

# FRONT-END BASICS

# DESCRIPTION & OBJECTIVES

- **Simple HTML / CSS** : fonts, colors, box model
- **Building components** : buttons, forms, tabs, etc...
- **Building layouts & grids** : CSS grids and Bootstrap
  - Code your [profile page](#)
  - Put it online with [Github Pages](#)
  - Add a fixed sidebar for most advanced

# FRONT-END LANGUAGES

The languages **your browser speaks**



**Content  
+ Structure**



**Dynamism  
+ Usability**



**Style**

# HTML

It's a **markup** language (== structure)  
Your page has different contents

Some content...

Some other content...

Some third content...

# HTML

HTML tags help you **identify** content

Some content...

h1

Some other content...

h2

Some third content...

p

# HTML

**Browser default styles** will apply

Some content...

h1

Some other content...

h2

Some third content...

p

# HTML

And you will also be able to apply  
**your own style rules** if you want

*Some content...*

h1

**Some other content...**

h2

`Some third content...`

p

# HTML SKELETON

```
<!DOCTYPE html>
<html>
  <head>

  </head>
  <body>

  </body>
</html>
<!-- end of file -->
```



# HTML SKELETON - HEAD & GOOGLE

Max 55 characters for title  
& 160 characters for description

```
<head>
  <!-- Google result text-->
  <title>Ecole Supérieure du Digital</title>
  <!-- Google result description-->
  <meta name="description" content="Passionné(e) du web de l'internet, du numérique et des
nouvelles technologies, vous recherchez une formation digitale à Paris, Lyon, Bordeaux,
Nice ou Nancy ...">
</head>
```

Ecole Supérieure du Digital

<https://ecole-du-digital.com/> ▼

Passionné(e) du web de l'internet, du numérique et des nouvelles technologies, vous recherchez une formation digitale à Paris, Lyon, Bordeaux, Nice ou Nancy ...

# HTML SKELETON - HEAD & FACEBOOK

```
<head>

  <meta property="og:title" content="ecole-du-digital.com">

  <meta property="og:image" content="facebook-card.jpg">

  <meta property="og:description" content="L'École supérieure du digital, école web,
école internet et numérique">

  <meta property="og:site_name" content="Ecole Supérieure du Digital"/>

</head>
```



# HTML SKELETON - HEAD

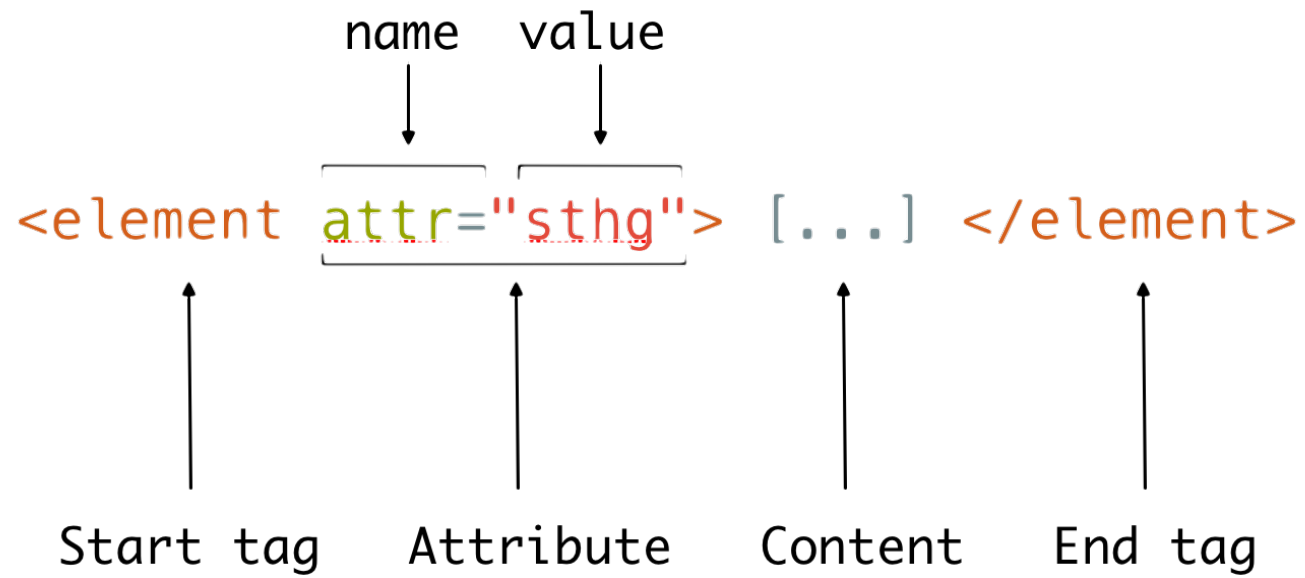
```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>TEST</title>
  </head>
  <body>

  </body>
</html>
<!-- end of file -->
```

# HTML SKELETON - BODY

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>Hello world</title>
  </head>
  <body>
    <h1>Hello buddies!</h1>
  </body>
</html>
<!-- end of file -->
```

# BASIC SYNTAX



# BASIC SYNTAX

What is the element's name?

What is the element's content?

What are the 2 attributes (name and value)?

```
<a href="https://ecole-du-digital.com/" target="_blank">  
  Ecole Supérieure du Digital  
</a>
```

# TITLES

```
<h1>[...]</h1>  <!-- Only one per page! SEO important -->
```

```
<h2>[...]</h2>
```

```
<h3>[...]</h3>
```

```
<h4>[...]</h4>
```

```
<h5>[...]</h5>
```

```
<h6>[...]</h6>
```

# PARAGRAPHS

```
<p>
```

```
  Lorem ipsum dolor sit amet, consectetur adipisicing elit.  
  Veritatis laboriosam mollitia autem at ab omnis iure quis  
  asperiores inventore eos nam aut iusto officiis deserunt  
  nihil, sequi tempore impedit quae?
```

```
</p>
```



# EMPHASIZE

```
<p>  
  You can emphasize <em>some words</em>,  
  and even <strong>more if needed</strong>  
</p>
```

# LISTS

```
<h2>Shopping List</h2>
```

```
<ul>
```

```
  <li>Milk</li>
```

```
  <li>Butter</li>
```

```
</ul>
```

```
<h2>World Cup 2014</h2>
```

```
<ol>
```

```
  <li>Germany</li>
```

```
  <li>Argentina</li>
```

```
  <li>Netherlands</li>
```

```
  <li>Brazil</li>
```

```
</ol>
```

# IMAGES

```

```

# TABLES

```
<table>
  <thead>
    <tr>
      <th>First Name</th>
      <th>Last Name</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>John</td>
      <td>Doe</td>
    </tr>
    [...]
  </tbody>
</table>
```

# FORMS

```
<form>
  <input type="email">
  <input type="password">
  <input type="submit" value="Log in">
</form>
```

More about HTML :

- [codeguide.co](https://codeguide.co)
- [MDN reference](https://developer.mozilla.org/en-US/docs/Web/HTML)

# CSS

Web without CSS ?

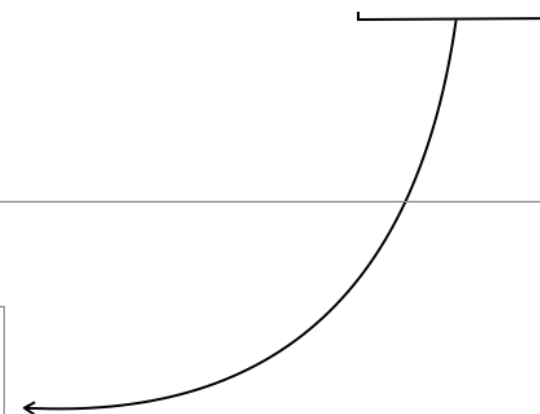
Cut the <head> on [ecole-du-digital.com](https://ecole-du-digital.com)  
with Chrome dev tool

This is how a website looks like without CSS

# LINKING STYLESHEET TO HTML PAGE

 index.html

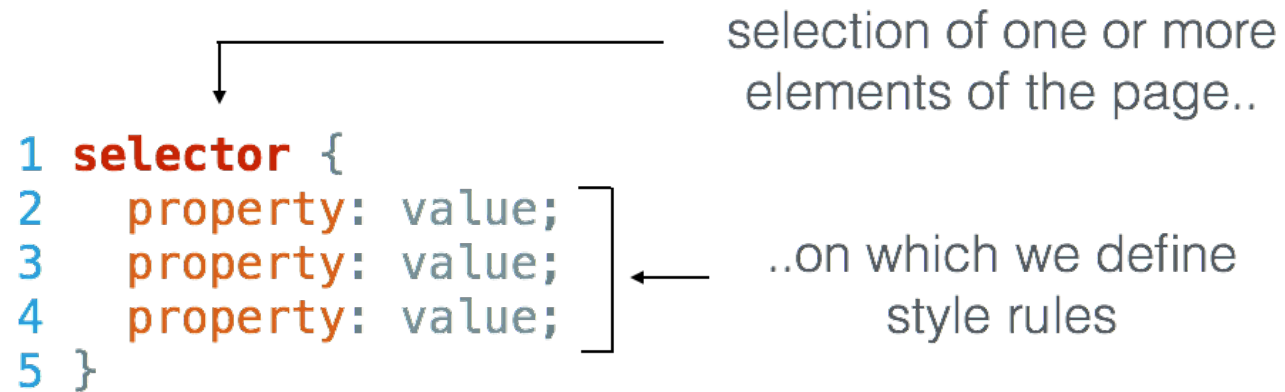
```
1 <head>
2   <link rel="stylesheet" href="style.css">
3 </head>
4 <body>
5   <h1>Hello</h1>
6 </body>
```



 style.css

```
1 h1 {
2   color: red;
3 }
```

# CSS SYNTAX



The diagram illustrates the CSS syntax structure. It shows a code block with five lines: a selector, an opening curly brace, three property-value pairs, and a closing curly brace. An arrow points from the text 'selection of one or more elements of the page..' to the selector. Another arrow points from the text '..on which we define style rules' to the three property-value pairs, which are grouped by a large right-facing square bracket.

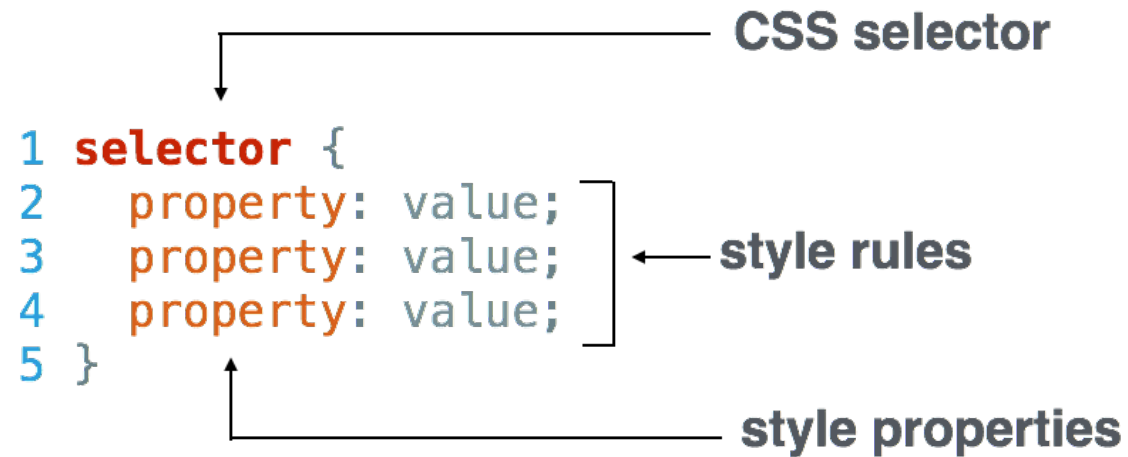
```
1 selector {  
2   property: value;  
3   property: value;  
4   property: value;  
5 }
```

selection of one or more elements of the page..

..on which we define style rules

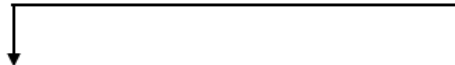


# CSS VOCABULARY



# EXAMPLE

we select  
**all <h2>** of the page



```
1 h2 {  
2   color: red;  
3   font-size: 20px;  
4   font-family: arial;  
5 }
```

# COLORS

```
color: #FF530D;  
color: rgb(255, 83, 13);  
color: rgba(255, 83, 13, 1.0);
```



# COLORS - TIPS

```
body {  
  color: rgb(10, 10, 10);  
}
```

**RGB** stands for **Red Green Blue**

Each value is between 0 and 255

For same values of R, G and B,  
you are on the grey scale



# TEXT VS BACKGROUND



1 body {  
2 color: orange;  
3 background-color: yellow;  
4 }

text color

background color

The diagram illustrates the difference between text color and background color in CSS. It shows a CSS rule for the 'body' element. The 'color' property is set to 'orange', and the 'background-color' property is set to 'yellow'. Arrows point from the labels 'text color' and 'background color' to their respective properties in the code.

# BACKGROUND IMAGE

```
1 body {  
2   color: orange;  
3   background-image: url("background.jpg");  
4 }
```

background-image



# FONT FAMILY

```
1 body {  
2   font-family: Times, serif;  
3 }
```

Abc

```
1 body {  
2   font-family: Arial, sans-serif;  
3 }
```

Abc

```
1 body {  
2   font-family: Courier, monospace;  
3 }
```

Abc

# FONT SIZE AND SPACING

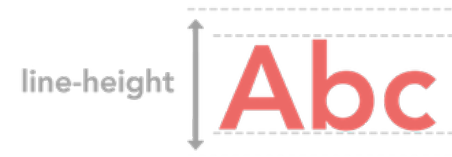
```
1 body {  
2   letter-spacing: 10px;  
3 }
```



```
1 body {  
2   font-size: 30px;  
3 }
```



```
1 body {  
2   line-height: 1.6;  
3 }
```





# FONT DECORATION

```
1 p {  
2   text-decoration: underline;  
3 }
```

Abc

```
1 a {  
2   text-decoration: none;  
3 }
```

sign up  
↓  
sign up

# FONT ALIGNMENT

```
1 p {  
2   text-align: center;  
3 }
```

This is a centered  
paragraph aligned  
with text-align

```
1 p {  
2   text-align: justify;  
3 }
```

This is a justified  
paragraph aligned  
with text-align

# FONT WEIGHT

```
1 body {  
2   font-weight: 100;  
3   // from 100 to 900.  
4 }
```

Light text

```
1 body {  
2   font-weight: bold;  
3 }
```

**Bold text**

# GOOGLE FONTS

Make your shopping on [Google fonts](#)

Open-Sans : <body>

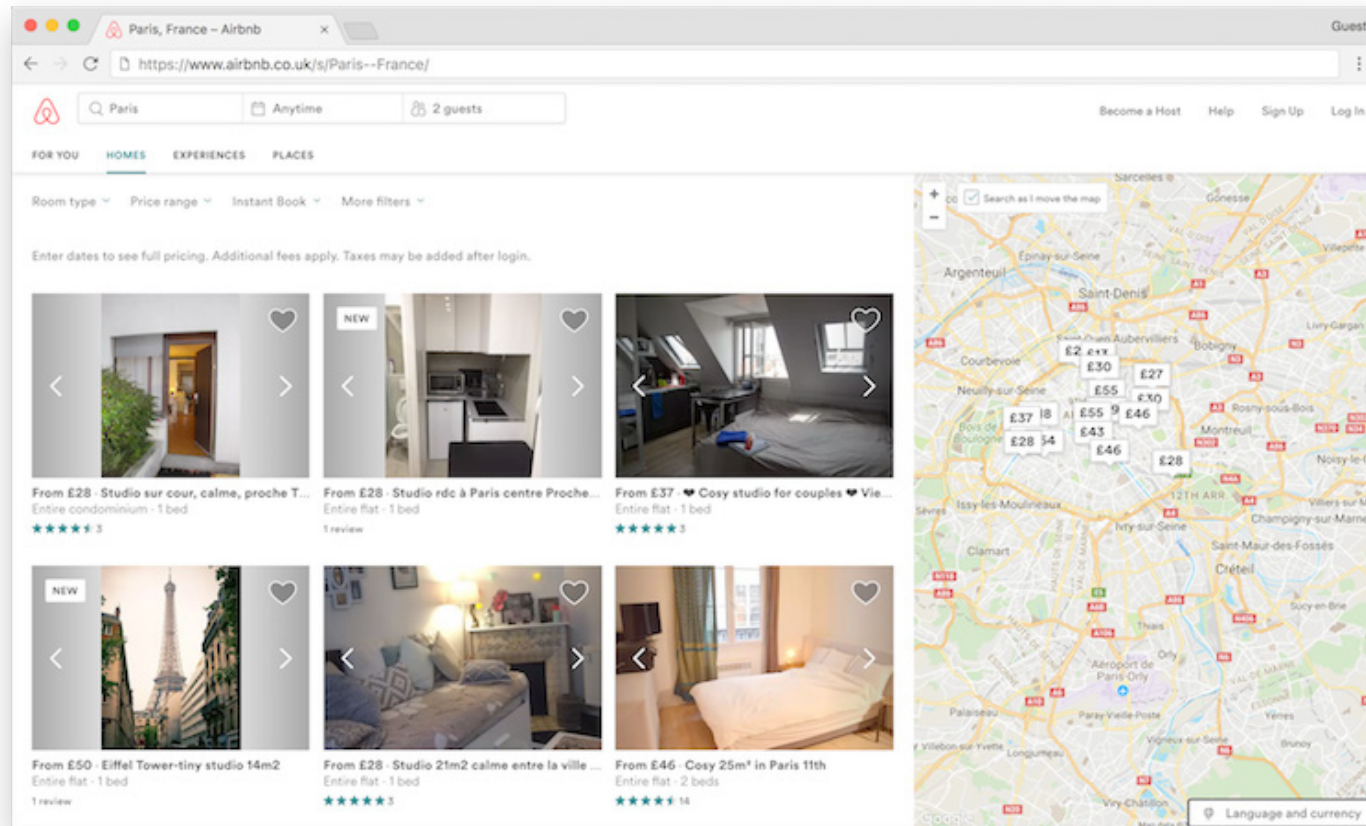
Raleway, Montserrat, Varela : <h1>, <h2>, <h3>

# FONT AWESOME

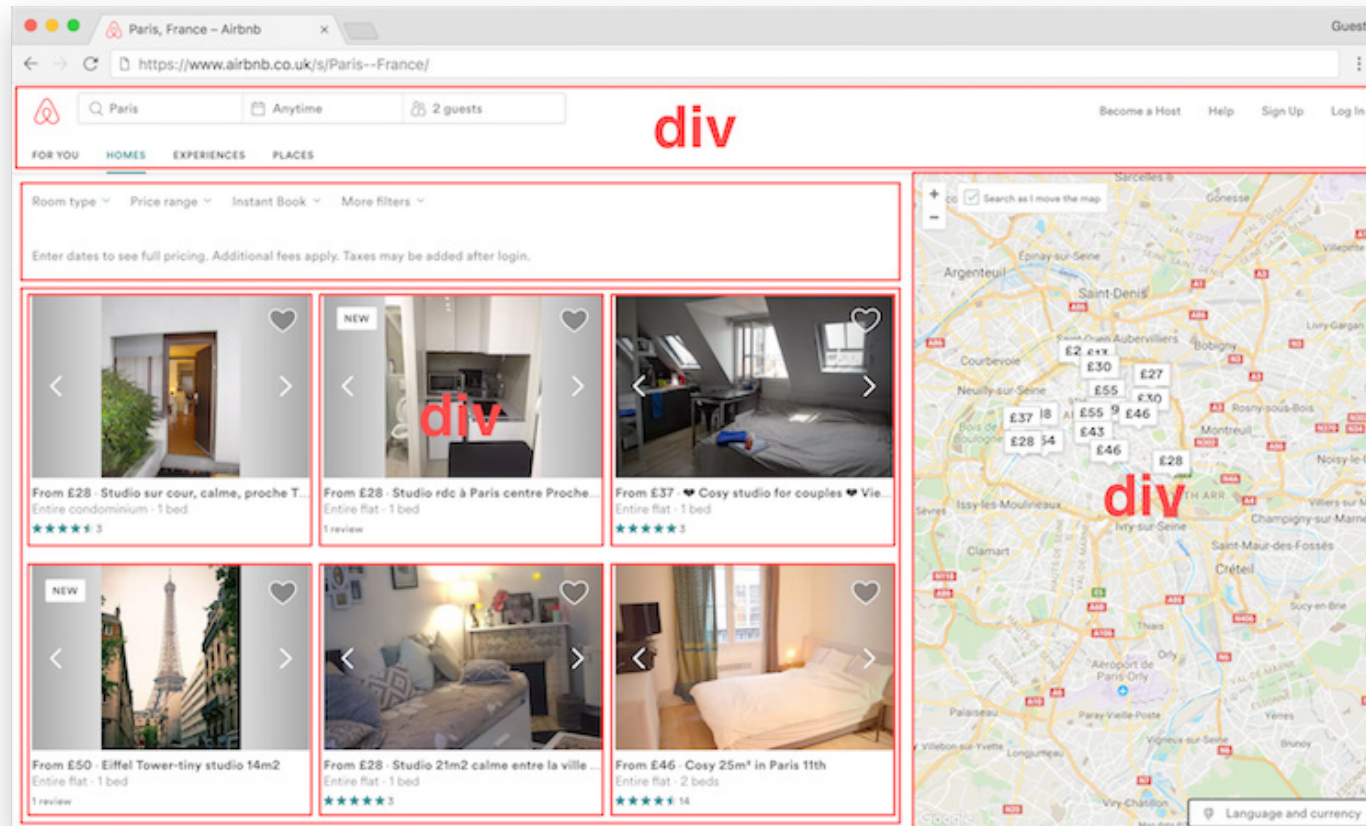
```
<!-- cdn link to paste in your <head> -->  
<link rel="stylesheet" href="https://use.fontawesome.com/releases/v5.0.10/css/all.css">
```

[Font Awesome](#) is a font of icons

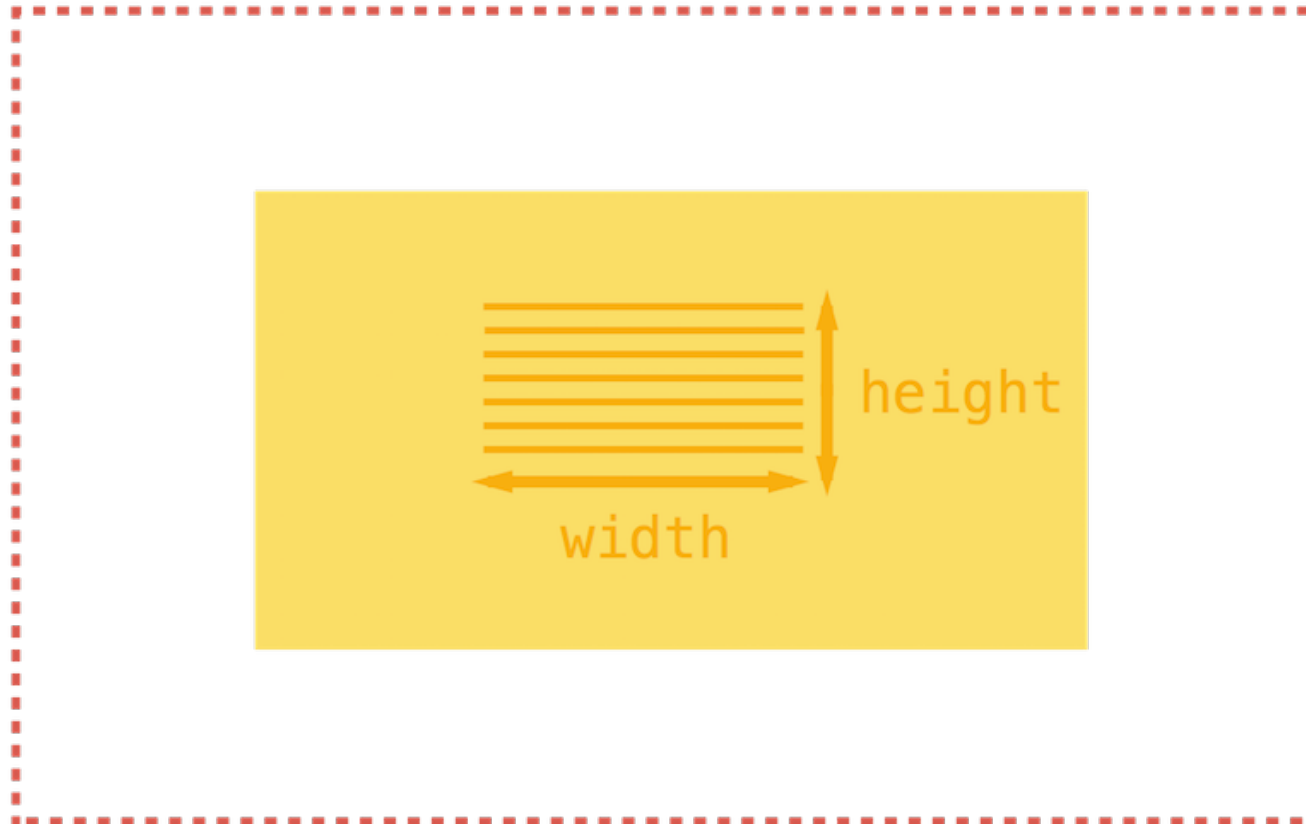
# DIV AND BOX MODEL



# REAL LIFE IS MADE OF DIV

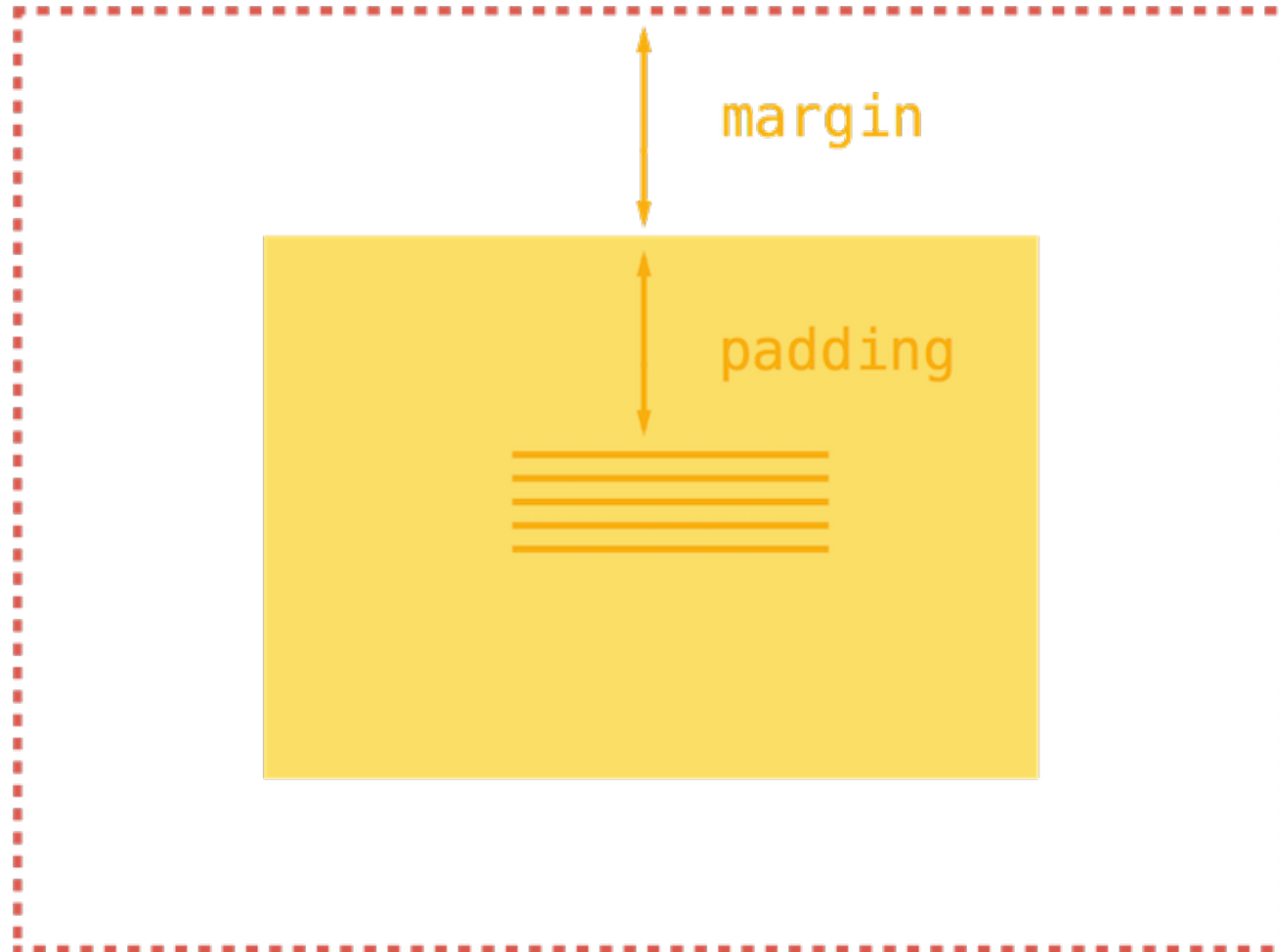


# BOX MODEL - CONTENT

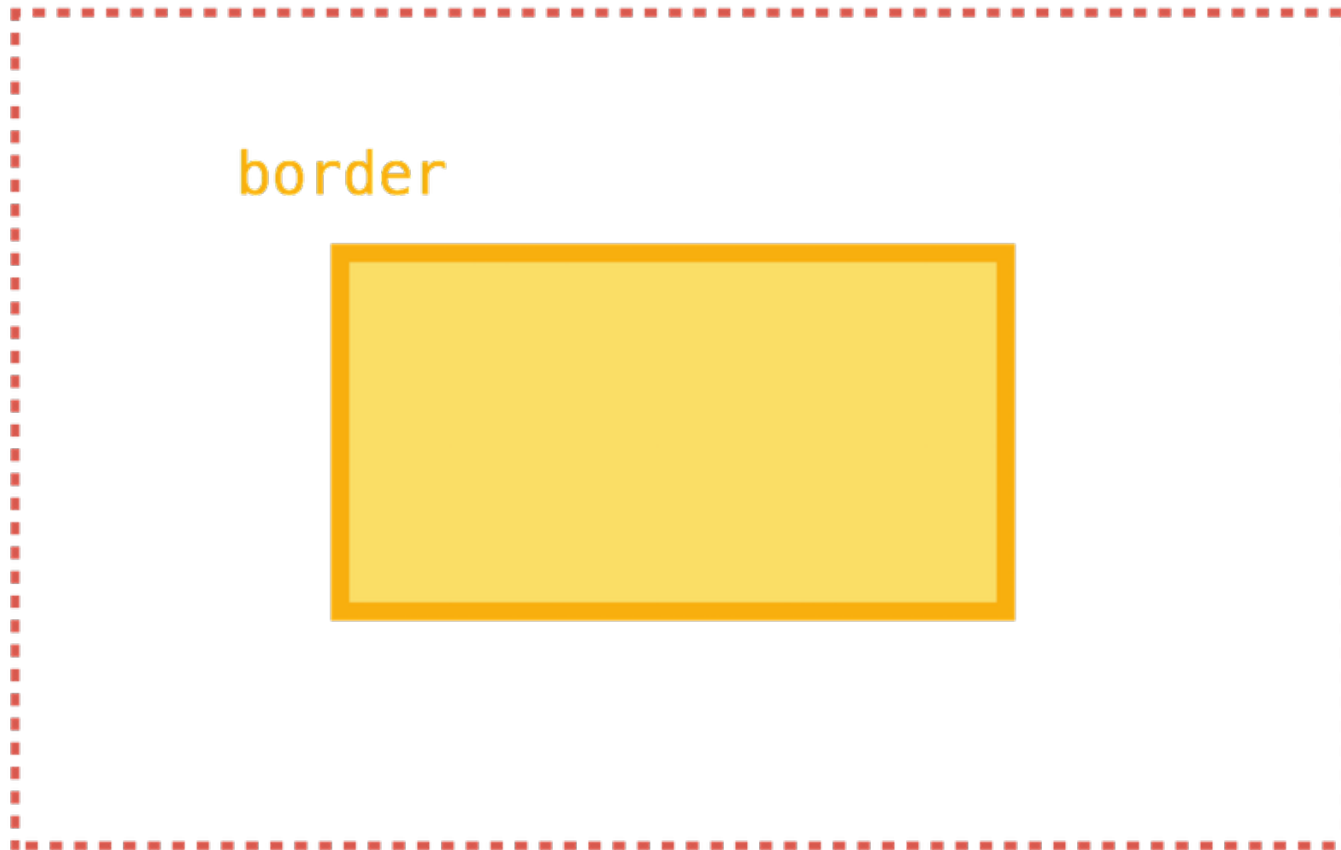




# BOX MODEL - PADDING & MARGIN



# BOX MODEL - BORDER



# BORDERS

```
div {  
  border-top: 1px solid red;  
  border-right: 2px dotted black;  
  border-bottom: 1px dashed green;  
  border-left: 2px dotted black;  
}
```



solid

dashed

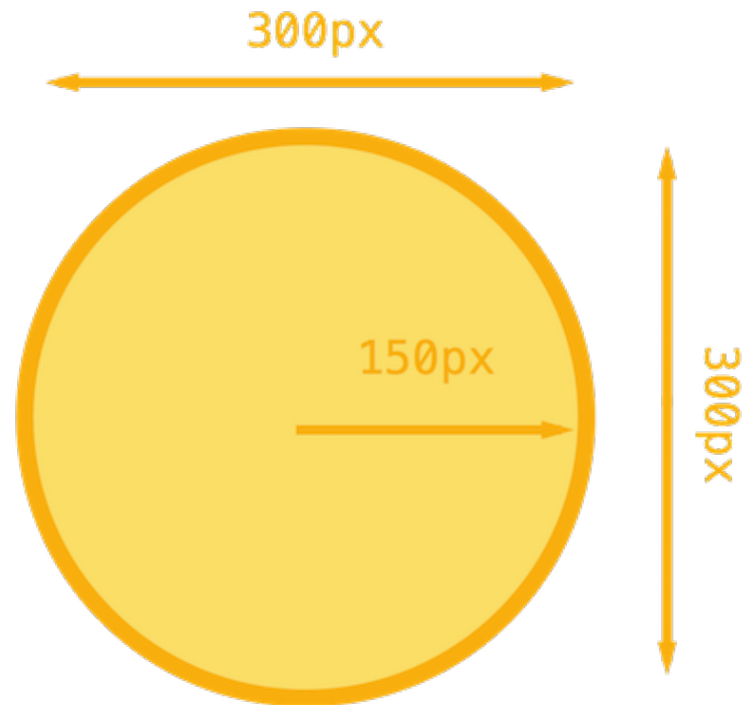
dotted

## BORDER RADIUS



```
border-radius: 5px;
```

## BORDER RADIUS



```
width: 300px;  
height: 300px;  
border-radius: 150px;
```

## BOX SHADOW



→ ↓ ↗ ●  
**box-shadow:** 2px 2px 3px blue;

# UNITS

```
/* Absolute */  
p {  
  width: 50px;  
}  
  
/* Relative to parent */  
p {  
  width: 50%;  
}  
  
/* Relative to font size */  
p {  
  width: 2em;  
}
```

# DIV DESIGN TIPS

```
background: white;                /* White background */
padding: 30px;                    /* Internal space */
border-radius: 4px;               /* Small radius */
box-shadow: 1px 1px 3px rgba(0, 0, 0, 0.1); /* Subtle shadow */
border: 1px solid rgba(0, 0, 0, 0.1); /* OR subtle border */
```

Result :

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Eos voluptatibus, quis iure vel aliquam veritatis architecto fugiat necessitatibus? Quidem error explicabo nemo maiores voluptatem odio delectus ad, esse reprehenderit animi.



# DIV CENTERING TECHNIQUE

```
width: 300px;      /* Set the width */  
margin: 0 auto;    /* Set automatic margins on right/left */
```

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Eos voluptatibus, quis iure vel aliquam veritatis architecto fugiat necessitatibus? Quidem error explicabo nemo maiores voluptatem odio delectus ad, esse reprehenderit animi.

# ID & CLASS

HTML

```
1 
2
3 <ul>
4   <li></li>
5   <li></li>
6   <li></li>
7   <li></li>
8 </ul>
```

CSS

```
1 img {
2   width: 40px;
3 }
```



How do you style only the logo?

# NAME YOUR TAG WITH ID

HTML

```
1 
2
3 <ul>
4   <li></li>
5   <li></li>
6   <li></li>
7   <li></li>
8 </ul>
```

CSS

```
1 #logo {
2   width: 40px;
3 }
```



# HOW DO YOU STYLE YOUR STAFF PICTURES?

```
HTML 1 
      2
      3 <ul>
      4   <li></li>
      5   <li></li>
      6   <li></li>
      7   <li></li>
      8 </ul>
```


# NAME YOUR TAGS WITH CLASS

HTML

```
1 
2
3 <ul>
4   <li></li>
5   <li></li>
6   <li></li>
7   <li></li>
8 </ul>
```

CSS

```
1 .img-circle {
2   border-radius: 50%;
3 }
```



# ID OR CLASS?

unique



HTML

```
1 
2
3 <ul>
4   <li></li>
5   <li></li>
6   <li></li>
7   <li></li>
8 </ul>
```



re-usable

# COMBINE (1)

HTML 1 ``

CSS 1 `.img-circle {`  
2 `border-radius: 50%;`  
3 `}`



## COMBINE (2)

HTML 1 ``

CSS

```
1 .img-circle {  
2   border-radius: 50%;  
3 }  
4  
5 .shadowed {  
6   box-shadow: 5px 5px 3px black;  
7 }
```





## COMBINE (3)

HTML 1 ``

CSS

```
1 .img-circle {  
2   border-radius: 10px;  
3 }  
4  
5 .shadowed {  
6   box-shadow: 5px 5px 3px black;  
7 }  
8  
9 #leader {  
10  border: 5px solid red;  
11 }
```



# CLASS NAMING - CONVENTION

.component-shape

```
/* Examples*/  
.text-center  
.text-justify  
.btn-red  
.btn-green  
.btn-big  
.list-inline  
.form-horizontal  
.img-rounded  
.img-circle
```

# ELEMENT SELECTOR

```
<!-- index.html -->
[...]  
<body>  
  <h1>Hello World</h1>  
</body>
```

Combined with :

```
/* style.css */  
h1 {  
  color: red;  
}
```

Makes the **h1** elements red

# CLASS SELECTOR

```
<!-- index.html -->
[...]  
<body>  
  <p>This paragraph is not justified</p>  
  <p class="text-justify">This one is</p>  
  <p class="text-justify">This one also</p>  
</body>
```

Combined with :

```
/* style.css */  
.text-justify {  
  text-align: justify;  
}
```

Will make only the second and  
third paragraphs justified

# ID SELECTOR

```
<!-- index.html -->
<body>
  <div id="banner">
    <h1>Ecole Supérieure du Digital</h1>
    <p>L'École supérieure du digital, école web, école internet et numérique</p>
  </div>
</body>
```

Combined with :

```
/* style.css */
#banner {
  background-image: url("example.jpg");
  background-size: cover;
}
```

Will put an image background  
on the **unique** div with **id="banner"**

# DESCENDANT SELECTOR

```
<!-- index.html -->
<body>
  <div id="banner">
    <h1>Ecole Supérieure du Digital</h1>
    <p>L'École supérieure du digital, école web, école internet et numérique</p>
  </div>
</body>
```

Combined with :

```
/* style.css */
#banner h1 {
  color: white;
}
```

**h1 children** of the element **id="banner"** will be white

# DIRECT CHILDREN

```
<!-- index.html -->
<body>
  <ul id="navigation">
    <li><a href="#">Home</a></li>
    <li><a href="#">Team</a></li>
    <li><a href="#">Contact</a></li>
  </ul>
</body>
```

Combined with :

```
/* style.css */
#navigation > li > a {
  color: blue;
}
```

A **direct children** of li direct children  
of **id="navigation"** will be blue

# GROUPING

```
/* style.css */  
h1, h2, h3 {  
  font-weight: bold;  
}
```

Is a shortcut syntax for :

```
/* style.css */  
h1 {  
  font-weight: bold;  
}  
h2 {  
  font-weight: bold;  
}  
[...]
```



# PSEUDO CLASSES

```
/* style.css */  
  
a {  
  color: red;  
  text-decoration: none;  
}  
  
a:hover {  
  text-decoration: underline;  
}
```

Will make links underlined when the mouse hovers over them

See other [pseudo class](#)

# QUIZZ #1

```
<!-- index.html -->
<body>
  <p class="text-red">
    Lorem ipsum dolor sit amet, consectetur adipisicing elit.
  </p>
</body>
```

Combined with :

```
p {
  color: black;
}
.text-red {
  color: red;
}
```

# QUIZZ #2

```
<!-- index.html -->
<body>
  <p id="bio" class="text-red">
    Lorem ipsum dolor sit amet, consectetur adipisicing elit.
  </p>
</body>
```

Combined with :

```
/* style.css */
.text-red {
  color: red;
}
#bio {
  color: green;
}
```

# SPECIFICITY OF SELECTORS

```
p {                                /* least specific */
  color: black;
}
.text-red {                        /*      ↓      */
  color: red;
}
#bio {                             /* most specific */
  color: green;
}
```

# RESSOURCES

## Fonts :

- [Get the Font](#)
- [Fontface Ninja](#)

## Icons :

- [Material Design Icons](#)
- [The Noun Project](#)
  - [Flaticon](#)
- [Nucleo App](#)

## Inspiration :

- [Dribbble](#)
- [Awwwards](#)
  - [FWA](#)

## Colors :

- [Coolors](#)
- [Color Hunt](#)
- Install [ColorZilla](#) on Chrome

## Pictures :

- [Picsum](#)
- [Placeholder](#)

## HTML/CSS snippets :

- [Codepen](#)