

# **HTML & CSS Workshop**

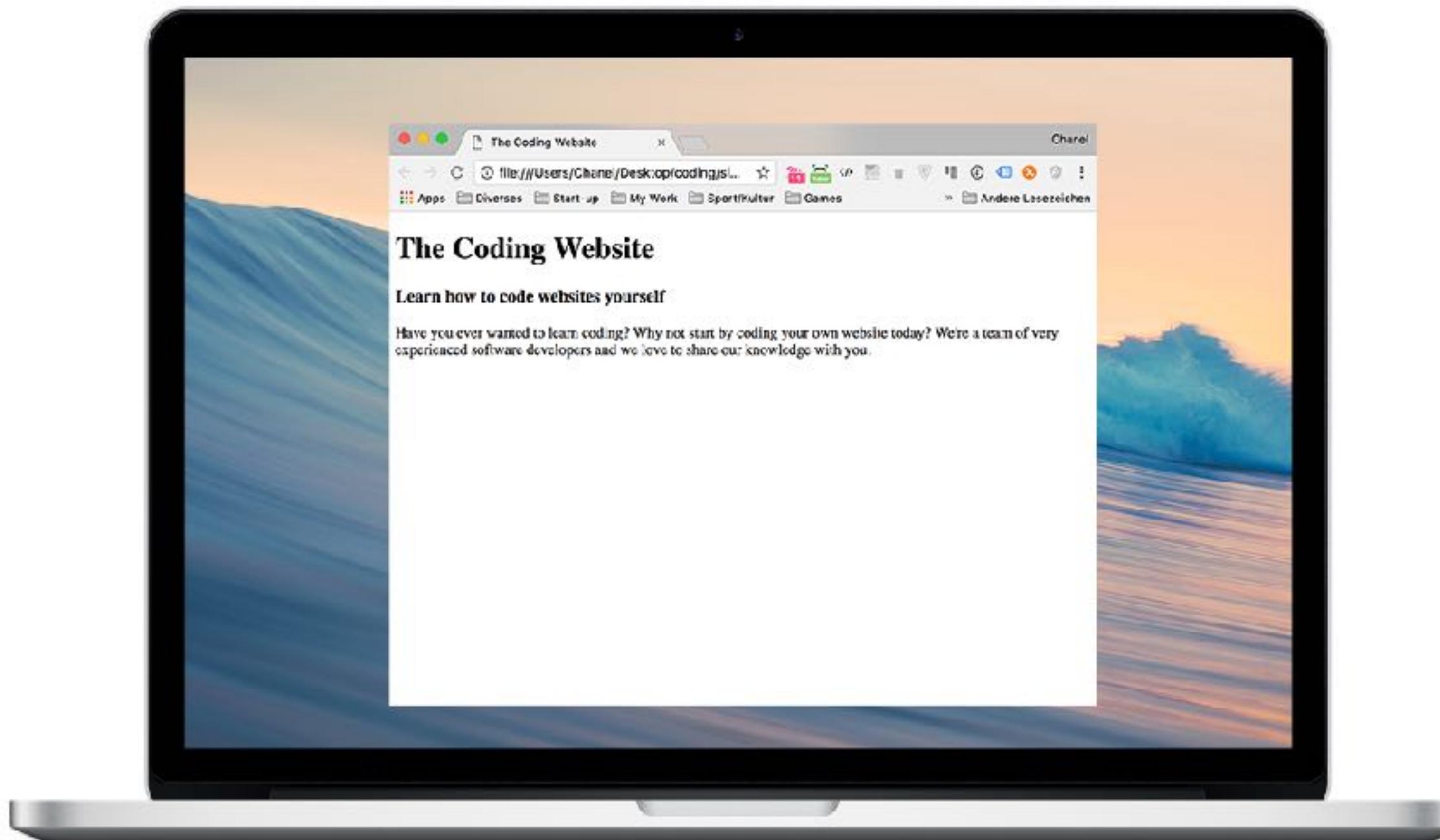
---

Let's create a Landing Page!

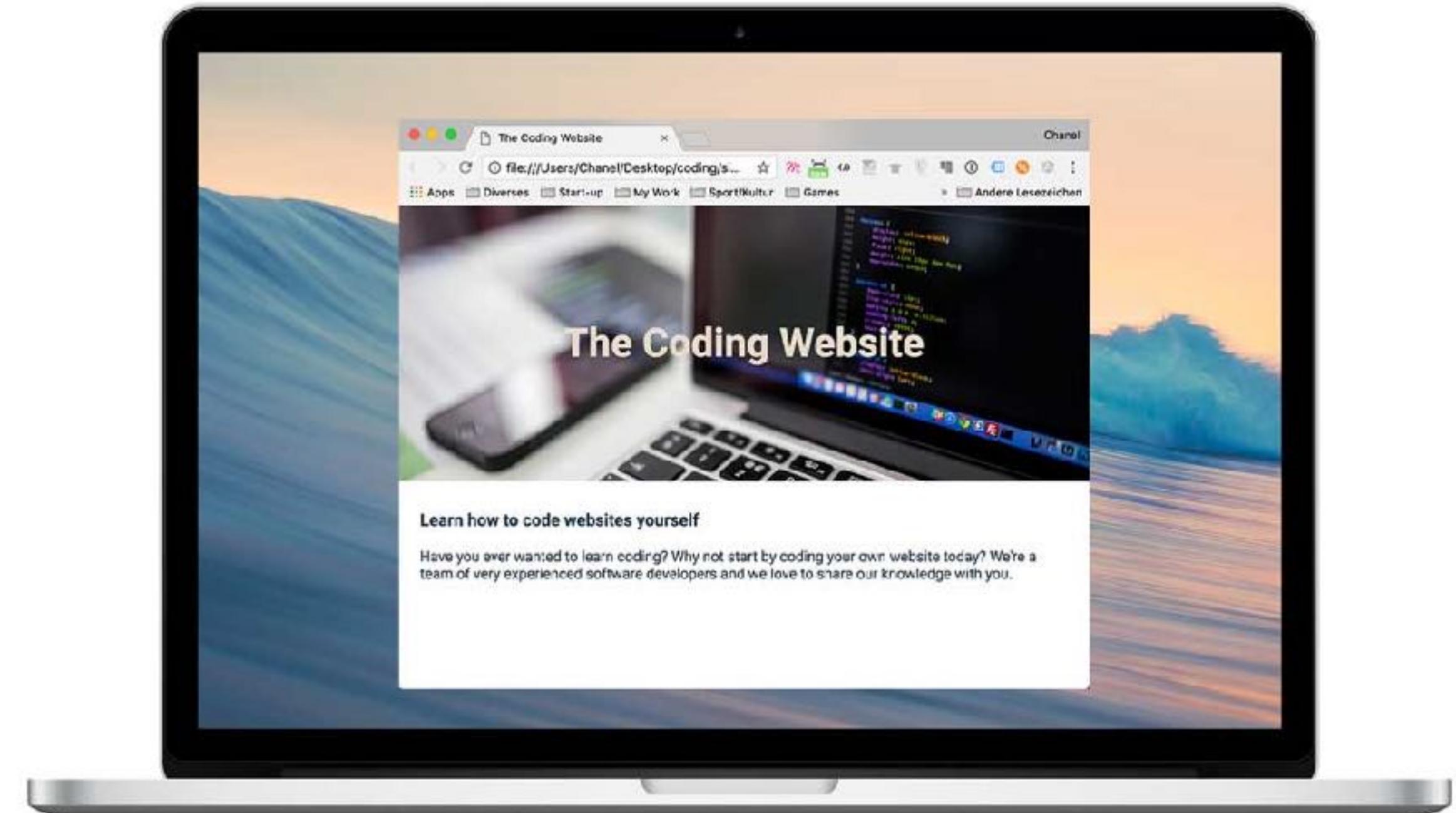
# What we'll learn

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How to write a **HTML** document



How to style the document using **CSS**



# How this works

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-  First we'll look at the **Theory**
-  Then we'll show you how it can be done (**we code, you watch**)
-  You go!

# What you'll need

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A Text Editor

A Web Browser



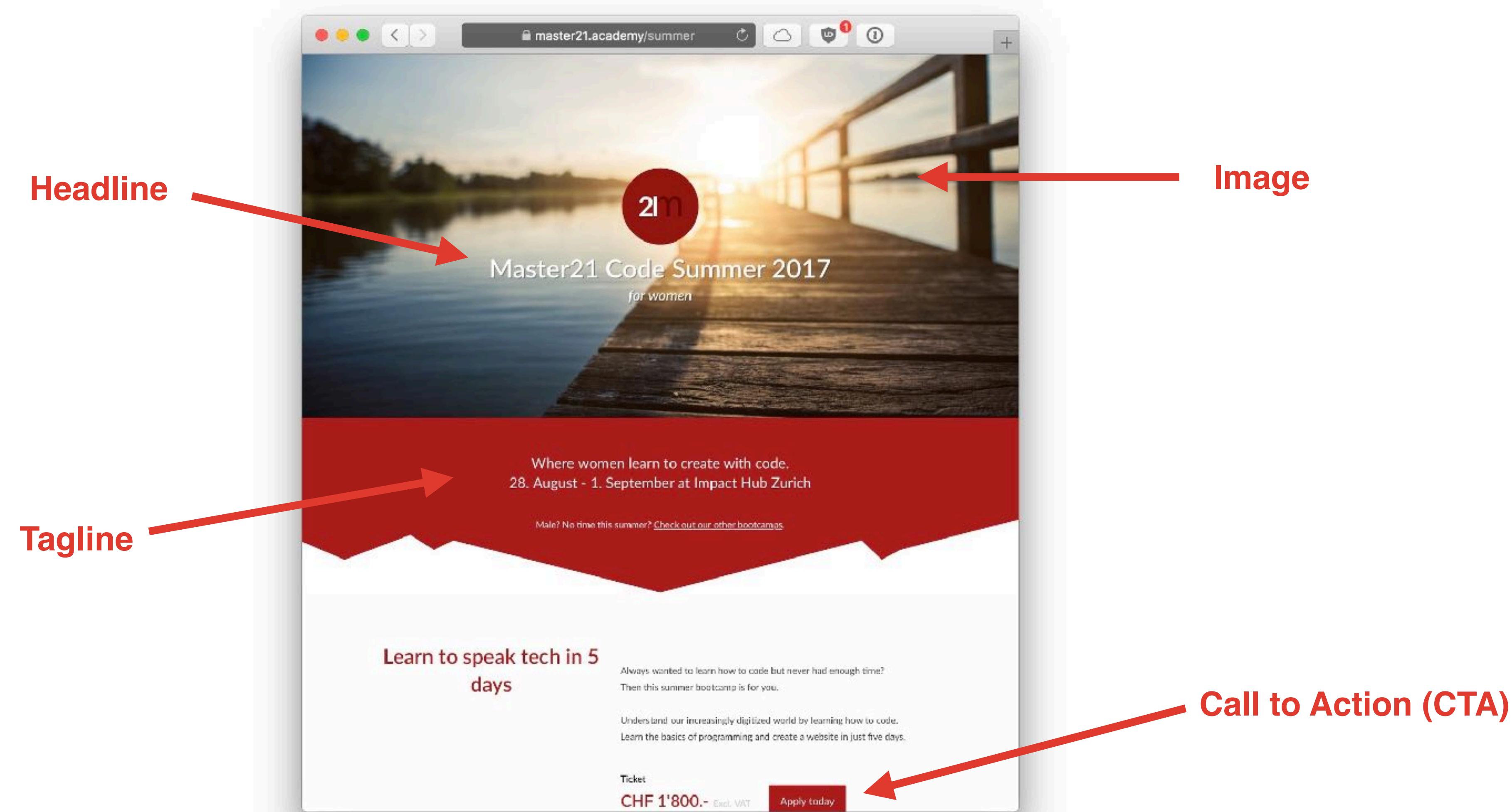
<https://www.google.com/chrome/>

# Why a Landing Page?

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- Great way to present initial offering ...
- ... to test the possible demand of a product ...
- ... and to collect possible contacts!

# Content of a Landing Page



# HTML - Theory

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# What does HTML stand for?

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**HTML** stands for **HyperText Markup Language**

## **Hypertext**

Overcoming the constraints of written text. *Interactive*

## **Markup Language**

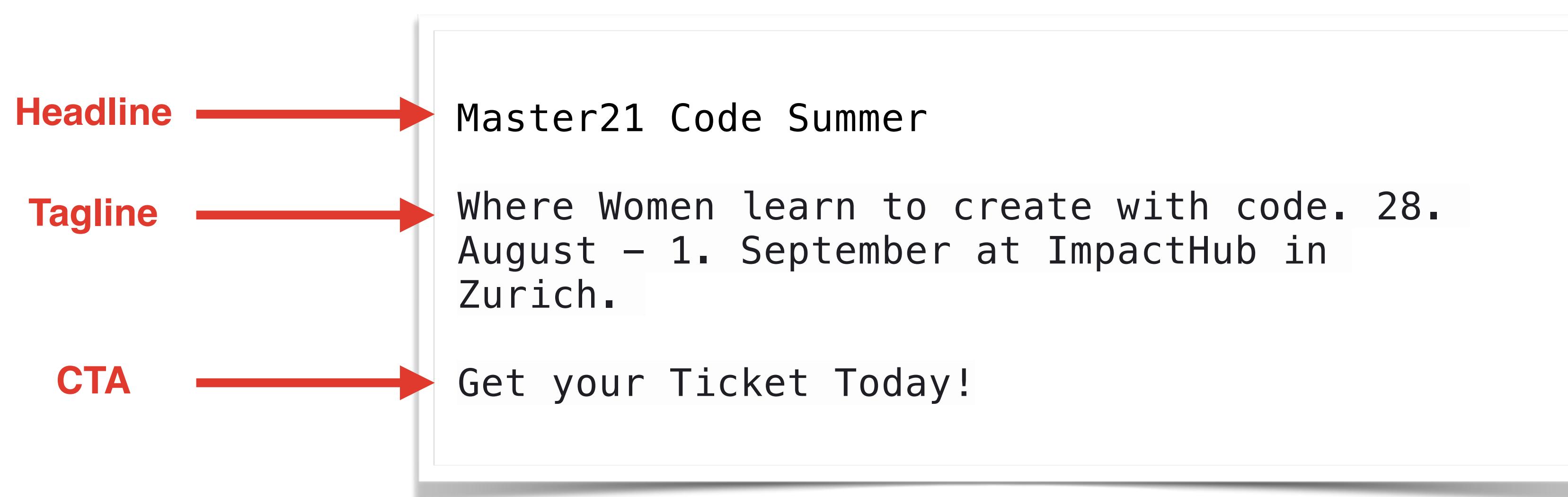
A way to literally “Mark Up” a document to specify attributes, like different font sizes, lists, links to other webpages and images.

# First - get some content!

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Before you start making a web page, you've got to figure out what content you are going to use.

We'll start with the **Headline**, **Tagline** and **Call to Action** of our page.

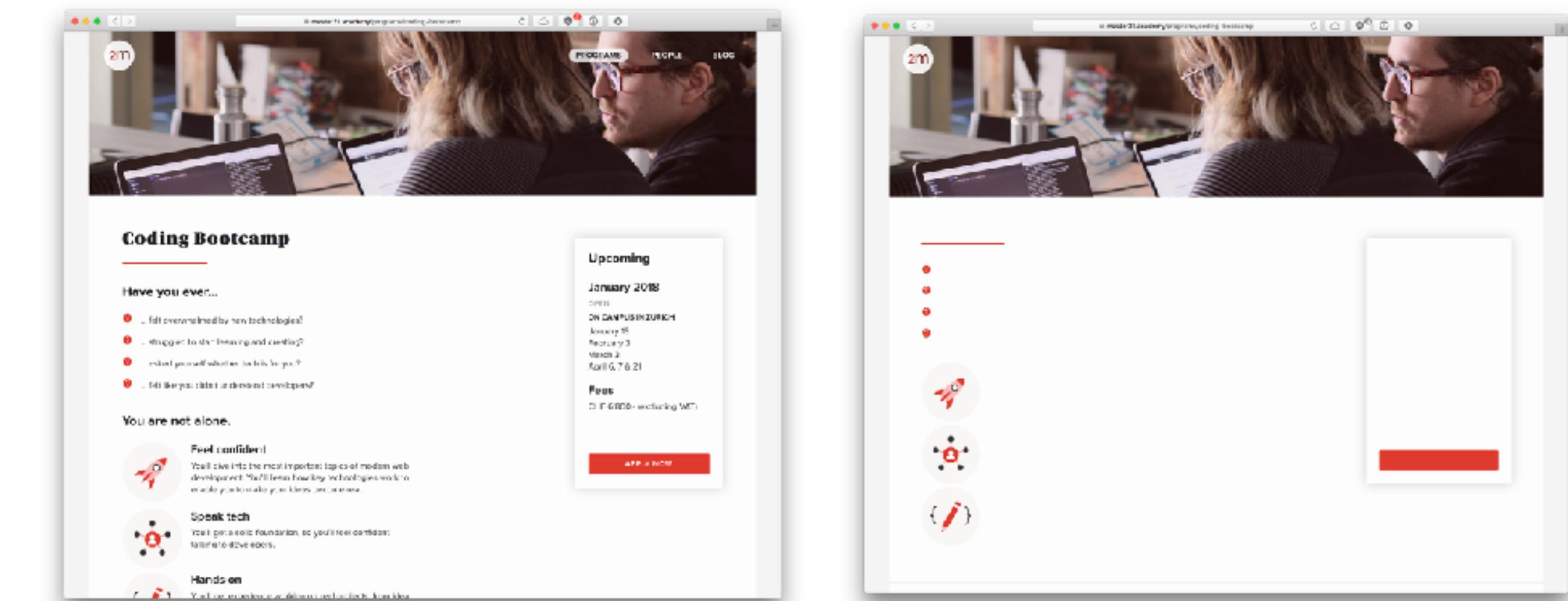


“Click away from the pen tool, put down your Pantone book, stop rearranging your layers, close your stock texture folder, log out of your Dribble and god dammit, hug your copywriter...

**Designing for the web is still about words.”**

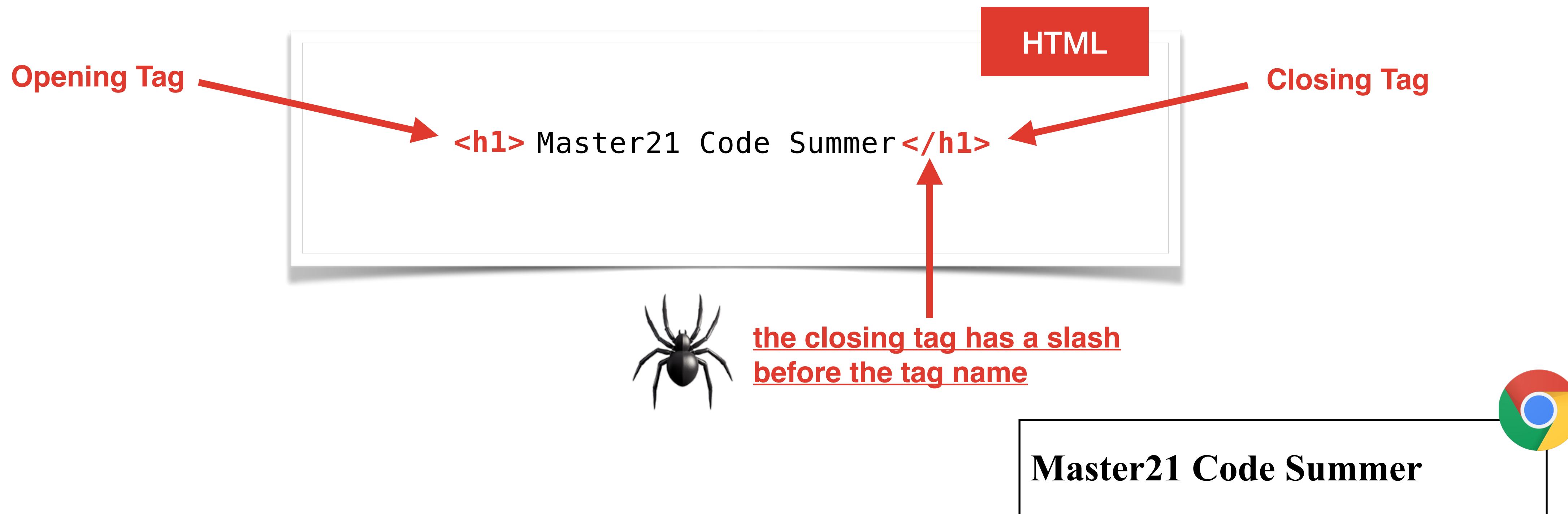
---

**Mig Reyes**  
Designer, Basecamp



# Core Syntax

Most of the time, you'll put your content in between **HTML tags**, which have corresponding **opening** and **closing** versions.

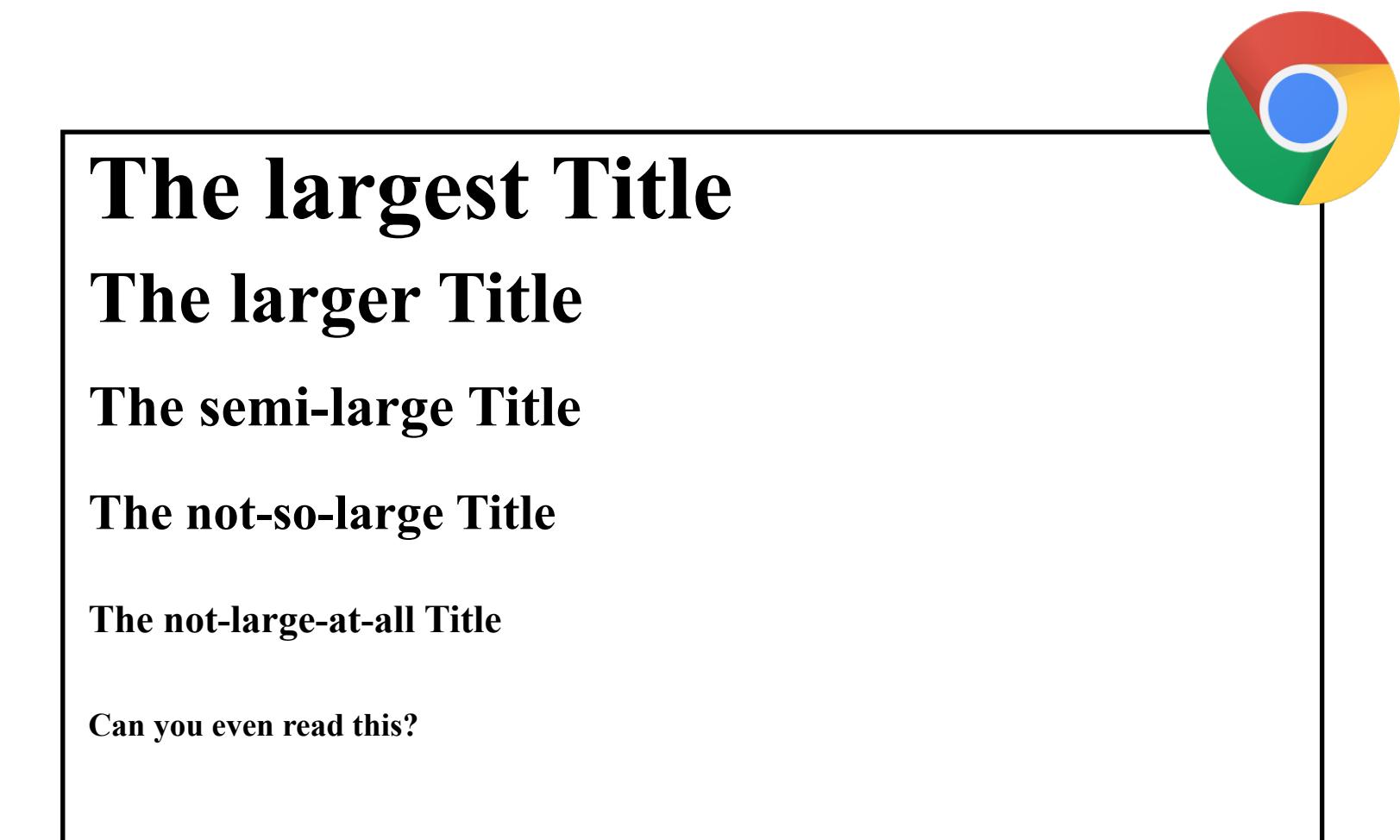


# Use heading tags to define your content hierarchy

Higher heading numbers mean the content that appears between the headings is less important than lower numbers.

HTML

```
<h1>The largest Title</h1> ← More important  
<h2>The large Title</h2>  
<h3>The semi-large Title</h3>  
<h4>The not-so-large Title</h4>  
<h5>The not-large-at-all Title</h5>  
<h6>Can you even read this?</h6> ← Less important
```



Generally speaking:

The **page title/company name** goes in the **<h1>**

The **page main subject** goes in the **<h2>**

**<h3>** through **<h6>** are used to organize other divisions of your content.

# Use paragraph tags for non-heading text

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**< p >** is called a paragraph tag.

HTML

```
<h1>Master21 Code Summer</h1>  
  
<p>Where Women learn to create with code.  
28. August - 1. September at ImpactHub in  
Zurich.</p>
```



Add paragraph content (where necessary) in between heading tags.

# Use an unordered list to display a list of things

---

**<ul>** stands for unordered list.

Each list item needs to be put inside of an **<li>** tag.

HTML

```
<h2>What to bring</h2>  
  
unordered list → <ul>  
list item →   <li>Personal Laptop</li>  
              <li>Pen & Paper to take notes</li>  
              <li>Swimsuit</li>  
            </ul>
```

**What to bring**

- Personal Laptop
- Pen & Paper to take notes
- Swimsuit



# Nesting tags

Important: HTML tags don't have to always just contain text, **they can contain other HTML tags.**

HTML

```
<p>Where Women learn to create with code.  
28. August – 1. September at ImpactHub in  
Zurich.</p>  
<h2>What to bring</h2>  
  
parent → <ul>  
children ← <li>Personal Laptop</li>  
           <li>Pen & Paper to take notes</li>  
           <li>Swimsuit</li>  
         </ul>
```

A tag that contains other tags is called the **parent**.

The tags contained in a parent tag are called **children**.

# Keep your HTML easy to read

Not indenting child tags makes HTML hard to read. Make sure you keep your HTML clean & neat all the time!



HTML

```
<p>Where Women learn to create with code.  
28. August – 1. September at ImpactHub in  
Zurich.</p>  
<h2>What to bring</h2>  
<ul><li>Personal Laptop</li><li>Pen & Paper  
to take notes</li><li>Swimsuit</li></ul>
```



This is valid HTML,  
but it's really hard to read.

# Use an ordered list to show list items in a certain order

If the content in your list does refer to steps to be followed, use an ordered list.

HTML

```
<h2>How to learn HTML</h2>
<ol>
  <li>Listen to the Theory part</li>
  <li>See how it's done in the Demo</li>
  <li>Try it out yourself</li>
  <li>Profit!</li>
</ol>
```

ordered list →

list item →

## How to learn HTML

1. Listen to the Theory part
2. See how it's done in the Demo
3. Try it out yourself
4. Profit!



# Use the anchor tag to add links

---

You can link to other **HTML** documents using the **<a>** (anchor) tag.

HTML

```
<h1>Master21 Code Summer</h1>  
  
<p>Where Women learn to create with code. 28.  
August – 1. September at ImpactHub in Zurich.</p>  
  
<a href="/apply.html">Apply Today</a>
```



**Master21 Code Summer**

Where Women learn to create with code. 28. August - 1. September at ImpactHub in Zurich.

[Apply Today](#)

# Not so fast...

HTML tags can include **attributes**.

HTML

```
<a href="/apply.html">Apply Today</a>
```



Attributes provide more information about the contents of an element.

In time you will learn how to look up attributes using the documentation.

## href

Contains a URL or a URL fragment that the hyperlink points to.

A URL fragment is a name preceded by a hash mark (#), which specifies an internal target location (an ID of an HTML element) within the current document. URLs are not restricted to Web (HTTP)-based documents, but can use any protocol supported by the browser. For example, `file:`, `ftp:`, and `mailto:` work in most browsers.

This attribute may be omitted (as of HTML5) to create a placeholder link. A placeholder link resembles a traditional hyperlink, but does not lead anywhere.

**Note:** You can use `href="#top"` or the empty fragment `href="#"` to link to the top of the current page. *This behavior is specified by HTML5.*

# How to add images to your document

use the **<img>** tag to embed images on your page.

HTML

```
<h1>Master21 Code Summer</h1>  

```

```
<p>Where Women learn to create with code. 28.  
August - 1. September at ImpactHub in Zurich.</p>
```



In this case the **<img>** tag  
has two attributes and no  
closing tag!



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# Wrapping everything in the body

---

Any content that appears on a web page should be in between a **<body>** tag.

## HTML

```
<bod>
<h1>Master21 Code Summer</h1>


<p>Where Women learn to create with code. 28.
August – 1. September at ImpactHub in Zurich.</p>

<h2>How to learn HTML</h2>

<ol>
  <li>Listen to the Theory part</li>
  <li>See how it's done in the Demo</li>
  <li>Try it out yourself</li>
  <li>Profit!</li>
</ol>
</bod>
```

**<body>** doesn't display anything, but helps to keep the page content organized.

# Add a head tag

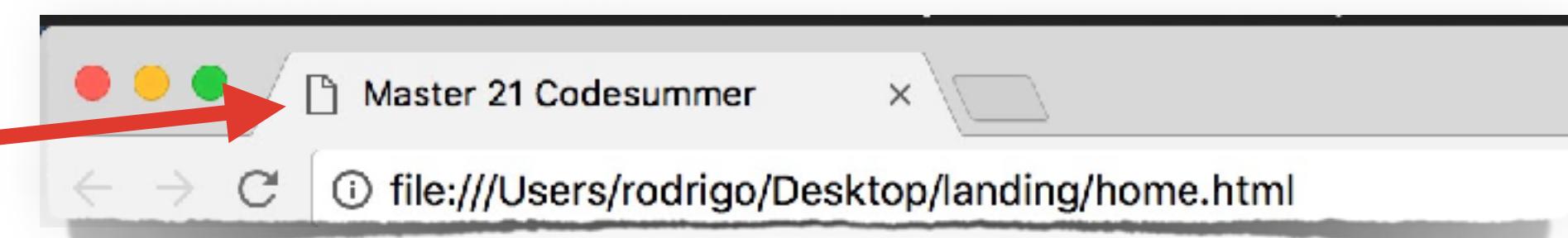
---

Non-visible stuff goes in the `<head>` tag.

HTML

```
<head>
  <title>Master21 Codesummer</title>
</head>
<body>
  <h1>Master21 Code Summer</h1>
  ...
</body>
```

In this case the `<title>` tag  
changes the name of the  
tab in the Browser.



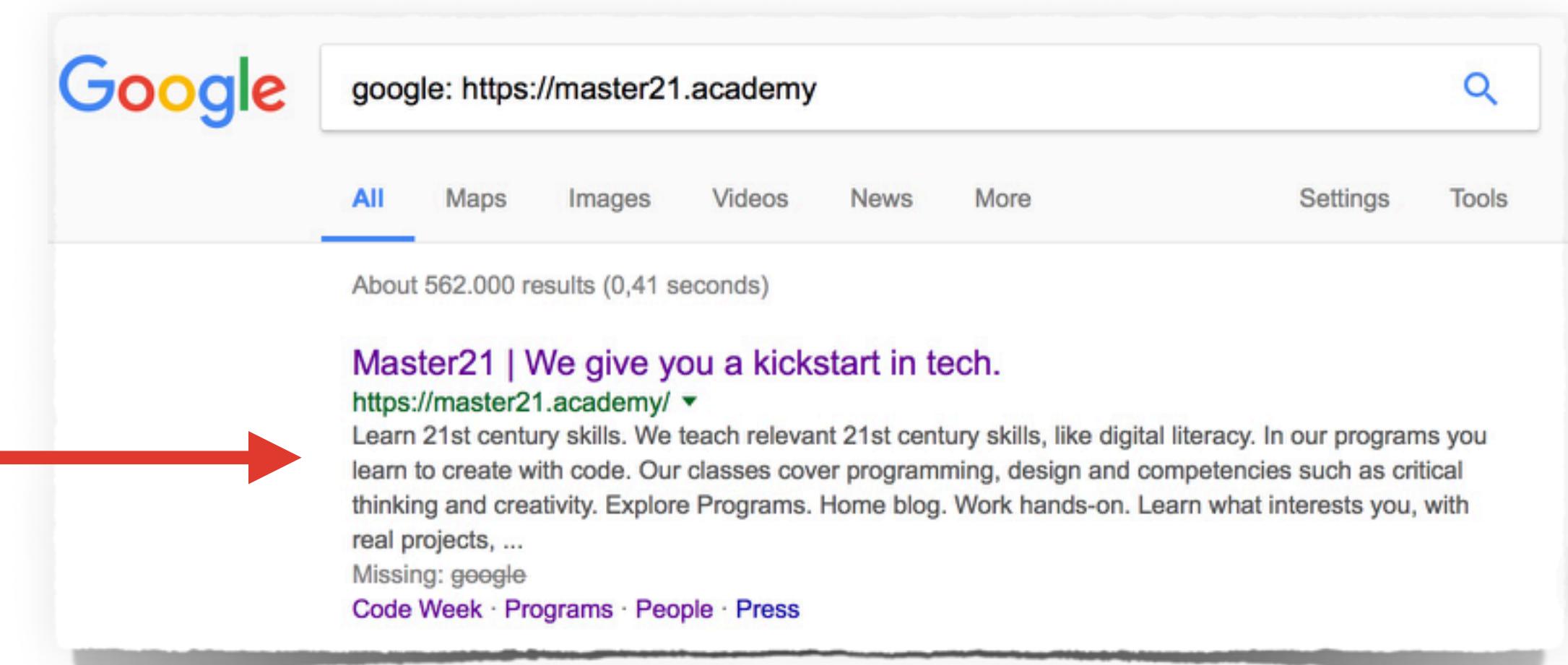
# The meta tag

Metadata for your page goes into <meta> tags.

HTML

```
<head>
  <title>Master21 Codesummer</title>
  <meta name="description" content="Learn 21st century skills. We teach
relevant 21st century skills, like digital literacy...">
</head>
```

Google will use the information  
provided by the meta tag  
to populate search results.



# The HTML parent tag

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All of your HTML goes inside of the <html> tag.



HTML

```
<html>
  <head>
    <title>Master21 Codesummer</title>
    ...
  </head>
  <body>
    <h1>Master21 Code Summer</h1>
    ...
  </body>
</html>
```

Notice that we're indenting again so it's  
easy to see the parent/child relationship

# Set the DOCTYPE to html

---

The DOCTYPE sets the HTML version.

```
<!DOCTYPE html>
<html>
  <head>
  </head>
  <body>
    <h1>Master21 Code Summer</h1>
    ...
  </body>
</html>
```

HTML

The browser can make better decisions about how to display your page when it knows which version of HTML you're using.

# Our Landing Page so far

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### What to bring

- Personal Laptop
- Pen & Paper to take notes
- Swimsuit

### How to learn HTML

1. Listen to the Theory part
2. See how it's done in the Demo
3. Try it out yourself
4. Profit!

# HTML - Demo 😎

---

# HTML - Your Turn

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# master21.academy/landing

---

- Go to the website listed above and work through section **1 & 2**.
- Don't forget to open the HTML document in your browsers to see a preview!

The screenshot shows a web browser displaying the URL `master21.academy/guides/landing`. The page features a video of a person with a beard working on a laptop. Overlaid on the video is the text "Learn HTML and CSS". At the top right of the page are links for "PROGRAMS", "PEOPLE", and "BLOG". Below the video, a section titled "1. Let's get started" contains a numbered list of instructions:

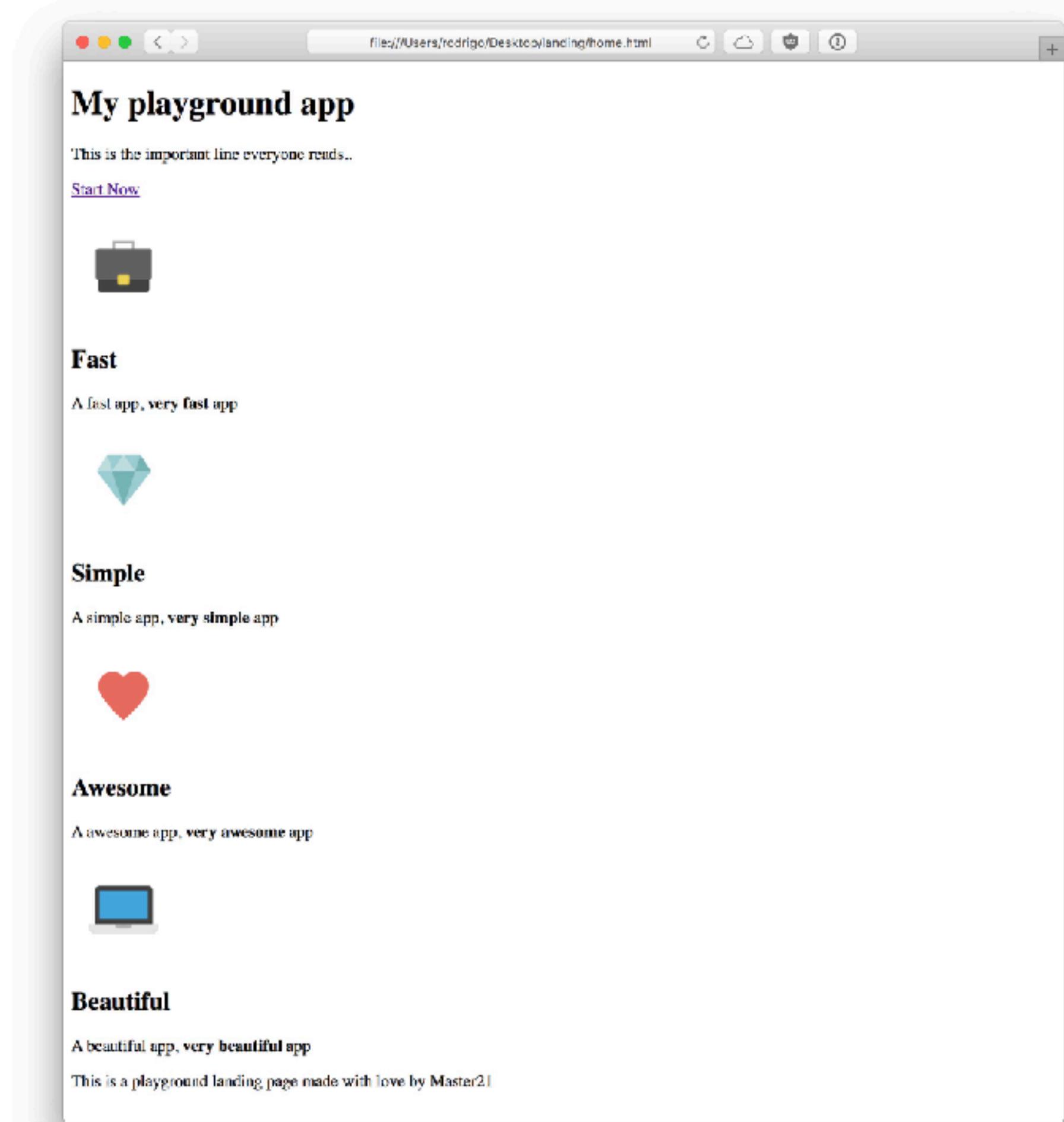
1. Start Sublime Text. It will open a new black window.
2. Create a folder `landing` on your Desktop. Drag & drop this folder in the Sublime Text window.
3. In Sublime Text left navigation:
  - Right click "New file"
  - Save it as `playground.html` with **Cmd + S** or **Ctrl + S**
  - Do the same to create a `style.css` file
  - Then "New Folder" and create an `images` folder
4. Finally double click on `playground.html` to open it with Chrome

Below the instructions, there is a small thumbnail image of a sunset or sunrise over water.

# Goal

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- What you should see in the end.
- Play around and add your own content!
- Time: 20 minutes



# Use the Documentation, Luke

- <https://developer.mozilla.org/en-US/docs/Web/HTML/Element>

The screenshot shows a web browser window displaying the MDN web docs HTML elements reference. The URL in the address bar is `https://developer.mozilla.org/en-US/docs/Web/HTML/Element`. The page title is "HTML elements reference". On the left, there's a sidebar with navigation links like "Web technology for developers", "HTML", "HTML elements reference", "Related Topics", "HTML", "Tutorials", "HTML basics", and "References". The main content area starts with a paragraph about listing all HTML elements grouped by function. Below that is a callout box with a tip about HTML basics. The "Main root" section features a table for the <html> element. The "Document metadata" section explains what metadata is and its purpose.

MDN web docs

Technologies ▾ References & Guides ▾ Feedback ▾

## HTML elements reference

Web technology for developers ▾

HTML ▾

HTML elements reference

Related Topics

HTML

Tutorials:

HTML basics

- ▶ Introduction to HTML
- ▶ Multimedia and embedding

References:

- ▼ HTML elements
  - <a>
  - <abbr>
  - <acronym>
  - <address>
  - <applet>
  - <area>
  - <article>
  - <aside>
  - <audio>
  - <b>
  - <base>
  - <basefont>

This page lists all the HTML elements. They are grouped by function to help you find what you have in mind easily.

For more information about the basics of HTML elements and attributes, see the section on elements in the [Introduction to HTML article](#).

### Main root

Element	Description
<html>	The HTML <html> element represents the root (top-level element) of an HTML document, so it is also referred to as the <i>root element</i> . All other elements must be descendants of this element.

### Document metadata

Metadata contains information about the page. This includes information about styles, scripts and data to help software (search engines, browsers, etc.) use and render the page. Metadata for styles and scripts may be defined in the page or link to another file that has the information.

# **CSS - Theory Part I**

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## Introduction to CSS

# What does CSS stand for?

---

**CSS** stands for **Cascading Style Sheet**

## **Cascading**

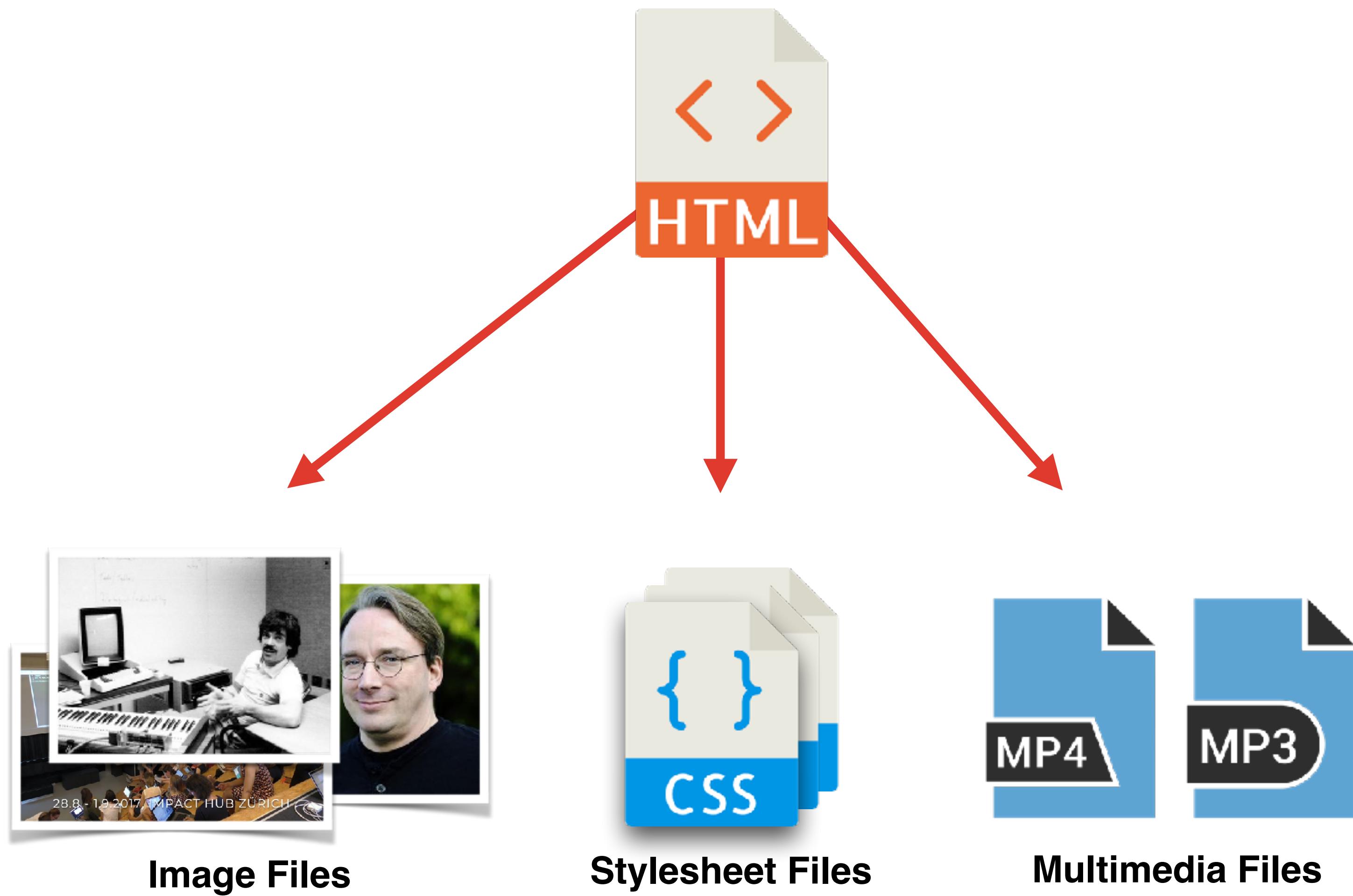
“Cascading” means that styles can fall (or cascade) from one HTML element to another.

## **Style Sheet**

Is one or many additional files that describe how HTML elements are to be displayed on screen, paper, or in other media.

# A HTML document can link to other files

---



When you open the document your Browser starts to collect all the linked files. These files are referenced via **URL's**.

# How do we link a Stylesheet?

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Remember the **<head>** tag from the previous section? That's where we can put links to Stylesheets.



# Core Syntax

CSS is very different from HTML. While **HTML provides the content & structure** of a page – **CSS provides the style**.

HTML

```
<h1>Master21 Code Summer</h1>  
  
<p>Where Women learn to create with code.  
28. August – 1. September at ImpactHub in  
Zurich.</p>
```

CSS

```
h1 {  
    color: green;  
    font-family: Helvetica;  
    font-size: 50px;  
}
```

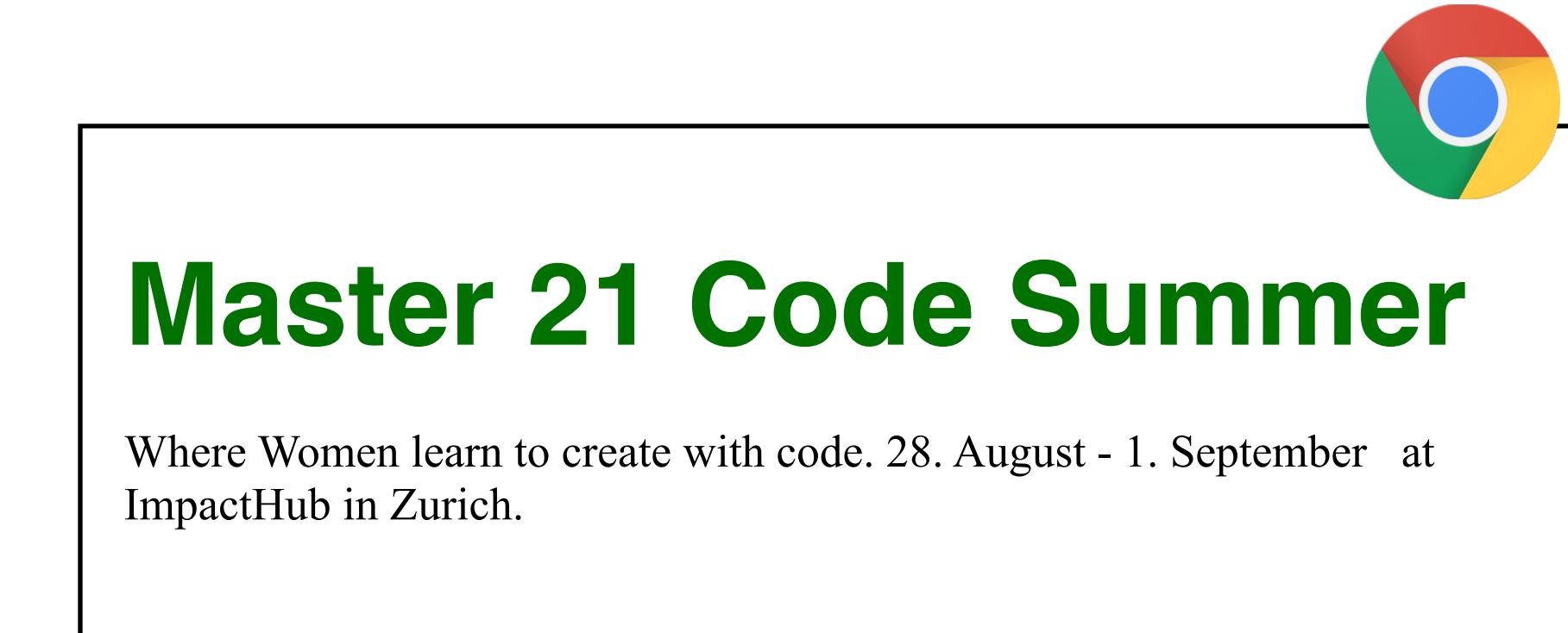
Selector

h1

Property

color: green;  
font-family: Helvetica;  
font-size: 50px;

Value

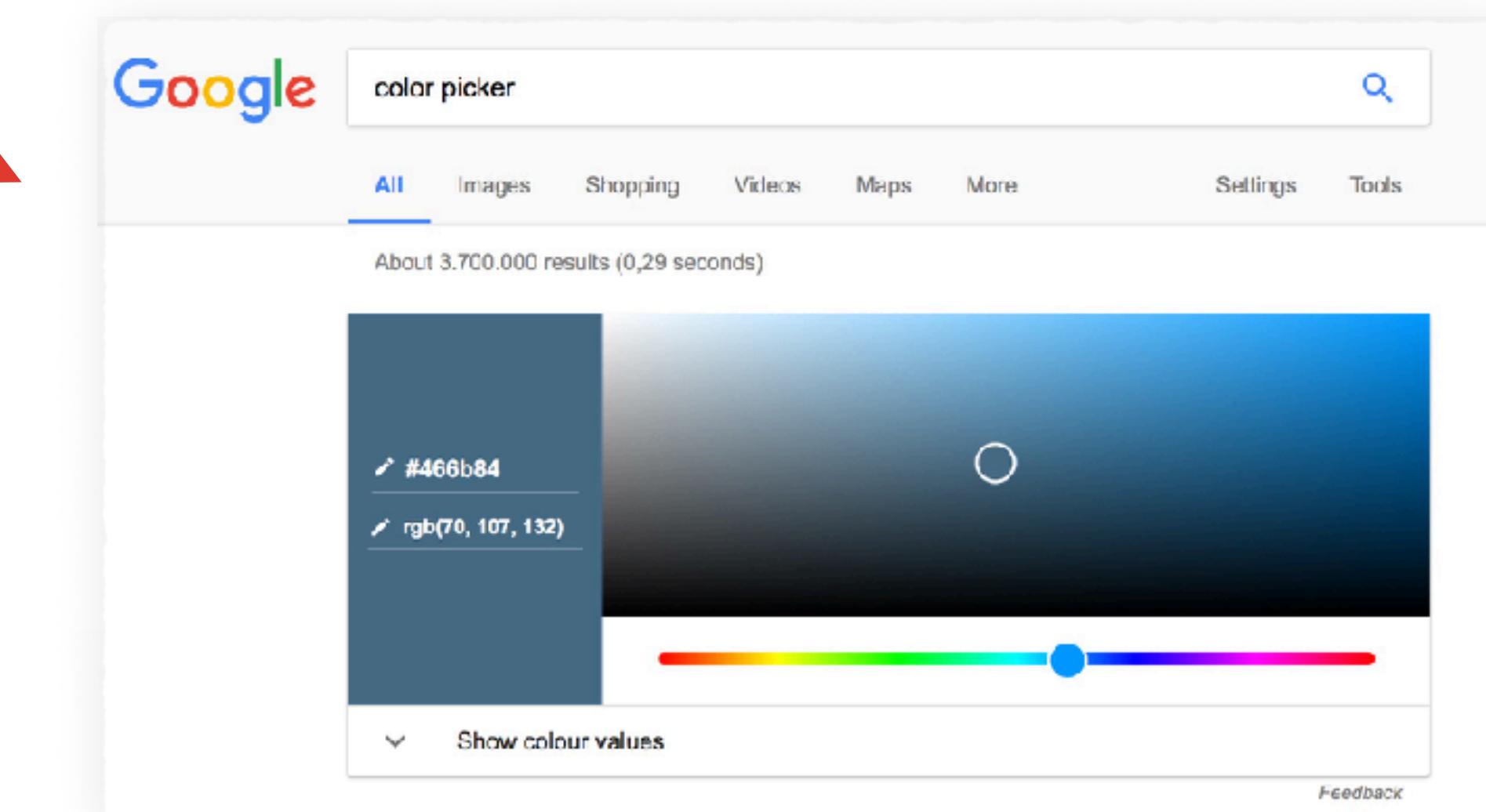


# Some examples

CSS

```
h1 {  
    color: green;  
    font-family: Helvetica;  
    font-size: 50px;  
    font-weight: lighter;  
    background-color: rgb(245,245,245);  
    text-decoration: underline;  
    text-align: left;  
}  
  
a {  
    color: red;  
    text-decoration: none;  
}
```

MONTserrat  
HAIRLINE ULTRA LIGHT  
LIGHT REGULAR SEMIBOLD  
**BOLD EXTRA BOLD BLACK**



# Result

```
h1 {  
    color: green;  
    font-family: Helvetica;  
    font-size: 50px;  
    font-weight: lighter;  
    background-color: rgb(245,245,245);  
    text-decoration: underline;  
    text-align: left;  
}  
  
a {  
    color: red;  
    text-decoration: none;  
}
```

css

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### What to bring

- Personal Laptop
- Pen & Paper to take notes
- Swimsuit

### How to learn HTML

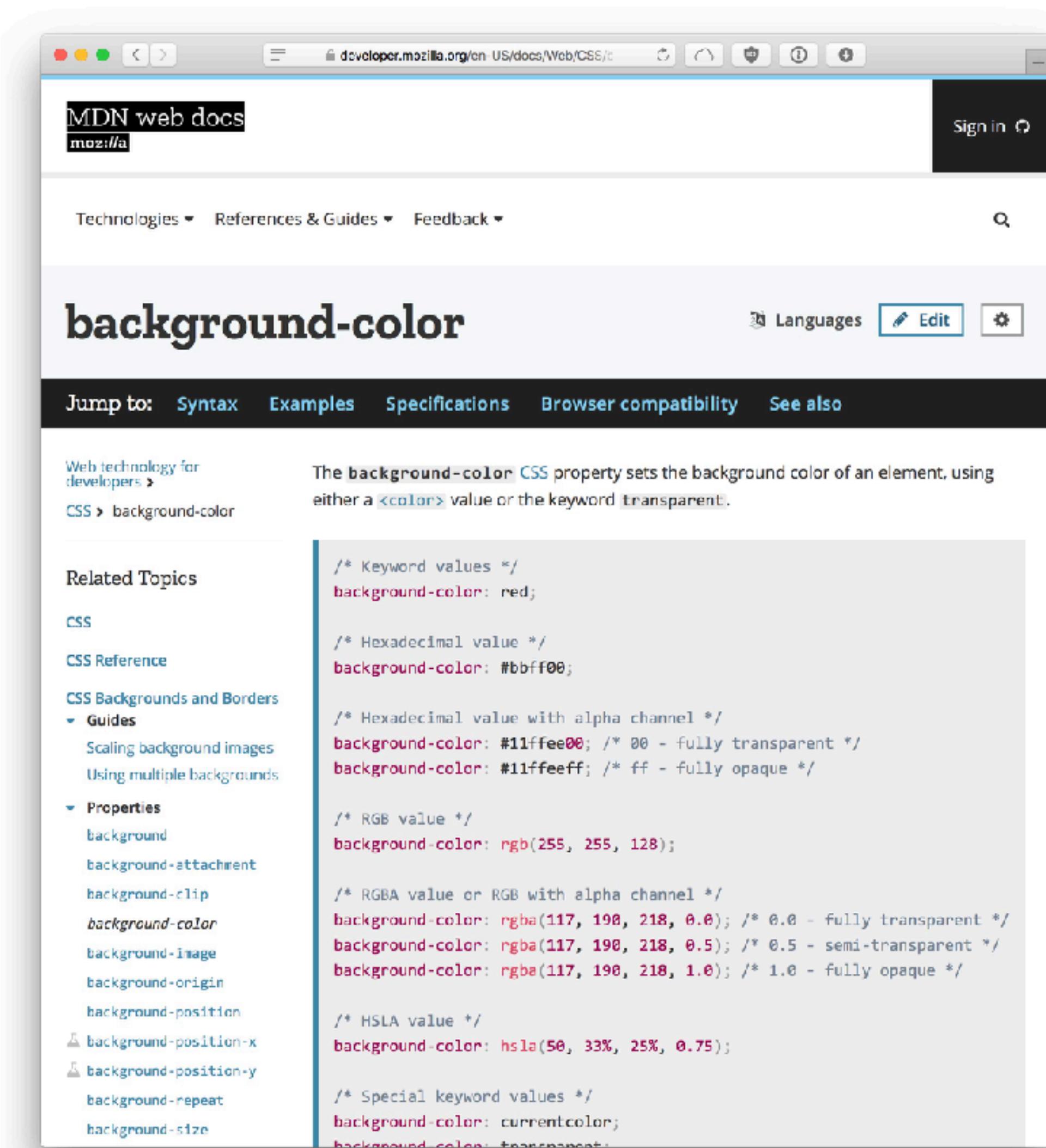
1. Listen to the Theory part
2. See how it's done in the Demo
3. Try it out yourself
4. Profit!



# The Documentation strikes back

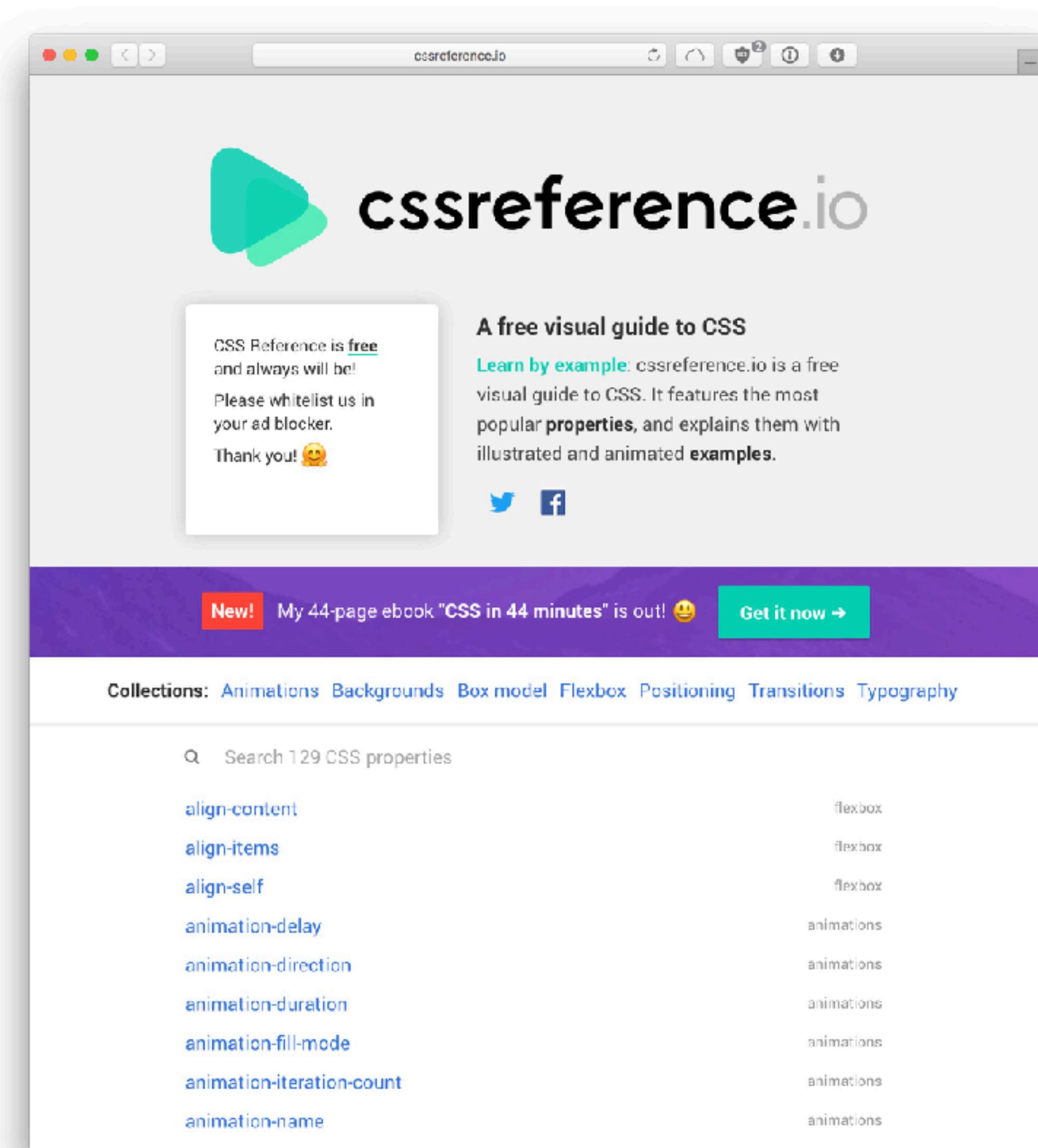
---

- <https://developer.mozilla.org/en-US/docs/Web/CSS/Reference>



# cssreference.io

- <http://cssreference.io>



# CSS - Demo Part I

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# **CSS - Your turn Part I**

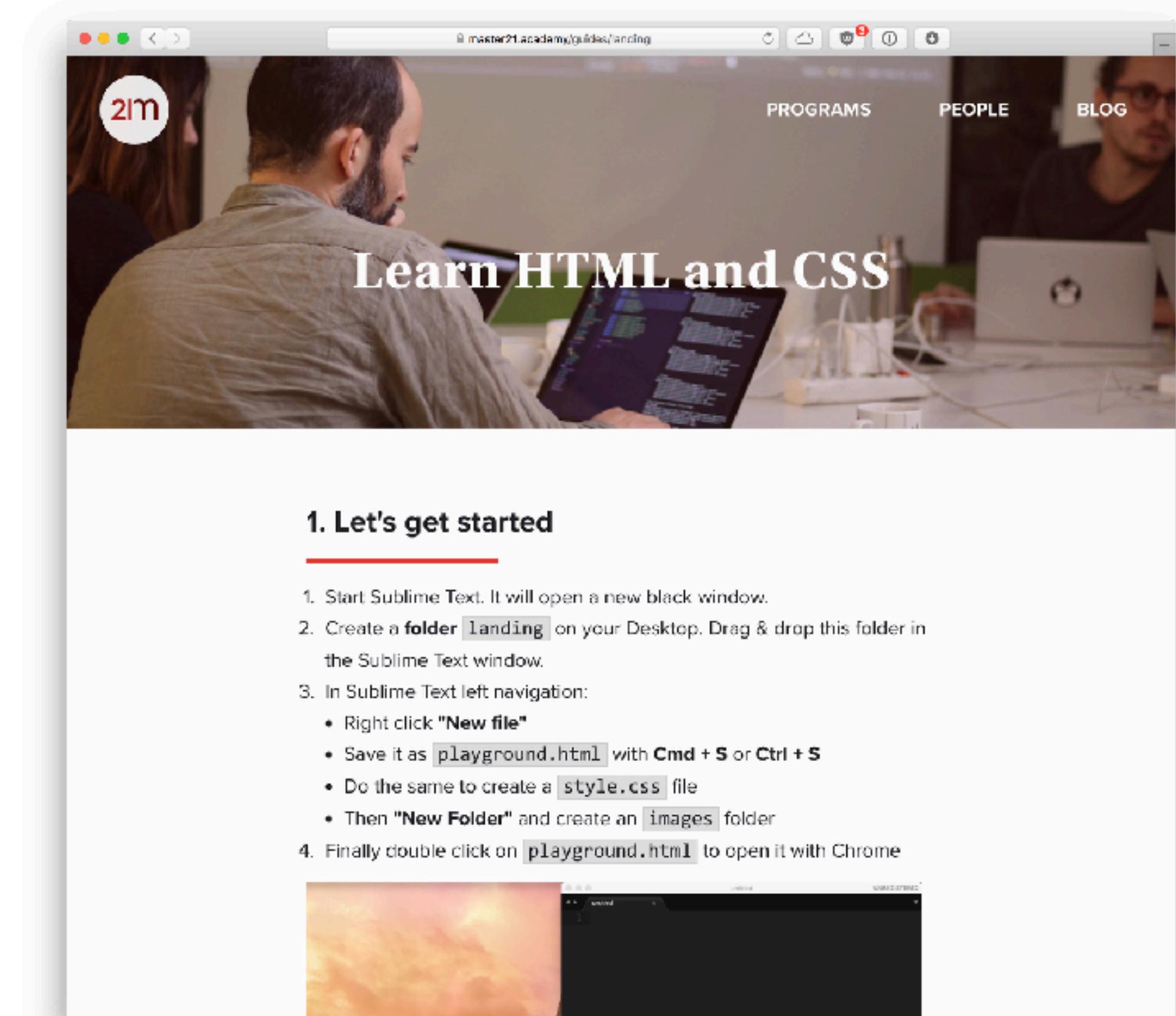
---



# master21.academy/landing

---

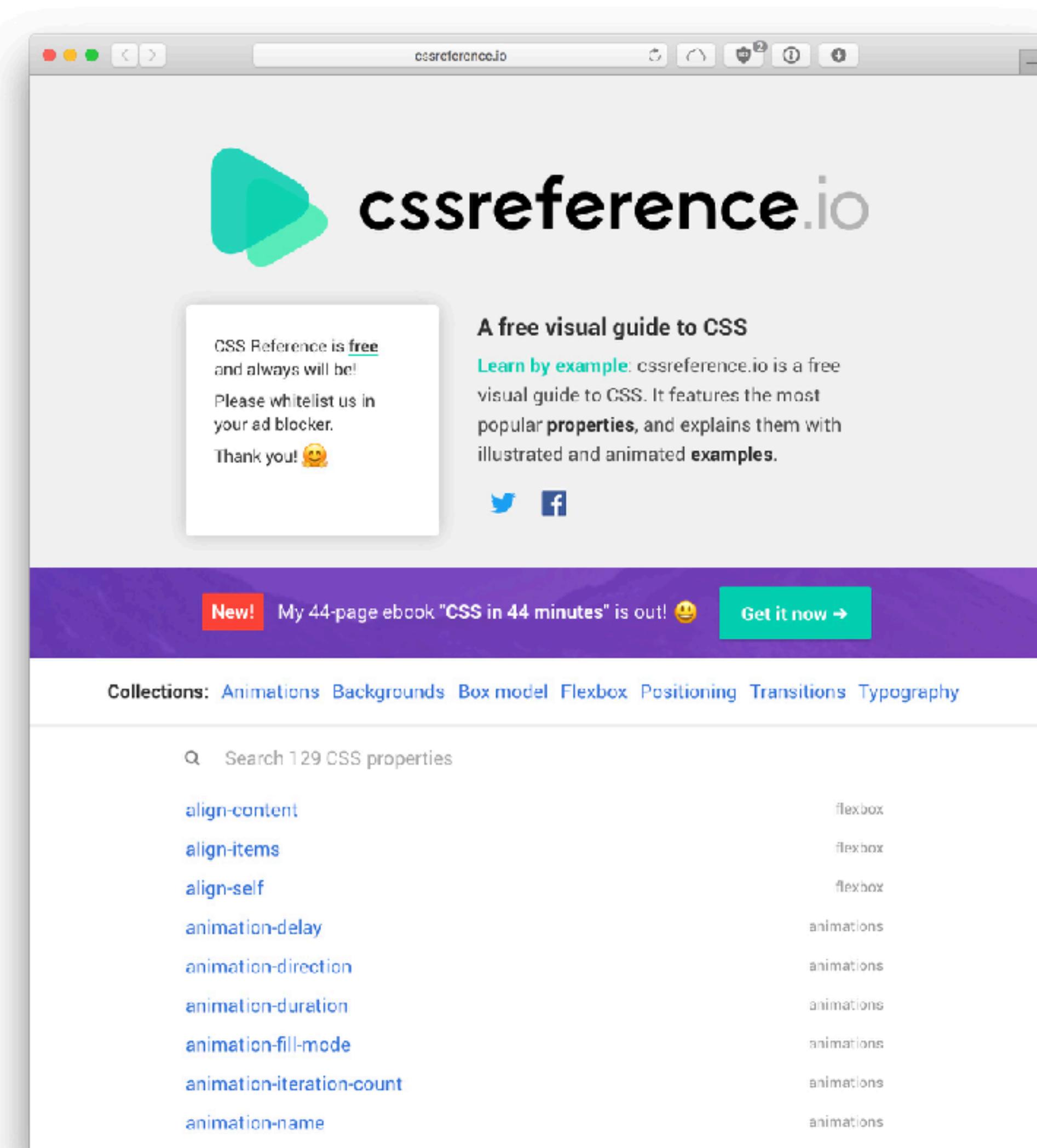
- Go to the website listed above and work through section 3.
- Play around with the CSS properties!



# Don't forget the Documentation!

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- <http://cssreference.io>



# **CSS - Theory Part II**

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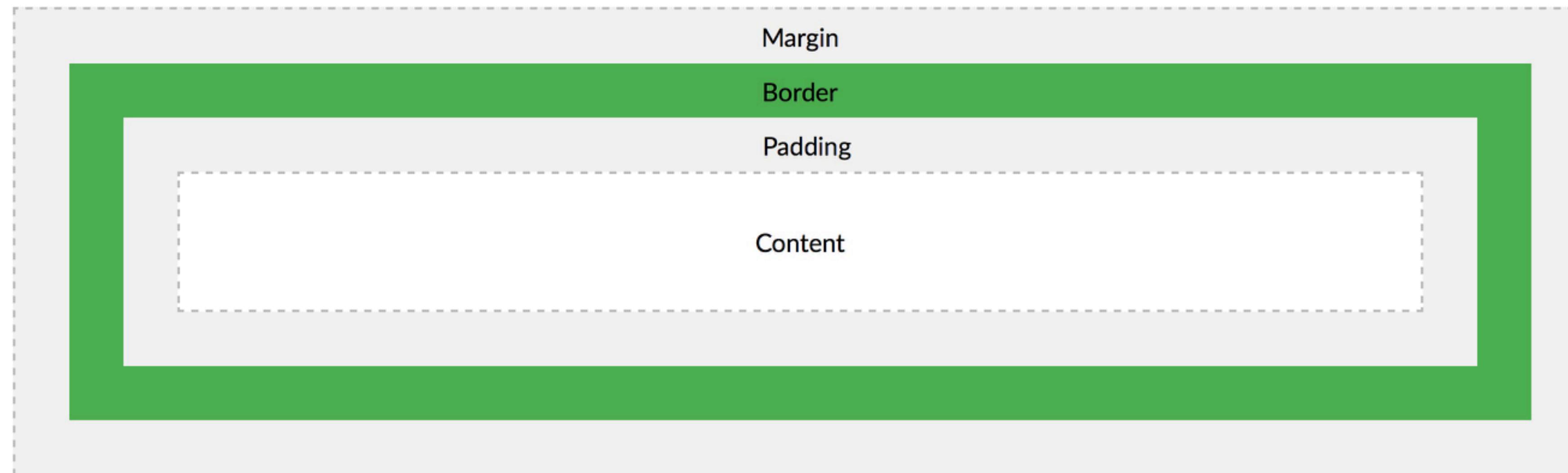
The CSS Box Model, classes & id's

# The CSS Box Model

---

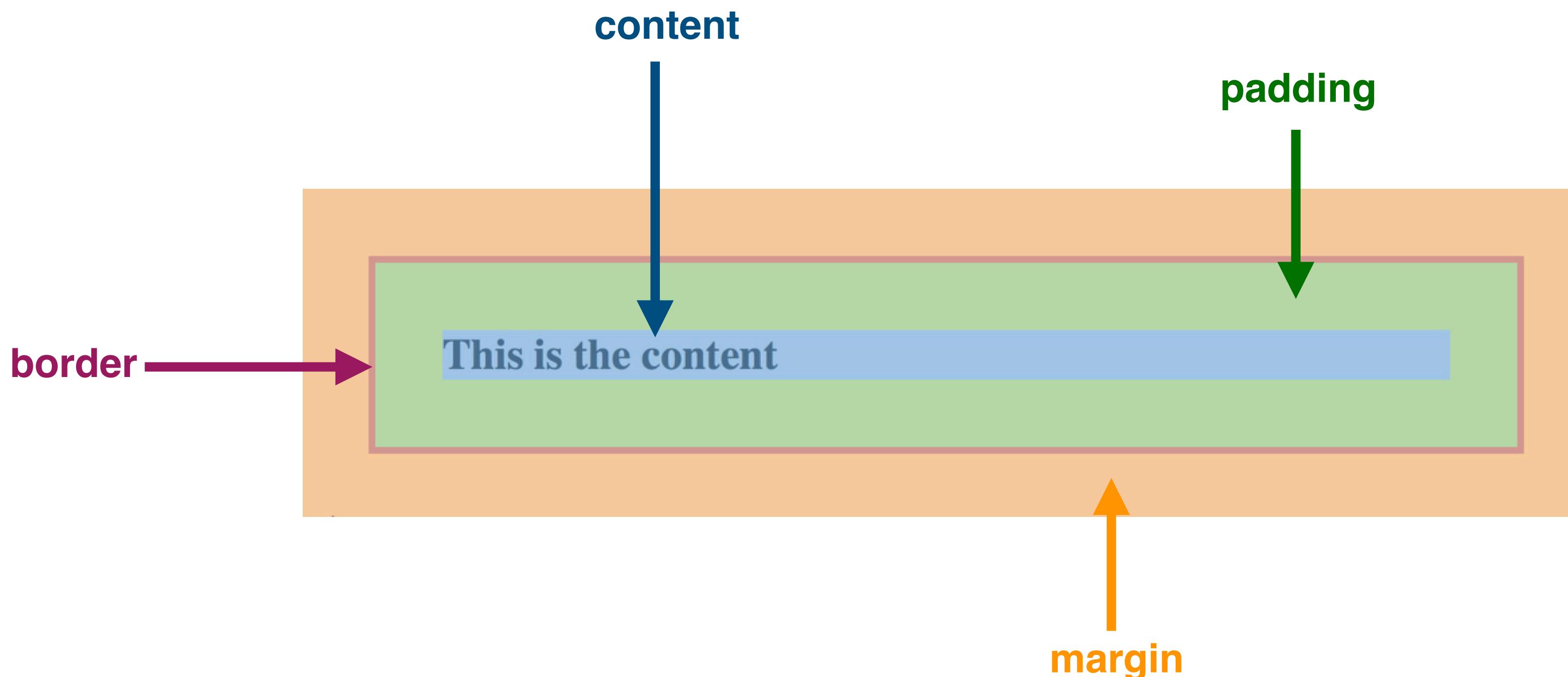
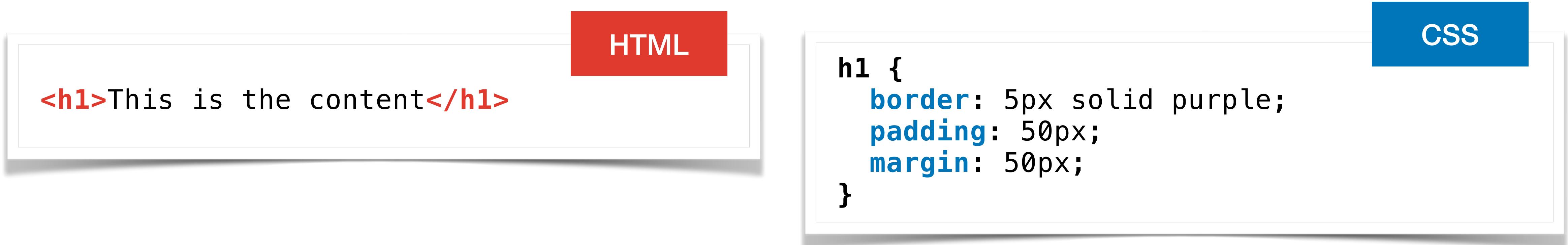
All HTML elements can be considered as boxes. In CSS, the term “**box model**” is used when talking about design and layout.

The CSS box model is essentially a box that wraps around every HTML element. It consists of: **margins**, **borders**, **padding**, and the actual **content**.



# The CSS Box Model

---



# Grouping things together

The **HTML Content Division element (div)** is the generic container for flow content. It has no effect on the content or layout until styled using CSS. Which makes it a great tool to group things together!

HTML

```
<div>
  <h2>What to bring</h2>
  <ul>
    ...
  </ul>
</div>
<div>
  <h2>How to learn HTML</h2>
  <ol>
    ...
  </ol>
</div>
```

CSS

```
div {
  width: 40%;
  border: 1px solid black;
  padding: 20px;
  vertical-align: top;
  height: 180px;
}
```

## What to bring

- Personal Laptop
- Pen & Paper to take notes
- Swimsuit

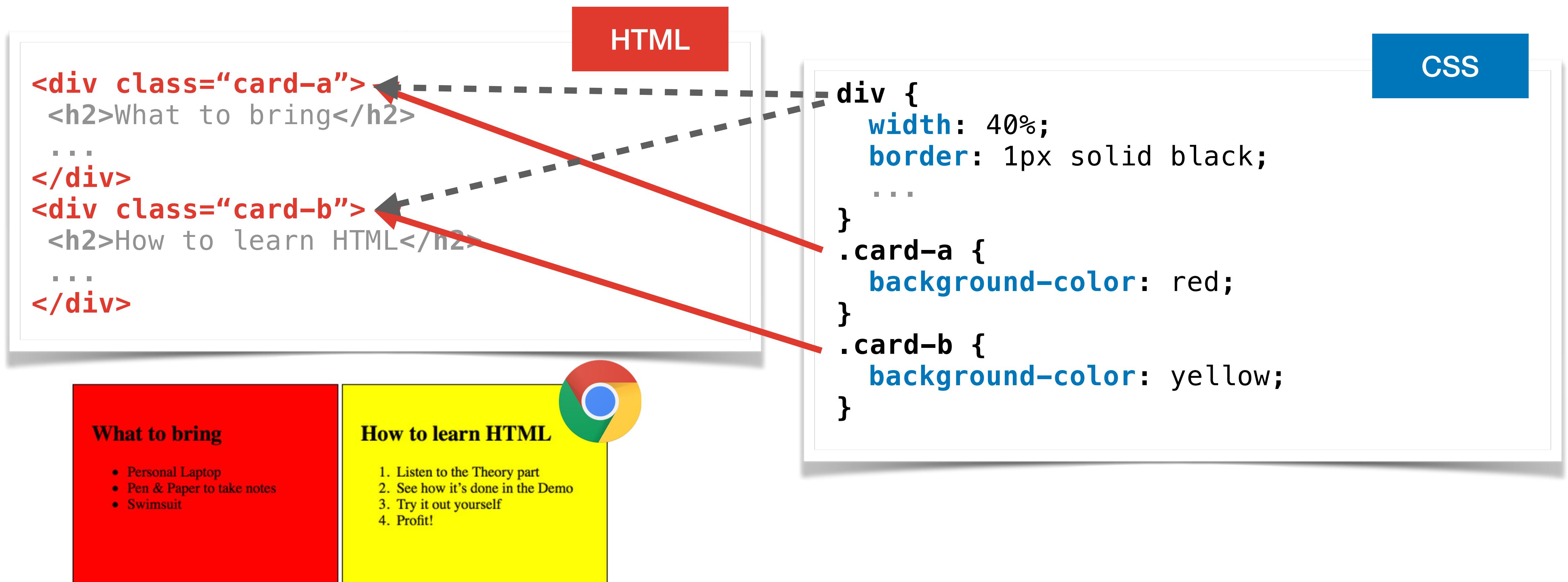
## How to learn HTML

1. Listen to the Theory part
2. See how it's done in the Demo
3. Try it out yourself
4. Profit!



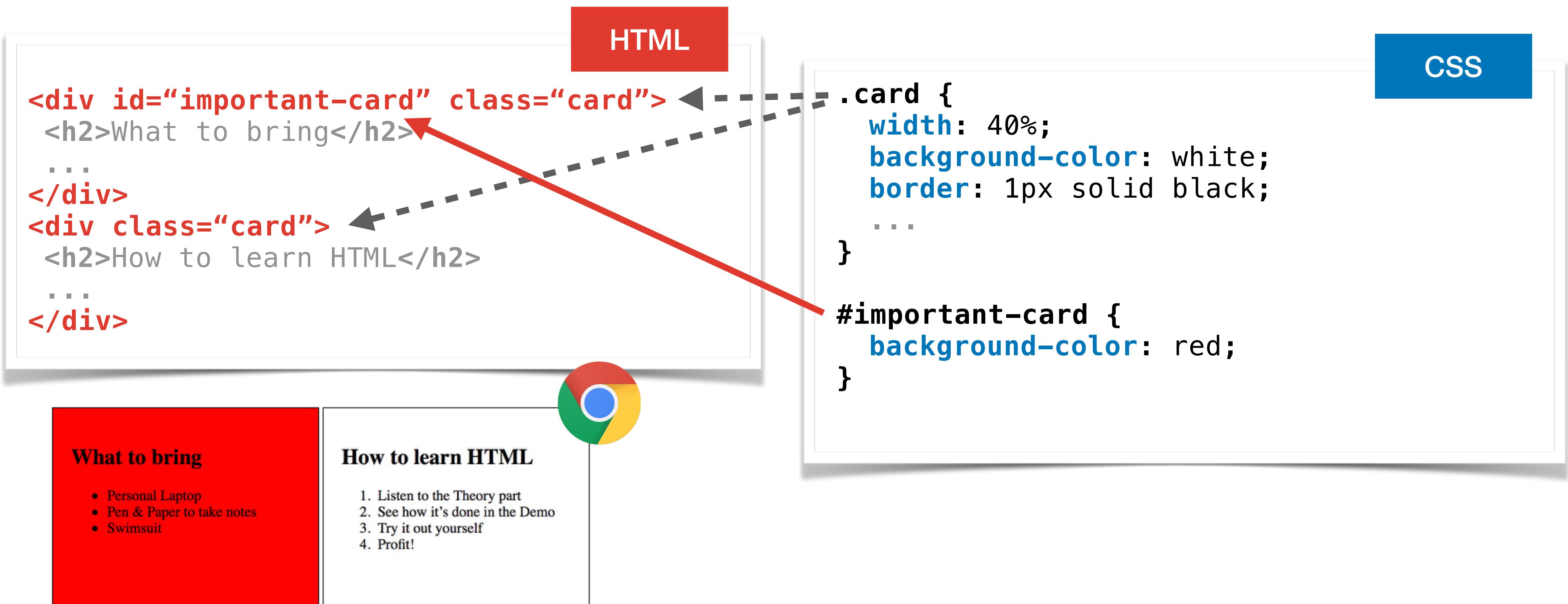
# Class Selector

The CSS **class selector** matches HTML elements based on the value of their **class** attribute.



# Id Selector

The CSS **id selector** matches HTML elements based on the value of their **id** attribute.



# Class vs Id

---



HTML

```
<h1 id="page-title">Master21 Codesummer</h1>
...
<h2 id="page-title">Another Section</h2>
```

CSS

```
#page-title {
    color: red;
}
```



HTML

```
<h1 class="page-title">Master21 Codesummer</h1>
...
<h2 class="page-title">Another Section</h2>
```

CSS

```
.page-title {
    color: red;
}
```

Each **HTML** element can only have **ONE** Id attribute and each attribute needs to be unique on the whole page.

# CSS - Demo Part II

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# **CSS - Your turn Part II**

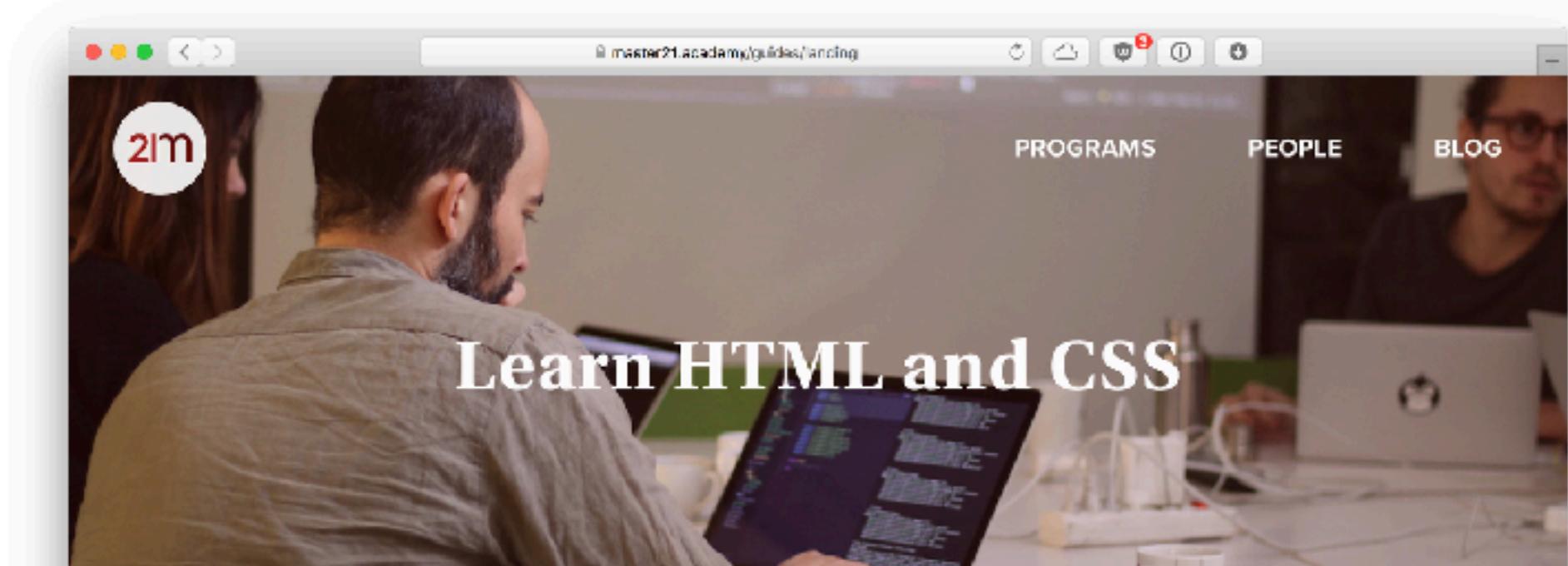
---



# master21.academy/landing

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- Go to the website listed above and work through section 4 & 5.
- Add your own content and make the page uniquely yours!



The screenshot shows a web browser window with the URL "master21.academy/guides/landing". The page features a video of a man with a beard working on a laptop. Overlaid on the video is the text "Learn HTML and CSS". At the top right of the page are links for "PROGRAMS", "PEOPLE", and "BLOG". Below the video, there is a section titled "1. Let's get started" with a numbered list of instructions:

1. Start Sublime Text. It will open a new black window.
2. Create a folder `landing` on your Desktop. Drag & drop this folder in the Sublime Text window.
3. In Sublime Text left navigation:
  - Right click "New file"
  - Save it as `playground.html` with **Cmd + S** or **Ctrl + S**
  - Do the same to create a `style.css` file
  - Then "New Folder" and create an `images` folder
4. Finally double click on `playground.html` to open it with Chrome

