

Web Development

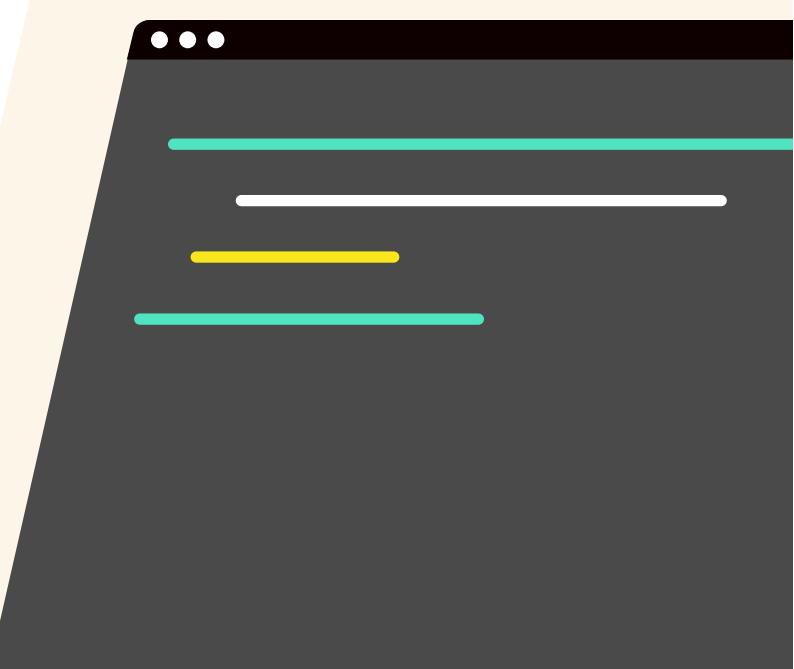
Sprint



Welcome, class !

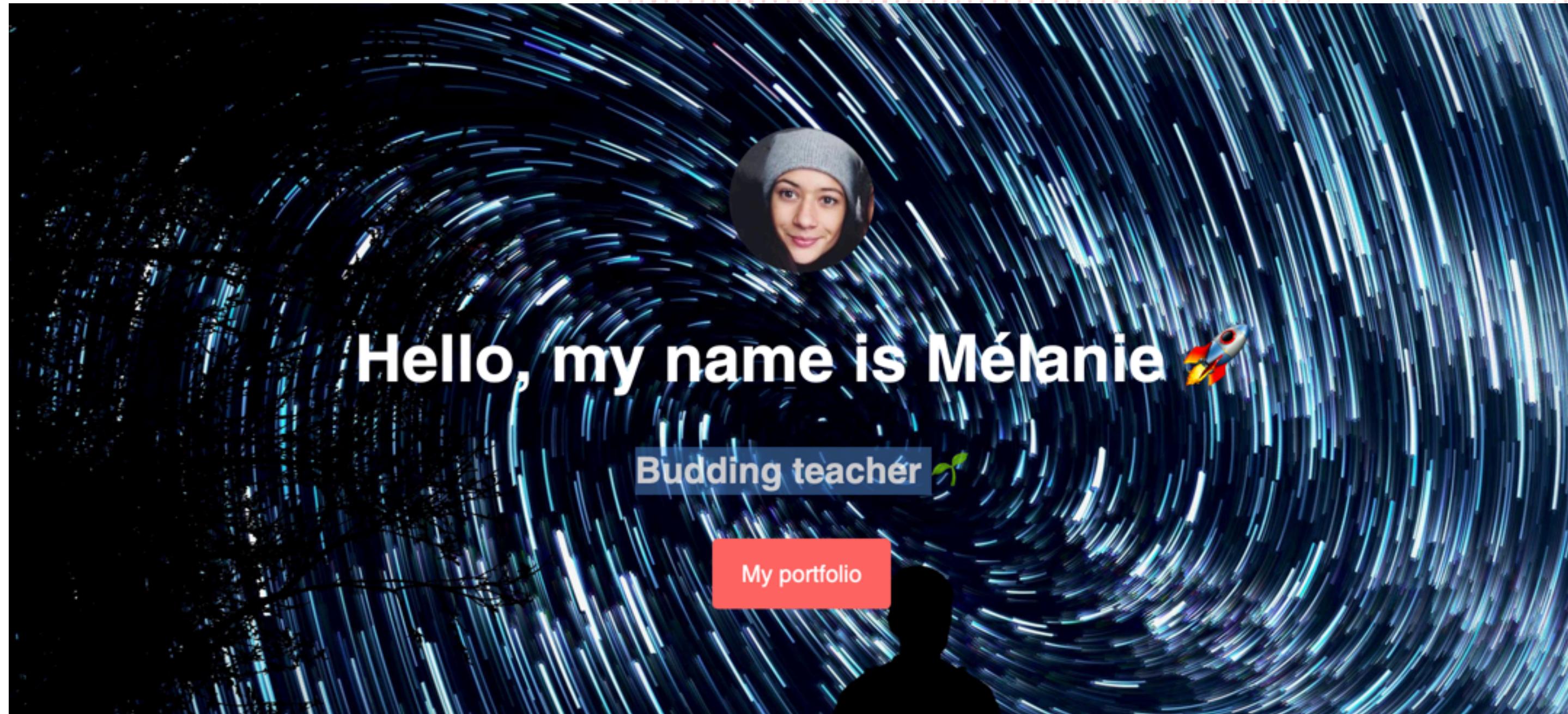
Let's learn how to code websites together 😎

<https://pedrolane.github.io/cv/>



What **you** will build in this sprint

your responsive profile page

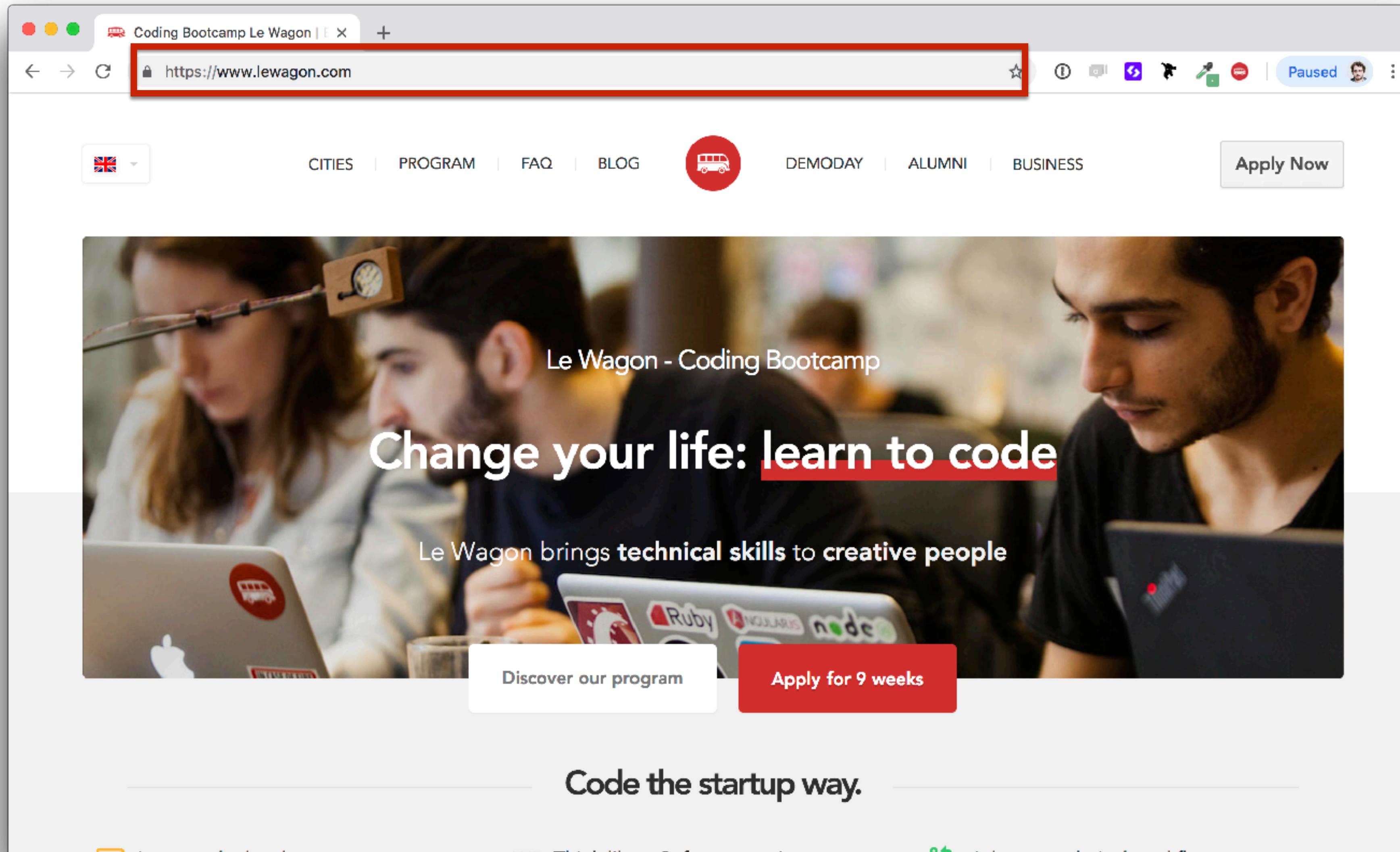


**But first,
How does a website work?**



What happens when we visit a website?

We enter a URL

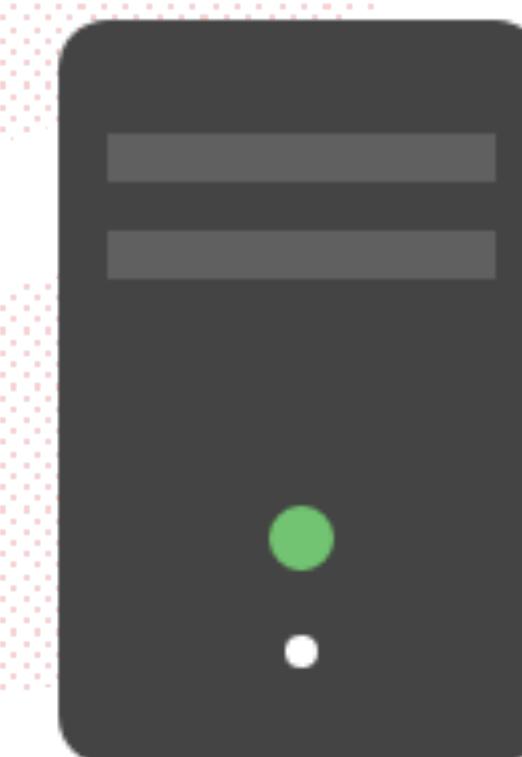


We see the result
web page

<http://www.lewagon.com>



client



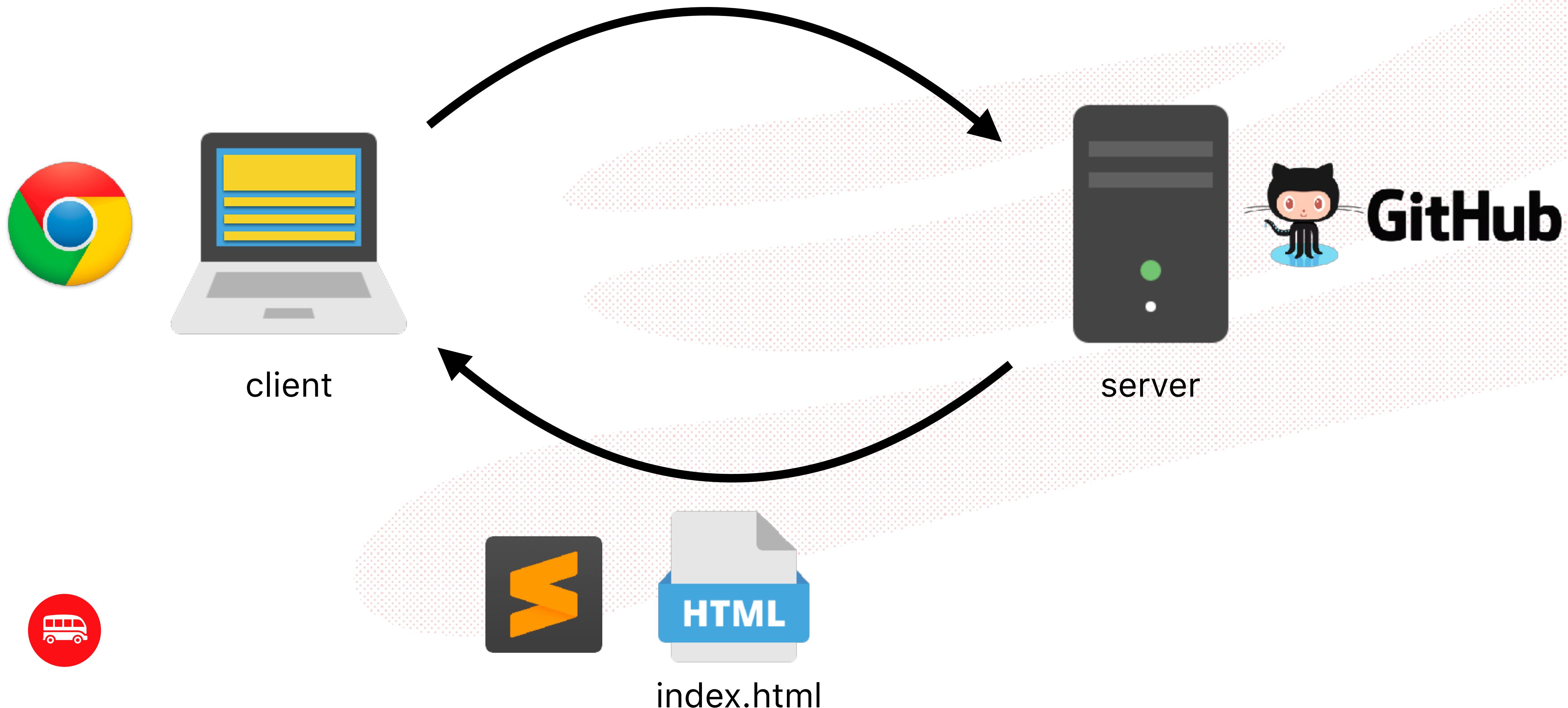
server



index.html



<http://www.lewagon.com>



Text editor

Sublime Text

A tool to write our code.



Web browser

Google Chrome

A tool to navigate on a website and display pages.



Hosting Service

Github

A service to put our website online.



Demo 1- Setup

Let's create our project and
learn how to work with Sublime Text / Google Chrome

5 min



Web Development

HTML Basics



A web page =

Content and structure



+

Design



HTML

basic syntax

```
<element> Content </element>
```

```
<element attr="value"> Content </element>
```

```
<a href="http://lewagon.com"> Le Wagon </a>
```



HTML **skeleton**

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

Page's intelligence (meta data)

```
  </head>
```

```
  <body>
```

Page's content (displayed in browser)

```
  </body>
```

```
</html>
```

HTML

head

```
<head>
```

```
  <title>    Page Title    </title>
```

```
  <meta name="description" content="desc...">
```

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

```
</head>
```

HTML

headers

<h1> Main title </h1>

<h2> Subtitle </h2>

<h3> Section title </h3>

<h4> Section subtitle </h4>

Etc...

HTML

paragraph

< p >

 Lorem ipsum dolor sit amet, consectetur
 adipisicing elit. Veritatis laboriosam

< / p >

HTML

strong

```
<p>
```

 Lorem ipsum dolor sit amet,

 consectetur adipisicing
 elit. Veritatis laboriosam

```
</p>
```

HTML

unordered list

```
<ul>
```

```
  <li> Bread </li>
```

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

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

```
</ul>
```

HTML

ordered list

```
<ol>
```

```
  <li> France </li>
```

```
  <li> Uruguay </li>
```

```
  <li> Belgium </li>
```

```
</ol>
```

HTML

images

```

```

Demo 2- HTML content

Let's add some HTML content for our landing page

10 min



Web Development

CSS Basics



A web page =

Content and structure



+

Design



Linking a stylesheet



index.html

```
<head>
```

```
    <link href="style.css" rel="stylesheet">
```

```
</head>
```



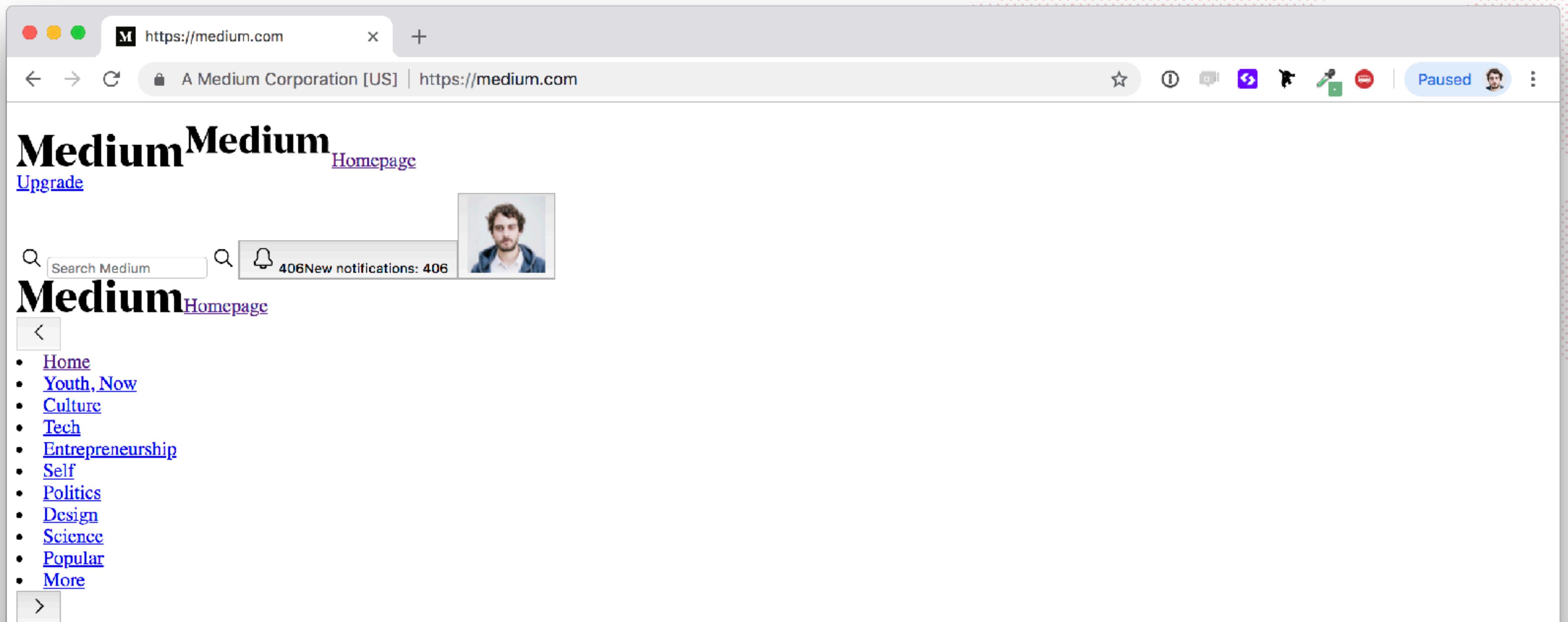
style.css

```
h1 {  
    color: red;  
}
```



Web without CSS

Let's check a website without CSS



[Conservatives Hate Postmodernism, and Liberals Don't Understand Why](#)

Right-leaning intellectuals toss around the artsy term both as an attack and defense of their values.

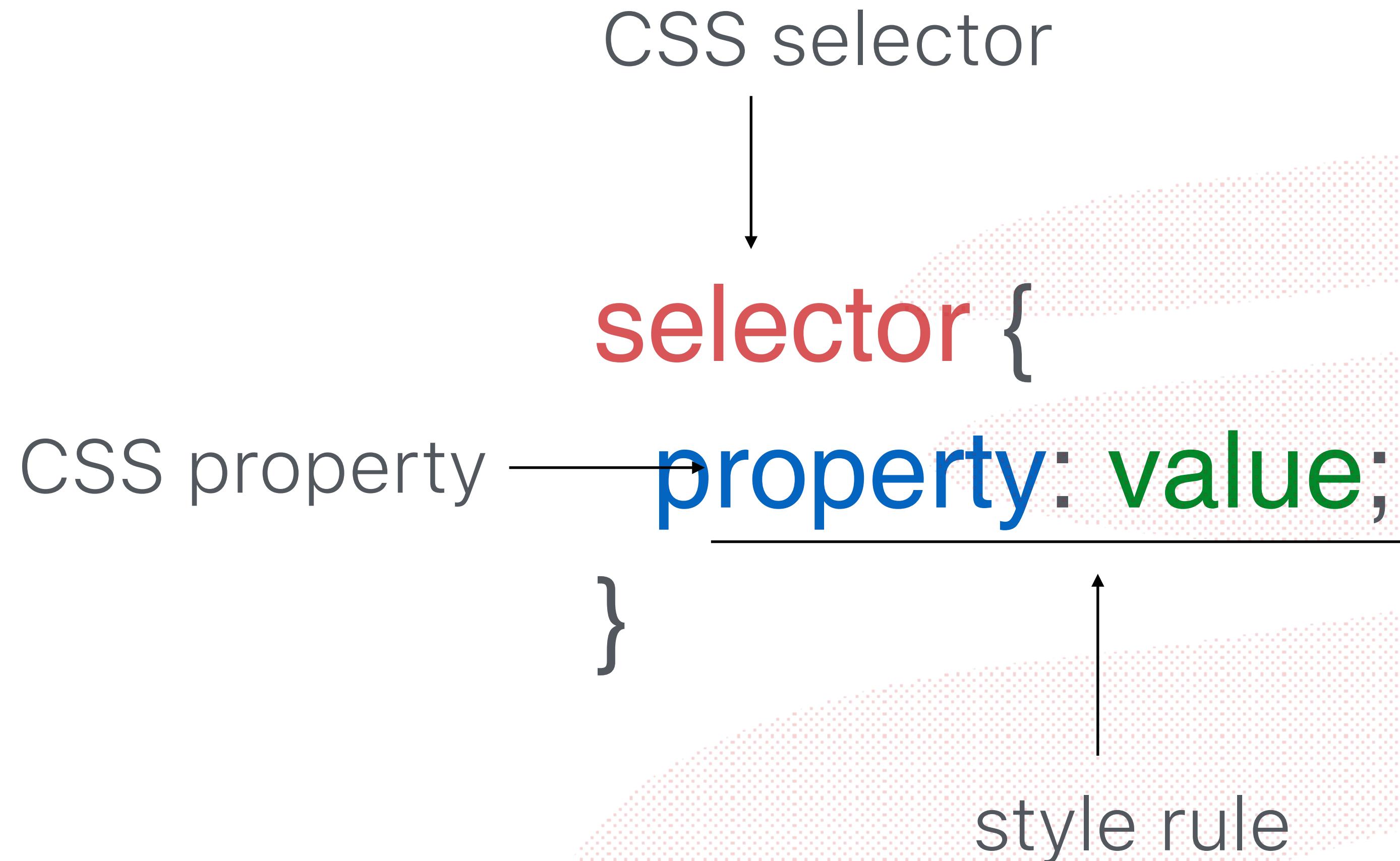
CSS

syntax

```
selector {  
    property: value;  
    property: value;  
}  
  
h2 {  
    color: red;  
    font-size: 24px;  
}
```

CSS

vocabulary



CSS

colours

```
h2 {  
    color: red;  
    background-color: yellow;  
}
```

CSS

colours

```
h2 {  
    color: orange;  
    color: #FF530D;  
    color: rgb(255, 83, 13);  
    color: rgba(255, 83, 13, 1.0);  
}
```



CSS

grey scale

```
h2 {  
    color: rgb(0, 0, 0);  
    color: rgb(255, 255, 255);  
    color: rgb(30, 30, 30);  
    color: rgb(230, 230, 230);  
}
```

CSS

font-family

```
body {
```

```
  font-family: Times, serif;
```

```
  font-family: Arial, sans-serif;
```

```
  font-family: Courier, monospace;
```

```
}
```

A
B
C

A
B
C

A
B
C

CSS

font size and spacing

```
body {
```

```
  font-size: 30px;
```

```
  line-height: 1.6;
```

```
  letter-spacing: 10px;
```

A diagram showing the word "Abc" in red font. A vertical double-headed arrow labeled "font-size" indicates the height from the baseline to the top of the letters. Dashed horizontal lines above and below the letters define the font's bounding box.

A diagram showing the word "Abc" in red font. A vertical double-headed arrow labeled "line-height" indicates the total height from the baseline to the baseline of the next line. Dashed horizontal lines above and below the letters define the line's bounding box.

A diagram showing the letters "A", "b", and "c" in red font. Horizontal double-headed arrows labeled "letter-spacing" indicate the distance between the centers of each letter. Dashed horizontal lines above and below the letters define the letters' bounding box.

```
}
```

CSS

font weight

```
body {
```

```
  font-weight: 100;
```

```
  /* from 100 to 900 */
```

```
  font-weight: lighter;
```

```
  font-weight: bold;
```

Light text

Bold text

```
}
```

CSS decoration and alignment

```
a {  
    text-decoration: none;  
}
```

sign up
↓
sign up

```
p {  
    text-align: center;  
    text-align: justify;  
}
```

This is a centered
paragraph aligned
with text-align

This is a justified
paragraph aligned
with text-align

Demo



3- First CSS rules

Let's design **fonts** and **colors** for body, headers, links

Let's use Google Fonts (**Lato**) + a color picker

15 min



Web Development

Div structure



A real website is made of <div>

The screenshot shows a web browser window for Airbnb in Paris, France. The URL is https://www.airbnb.co.uk/s/Paris--France/. The page features a search bar with 'Paris' and filters for 'Anytime' and '2 guests'. Below the search bar are navigation links for 'FOR YOU', 'HOMES', 'EXPERIENCES', and 'PLACES'. A red box highlights the top navigation area. The main content area displays a grid of six Airbnb listing cards, each with a thumbnail image, location, price, and room details. To the right of the grid is a map of the Paris region with several major roads labeled (E2, E30, E37, E46, E55, E28). A red box highlights the map area.

Paris, France – Airbnb

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

Guest

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 review

From £28 · Studio rdc à Paris centre Proche... entire flat - 1 bed

From £37 · ❤️ Cosy studio for couples ❤️ Vie... entire flat - 1 bed review

From £50 · Eiffel Tower-tiny studio 14m² entire flat - 1 bed

From £28 · Studio 21m² calme entre la ville ... entire flat - 1 bed

From £46 · Cosy 25m² in Paris 11th entire flat - 2 beds

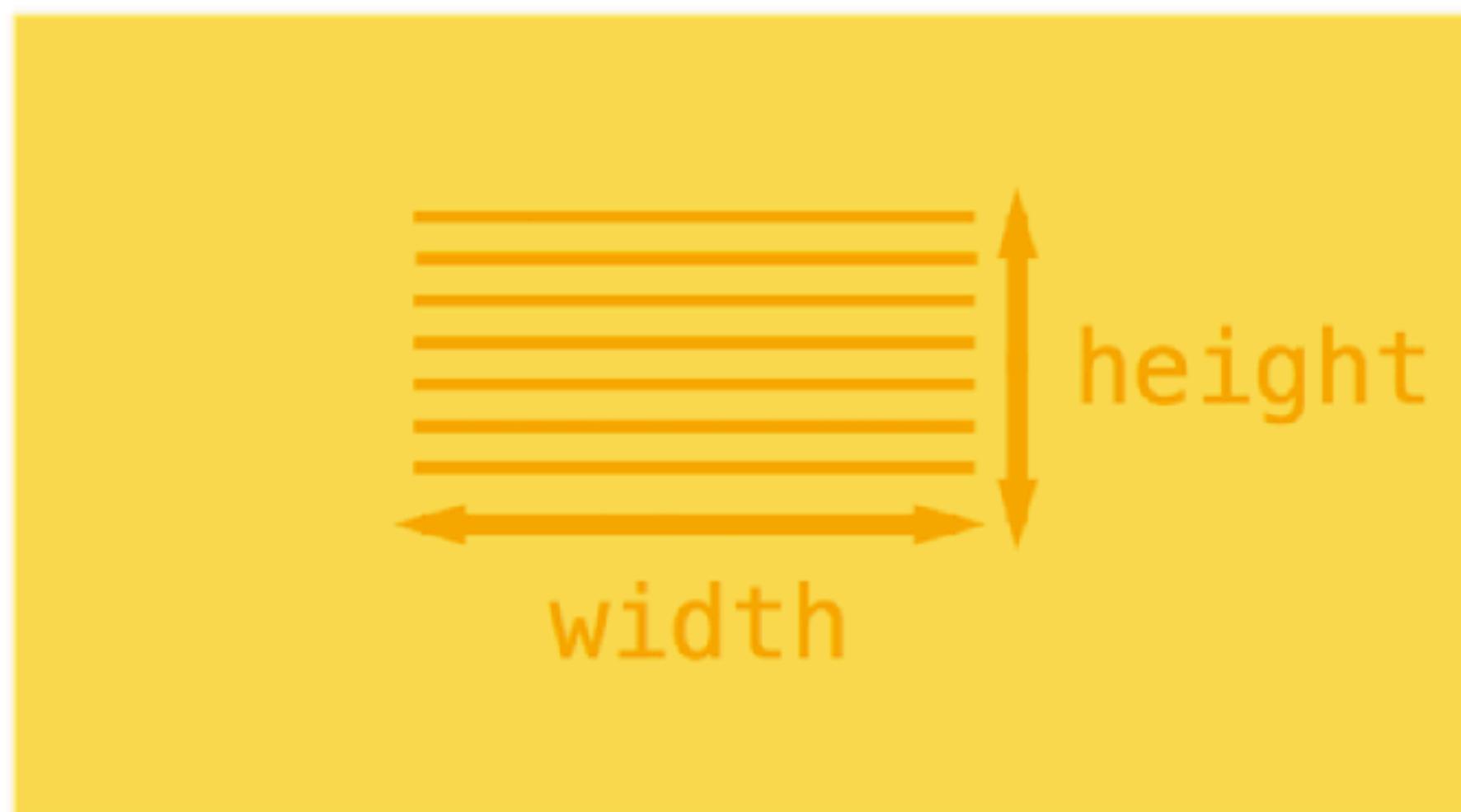
Search as I move the map

E2 E30 E37 E46 E55 E28 E37 18 E55 9 E43 E46 E28 34 E27 E40 E28 12TH ARR. Eiffel Tower

Language and currency

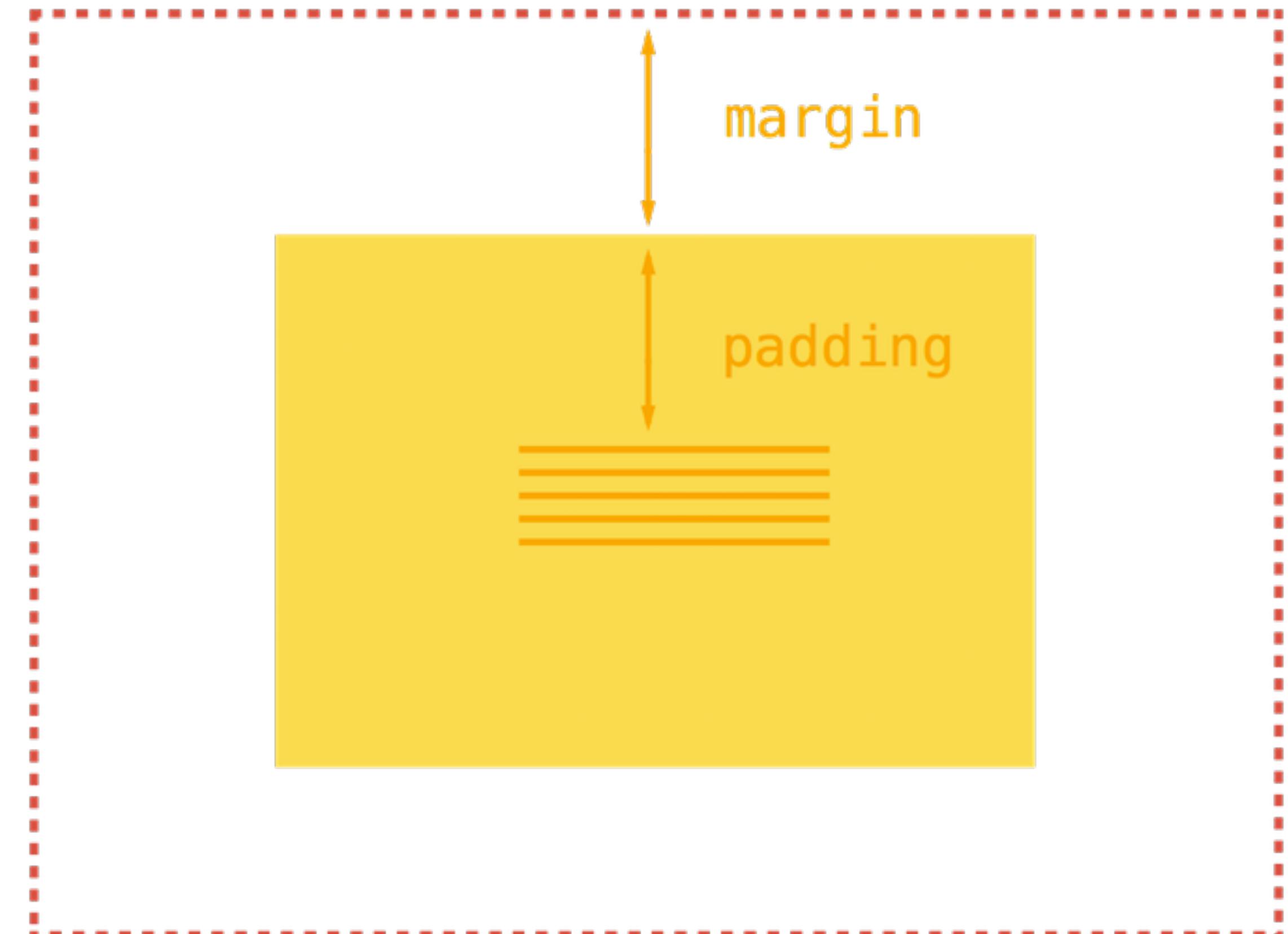
div width and height

```
div {  
    width: 300px;  
    height: 150px;  
}
```



div margin / padding

```
div {  
  margin: 30px;  
  padding: 10px 20px;  
}
```



div border



`border: 1px solid yellow;`



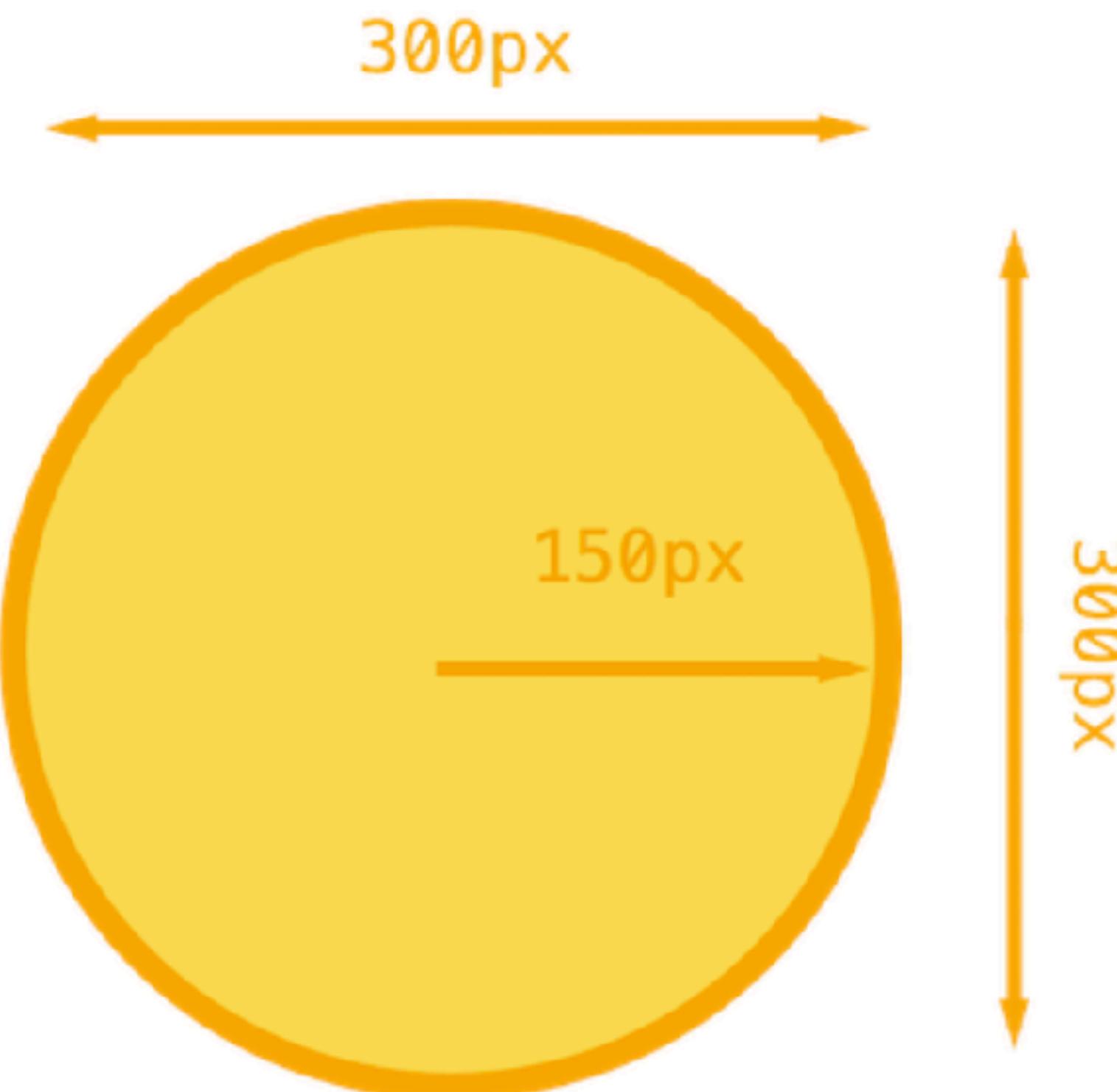
div border radius



border-radius: 5px;



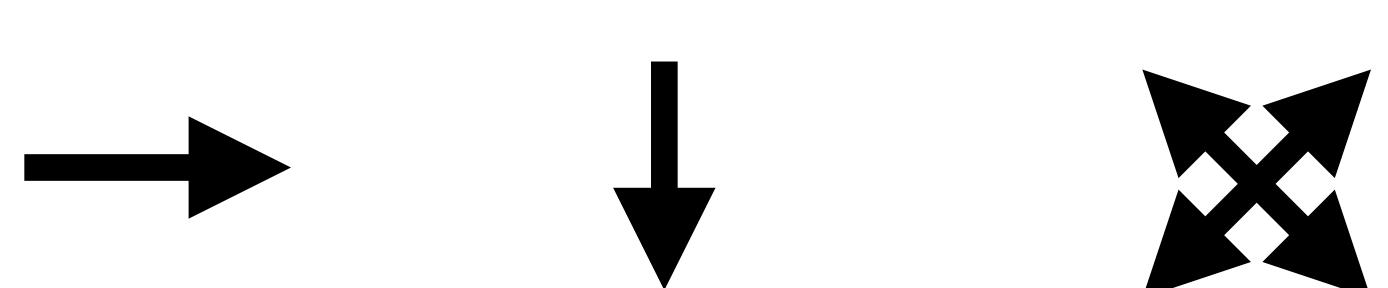
div border radius



border-radius: 50%;



div box shadow



box-shadow: 10px 20px 30px blue;



Demo



4- Adding div

Let's add div for the different page sections.

5 min



Web Development

Id and class



How to resize the logo **only** ?



index.html

```
  
  
<ul>  
  <li></li>  
  <li></li>  
  <li></li>  
  <li></li>  
</ul>
```



style.css

```
img {  
  width: 100px;  
}
```

A large red 'X' is drawn over the entire CSS code block, indicating that this approach does not work.

How to resize the logo **only** ?



index.html

```
  
  <li></li>  
  <li></li>  
  <li></li>  
  <li></li>  
</ul>
```



style.css

```
#logo {  
  width: 100px;  
}
```



How to resize staff pictures **only** ?



index.html

```
  
<ul>  
  <li></li>  
  <li></li>  
  <li></li>  
  <li></li>  
</ul>
```



style.css

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



unique adjustment 10% of your CSS



```

```

```
<ul>
  <li></li>
  <li></li>
  <li></li>
  <li></li>
</ul>
```



re-usable design 90% of your CSS



Combining classes



```

```

```
.img-circle {  
    border-radius: 50%;  
}  
  
.img-bordered {  
    border: 5px solid red;  
}
```

Class naming convention

class="element-design"

Examples

class="text-center"

class="button-red"

class="list-inline"

class="img-circle"

class="form-horizontal"

Demo



5- Designing with class

Let's design the following elements

15 min

`id="banner"`

`class="btn-blue"`

`class="card-white"`

`id="footer"`

Web Development

Display our cards horizontally



Let's use **CSS grid**



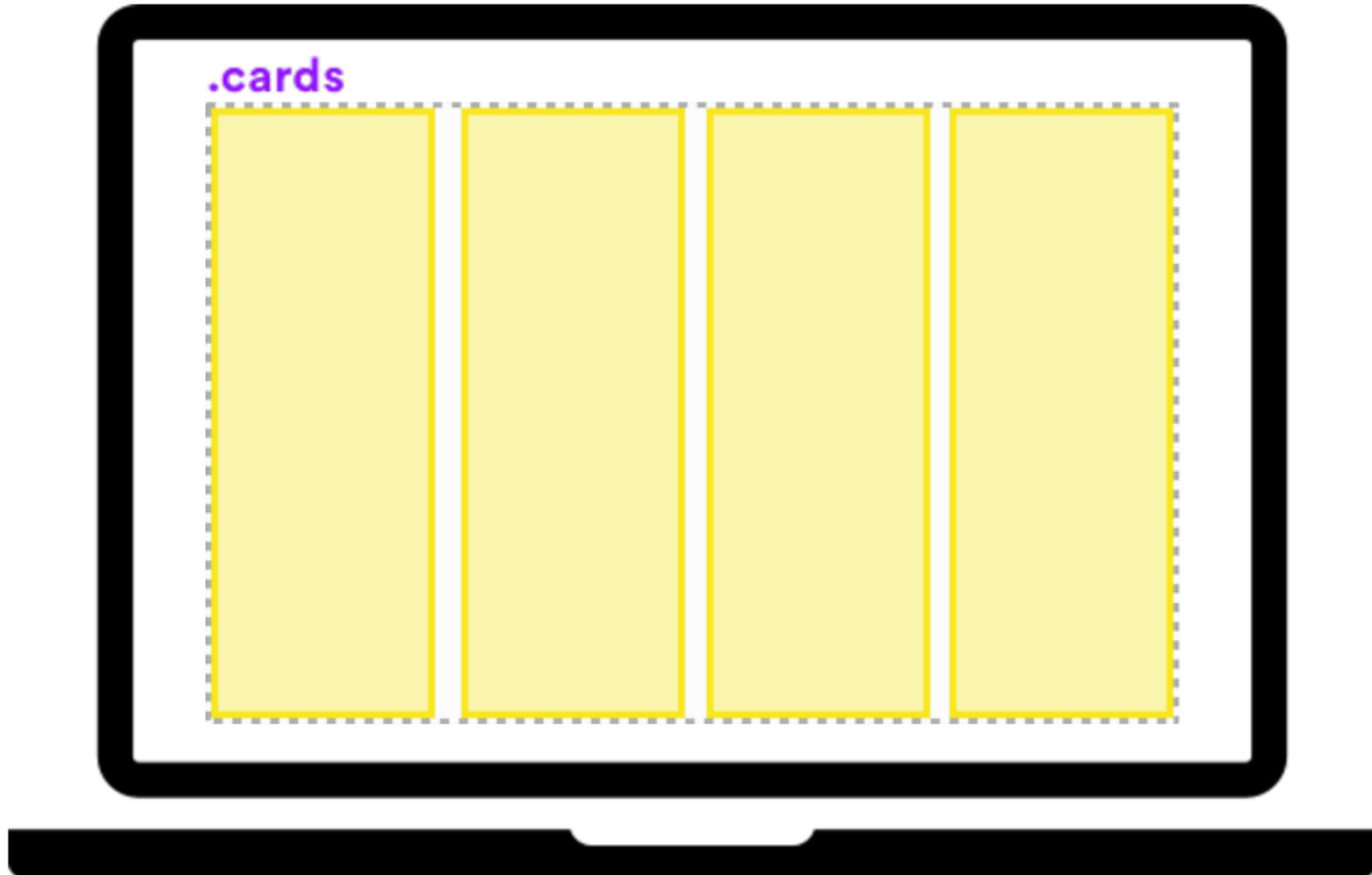
We can use the **CSS Grid**



```
.cards {  
  display: grid;  
}
```



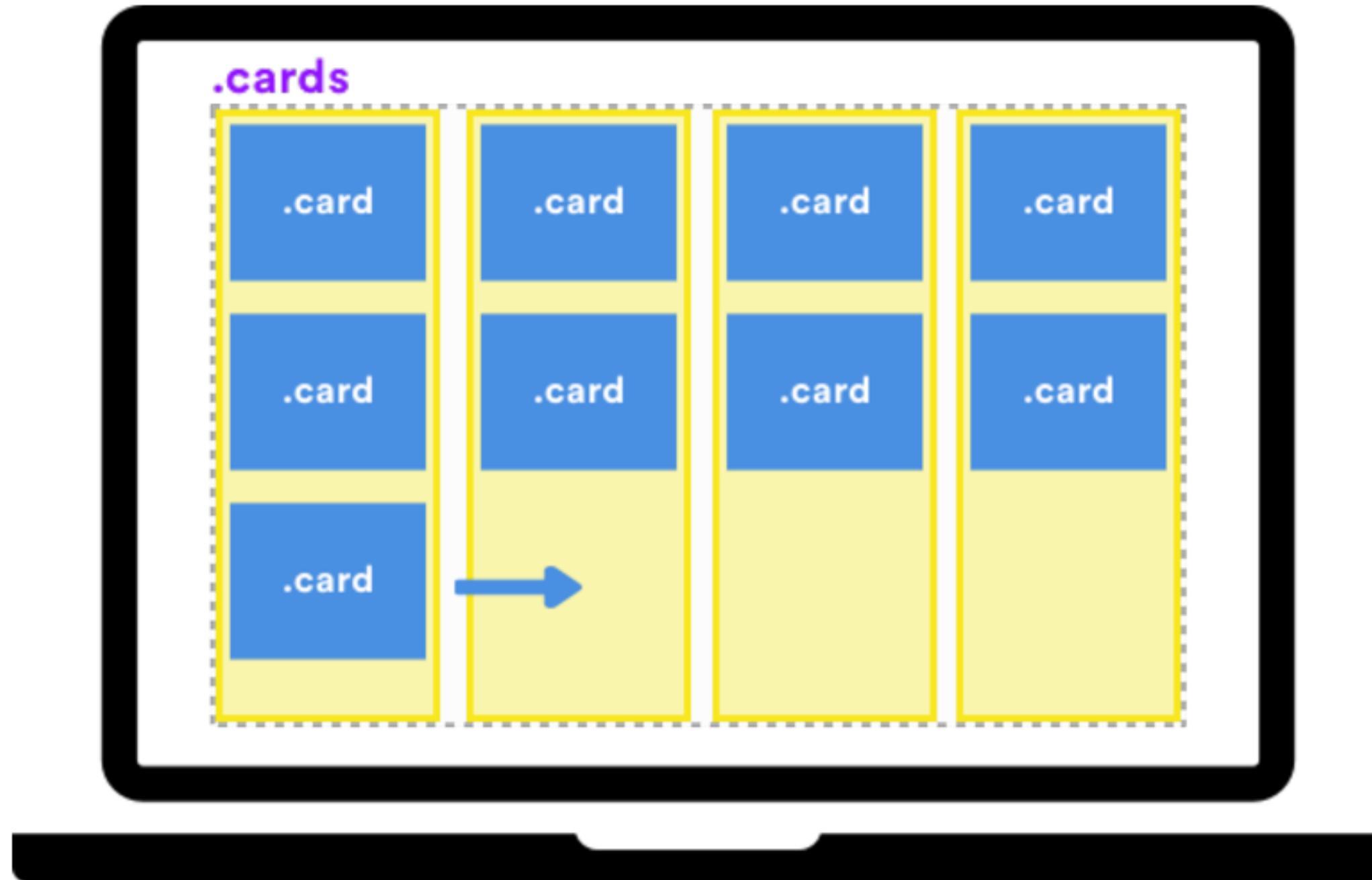
We then create **columns**



```
.cards {  
  display: grid;  
  grid-template-columns: 1fr 1fr 1fr 1fr;  
  grid-gap: 16px;  
}
```



Automatically cards fill the columns



```
.cards {  
  display: grid;  
  grid-template-columns: 1fr 1fr 1fr 1fr;  
  grid-gap: 16px;  
}
```



Demo



6- CSS grid

Let's inject our cards in a grid.

5 min

>

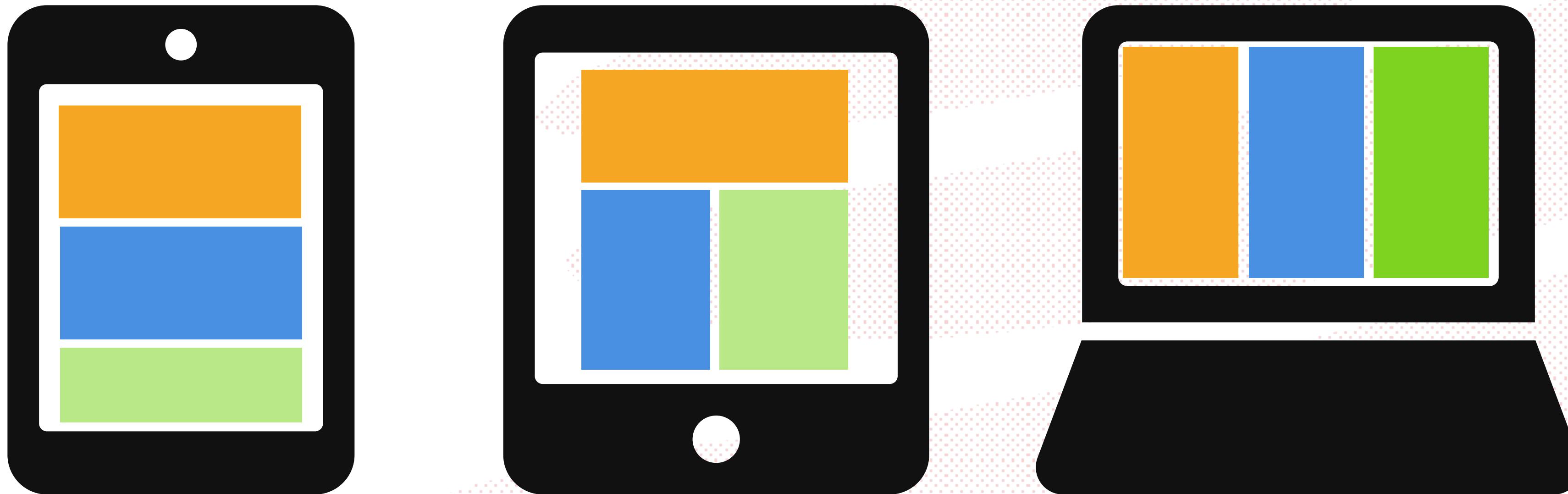


Web Development

Responsive Design



What is responsive design?



Let's use

Media queries

```
@media (max-width: 720px) {  
  .card {  
    grid-template-columns: 1fr;  
  }  
}
```



Demo



7- Responsive grid

Let's add media queries to our css

5 min

>



Web Development

Pushing to GitHub



0. Check your files and folders' names

First check that all your files and folders are correctly named:

- ✓ index.html ✓ style.css ✓ images ✓ profile-picture.png
- ✗ Index.html ✗ Style.css ✗ Images ✗ My profile picture!.png

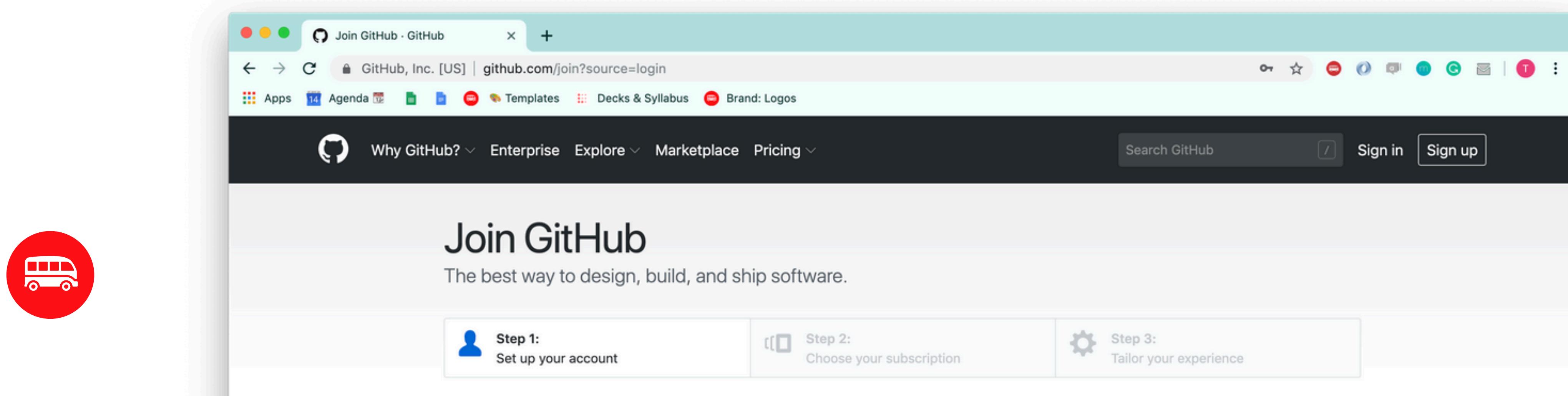
No space, no upcase letters, no accents, no special characters! Only downcase letters and - to separate words.



1. Create a Github account

Let's **sign up and create your account** on Github! Follow the steps below to join the Github's community:

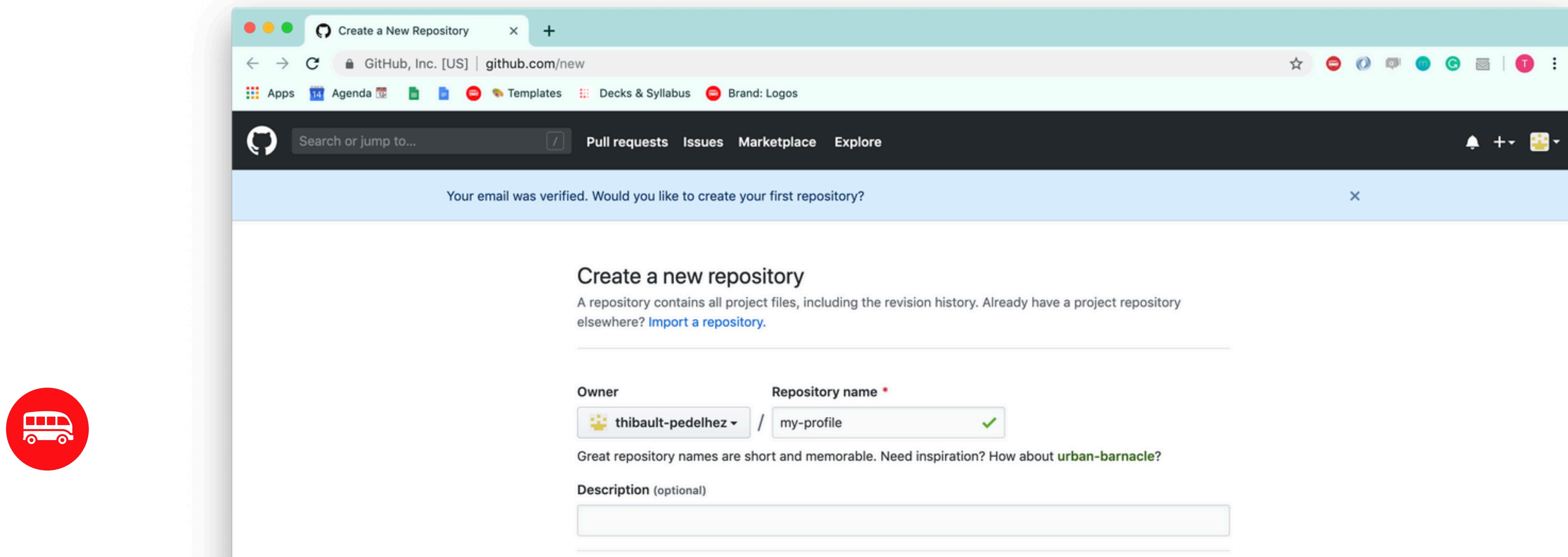
- Let's follow this naming convention for your username: **yourfirstname-yourlastname**. For instance, John Lennon's github username would have been: **john-lennon** 😊. But **tagada59** is still a good github username if you really like it!



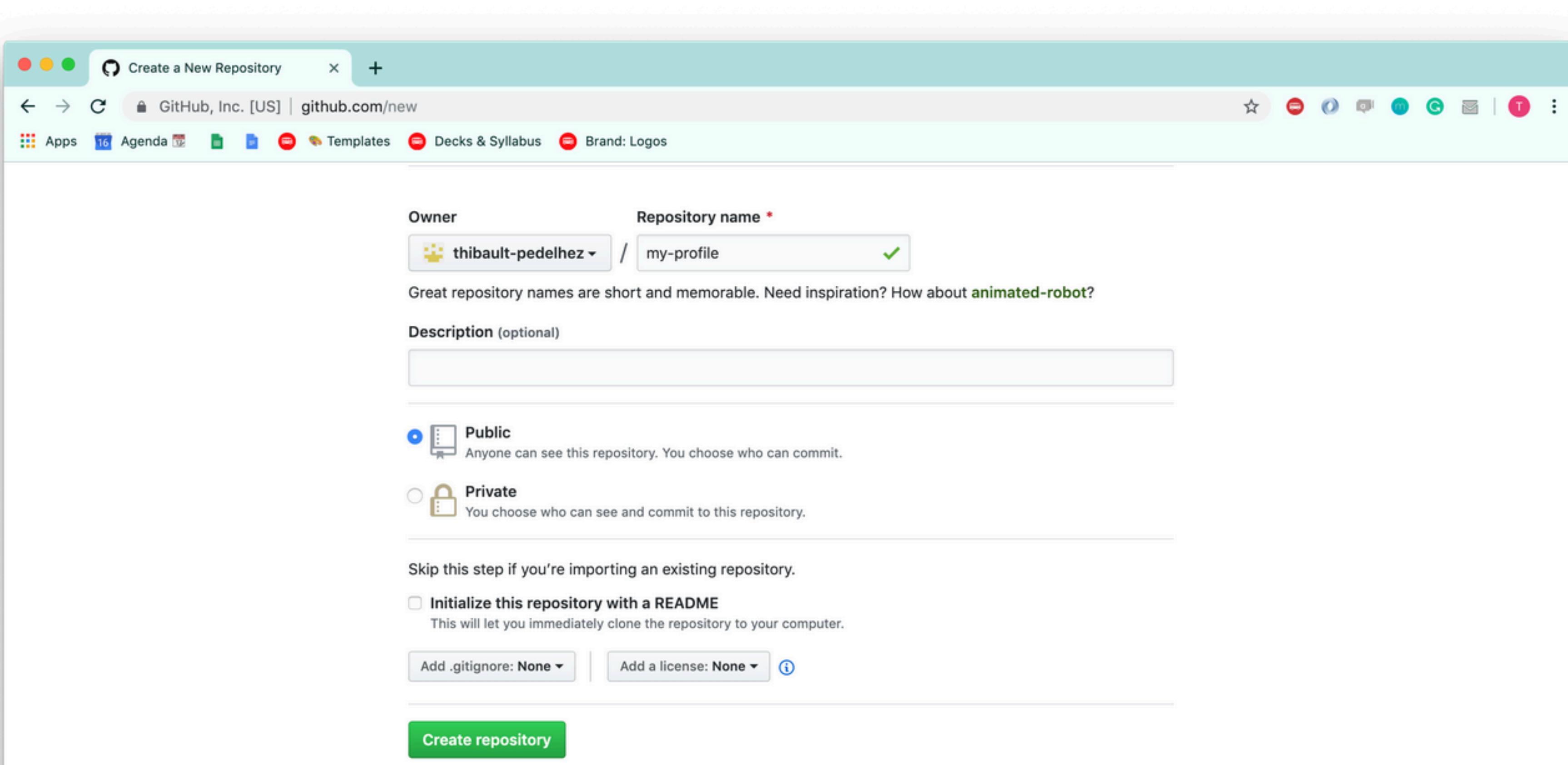
2. Create your first repository

Congratulations! You are ready to create your very first repository on GitHub. Let's do this:

- Let's call this repository **my-profile** when choosing a repository name:



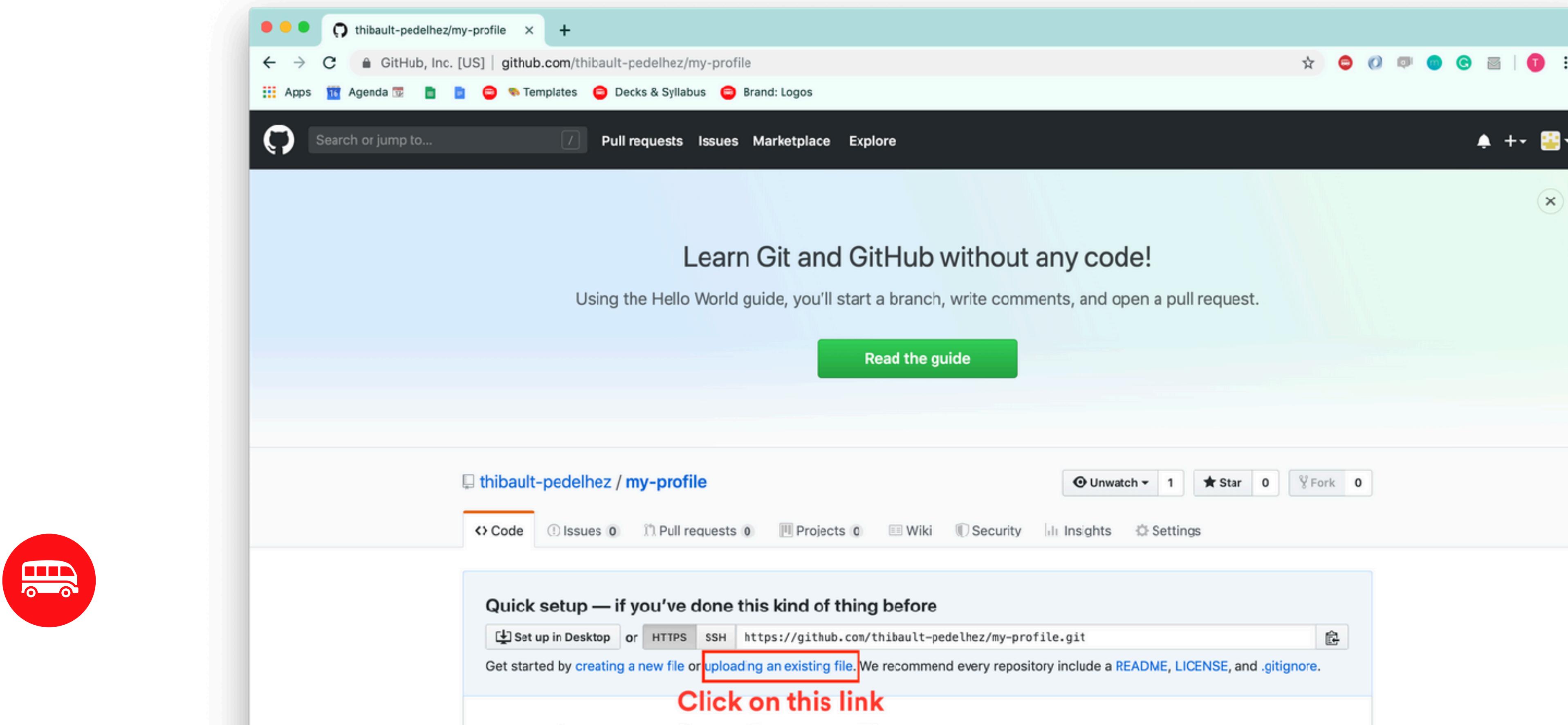
- Let's keep the **Public** option checked. You don't want to make this repository **Private** otherwise you won't be able to publish it online! No need to **initialize this repository with a README**, leave it blank and click on  **Create repository**



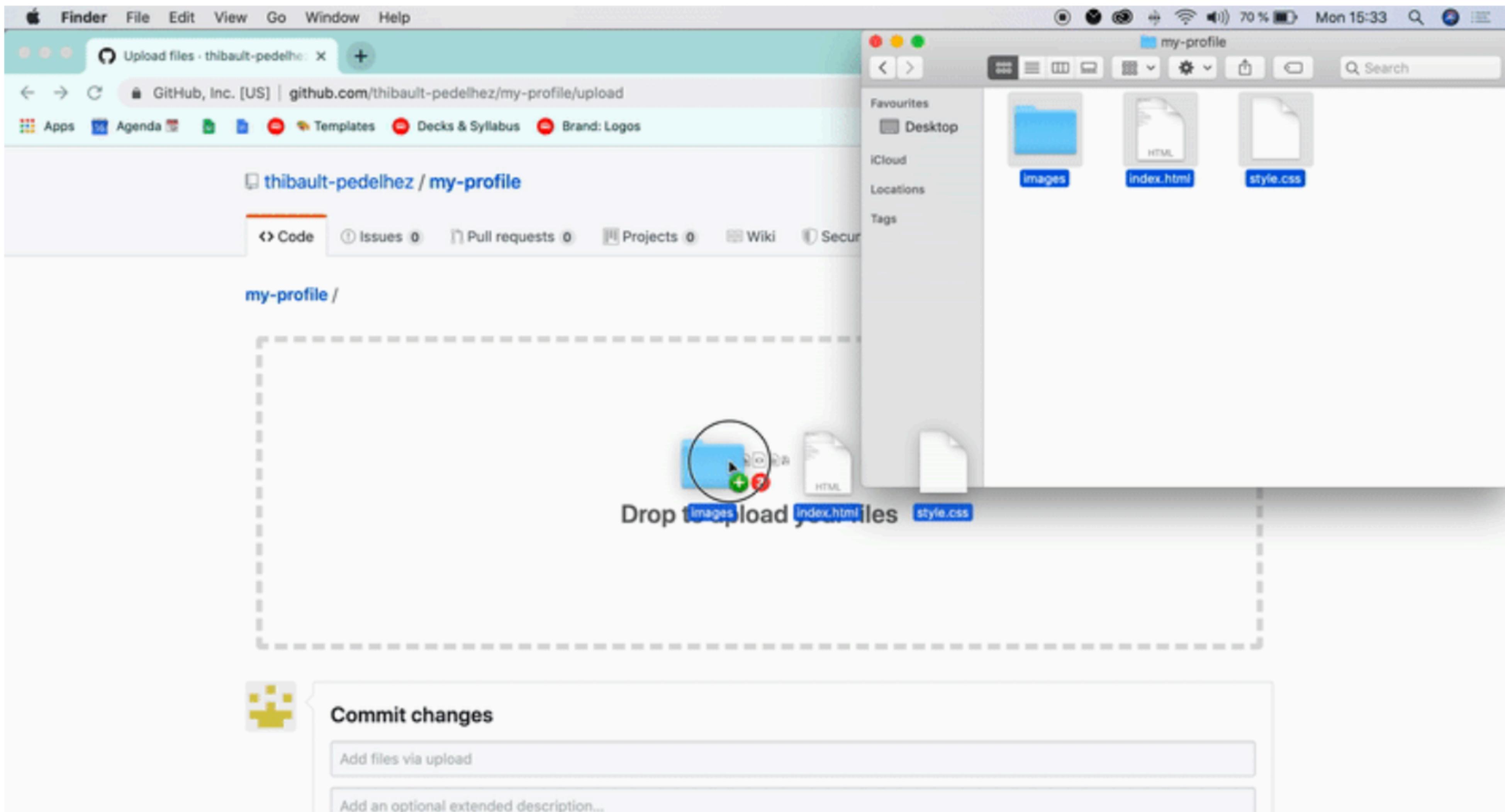
3. Add your profile's code to the Github repository

Well done! Now that you have created a repository on Github for your profile, you need to put your code inside! Very easy:

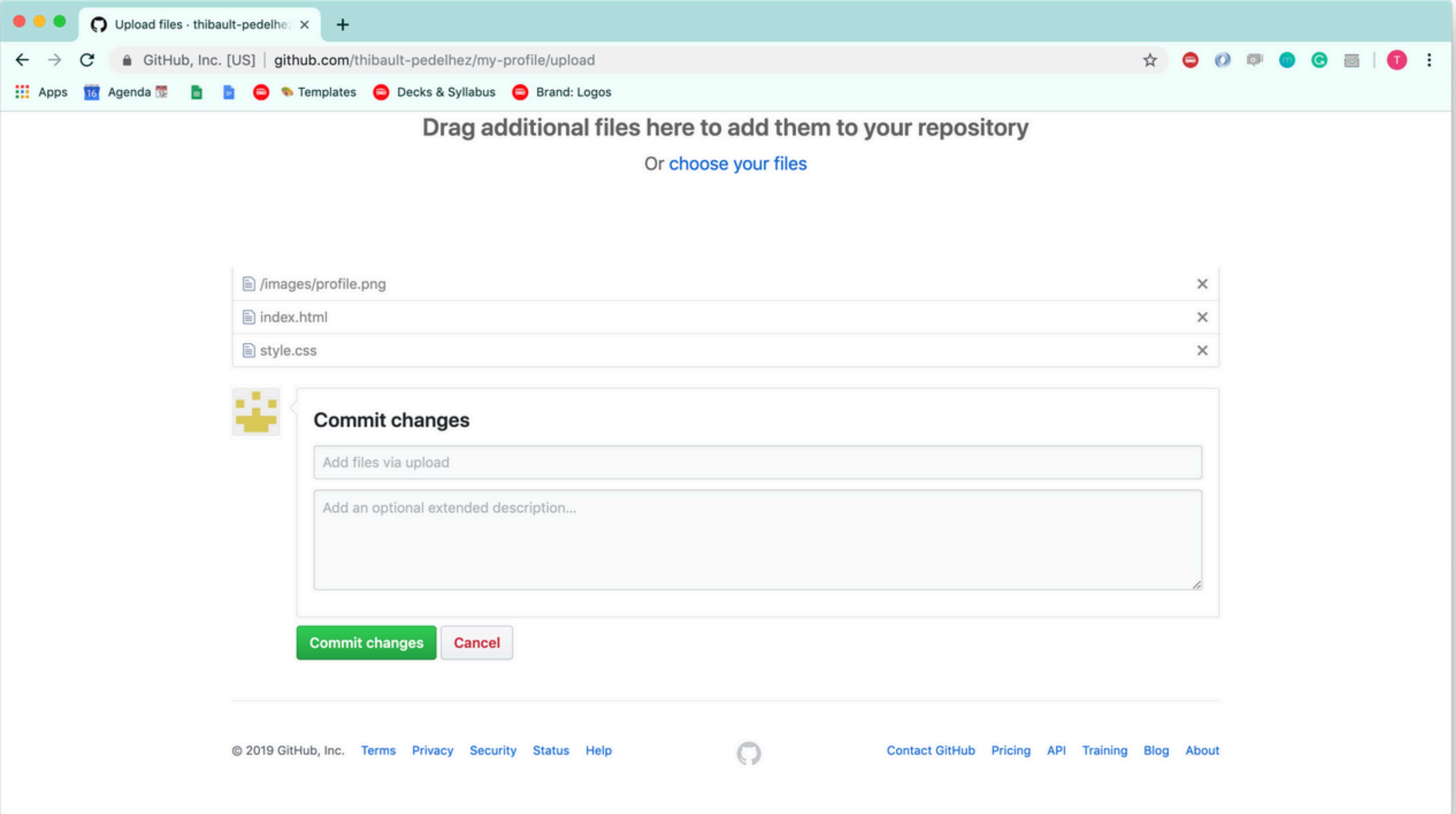
- Just click on **uploading an existing file** in the menu.



- Drag and drop the `style.css`, `index.html` files and the `images` folder. Be careful to do it the same way as showed below ⤵ You **must not** drag and drop the `my-profile` folder but the files and the folders which are inside 😊



- Now you can  Click on **Commit changes**, no need to change the two fields above.



The screenshot shows a web browser window for GitHub's file upload interface. The title bar says "Upload files · thibault-pedelhez". The address bar shows "GitHub, Inc. [US] | github.com/thibault-pedelhez/my-profile/upload". Below the address bar are various GitHub links like "Apps", "Agenda", "Templates", "Decks & Syllabus", and "Brand: Logos". The main content area has a large text box with "Drag additional files here to add them to your repository" and a link "Or choose your files". Below this, three files are listed: "/images/profile.png", "index.html", and "style.css", each with a delete "x" button. A modal window titled "Commit changes" is open in the center. It contains a "Commit changes" button with a yellow plus icon, a "Cancel" button, and two input fields: "Add files via upload" and "Add an optional extended description...". At the bottom of the modal is a scrollable text area. The footer of the page includes a red circular icon with a white bus icon, copyright information ("© 2019 GitHub, Inc. Terms Privacy Security Status Help"), GitHub logo, and navigation links ("Contact GitHub Pricing API Training Blog About").

- You should arrive on this page 😊👏

The screenshot shows a GitHub repository page for the user 'thibault-pedelhez' with the repository name 'my-profile'. The page includes a navigation bar with links for Pull requests, Issues, Marketplace, and Explore. Below the navigation is a search bar and a header with the repository name and statistics: 1 commit, 1 branch, 0 releases, and 1 contributor. A 'New pull request' button is visible. The main content area displays a commit from 'thibault-pedelhez' adding files via upload, with three files listed: 'images', 'index.html', and 'style.css', all added 2 minutes ago. A call-to-action button 'Add a README' is present at the bottom. The footer contains standard GitHub links like Contact GitHub, Pricing, API, Training, Blog, and About.

thibault-pedelhez/my-profile

GitHub, Inc. [US] | github.com/thibault-pedelhez/my-profile

Apps Agenda Templates Decks & Syllabus Brand: Logos

Pull requests Issues Marketplace Explore

thibault-pedelhez / my-profile

Code Issues 0 Pull requests 0 Projects 0 Wiki Security Insights Settings

No description, website, or topics provided. Edit

Manage topics

1 commit 1 branch 0 releases 1 contributor

Branch: master New pull request Create new file Upload files Find File Clone or download

thibault-pedelhez Add files via upload Latest commit 08bb5f1 2 minutes ago

images Add files via upload 2 minutes ago

index.html Add files via upload 2 minutes ago

style.css Add files via upload 2 minutes ago

Add a README

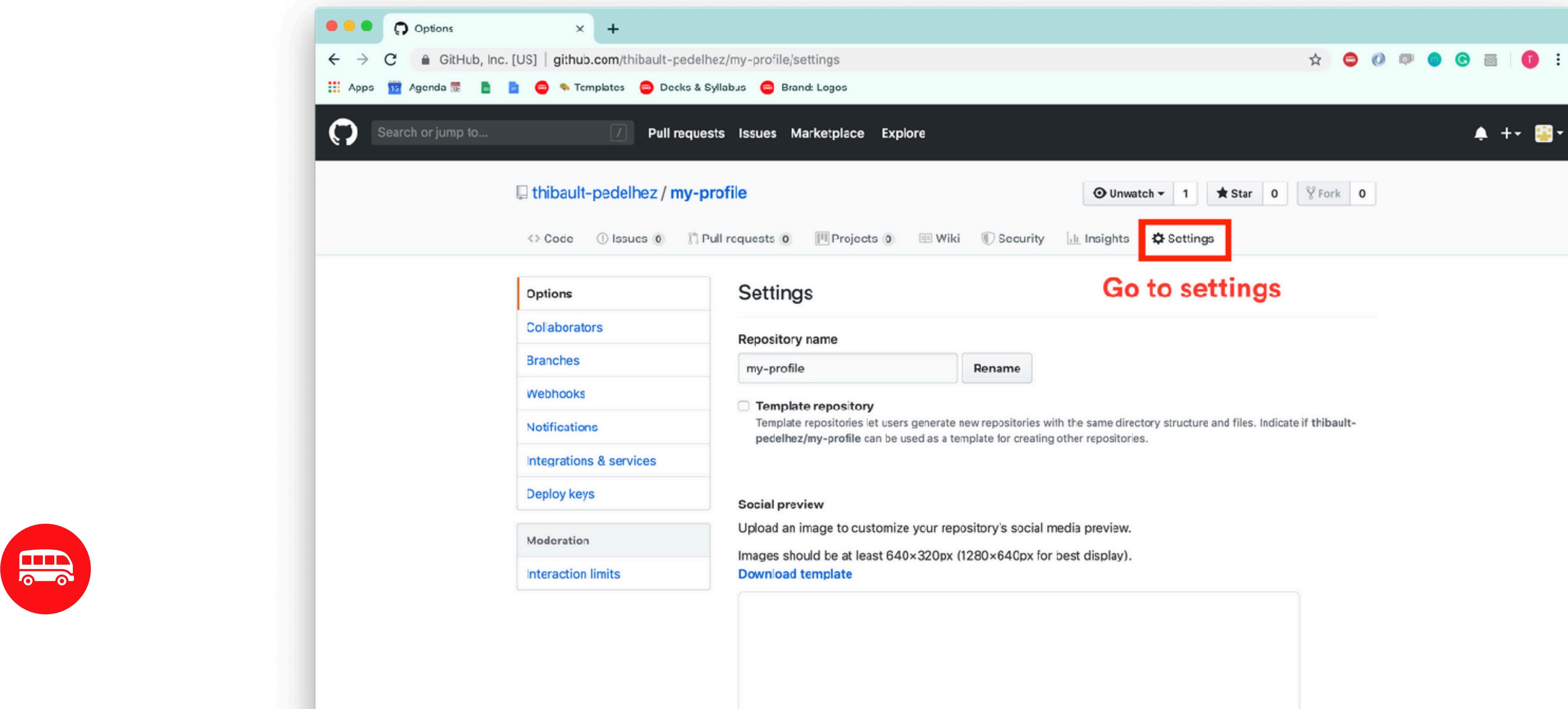
© 2019 GitHub, Inc. Terms Privacy Security Status Help

Contact GitHub Pricing API Training Blog About

4. Activate the “magic” setting ✨

Time to activate a Github repository setting that will automatically put you website online ✨. For that:

- Go to the repository's setting on Github.



- Scroll to the **Github Pages** section of the settings and Save the master branch. That's all you need to do, normally Github will generate the automatic URL of your website and give it to you like below.

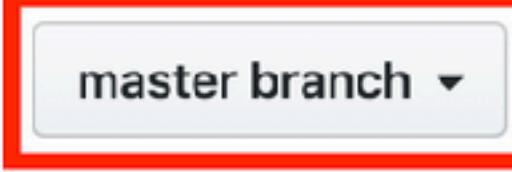
GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

✓ Your site is published at <https://thibault-pedelhez.github.io/my-profile/>  **2. It will create the URL of your website**

Source

Your GitHub Pages site is currently being built from the master branch. [Learn more.](#)

 master branch ▾

1. Activate the master branch

Theme Chooser

Select a theme to publish your site with a Jekyll theme. [Learn more.](#)

 Choose a theme

Now you just have to wait a few minutes and you should see your profile page live on this automatic Github URL 😎😎😎.

