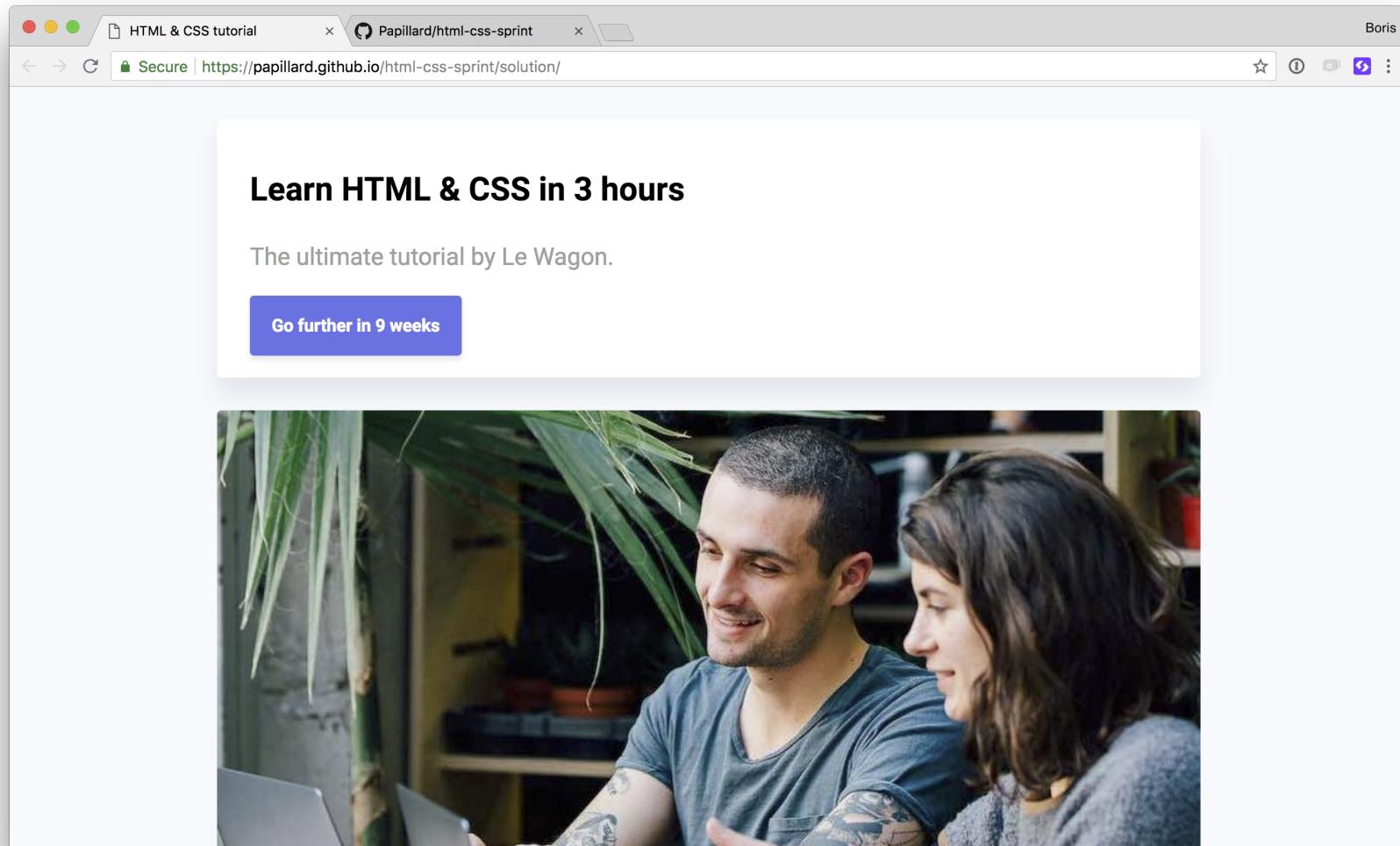


HTML & CSS Sprint

2th July, Le Wagon Paris

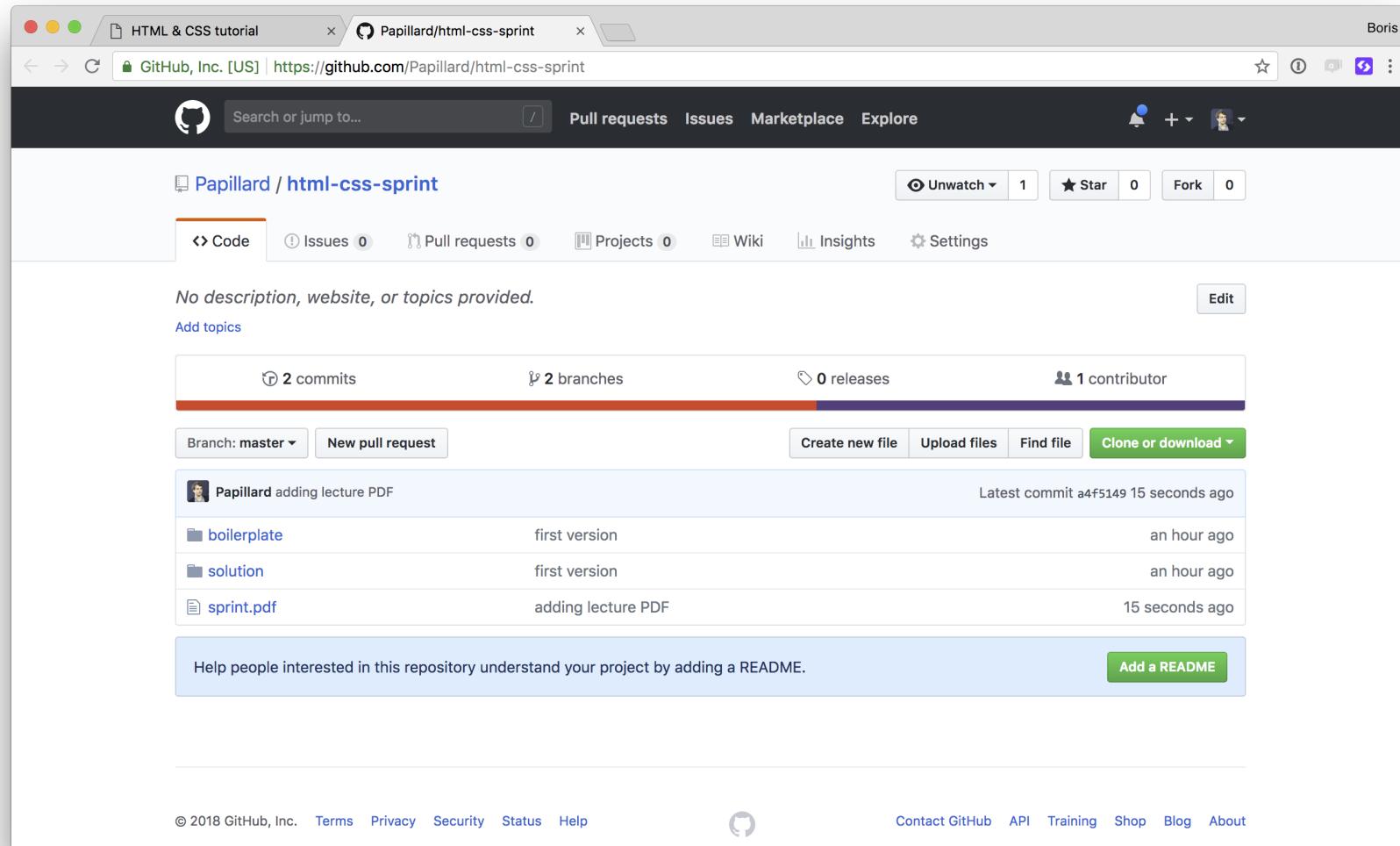
Today's objective

Code and design [this page](#)



Getting started

Download the sprint material on [Github](#)



Outline

1. Front-end 101
2. HTML basics (page structure, syntax & common tags)
3. CSS basics (fonts & colors)
4. Structuring a page with `div`
5. Custom design with `id` and `class`

1. Front-end 101

General knowledge about front-end languages

Frontend Languages

The languages your browser speaks

HTML



content
+ structure

CSS



style

JS



dynamism
+ usability

Content & Structure

HTML



This is what Google cares about. Think of SEO.

Design

CSS



How it looks like.

Dynamic behavior



Animate stuff on screen (e.g. client-side form validation)

2. HTML Basics

All you need to know about HTML

HTML tags help you identify content

some text content..

h1

some other content..

h2

some third content..

p

Hence, browser default styles apply

some text content..

h1

some other content..

h2

some third content..

p

You can also apply your own style rules

some text content..

h1

some other content..

h2

some third content..

p

HTML Skeleton

```
<!DOCTYPE html>
```

```
<!-- end of file -->
```

HTML Skeleton

```
<!DOCTYPE html>
<html>

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

HTML Skeleton

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

    </head>
    <body>

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

HTML Skeleton

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>Title of your page</title>
  </head>
  <body>

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

HTML Skeleton - head & Google

```
<head>
  <!-- Google result's text-->
  <title>Coding Bootcamp Le Wagon | Europe's Best Coding Bootca
  <!-- Google result's description-->
  <meta name="description" content="Le Wagon is Europe's best c
</head>
```

Coding Bootcamp Le Wagon | Europe's Best Coding Bootcamp

<https://www.lewagon.com/> ▾

Le Wagon is Europe's best coding bootcamp for creative people & entrepreneurs. Learn to code in 9 weeks with our fullstack coding bootcamp.

Paris

My name is Anne-Sophie, and I was part of Le Wagon Batch ...

Program

Apply Now - FAQ - Demoday -
Alumni - Le Wagon Berlin - Bali

FAQ

We know you have questions about our program. That's why ...

Apply Now

9 weeks to learn ruby on Rails, HTML/CSS, Javascript, and ...

HTML Skeleton - head & Facebook

```
<head>
  <meta property="og:title" content="Coding Bootcamp Le Wagon |"
  <meta property="og:image" content="facebook-card.jpg">
  <meta property="og:description" content="Le Wagon is the best"
  <meta property="og:site_name" content="Le Wagon"/>
</head>
```

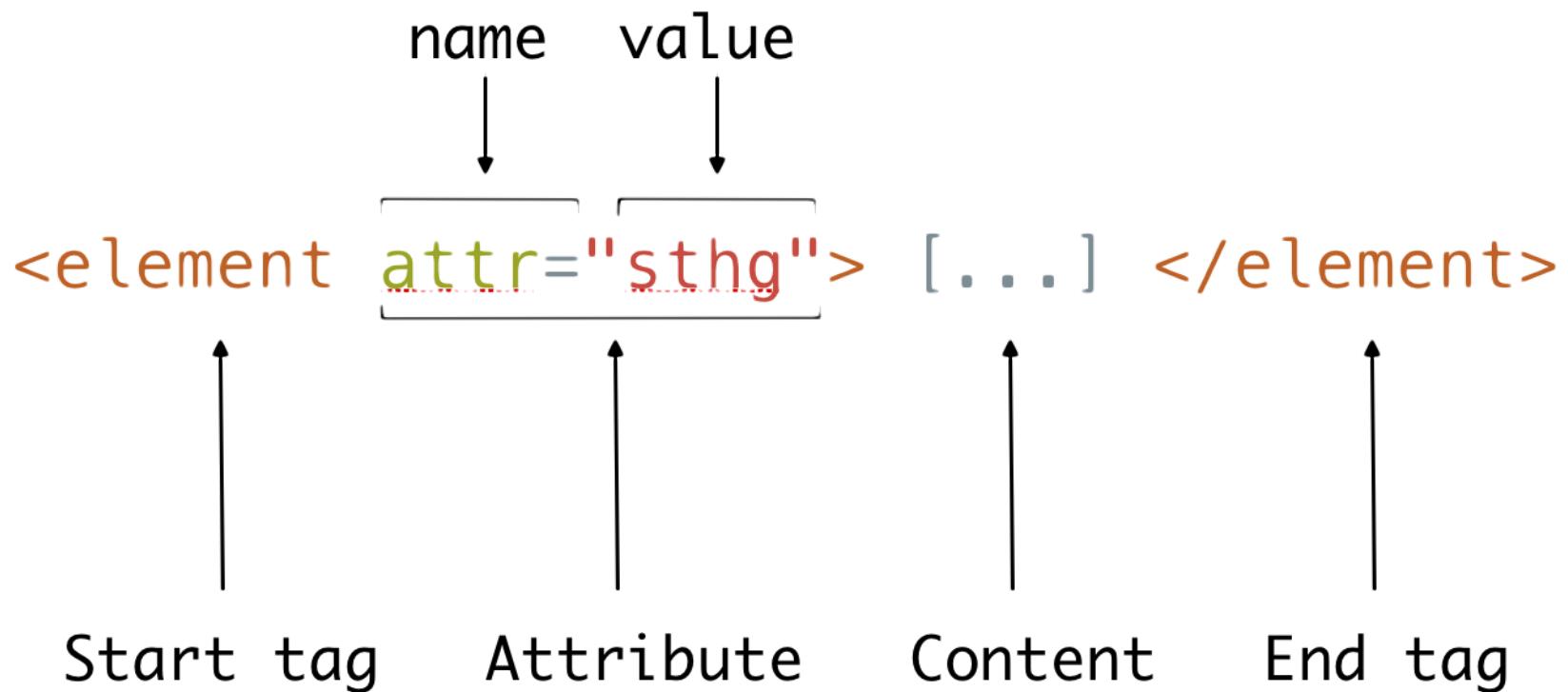


HTML Skeleton - body

`body` is where you write content displayed on the page.

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

HTML Syntax



Example

```
<a href="https://www.lewagon.com" target="_blank">  
    Le Wagon  
</a>
```

Result: Le Wagon

Questions:

- What is the element's name?
- What is the element's content?
- What are the 2 attributes (name and value)?

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 `some words`,
and even `more if needed`

```
</p>
```

Lists

```
<!-- Bullet points -->
<h2>Shopping List</h2>
<ul>
  <li>Milk</li>
  <li>Butter</li>
</ul>

<!-- Numbers -->
<h2>World Cup 2018</h2>
<ol>
  <li>France</li>
  <li>Uruguay</li>
  <li>Belgium</li>
  <li>England</li>
</ol>
```

Images

```

```

Forms

```
<form>
  <input type="email">
  <input type="password">
  <input type="submit" value="Sign up">
</form>
```

Sprint #1 (30 minutes)

- Start with the `boilerplate`
- Take your time for the setup (Sublime Text / Google Chrome)
- Replace current `images` with personal ones
- **Focus on the content (texts and images) of the result page we want.** Don't worry about the design right now.
- Your time to code the HTML content of your page.

3. CSS Basics

Style rules for fonts, colors, images & links.

Web without CSS?

Let's cut the `<head>` on lewagon.com with Chrome dev tool.

This is how a website looks like without CSS .

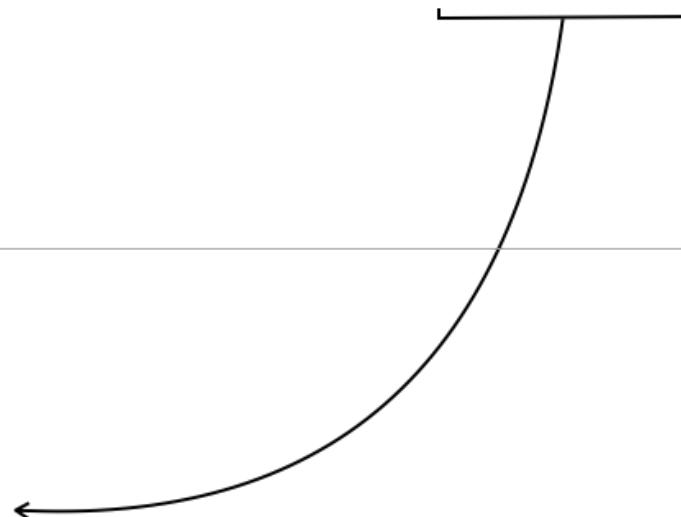
Linking a stylesheet

📄 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

```
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

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

The diagram illustrates the components of a CSS rule. A horizontal line with a downward-pointing arrow points from the word 'selector' to the first line of the code ('selector {'). This is labeled 'CSS selector'. Another horizontal line with an upward-pointing arrow points from the word 'style properties' to the second line of the code ('property: value;'). This is labeled 'style properties'. A third horizontal line with a leftward-pointing arrow points from the word 'style rules' to the closing brace of the code ('}'). This is labeled 'style rules'.

CSS selector

style rules

style properties

CSS Example

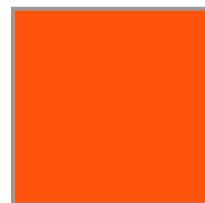


we select
all **<h2>** of the page

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

CSS Colors

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



Tips for grey scale

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



Text vs. Background

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

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

text color

background color

Fonts - 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

Fonts - size & spacing

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

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

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

A ← b → c
letter-spacing

font-size
A b c

line-height
A b c

Fonts - decoration

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

Abc

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

sign up
↓
sign up

Fonts - 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

Fonts - weight

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

Light text

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

Bold text

Sprint #2 (15 minutes)

- Pick two fonts on [Google fonts](#) (1 for `body` + 1 for `h1, h2, h3`) and embed them into the `head` section.
- Don't forget to `link` your `style.css` in the `head` as well.
- Pick a color scheme on [Color Hunt](#).
- Define CSS rules for colors & fonts: `body` , `h1` , `h2` , `h3` , `a` .
- Also design the `a:hover` state.

4. Structuring a page with `div`

You need to split your page into sections.

Real life...

Paris, France – Airbnb

https://www.airbnb.co.uk/s/Paris--France/

Paris Anytime 2 guests

Become a Host Help Sign Up Log In

FOR YOU HOMES EXPERIENCES PLACES

Room type Price range Instant Book More filters

Enter dates to see full pricing. Additional fees apply. Taxes may be added after login.

From £28 - Studio sur cour, calme, proche T...
Entire condominium - 1 bed
★★★★★ 3

From £28 - Studio rdc à Paris centre Proche...
Entire flat - 1 bed
1 review

From £37 - Cosy studio for couples Vie...
Entire flat - 1 bed
★★★★★ 3

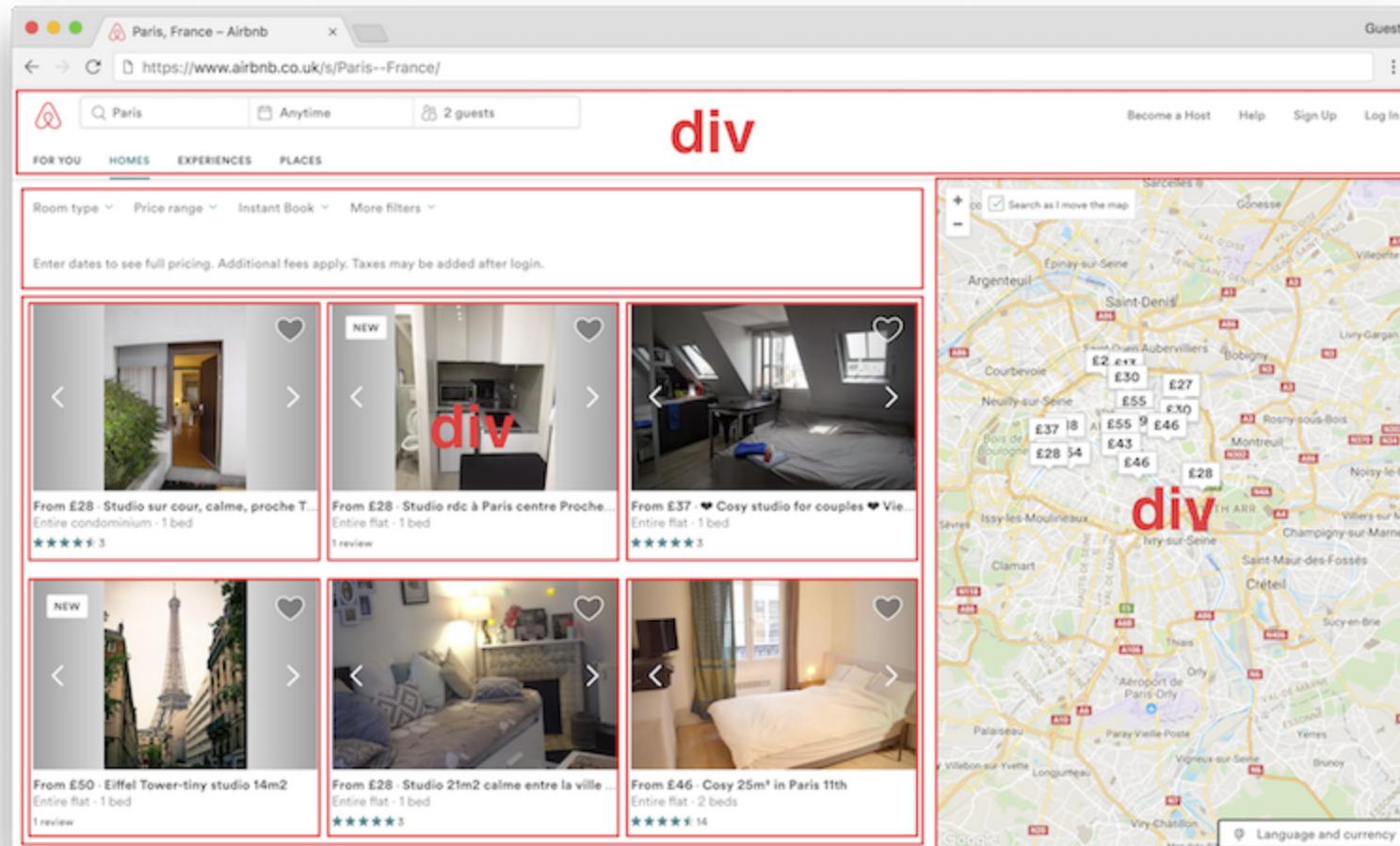
From £50 - Eiffel Tower-tiny studio 14m2
Entire flat - 1 bed
1 review

From £28 - Studio 21m2 calme entre la ville ...
Entire flat - 1 bed
★★★★★ 3

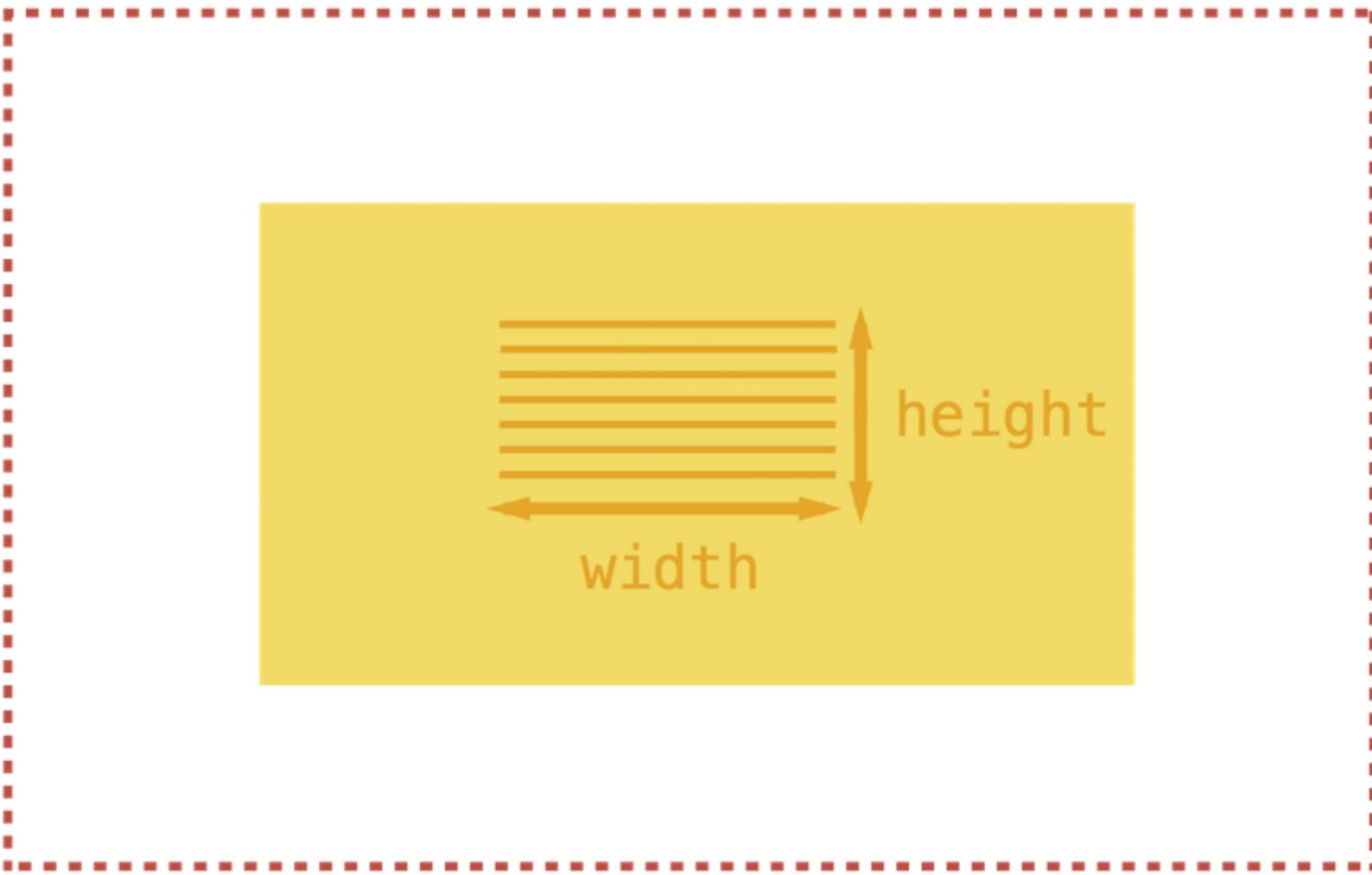
From £46 - Cosy 25m² in Paris 11th
Entire flat - 2 beds
★★★★★ 14

Language and currency

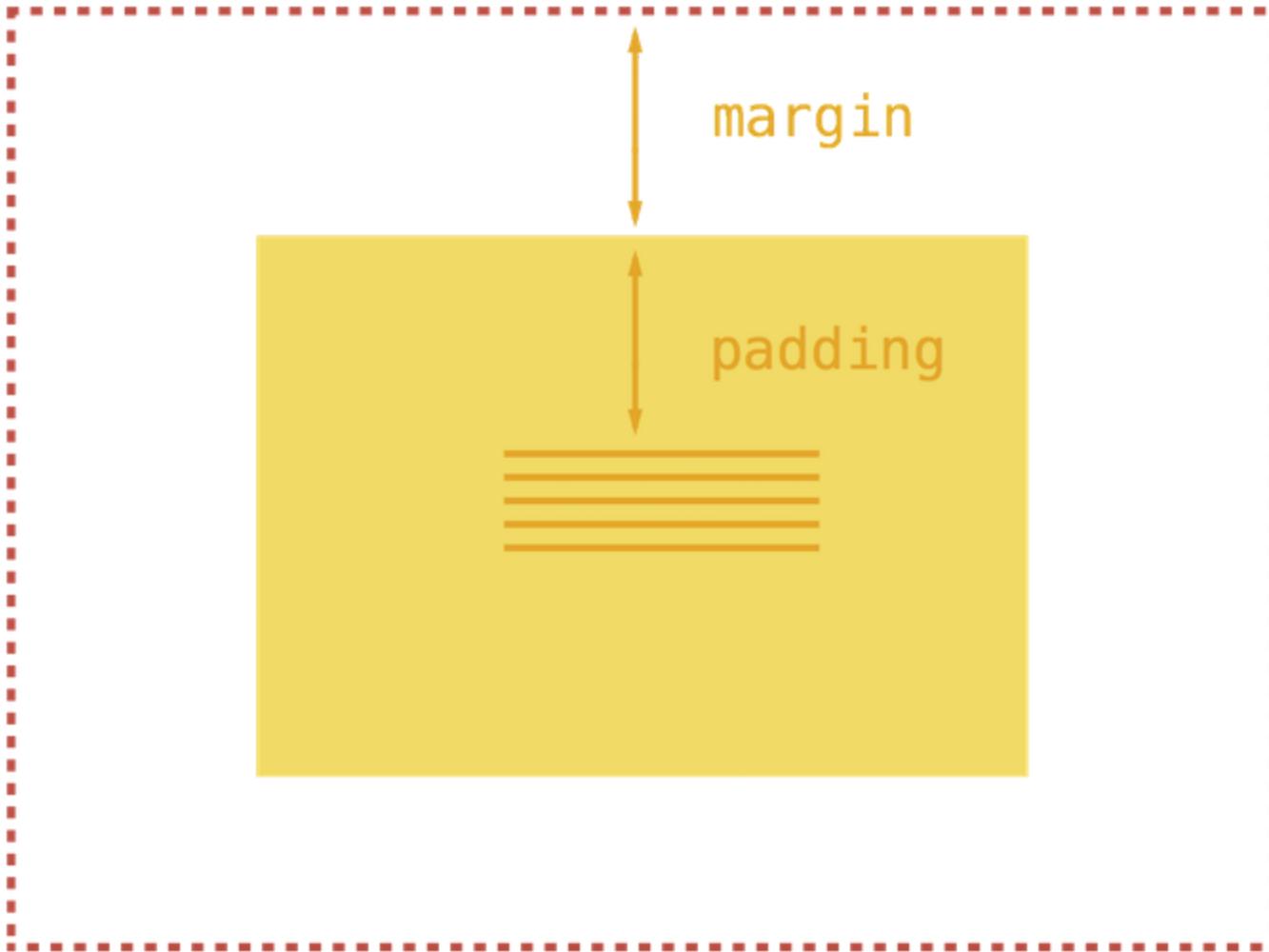
...is made of <div>



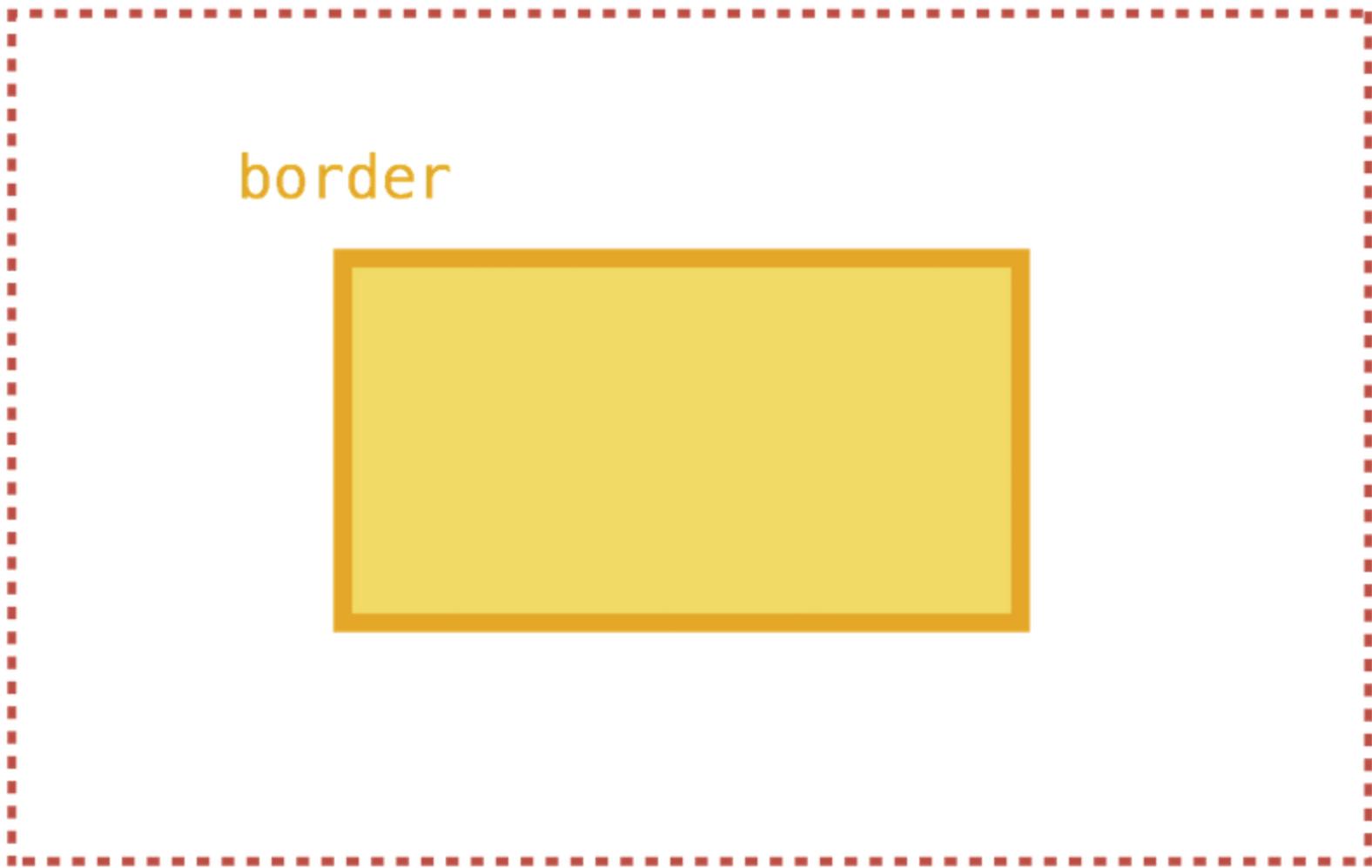
Box model - content



Box model - padding & margin



Box model - border



Border's syntax

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



Border radius



border-radius: 5px;

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;
}
```

Classic <div> design

```
background: white;          /* White background
padding: 30px;             /* Internal space */
border-radius: 4px;         /* Small radius */
box-shadow: 0 15px 35px rgba(50,50,93,.1); /* Stripe shadow */
```

An example of this design here.

<div> centering technique

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

Classic centering
technique.

Sprint #3 (10 minutes)

- Look carefully at [our result](#) to understand the `<div>` structure of the page.
- Once you have it, quickly add the `<div>` in your HTML to wrap the relevant content.

Correction for <div> structure

```
<body>
  <div> <!-- Container (to center content) -->
    <div> <!-- Header -->
      ...
    </div>
    <div> <!-- Section -->
      ...
    </div>
    <div> <!-- Section -->
      ...
    </div>
    <div> <!-- Section -->
      ...
    </div>
    <div> <!-- Footer -->
      ...
    </div>
  </div>
</body>
```

5. Custom design with `id` and `class`

Let's do some real design.

What's the issue?

How do you style only the logo?

```
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 }
```



Name your element with an `id`

```
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 only team pictures?

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

Name your elements with a `class`

HTML

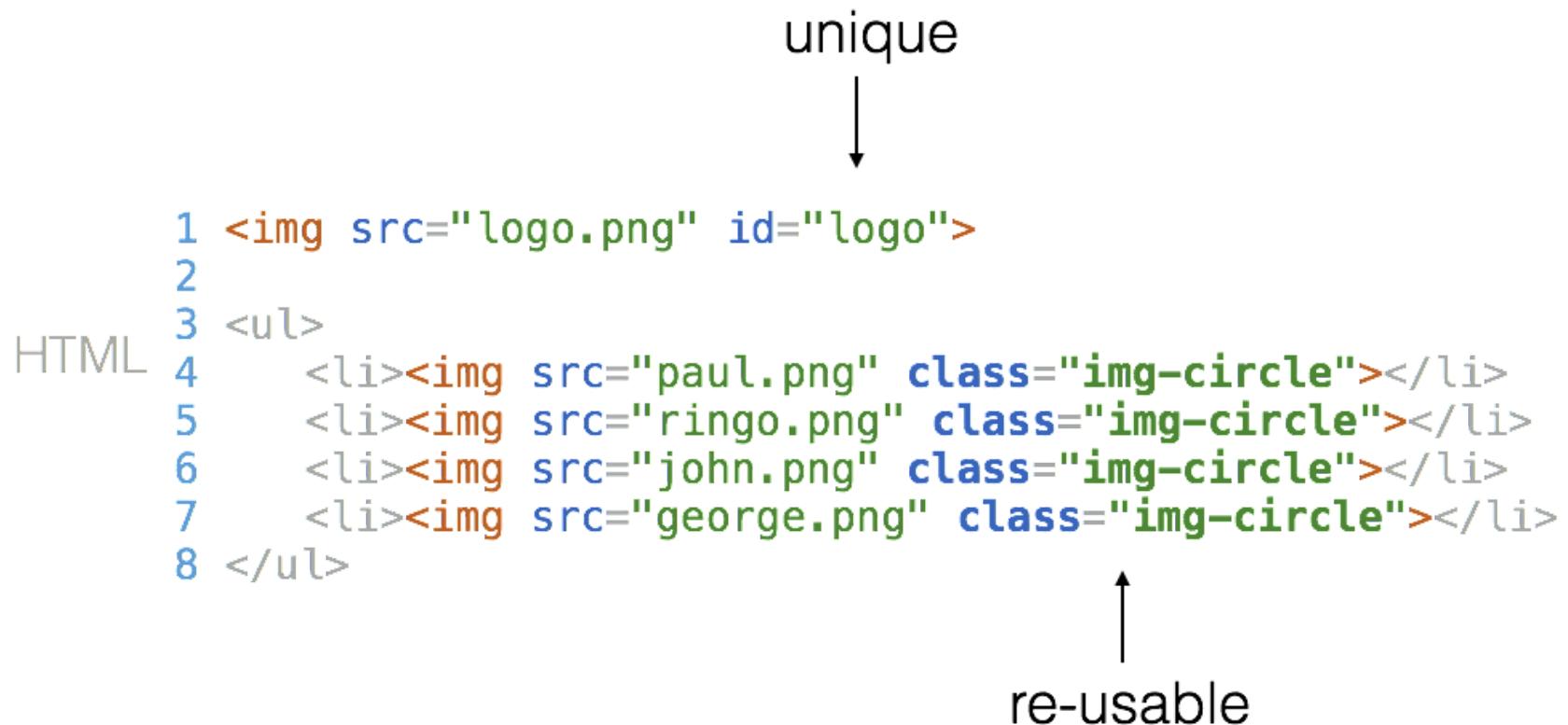
```
1 
2
3 <ul>
4   <li></li>
5   <li></li>
6   <li></li>
7   <li></li>
8 </ul>
```

CSS

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



id or **class** ?



You can combine them

HTML 1



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



You can combine them

HTML 1

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



You can combine them

HTML 1

```
1 .img-circle {  
2   border-radius: 10px;  
3 }  
4
```

CSS 5 .shadowed {
6 box-shadow: 5px 5px 3px black;
7 }
8

```
9 #leader {  
10  border: 5px solid red;  
11 }
```



What's your intuition?

What are the best `class` names?

- `.btn-red` or `.btn-signup` ?
- `.background-blue` or `.background-home` ?
- `.img-user` or `.img-circle` ?

Tip: think graphical

A classic naming convention

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

Let's rehearse our CSS selectors

Element selectors

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

combined with

```
/* style.css */
h1 {
  color: red;
  font-weight: bold;
}
```

makes the `h1` elements red and bold.

Class selectors

```
<!-- 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;
}
```

makes only the second and third paragraphs justified.

Id selectors

```
<!-- index.html -->
<body>
  <div id="banner">
    <h1>Le Wagon</h1>
    <p>We bring tech skills to creative people</p>
  </div>
</body>
```

combined with

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

puts an image background on the unique div with `id="banner"`.

Descendant selectors

```
<!-- index.html -->
<body>
  <div id="banner">
    <h1>Le Wagon</h1>
    <p>We bring tech skills to creative people</p>
  </div>
</body>
```

combined with

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

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

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-class

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

a:hover {
    text-decoration: underline;
}
```

will make links underlined when the mouse hovers over them.

Quiz

Do you get it? Let's see!

Question #1

What's the text color?

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

combined with

```
/* style.css */
p {
  color: black;
}
.text-red {
  color: red;
}
```

Question #2

What's the text color?

```
<!-- 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;  
}
```

Check out the [specificity calculator](#)

Sprint #4 (30 minutes)

- Name the elements you want to design with `class` and `id`
- Code like a pro and use the naming convention `.element-design` when choosing your `class` names.
- Once you've added all your `class` and `id` in the HTML, it's time to design the corresponding elements in the CSS and finalize your design to get exactly [this result](#).

Good luck

Next time

- We'll design a library of components (avatar, buttons, cards) in CSS.
- We'll learn to combine them and build responsive grids.
- Finish your page & take time to go back on these slides before the next sprint!