



# HTML: Semantic Web

Sesiunea 2 - 22/04/2021







AVSCA





/Recap\



# Recap: well-formed markup

- About good coding
- Basic HTML structure
- Introduced basic elements: `<html>`, `<head>`, `<body>`, `<p>`, `<img>`, `<title>`, `<meta>`
- start/end tags and self-enclosing tags
- Attributes to use as config tools for our elements
- Comment your code only if needed (in all modules)

# HTML: the most basic example

```
1  <!DOCTYPE html>
2  <html>
3      <!-- This might be a very useful comment someday. -->
4  <head>
5      <title>Page title - Hello, World!</title>
6  </head>
7  <body>
8      <h1>Hello, world!</h1>
9      <p>How you doin'?</p>
10     
11 </body>
12 </html>
```

# HTML: well-formed markup

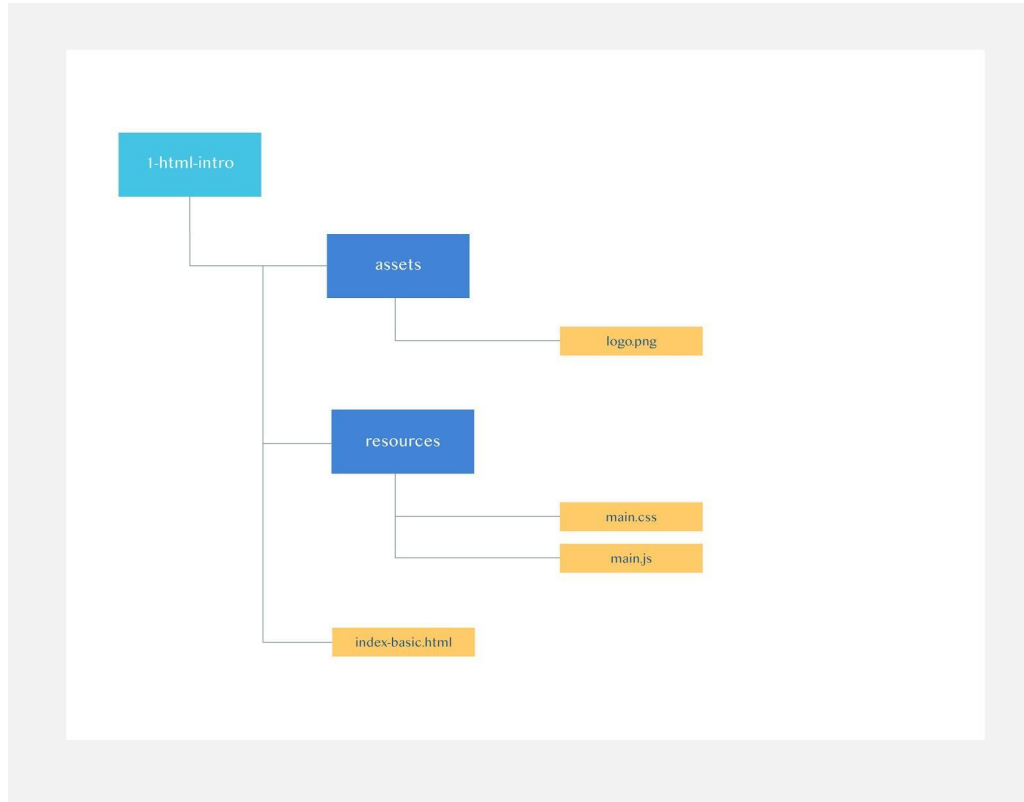
- `<!DOCTYPE>` declaration
  - Must be the very first thing in the HTML doc
  - It's not an HTML tag, but an instruction for the browser about the upcoming HTML doc
  - Always use it and use it before the `<html>` tag (get used to writing good code!)
- Main elements: `<html>`, `<head>`, `<body>`
- Tags: `<h1>`, `<p>`, `<img />`
- Attributes: `alt`, `src`

# HTML: <meta> tags - types

```
1  <!DOCTYPE html>
2  <html>
3    <head>
4      <title>Page title - Hello, World!</title>
5      <!-- Specifies the character encoding for the HTML doc. UTF-8 covers a great range of characters and symbols -->
6      <meta charset="UTF-8">
7      <!-- Define a description for the web page -->
8      <meta name="description" content="Front end development course">
9      <!-- Define keywords for search engine to process -->
10     <meta name="keywords" content="HTML,CSS,Learning">
11     <!-- Define the author of the page -->
12     <meta name="author" content="Roxana Popescu">
13     <!-- Setting the viewport to consider the users' visible area of the page.
14     | The initial-scale=1.0 sets the initial zoom level when the page is first loaded by the browser.
15     -->
16     <meta name="viewport" content="width=device-width, initial-scale=1.0">
17     <!-- Refresh the document every 30sec -->
18     <meta http-equiv="refresh" content="30">
19   </head>
20   <body>
21     <p translate="no">I don't want to be translated.</p>
22     <p>I don't have a problem in being translated.</p>
23   </body>
24 </html>
25
```



# HTML: repository structure






/Focus today: HTML Tags\



# About **TAGS**

- Are the building blocks, that will decide the format and display of the content
- Always written in lowercase
- Usually, but not always with intuitive naming: `<table></table>`, `<form></form>`,  
`<button></button>`, `<div></div>`, `<span></span>`
- 3 main parts: opening tag, content, closing tag (we also have self-closing tags)
- All tags must be enclosed in 
- 2 types:
  - Self-enclosing/unclosed: `<img />` or `<img>`
  - Start/End tag: `<div>This is some text content</div>`
- Each tag performs a different task



# TAGS: main types

- Meta tags: `<!DOCTYPE>`, `<title></title>`, `<link />`, `<meta />`, `<style></style>`
- Text tags: `<p></p>`, `<div></div>`, `<span></span>`, `<code></code>`, `<h1></h1>`, `<h2></h2>`, `<h3></h3>`,  
`<h4></h4>`, `<h5></h5>`, `<h6></h6>`, `<br />` (`<hr />`)
- Link tags: `<a></a>`
- Image/Object tags: `<img />`, `<object></object>`
- List tags: `<ul></ul>`, `<ol></ol>`, `<li></li>`, `<dl></dl>`, `<dt></dt>`, `<dd></dd>`
- Table tags: `<table></table>`, `<tr></tr>`, `<td></td>`, `<th></th>`, `<tbody></tbody>`, `<thead></thead>`,  
`<tfoot></tfoot>`
- Form tags: `<form></form>`, `<input />`, `<textarea></textarea>`, `<button></button>`, `<select></select>`,  
`<option></option>`, `<label />`
- Script tags: `<script></script>`, `<noscript></noscript>`



/code\



# Attributes

- Gives us access to configurable data in order control a certain element the way we need it to

```

```

- Each element has its' own set of attributes
- We have a set of **global** attributes also across elements: class, id, tabindex, style etc.
- Class/ID (CSS selectors) are mostly used global attributes among tags



/Search everything you know and/or do know\



# About **Semantic Web**



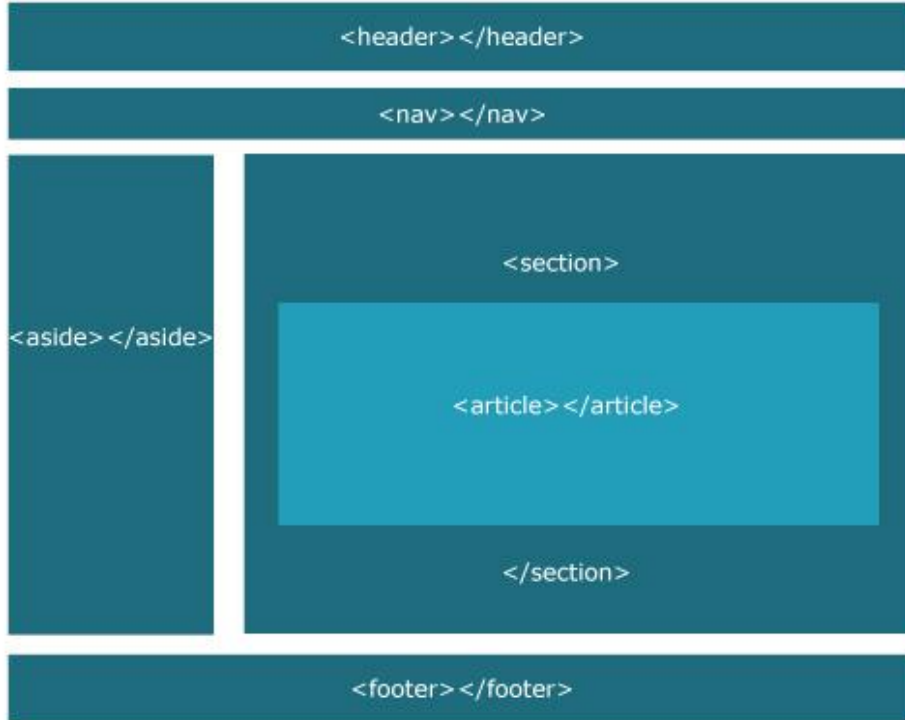
- Introduces **meaning to the web**, rather than just structure and/or presentation
- It's implemented in: HTML, CSS, JS
- `<p>` is already a semantic tag (people know what paragraphs are from real life and browsers know how to display it - native margin)
- A web page should be able to communicate (SEO benefit also!)
- **Semantic tags are:** `<header></header>`, `<main></main>`, `<nav></nav>`, `<section></section>`, `<article></article>`, `<aside></aside>`, `<footer></footer>`, `<details></details>`, `<summary></summary>`, `<figure></figure>`, `<caption></caption>`
- `<h1></h1>` .. `<h6></h6>` can be considered as semantic tags, because they should be used for headings only, giving meaning to the markup (documentations are 50%-50%)



/Semantic tags: visual representation\



# Semantic Web



- Semantic tags are about giving logical meaning
- The presentation of the content is still something the dev needs to cover
- Main benefits are:
  - SEO
  - Screen readers to cover impaired users
  - Easier navigation
  - Code reusability

# /Exercise\



# Practice

- Create a well formed doc
- Use at least 3 meta tags
- Your doc should have a title tag
- Include in your doc the following: a paragraph, an img, a list, 3 semantic tags

# /Navigation\



# Navigation

- Between pages
- Between different websites
- Between sections of the same page (anchors or bookmarks)
- Resources retrieval



# Navigation: tags

```
<a href="contact.html">Contact</a>
```

```

```

# Navigation: image links

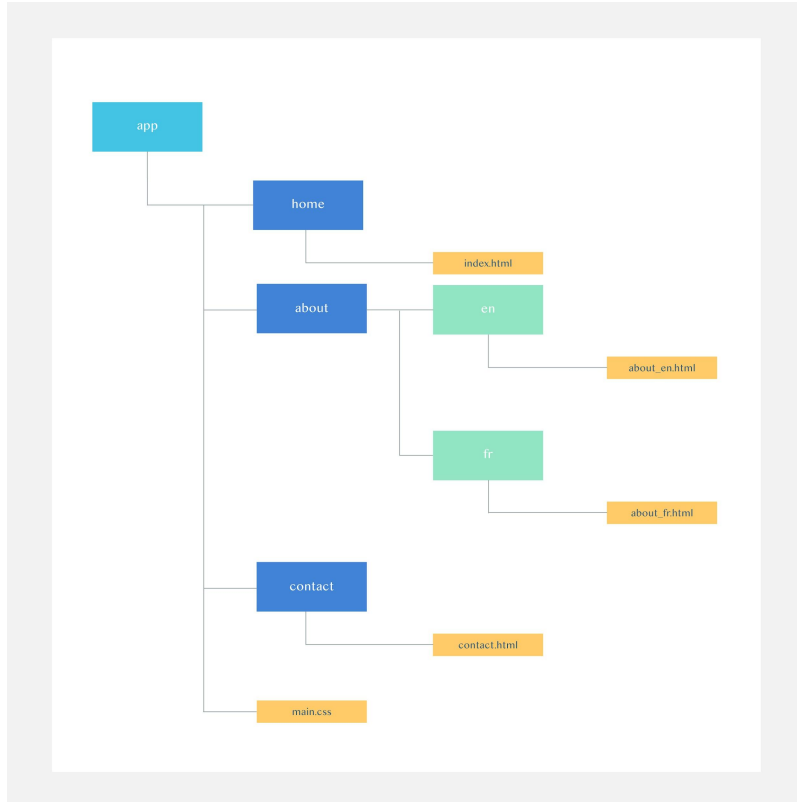
```
<a href="index.html">  
      
</a>
```



# Navigation: target attribute

```
<a target="_blank|_self|_parent|_top|framename" href="www.google.com">Ask Google</a>
```

# Navigation: relative paths - navigating folder hierarchy



- Access main.css from index.html: ../main.css
- Access index.html from about\_en.html: ../../home/index.html
- Access main.css from about\_fr.html: ../../../../main.css

# Navigation: bookmarks - navigating the same page

```
<a href="#contact">Contact</a>
```

```
<section id="contact" class="contact-info">This is my contact section</section>
```



/Q&A\





# Thank you

**Next: Introduction to CSS**

