_2021.mp4" controls></video>
    <!--optional atributs : autoplay, loop, poster="..."... -->

```

```

<!--the controls attribut can also be written as:-->
<!--controls="controls" --- controls=""-->
<!--second methode:-->
<!--
    <video style="height: 400px;" controls poster="images/nature.jpg">
        <source src="videos/rando 26_12_2021.mp4" type="video/mpeg">
    </video>
-->

</figure>

```

Trip vlog

Enjoy the nature



Audio element <audio></audio>

```

<audio src="audio/lofichiell.mp3" controls></audio>
<!--optional atributs : autoplay, loop, controls, width, preload... -->
<!--second methode:-->
<!--
    <audio controls>
        <source src="audio/lofichiell.mp3" type="audio/mpeg">
    </audio>
-->

```



Picture element <picture></picture>

```

<picture>
    <source srcset="images/nature.jpg" type="image/jpg">
    <!--the picture element can content many source elements-->
    
</picture>

```

Table element <table></table>

→ child element: <tr></tr>: ligne

→ children elements:

<th></th>: table head

<td></td>: column

```

<table>
  <tr>
    <td>Ligne1 - Column1</td>
    <td>Ligne1 - Column2</td>
  </tr>
  <tr>
    <td>Ligne2 - Column1</td>
    <td>Ligne2 - Column2</td>
  </tr>
</table>

<!--
  <td rowspan="n">x (x occupy n blanks in row)
  <td colspan="n">x (x occupy n blanks in column)
-->

```

Ligne1 - Column1 Ligne1 - Column2
 Ligne2 - Column1 Ligne2 - Column2

CSS Syntax

```

<!-- First methode -->
<!-- in the head element of the html file : -->
<link rel="stylesheet" href="style.css">
<!-- the file "style.css" is linked to the html file -->

<!-- Second methode -->
<!-- use the style element in the html file -->
<style>
  "css code here"
</style>

<!-- third methode -->
<!-- directly in the html elements -->
<p style="css code here;"></p>

```

selecter + {}

a selecter can be: **element, class, id,...**

- Examples:

```

/* element */
article{
  background-color: pink;
  background-image: url(assets/pinkbackground.jpg);
}

```

Ultimate Courses

CSS basics

An Article

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fugiat quam qui paratur tenetur explicabo deleniti esse nam ullam, dignissimos, ipsa vel accusamus. Aut est voluptates dignissimos. Magni nobis accusantium aliquid?

Lorem, ipsum dolor sit amet consectetur adipisicing elit. Animi quae necessitatibus cumque. Atque deserunt excepturi quid dolorem? Quod quos cupiditate illo maiores et distinctio quo, iure est, architecto, culpa quam.

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```

/* class */
.leder{
    background-color: rgb(0, 174, 255);
    background-image: url(assets/blue.jpg);
}

/* id */
#feature{
    background-color: rgb(0, 174, 255);
    background-image: url(assets/blue.jpg);
}

```

Ultimate Courses

CSS basics

An Article

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Fugiat quam qui paratur tenetur explicabo deleniti esse nam ullam, dignissimos, ipsa vel accusamus. Aut est voluptates dignissimos. Magni nobis accusantium aliquid?

Lorem, ipsum dolor sit amet consectetur adipisicing elit. Animi quae necessitatibus cumque. Atque deserunt excepturi quod dolorem? Quod quos cupiditate illo maiores et distinctio quo, iure est, architecto, culpa quam.

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```

article p{
    background-color: lightgreen;
} /* the p elements INSIDE of the article elements */

article header{
    background-color: yellowgreen;
} /* the header elements INSIDE of the article elements */

.mainheader, footer{
    background-color: violet;
} /* the elements with class mainheader AND the footer elements */

```

Ultimate Courses

CSS basics

An Article

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Fugiat quam qui paratur tenetur explicabo deleniti esse nam ullam, dignissimos, ipsa vel accusamus. Aut est voluptates dignissimos. Magni nobis accusantium aliquid?

Lorem, ipsum dolor sit amet consectetur adipisicing elit. Animi quae necessitatibus cumque. Atque deserunt excepturi quod dolorem? Quod quos cupiditate illo maiores et distinctio quo, iure est, architecto, culpa quam.

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Text

```

element {
    font-size: value; /* absolut size: pixels (px), relative size: percentage (em or ex)*/
    font-family: font; /* we can include multiple fonts */
    font-style: normal |italic |oblique
    font-weight: normal |bold
    text-decoration: underline |line-through| overline| none
    text-align: left (default)|center |right |justify
}

```

Float & Clear

```

img {
    float:left |right
    clear:...; /* texts always under the image */
}

```

etetur adipisicing
nque. Atque deserunt
os cupiditate illo
architecto, culpa
t consectetur adipisicing elit.
provident deserunt, impedit dolores
sed nihil earum perspiciatis, eligendi



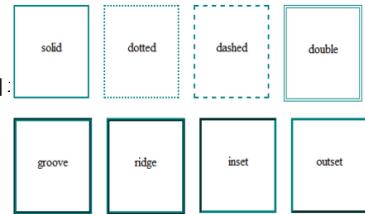
Color & Background

```
element {
  color:...;
  background-color:...;
  background-image:...;
}
```

white	
silver	
gray	
black	
red	
maroon	
lime	
green	
yellow	
olive	
blue	
navy	
fuchsia	
purple	
aqua	
teal	

Borders & Shadows

```
element {
  border: /* size in px + color + bordertype */ ;
  /* border types: solid |dotted |dashed |double |groove |ridge | ...
  /* the border sides can be customized */
  border-top:...;
  border-bottom:...;
  border-left:...;
  border-right:...;
  border-radius: value in px;
  border-radius: val1 val2 val3 val4;
  /* val1-> topleft | val2-> topright | val3-> botright | val4-> botleft */
  box-shadow: val1 val2 val3 color;
  /* val1-> horizontal offset | val2-> vertical offset | val3-> softening */
  text-shadow: val1 val2 val2 color;
}
```



Selectors

- **element:** h1, p, header, article,...
- **identifier:** “.” + identifier name
- **class:** “#” + class name
- **pseudo-class:** element + “:” + ...
- **all of the content:** *

```
/* single selector */
element_name { }
#identifier_name { }
.class_name { }

/* multiple selectors */
selector1, selector2, selector3 { }
```

```

/* contextual selector: elements combination */
selector1 selector2 { }
/* style the elements with a selector2 inside of a selector1 */

/* parent and child elements */
element1>element2 { }

/* element1 followed by element2 */
element1+element2 { }

/* element possessing an attribute */
element[attribute] { }
element[attribute="value"] { } /* specific value for the attribute*/
element[attribute*="value"] { } /* the attribute name contain the word in value */
/* all of the content */
* { }

```

Tables style

```

/* borders */
table {
    border: value border_type color;
    border-collapse: collapse;
}
th, td, tr {
    border: ...;
}

```

Margin & Padding

```

element {
    margin:...;
    padding:...;
    /* right |left |top |bottom */
    /* pixels (px) or percentage (%) */
}

```

Background

```

body {
    background-color:
    background-image: url(/*image path*/);
    background-repeat: no-repeat;
    background-position: val1 val2;
    /* val1-> horizontal offset |val2-> vertical offset */
    background-size: val1 val2;
    /* val1-> horizontal length |val2-> vertical length */
}

```

JavaScript syntax

Comments

```
// this is a comment => 1 ligne  
/* this is a comment => n lignes */
```

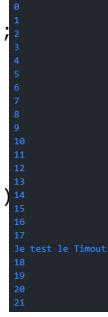
Identifiers

- begins with: _ or \$
- the rest: letters, numbers, _ or \$

Dates & Times

output:

```
function testTimout() {  
    setTimeout(function () {  
        console.log('Je test le Timout');  
    },2000);  
}  
testTimout();var i=0;  
testInterval();  
function testInterval() {  
    var code =setInterval(function ()  
    {  
        if(i<22)  
        {  
            console.log(i);  
            i++  
        }  
        else{  
            clearInterval(code);  
        }  
    },100,code);  
}
```



```
var maDate = new Date(2010, 0, 1); // Premier jour du premier mois  
// de 2010  
var apres = new Date(2010, 0, 1,  
17, 10, 30); // Même jour, à 5:10:30pm, heure  
locale  
var mnt = new Date(); // Date et heure actuelles  
var elapsed = now - then; // La valeur de retour représente  
la différence en millisecondes  
apres.getFullYear() // => 2010  
apres.getMonth() // => 0: (0:11)  
apres.getDate() // => Jour du mois 1: (1:31)  
apres.getDay() // => Jour de la semaine (0:6)  
5: zero-based jour  
0 représente dimanche.  
apres.getHours() // => Heure (0:23) 17  
apres.getMinutes() // (0:59)  
apres.getSeconds() // (0:59)  
apres.getMilliseconds() // (0:999)  
apres.getTime() // retourne le timestamp de l'objet  
apres.setTime(timestamp) // modifie l'objet selon letimestamp
```