

Week 3: HTML, CSS

Meet the building blocks of all web pages. With these technologies you can display any content you wish.

Self assessment

TODO Don't forget to open your personal spreadsheet or notes to explain the concepts for this given time period.

Monday

HTML basics part I. - What is HTML? How an HTML page looks like? What are its main components and properties?

Title	Duration
What is HTML?	6:07
HTML Syntax & Structure	13:09
Your First Web Page	9:35
Head and Body Tag	7:22
Headings and Text	8:18
Default Browser Styles	3:40

Self assessment

- What can we create using by HTML? websites
- "HTML is a markup language"
 - What does it mean? A markup language is a computer language that defines the structure and presentation of raw text.
- HTML structure

```
<!DOCTYPE html>

<1>
  <2>
    </2>

  <3>
    </3>

</1>
```

- A valid HTML document requires a few basic elements, we marked them with numbers, figure out which number is which element
 - 1: `<html> </html>`
 - 2: `<head> </head>`
 - 3: `<body> </body>`
- HTML tags, attributes
`<h1 class="page-header">Title</h1>`
- Pair the parts of the HTML elements with their names
 - attribute name, start tag, end tag, value, content
 - `<h1>` start tag
 - `class` attribute name
 - `"page-header"` value
 - `Title` content
 - `</h1>` end tag
- How many kind of tags can you use for heading (`<h1>` - `<h?>`) The maximum is h6
- Which tag do you use for create a paragraph? `<p> ... </p>`

Practice

- Complete the following exercises from [Codecademy's Introduction to HTML course](#)
 - What is HTML? ok
 - HTML Anatomy ok
 - The Body ok
 - HTML Structure ok
 - Headings ok

Tuesday

HTML basics part II. - Introduction to the most common HTML tags and their usage.

Title	Duration
The img Tag	6:12
HTML Links	12:24
HTML Lists	8:05
The div Tag	4:51
ID's and Classes	8:13
Adding CSS to HTML	9:33

Optional:

- https://developer.mozilla.org/en-US/docs/Learn/Getting_started_with_the_web/HTML_basics

Self assessment

Write a few sentences to answer the following questions.

- What does the tag? *With it's help we can insert images into our website.*
 - What is the src attribute for? *It stands for source, it specifies the location of the images (can be local or online)*
 - What is the alt attribute for? *The alt attribute, which means alternative text, brings meaning to the images on our sites. The alt attribute can be added to the image tag just like the src attribute. The value of alt should be a description of the image.*
- What does the <a> tag? *anchor element, with it's help we can link to other web pages. must be used with href attribute.*
 - What is the href attribute for? *= hyperlink reference and is used to link to a path, or the address to where a file is located (whether it is on your computer or another location).*
- What kind of lists can you create in HTML? Name them:
 - + *unorganized list*
 - + *organized list*
 - <dl> + <dt> + <dd> *a list which contains terms and descriptions, much like a dictionary.*
- What is the <div> tag for? *it's for divide content into logical sections*
- What are the id and the class attributes for?
 - Which can you use to identify a unique element? *id* *The id attribute specifies a unique id for an HTML element (the value must be unique within the HTML document).*
 - Which can you use to identify multiple elements? *class* *The id attribute is most used to point to a style in a style sheet, and by JavaScript (via the HTML DOM) to manipulate the element with the specific id.*
- Write the three ways of adding CSS to HTML:
 - 1. *Inline styling using the style attribute*
 - 2. *Within <style> tags in the head of the document*
 - 3. *By linking up a stylesheet in the head*

Practice

- Complete the remaining exercises from [Codecademy's Introduction to HTML course](#) *ok*

Wednesday

CSS basics part I. - What is CSS? How does it work? Basic CSS syntax.

Title	Duration
What is CSS?	4:43
Default Browser Styles	4:46
Basic CSS Syntax	8:01
Targeting Elements with CSS	4:28

Self assessment

Write a few sentences to answer the following questions.

- What is CSS for? cascading style sheets, CSS controls presentation of HTML.
- What does Default Browser Styles mean? all browsers have their own default styling, f.e margin, padding between elements, font sizing, etc. It comes alive if the website doesn't have CSS.
- What do the CSS rules target? each rule targets a specific tag or element on a HTML document
`h1 {color: tomato;}`
- Which is the "selector" and the "rule"?
 - `h1` selector
 - `{color: tomato;}` rule

Practice

- Complete the [Codecademy's CSS Setup and Selectors course](#) ok

Thursday

CSS basics part II. - Targeting HTML elements with CSS

Title	Duration
Targeting Classes and ID's	7:24
CSS Conflicts & the Cascade	8:04
Inheritance	8:47
Selector Specificity	10:17
Targeting Multiple Elements	4:40
Descendant Selectors	6:22

Self assessment

Write a few sentences to answer the following questions.

```
<div id="main-menu">
```

```
<a class="menu-item" href="http://homepage.com"></a>
```

```
<a class="menu-item" href="http://page.hu"></a>
```

```
<a class="menu-item" href="http://home.com"></a>
```

```
</div>
```

- How can you target the "main-menu" id? `#main-menu { ... }`
- How can you target the "menu-item" class? `.menu-item { ... }`
- What happens when CSS conflict occur? `the bottommost or the more specific rule will be applied.`
- What is cascading order? `styling rules (including css rules too) are applied from the top of the source code to the bottom. so if there are 2 selectors which referres to the same id/class/tag, so in the end, the bottommost rule will be applied.`
- Inheritance

```
<body>
```

```
<h1>Title</h1>
```

```
<div>
```

```
<p></p>
```

```
</div>
```

```
</body>
```

```
body {  
  color: red;  
}
```

```
div {
  color: green;
}
```

- Name the <body> tag's child elements <h1>, <div>
- Name the <body> tag's grandchild element <p>
- Name the <p> tag's parent element <div>
- Name the <p> tag's grandparent element <body>
- What color is the <h1> tag? red
- What color is the <p> tag? green

```
<div id="content">
  <p>Lorem Ipsum</p>
  <p class="text">dolor sit amet</p>
</div>
#content p {
  color: red;
}
```

```
.text {
  color: green;
}
```

- What color is the <p> tags? <p> is red, <p class="text"> is green. IDs are the most specific selector in CSS, followed by classes, and finally, tags.
- How can you target multiple elements? by id/type/classname. f.e: #content p { color: red; } here all <p> elements will be red.
- What are the descendant selectors? What is their syntax?

Practice

- Complete the [CSS Visual Rules on Codecademy](#) ok

With descendant selectors we can make css rules specified f.e for all the <p> elements which are nested within a <div> element.

Syntax:

```
<div id="example">
  <div id="sub-example">
    <p>...</p>
  </div>
</div>
```

CSS:

```
#example #sub-example p {color: red}
```

Friday

CSS basics part III. - The basics of positioning with CSS

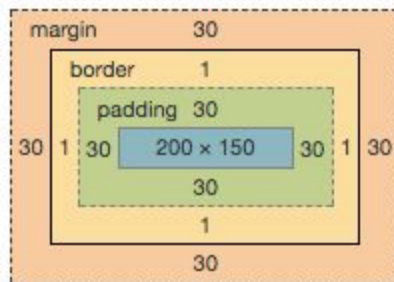
Title	Duration
The Box Model	9:27
Margins	10:38
Padding	4:41
Borders	6:47

Optional:

https://developer.mozilla.org/en-US/docs/Learn/Getting_started_with_the_web/CSS_basics

Self assessment

Write a few sentences to answer the following questions.



- What are the parts of the box model?
 - margin: 30px
 - border: 1px solid black
 - padding: 30px
 - element (width, height): width: 200px, height: 150px

Practice

- Complete the [Box model on Codecademy](#) ok