





## HTML basics

**HTML** course



### Lesson Plan

1

Emmet — the essential toolkit for web-developers

2

How to evaluate HTML

3

Quality criteria

## **HTML**

#### Let's write some markup

```
<header>
    <nav>
           <a href="">Lorem.</a>
           <a href="">Beatae.</a>
           <a href="">Officiis.</a>
           <a href="">Oui!</a>
           <a href="">Aut?</a>
       </nav>
</header>
   <h1>Lorem ipsum dolor sit amet.</h1>
    <section>
       <h2>Lorem, ipsum dolor.</h2>
       Lorem ipsum dolor sit amet consectetur adipisicing elit. Repellat et consequentur reprehenderit autem maxime esse?
       Temporibus excepturi eius, atque, illo doloremque unde explicabo corrupti quibusdam molestias, accusantium voluptas qui mollitia.
       Polores maiores molestias aliquid quasi quibusdam dolorum labore ullam est. Doloremque unde voluptate quis labore!
    </section>
    <section>
       <h2>Rerum, atque voluptate.</h2>
       Lorem ipsum dolor sit, amet consectetur adipisicing elit. Reiciendis rem quos necessitatibus maiores amet. Obcaecati.
       Reiciendis et numquam repellendus quia quibusdam asperiores at deleniti dolore. Aliquid, amet pariatur. Delectus, cum?
       Sed id, aut nam odit dolore architecto, pariatur, nulla repellendus eveniet ipsum consectetur rerum quo.
    </section>
    <section>
       <h2>Sapiente, ipsum magni?</h2>
       Lorem ipsum dolor, sit amet consectetur adipisicing elit. Necessitatibus eague perspiciatis laborum ducimus recusandae commodi.
       <qp>Quasi beatae rem dolorum fuqiat obcaecati laudantium illum tempore provident? Harum voluptatem reiciendis recusandae maqni.
       Obcaecati delectus nemo commodi iste quam aperiam voluptatum recusandae nostrum ipsam nesciunt est, tempore vitae.
    </section>
    <section>
       <h2>Error, ipsa aliquid!</h2>
       Lorem ipsum dolor sit amet consectetur adipisicing elit. Unde, soluta dolore eum facilis placeat obcaecati.
       Ab, unde? Assumenda recusandae repellat veritatis eveniet voluptas aliquam dolorem, culpa facere dolore architecto consequentur.
       <Culpa ducimus tempora repudiandae dicta ea inventore. Consectetur nesciunt repellat corrupti saepe debitis nulla recusandae!</p>
    </section>
    <section>
       <h2>Dignissimos, magni ipsa?</h2>
       Lorem ipsum dolor sit amet consectetur adipisicing elit. In aut suscipit hic fugit dignissimos quo?
       Aliquam tenetur iusto sapiente maiores saepe animi obcaecati cumque aspernatur laudantium quasi quod, temporibus excepturi.
       Iusto maiores odio est nobis aperiam a et dolorem culpa eaque distinctio eius, error quod.
   </section>
</main>
<footer>
    Lorem ipsum dolor, sit amet consectetur adipisicing elit. Sit, ea!
   <a href="">Lorem.</a>
</footer>
```

### **Emmet**

is a plugin for many popular text editors which greatly improves HTML & CSS workflow

Marks up an entire site with a single line of code

Save your time

```
<header>
   <nav>
          <a href="">Lorem.</a>
          <a href="">Beatae.</a>
          <a href="">Officiis.</a>
          <a href="">Oui!</a>
          <a href="">Aut?</a>
   </nav>
</header>
   <h1>Lorem ipsum dolor sit amet.</h1>
   <section>
      <h2>Lorem, ipsum dolor.</h2>
      Lorem ipsum dolor sit amet consectetur adipisicing elit. Repellat et consequuntur reprehenderit autem maxime esse?
      Temporibus excepturi eius, atque, illo doloremque unde explicabo corrupti quibusdam molestias, accusantium voluptas qui mollitia.
      Polores maiores molestias aliquid quasi quibusdam dolorum labore ullam est. Doloremque unde voluptate quis labore!
   </section>
   <section>
      <h2>Rerum, atque voluptate.</h2>
      Lorem ipsum dolor sit, amet consectetur adipisicing elit. Reiciendis rem quos necessitatibus maiores amet. Obcaecati.
      Reiciendis et numquam repellendus quia quibusdam asperiores at deleniti dolore. Aliquid, amet pariatur. Delectus, cum?
      Sed id, aut nam odit dolore architecto, pariatur, nulla repellendus eveniet ipsum consectetur rerum quo.
   </section>
   <section>
      <h2>Sapiente, ipsum magni?</h2>
      Lorem ipsum dolor, sit amet consectetur adipisicing elit. Necessitatibus eaque perspiciatis laborum ducimus recusandae commodi.
      <qp>Quasi beatae rem dolorum fugiat obcaecati laudantium illum tempore provident? Harum voluptatem reiciendis recusandae magni.
      Obcaecati delectus nemo commodi iste quam aperiam voluptatum recusandae nostrum ipsam nesciunt est, tempore vitae.
   </section>
   <section>
      <h2>Error, ipsa aliquid!</h2>
      Lorem ipsum dolor sit amet consectetur adipisicing elit. Unde, soluta dolore eum facilis placeat obcaecati.
      Ab, unde? Assumenda recusandae repellat veritatis eveniet voluptas aliquam dolorem, culpa facere dolore architecto consequentur.
      Culpa ducimus tempora repudiandae dicta ea inventore. Consectetur nesciunt repellat corrupti saepe debitis nulla recusandae!
   </section>
   <section>
      <h2>Dignissimos, magni ipsa?</h2>
      Lorem ipsum dolor sit amet consectetur adipisicing elit. In aut suscipit hic fugit dignissimos quo?
      Aliquam tenetur iusto sapiente maiores saepe animi obcaecati cumque aspernatur laudantium quasi quod, temporibus excepturi.
      Iusto maiores odio est nobis aperiam a et dolorem culpa eaque distinctio eius, error quod.
   </section>
</main>
<footer>
   Lorem ipsum dolor, sit amet consectetur adipisicing elit. Sit, ea!
   <a href="">I orem.</a>
</footer>
```

## Anatomy of an HTML Document

- 1. Doctype: Historical artifact
- 2. Root Element
- 3. Element for connecting resources not visible on the page
- 4. Element that sets the document's UTF-8 encoding
- Element for the page title (displayed in the browser tab or bookmarks)



Element for the content of the entire page



## structure of **Emmet**

!	Basic site structure	html <html lang="en"></html>
		<pre></pre>
#example	id	<div id="page"></div>
<pre>.example</pre>	class	<div class="logo"></div>
p <b>*2</b>	Number of elements	
ul>li	Nesting	<ul><li><li></li></li></ul>
a[href="index.html"]	Attribute	<a href="index.html"></a>
a{Click me}	Text	<a>Click me</a>

## Rules **Emmet**

Class without a tag = <b><div></div></b> with class	<pre>.wrap&gt;.content = div.wrap&gt;div.content</pre>
If an element has nesting rules, they apply automatically	ul>.item*3 = ul> <mark>li</mark> .item*3
• li for ul and ol	ol>.item = ol> <mark>li</mark> .item
<ul> <li>tr for table, tbody, thead and tfoot</li> </ul>	table>.row = table>tr.row
• td for tr	table>tr>.cell = table>tr>td.cell
<ul><li>option for select and optgroup</li></ul>	<pre>select&gt;.select-item*5 = select&gt;option.select-item*5</pre>
Follow nesting rules by element types	em>.info = em>span.info <del>div</del>

#### **Practice**

## **Emmet**

## codepen.io

### **Basic Metrics for Evaluating HTML**

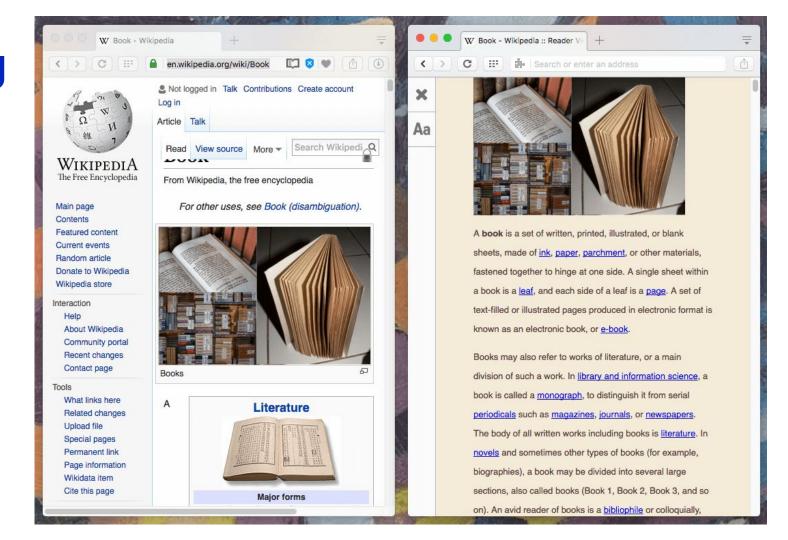
```
Semantics
Heading Hierarchy
3
Validity
Accessibility (a11y)
```

## **1** Semantics

Using tags for their intended purpose.

- 1. Cannot be checked automatically
- 2. Why use it:
  - a. Search engines and SEO
  - b. Accessibility through screen readers and reading mode
  - c. Code clarity
  - d. Developer's proficiency

## reading mode



### **HTML** tags (repeat)

#### 1. Basic Structural and Text Tags

Tags like <div>, <span>, , <h1>-<h6>, <a>, <br>, <hr>, <blockquote>, etc.

#### 2. Semantic Tags:

#### 3. Forms and Input Elements:

#### 4. Graphics and Multimedia:

Examples: <img>, <audio>, <video>,<source>, <canvas>, <track>, <svq>.

#### 5. Tables:

Examples: , <, <td>, <thead>, , <tfoot>,<caption>, <col>, <colgroup>.

#### 6. Scripts and Resource Links:

Examples: <script>, <noscript>,<style>.

#### 7. Metadata Tags:

• Examples: <meta>, <title>, <base>, <head>.

Repeat

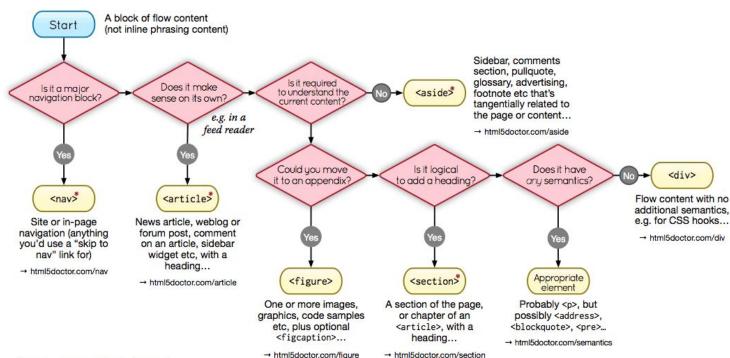
## a vs button



#### Doctor HTML5 Element Flowchart

Sectioning content elements and friends

By @riddle & @boblet www.html5doctor.com



#### \*Sectioning content element

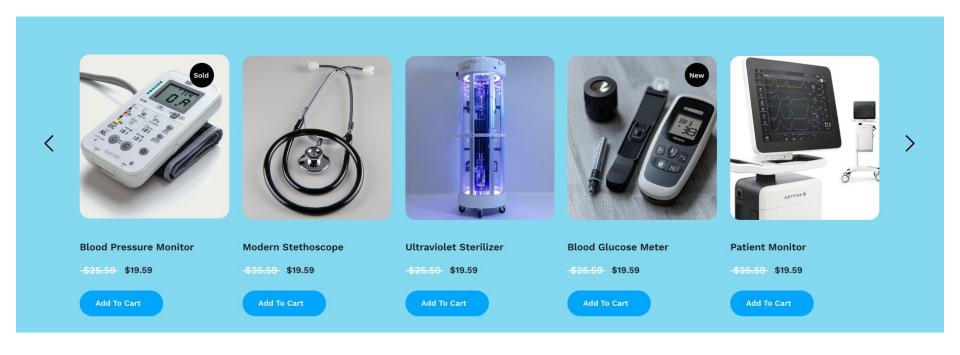
These four elements (and their headings) are used by HTML5's outlining algorithm to make the document's outline → html5doctor.com/outline



## section vs article vs aside

Section - when you want to group content semantically based on a thematic grouping

**Article -** when you want to represent an independent piece of content that can be reused on its own, without any other context





## hierarchy of headings

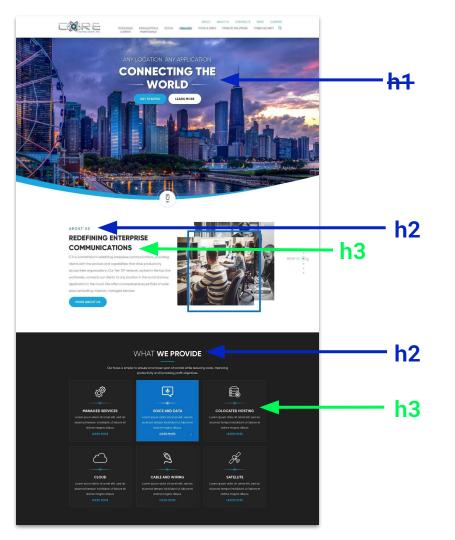
- Creating a hierarchy of headings, which should look like a book's table of contents

- 1. Main content
- 2. Why think about it:
  - a. Reasons similar to semantics
- 3. If the page lacks visual headings, add hidden ones

#### Contents

Chapter 1-Basic of InDesign	1
History of InDesign	
InDesign in Ancient Greek	1
The Birth of InDesign	1
The Death of InDesign	
What About Quark	
What About Office	3
Why Use inDesign?	3
I Love In Design.	4
I Also Love Photoshop	4
Who Create InDesign?	4
Chapter 2-Typography	5
Definition of Typography	5
Typography is Text In Visual	5
Typhography as Art	5
Dealing With Typography	6
Mr. Typhography Himself	6

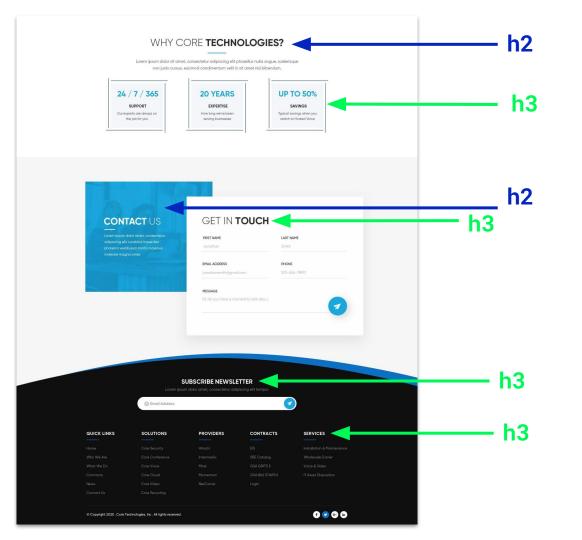
```
<h1>InDesign book</h1>
 <h2>Basics of InDesign</h2>
   <h3>History of InDesign</h3>
      <h4>InDesign in Ancient Greek</h4>
     <h4>The Birth of InDesign</h4>
     <h4>The Death of InDesign</h4>
   <h3>The best publishing software</h3>
     <h4>What about Quark</h4>
     <h4>What about Office</h4>
   <h3>Whu use InDesign?</h3>
     <h4>I love InDesign</h4>
     <h4>I also love Photoshop</h4>
   <h3>Who Create InDesign?</h3>
 <h2>Typography</h2>
   <h3>Defenition of Typography</h3>
     <h4>Typography is Text in Visual</h4>
     <h4>Typography is Art</h4>
   <h3>Dealing with Typography</h3>
      <h4>Mr.Typography Himself</h4>
```



#### 1. Connecting the world

## Core technologies inc. – communication services for your business

- 2. About us
  - **3.** Redefining enterprise communications
- 2. What we provide
  - **3.** Managed services
  - 3. Voice and data
  - 3. Colocated hosting
  - 3. Cloud
  - 3. Cable and wiring
  - 3. Satellite



- 2. Why core technologies?
  - 3. Support
  - **3.** Experties
  - 3. Savings
- 2. Contact us
  - 3. Get in touch
  - 3. Subscribe newsletter

#### 2. Site navigation

- 3. Quick links
- 3. Solutions
- **3.** Providers
- 3. Contracts
- 3. Services

## **3** Validity

- Conformity to standards (specification)

The World Wide Web Consortium(W3C) is an international community that develops open standards for the Internet.

- 1. Correct order of opening and closing tags
- 2. Presence of closing tags
- 3. All required attributes
- 4. Proper use of tags within other tags

#### 1. Correct order of opening and closing tags

Lorem ipsum <a> dolor set </a>



Lorem ipsum <a> dolor set </a>



Lorem ipsum <a> dolor set </a>





#### 2. Presence of closing tags

- Lorem ipsum dolor set
- Lorem ipsum dolor set



- Lorem ipsum dolor set
- Lorem ipsum dolor set



<img src="image.png" alt="icon check">
<input type="text">





#### 3. Availability of all required attributes

<img>
<img src="image.png" alt="icon check">

<a> Lorem ipsum </a>
<div id="value01"></div>
<section id="value01"></section>



#### 4. Proper use of tags within other tags

```
<span> Lorem ipsum <div> dolor sit </div> </span>
<div> Lorem ipsum <span> dolor sit </span> </div>
Lorem ipsum
    dolor sit 
Lorem ipsum
     dolor sit
```

## **4** Accessibility

- Ensures the website is usable for people with additional needs

- 1. Often overlooked
- 2. If you follow the other three rules, accessibility will be achieved automatically
- 3. Can be checked using Chrome's audits for accessibility, which also provide fixes
- 4. Ensures people can use your site with a keyboard and screen reader

## **Quality Criteria for HTML Course**

- 1.1 The document must begin with <!DOCTYPE HTML>.
- 1.2 Each page must have the lang attribute set according to the page's language.
- 1.3 The document must have a specified encoding.
- 1.4 Title Tag must be set on all pages.
- 1.5 Description meta tag must be set
- 1.8 No critical markup errors.
- 1.9 Semantic Markup
- 1.10 The markup must be valid (W3C).
- 1.11 Classes are named correctly
- 1.12 Use the minimum possible number of HTML elements.
- 1.13 The logo on internal pages should lead to the home page.
- 1.14 All pages should be linked and checked for broken links.
- 1.15 External links should have the attribute target="\_blank".
- 1.16 Each page must have an <h1> tag that is different from the page title.
- 1.17 The heading tree structure is maintained.

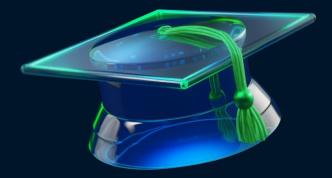
When developing a website, there are many conditions that must be met to ensure the site displays correctly.

- Mandatory for passing the course
- Required for the highest grade
- **Optional**

- 4.2 The root document should have folders like css, img, js.
- 4.3 The main page should be named index.html.
- **♥**4.4 File names and extensions should be lowercase without spaces.
- 4.5 Files should be uniformly formatted.

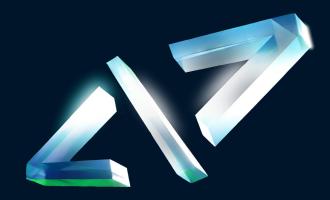
### **What We Learned Today**

- 1. What HTML is
- 2. HTML syntax:
  - Element
  - Tag
  - Attribute
  - Class
- 3. How to choose tags



### **Homework** until next Wednesday

- 1. Practice Emmet
- 2. Pass the free practice HTML Course
- 3. Practice HTML in small tasks
- 4. Markup of Figma template
  - tags
  - attributes
  - classes
- Check your site markup Validation and Heading hierarchy













## Please fill out the feedback form

It's very important for us



# THANK YOU! Have a good evening!

