

Front-End I: HTML & CSS

Language Technology and Web Applications

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Review of Assignment 0

1. Using the Developer Tools in the browser
2. Deploying your personal website

Learning Goals for this Week

- You recall the basic syntax of HTML and CSS
- You can write an HTML document with help of documentation
- You can write a CSS stylesheet with help of documentation

Alternative Paths for Achieving the Learning Goals

- Attending this lecture
- Reading the MDN web docs (linked in the Teams tab “Textbook”)
- Watching the lecture recordings (listed in the Teams tab “Recordings from 2020”)

1. HTML — Structuring a Website

2. CSS — Styling a Website

1. HTML — Structuring a Website

2. CSS — Styling a Website

```
<h1>This is a Title</h1>
```

```
<p>This is a paragraph.</p>
```

This is a Title

This is a paragraph.

Anatomy of an HTML element




Nesting elements

`<p>My cat is very grumpy.</p>`

My cat is **very** grumpy.

Attribute



The diagram shows the word "Attribute" with a vertical line pointing down to a horizontal bracket. The bracket is positioned above the `class="editor-note"` part of the HTML code below.

```
<p class="editor-note">My cat is very grumpy</p>
```

Examples of Attributes

```
<h1 id="myheading">Title</h1>
```

```
<h1 class="main-heading green-heading">Title</h1>
```

```

```

Empty elements

`<p>`

Shall I compare thee to a summer's day?`
`

Thou art more lovely and more temperate:

`</p>`

Shall I compare thee to a summer's day?

Thou art more lovely and more temperate:

Whitespace in HTML

```
<p>Dogs are silly.</p>
```

```
<p>Dogs      are  
    silly.</p>
```

Dogs are silly.

Dogs are silly.

Inspecting HTML in the Browser

1. Right-click on a webpage
2. Click on “Inspect”

Special Characters

- < → <
- > → >
- " → "
- ' → '
- & → &

Example:

<p>Ben & Jerry's > Extrême</p>

Ben & Jerry's > Extrême

```
<p>I'm not inside a comment</p>
```

```
<!-- I am! -->
```


A Full HTML Document

```
<!DOCTYPE html>  
<html>  
  
  <head>  
    <meta charset="utf-8">  
    <title>My test page</title>  
  </head>  
  
  <body>  
    <p>This is my page</p>  
  </body>  
  
</html>
```

Indicating the primary language

<!-- On the document -->

```
<html lang="en-US">
```

<!-- On a single element -->

```
<p lang="gsw">Grüezi!</p>
```

Google Terms and Conditions:

“If unaltered Cloud Translation API results are published and made searchable on the web, you are required to designate the translated text as machine translated content.”

How could you implement this?

HTML elements for structuring content

- Header: `<header>`
- Navigation bar: `<nav>`
- Main content: `<main>`
- Sections of main content: `<section>`
- Sidebar: `<aside>`; often placed inside `<main>`
- Footer: `<footer>`

Headings

<h1>Book Title</h1>

<p>By Jane Doe</p>

<h2>Chapter 1</h2>

<h3>A dark and stormy night</h3>

Book Title

By Jane Doe

Chapter 1

A dark and stormy night

Images

<!-- Different forms of source paths -->

<img src="dinosaur.jpg">

<img src="images/dinosaur.jpg">

<img src="../../../images/dinosaur.jpg">

<img src="https://www.example.com/images/dinosaur.jpg">

<!-- Other image attributes -->

<img src="images/dinosaur.jpg"

alt="The head and torso of a dinosaur skeleton."

width="400"

height="341">

Unordered Lists

```
<ul>
  <li>milk</li>
  <li>eggs</li>
  <li>bread</li>
</ul>
```

-
- milk
 - eggs
 - bread

```
<ol>  
  <li>Drive to the end of the road</li>  
  <li>Turn right</li>  
  <li>Go straight for two blocks</li>  
</ol>
```

-
1. Drive to the end of the road
 2. Turn right
 3. Go straight for two blocks

<p>I am glad you weren't late.</p>

I am *glad* you weren't *late*.

<p>This liquid is highly toxic.</p>

This liquid is **highly toxic**.

```
<p>I'm creating a link to  
  <a href="https://www.uzh.ch/">the UZH homepage</a>.  
</p>
```

I'm creating a link to [the UZH homepage](https://www.uzh.ch/).

Turning other elements into hyperlinks

```
<a href="https://www.uzh.ch/">  
    
</a>
```

Edit the HTML of your personal website on GitLab.

Add the following elements:

- An `<h2>` element
- A hyperlink
- A `` and an `` element
- A bullet list

Linking to a specific part of a page

```
<h2 id="address">Mailing address</h2>
```

...

```
<!-- From the same page -->
```

Want to write us? Use our `Address`.

```
<!-- From a different page -->
```

Want to write us? Use our `Address`.

Inline elements and Block elements

`firstsecondthird`

`<p>fourth</p><p>fifth</p><p>sixth</p>`

firstsecondthird

fourth

fifth

sixth

Non-semantic elements

- Block-level: `<div>`
- Inline: ``

Example usage:

`<p>`

The King walked drunkenly back to his room at 01:00, the beer doing nothing to aid him as he staggered through the door

``[Editor's note: At this point in the play, the lights should be down low]``.

`</p>`

1. HTML — Structuring a Website

2. CSS — Styling a Website

```
h1 {  
    color: red;  
    font-size: 20px;  
}
```

```
p {  
    color: black;  
}
```

```
/* A comment */
```

Linking an External Stylesheet

```
<html>
  <head>
    <link rel="stylesheet" href="styles.css">
  </head>
  <body>
    ...
  </body>
</html>
```

Internal Stylesheets

```
<html>
  <body>
    ...

    <style>
      h1 {
        color: blue;
      }
      p {
        color: red;
      }
    </style>
  </body>
</html>
```

```
<p style="color:red; background-color:yellow">  
  Make this colorful!  
</p>
```

Make this colorful!

Selecting elements by tag

```
h1 {  
    /* ... */  
}
```

```
a {  
    /* ... */  
}
```

```
body {  
    /* ... */  
}
```

Selecting elements by ID or class

```
#myid {  
    /* ... */  
}
```

```
.myclass {  
    /* ... */  
}
```

```
p#myid {  
    /* ... */  
}
```

```
p.myclass {  
    /* ... */  
}
```

Multiple Selectors

```
ul, ol {  
  color: green;  
}
```


Example: Setting the background of an element

```
background: green;
```

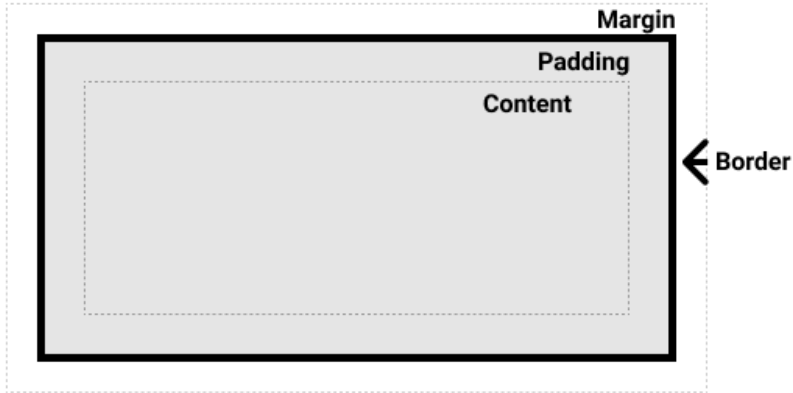
```
background: #74992e;
```

```
background: rgb(255, 255, 128);
```

```
background: url("bg.jpg");
```

Add a background color to your personal website.

Defining the space around an element



Spacing Examples

```
margin-left: 20px;
```

```
margin-left: 100%;
```

```
margin-left: 50vw;
```

```
margin-top: 50vh;
```

font-size: 12px;

font-size: 3em;

font-size: 2rem;

Font Families

```
p {  
  font-family: Arial;  
}
```

/ Specifying fallback fonts */*

```
p {  
  font-family: "Helvetica Now", Helvetica, Arial, sans-serif;  
}
```

Other useful text properties

font-style: italic;

font-weight: bold;

text-transform: uppercase;

text-decoration: underline;

Text Alignment

```
text-align: left;  
text-align: right;  
text-align: center;  
text-align: justify;
```




<https://t.uzh.ch/1BW>