

WEB ENGINEERING

Lab 1

K.H.Kempen en Lessius bundelen de krachten en worden *more*.

BROWSERS AND TEXT EDITORS

- Notepad++ / Visual Studio Code / WebStorm
- **Remark:** no visual editor needed!
- Browsers:



VISUAL STUDIO CODE: INSTALLATION

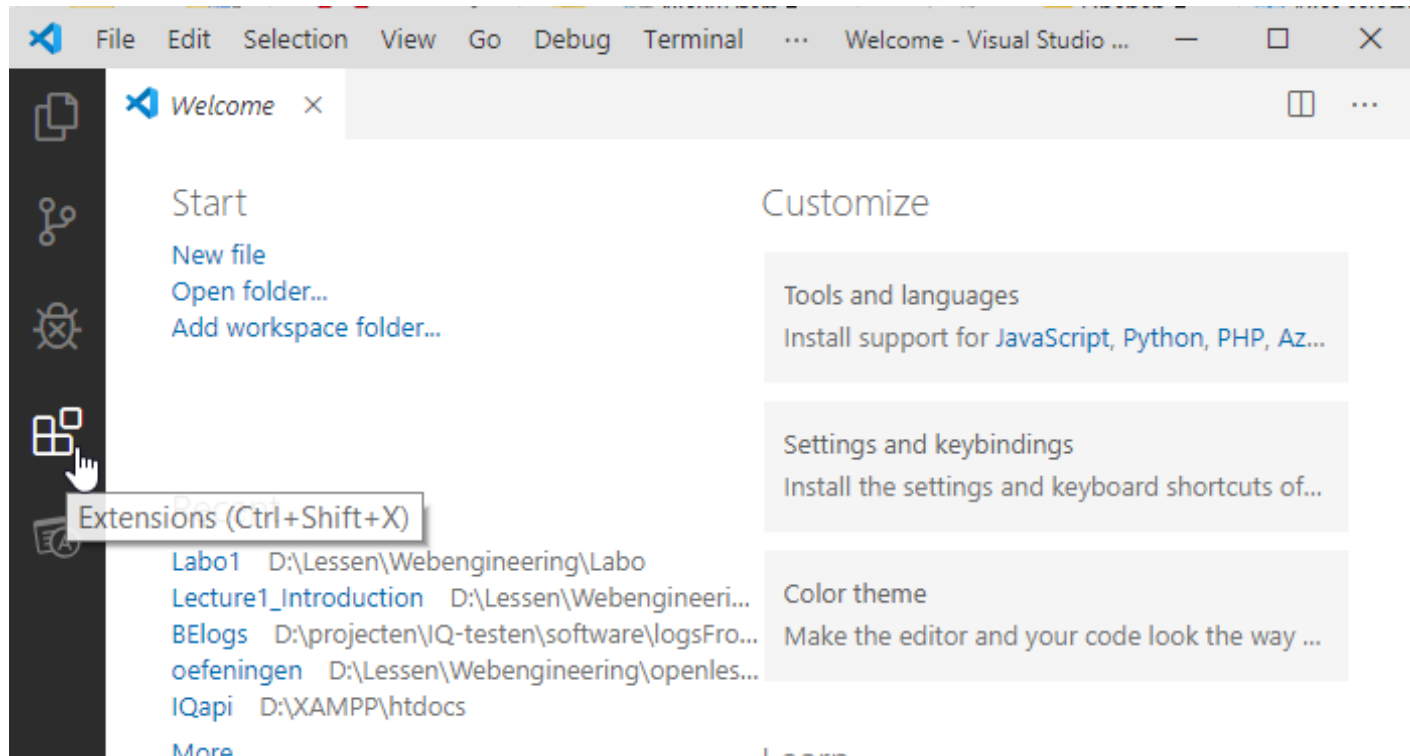
- Install visual studio code:

<https://code.visualstudio.com/>

- Be sure to add code to your path during installation!

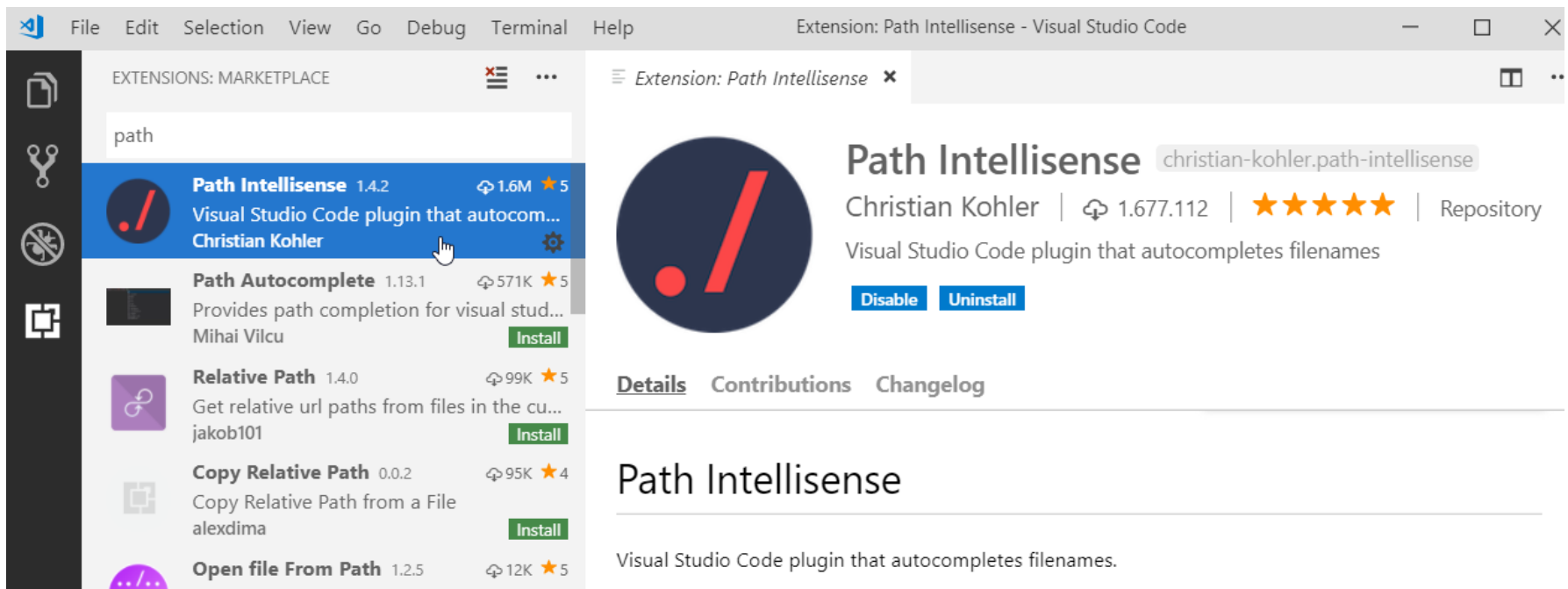
VISUAL STUDIO CODE: PLUGINS

- Go to plugin screen:



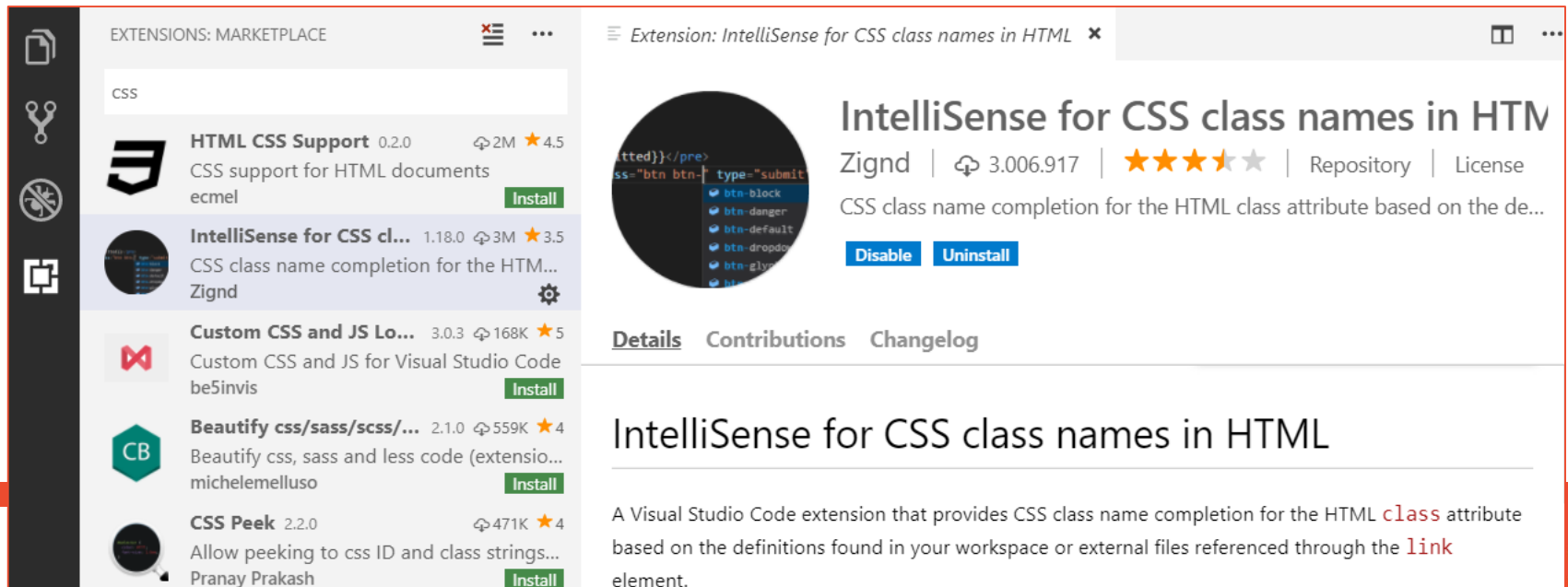
PLUGINS: AID FOR PATHS

- In search field:
type 'path' and select 'path intellisense'
click 'install'



PLUGINS: AID FOR CSS

- In search field:
type 'css' and select 'IntelliSense for CSS class names in HTML'
click 'install'



The screenshot displays the Visual Studio Code interface. On the left, the 'EXTENSIONS: MARKETPLACE' sidebar shows a search for 'css'. The results list several extensions, with 'IntelliSense for CSS class names in HTML' by Zignd highlighted. The main panel shows the details for this extension, including its icon, name, author (Zignd), version (1.18.0), and a list of installed extensions. The extension description states: 'CSS class name completion for the HTML class attribute based on the definitions found in your workspace or external files referenced through the link element.'

EXTENSIONS: MARKETPLACE

css

HTML CSS Support 0.2.0 2M 4.5
CSS support for HTML documents
ecmel [Install](#)

IntelliSense for CSS class names in HTML 1.18.0 3M 3.5
CSS class name completion for the HTML class attribute based on the definitions found in your workspace or external files referenced through the link element
Zignd [Install](#)

Custom CSS and JS Language Support 3.0.3 168K 5
Custom CSS and JS for Visual Studio Code
be5invis [Install](#)

Beautify css/sass/scss/less 2.1.0 559K 4
Beautify css, sass and less code (extension)
michelemelluso [Install](#)

CSS Peek 2.2.0 471K 4
Allow peeking to css ID and class strings...
Pranay Prakash [Install](#)

Extension: IntelliSense for CSS class names in HTML

IntelliSense for CSS class names in HTML
Zignd | 3.006.917 | 4.5 | Repository | License
CSS class name completion for the HTML class attribute based on the definitions found in your workspace or external files referenced through the link element.

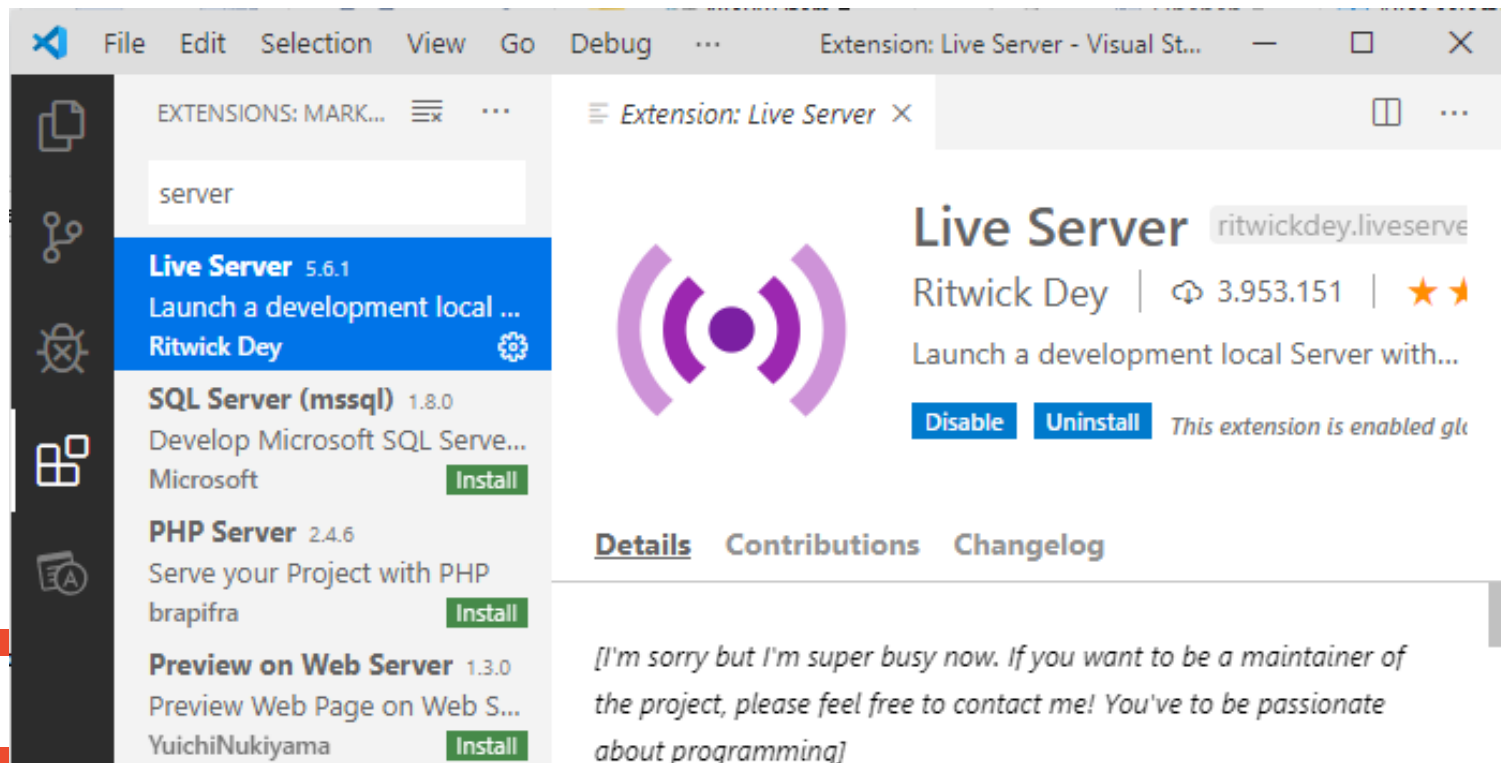
[Details](#) [Contributions](#) [Changelog](#)

IntelliSense for CSS class names in HTML

A Visual Studio Code extension that provides CSS class name completion for the HTML `class` attribute based on the definitions found in your workspace or external files referenced through the `link` element.

PLUGINS: LIVE SERVER

- In search field:
type 'server' and select 'Live Server'
click 'install'



HTML: HYPERTEXT MARKUP LANGUAGE

- not a programming language !
- coding agreement => describes **structure**
- pure ASCII
- platform-independent
- composed of tags and text

CSS/CSS3

- **Layout**
- external stylesheet
 - .css
 - all style info entire website in 1 document
 - easier to make changes
 - web pages load faster (style sheet cache)
 - Allows the creation of optimized style sheets for smartphone, screen, ...

SUMMARY

1. **HTML** = structuring data on a page
2. **CSS** = design the page

HTML: TAGS

Tag: short code typed into a text file to create the structure of the web page

1. Open tags `
` or `<hr />`
2. Container tags

<code><p></code>	paragraph	<code></p></code>	<code><h1></code>	title	<code></h1></code>
↓		↓	↓	↓	↓
open		close	open		close

use small letters
(not mandatory in html5 but advisable)

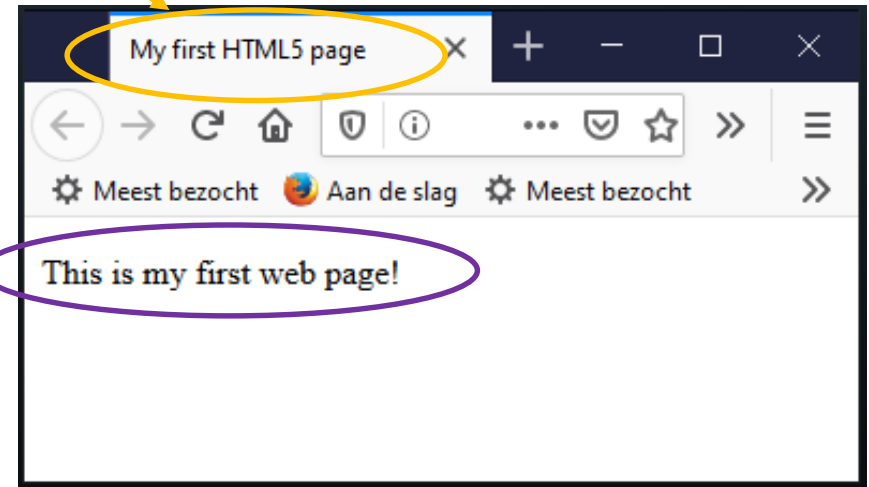
MY FIRST WEB PAGE

```
1  <!DOCTYPE html>
2  <html>
3      <head>
4          <meta charset="utf-8" />
5          <title>My first HTML5 page</title>
6      </head>
7      <body>
8          <p>This is my first web page!</p>
9      </body>
10 </html>
```

Indicate the usage of HTML5

html code starts here

html code ends here



TAGS: ATTRIBUTES

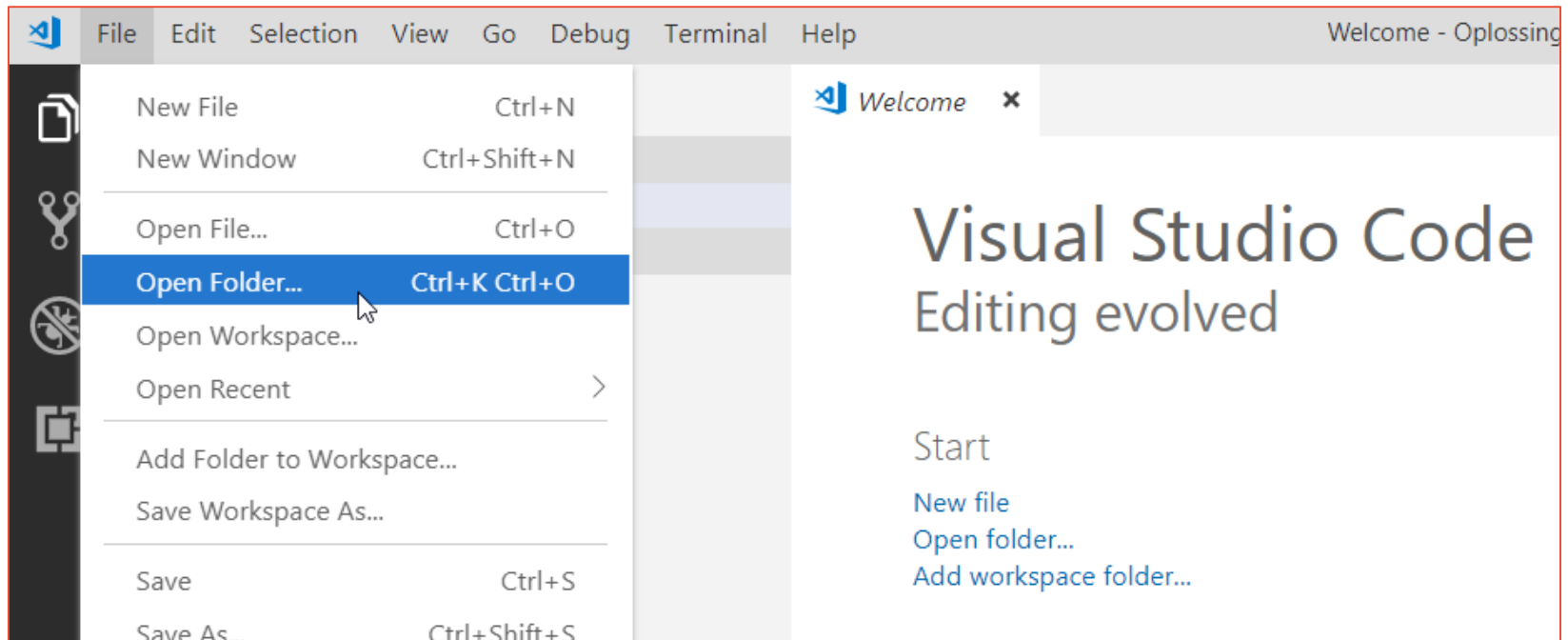
E.g.: place titel in middle of the page?

```
<h1 class="style1">my title</h1>
```

- specified in start tag
- space needed between tag and attribute
- multiple attributes possible
- name attribute written in small letters
- key/value pairs with value in between double quotes

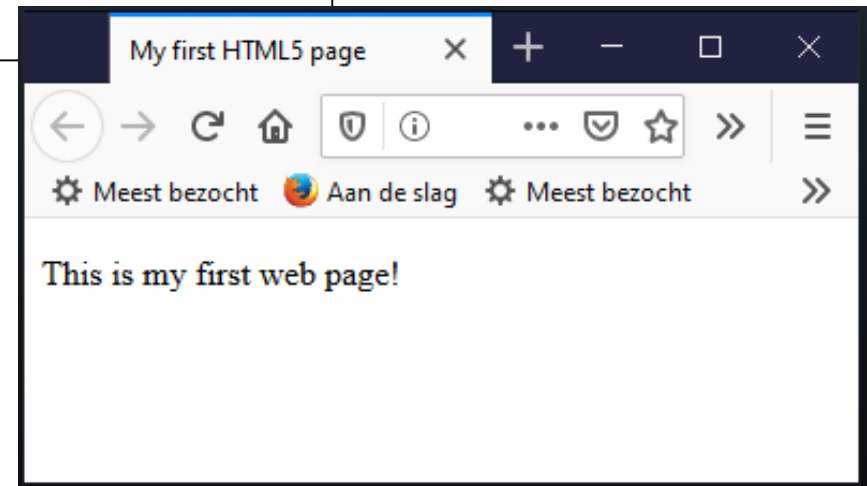
CODE: FIRST PROJECT

- Open a complete folder instead of separate files:




MY FIRST WEB PAGE

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8" />
    <title>My first HTML5 page</title>
  </head>
  <body>
    <p class="parStyle">This is my first web page!</p>
  </body>
</html>
```



VALIDATE YOUR CODE!

- <https://validator.w3.org/>



The screenshot shows a web browser window with the address bar displaying <https://validator.w3.org/>. The page title is "The W3C Markup Validation Service". The main heading is "W3C® Markup Validation Service" with the subtitle "Check the markup (HTML, XHTML, ...) of Web documents". There are three tabs: "Validate by URI", "Validate by File Upload", and "Validate by Direct Input". The "Validate by URI" tab is selected. Below the tabs, the text "Validate by URI" is followed by "Validate a document online:". There is a text input field labeled "Address:". Below the input field is a link "More Options". At the bottom of the form is a "Check" button. At the very bottom of the page, a footer text reads: "This validator checks the [markup validity](#) of Web documents in HTML, XHTML, SMIL,".

GENERAL FORMAT

- selector {
 CSS property name: value;
 CSS property name: value;
 ...
}

- p{
 color:purple;
}

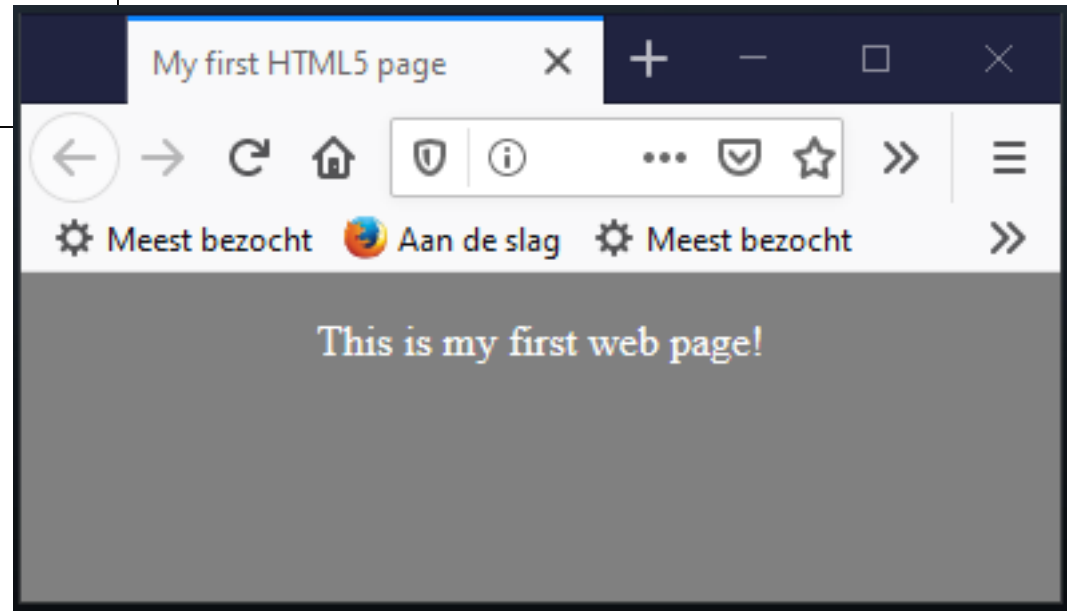
- p{
 color:purple;
 background-color: white;
}

- Group selectors:
h1, h2 {
 color:red;
 font-style:italic
}

- ☐ Declaration block surrounded by curly braces
- ☐ Declarations are separated by semicolon ;

MY FIRST CSS FILE

```
1  body {  
2    background-color: gray;  
3  }  
4  
5  .parStyle {  
6    text-align: center;  
7    color: white;  
8  }
```



LINKED STYLESHEETS

<head>

<title></title>

<link rel="stylesheet" href="name.css">

</head>

Relation between current and
linked document

refers to location
stylesheet

INTRODUCTORY EXERCISE

In the start files on Canvas you will find a dir "example". Open the file "example_site" in your web browser. Study the structure of the site using F12.

What is determined by the HTML code? What is determined by css?

Can you change the background color of the page?

EXERCISE 1

The screenshot shows a web browser window with the title 'Exercise 1.1'. The address bar shows '127.0.0.1:5500/S'. The page content includes a centered heading, two paragraphs, a horizontal line, a section title, and a list of instructions. Annotations in blue boxes identify the HTML tags used for each element.

This is a centered heading of level 1. title: `<h1>`

`<p>` This is an ordinary paragraph. The text is therefore placed against the left margin. If the dimensions of the browser window are changed, the text will adjust itself automatically.

This text will be aligned against the right margin. It reads less pleasant, a reason why this type of alignment is not used very often. `<p>`

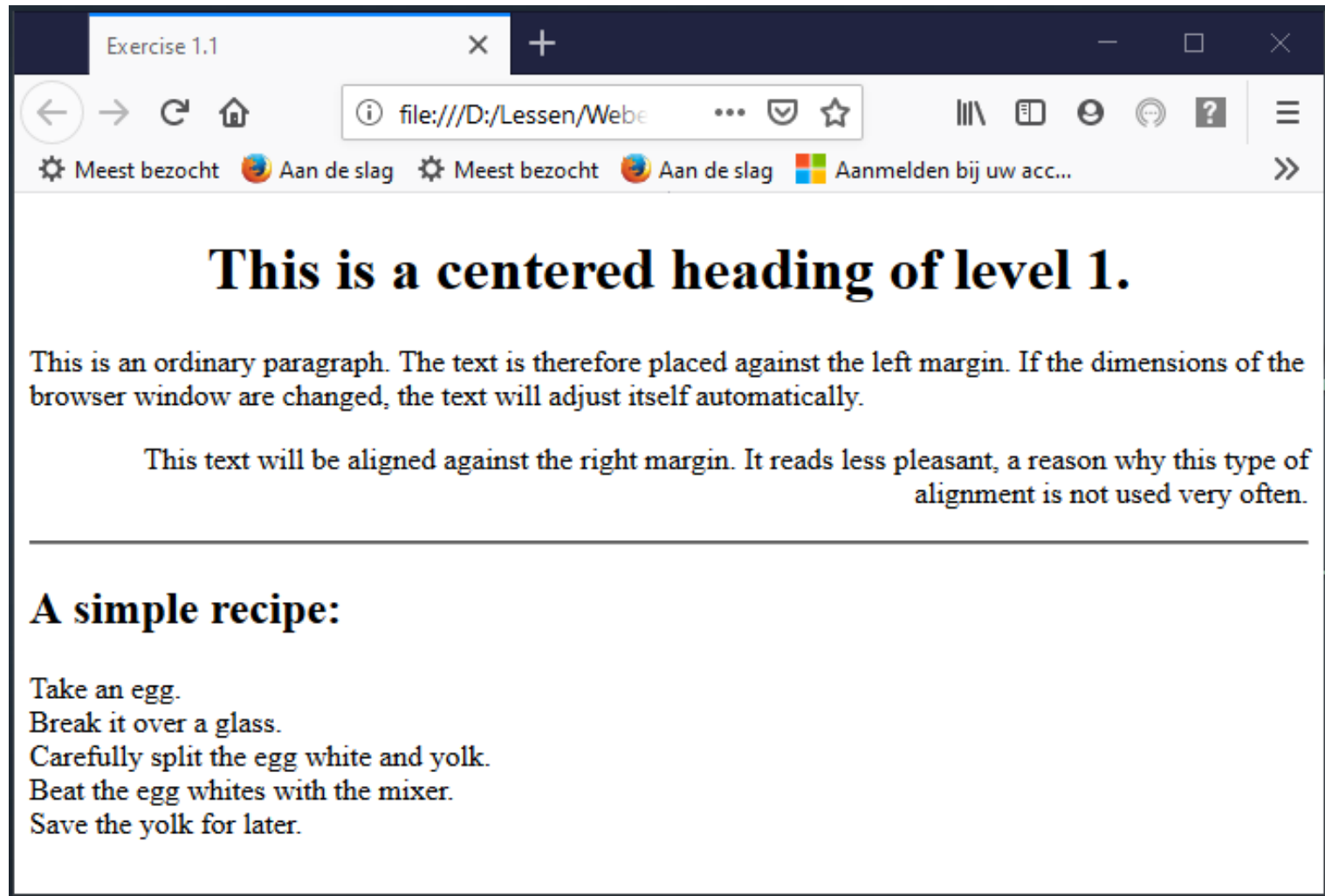
line: `<hr />`

A simple recipe: smaller title: `<h2>`

Take an egg.
Break it over a glass.
Carefully split the egg white and yolk.
Beat the egg whites with the mixer.
Save the yolk for later.

`<p>` each new line with `
`

EXERCISE 1 WITH CSS



MORE EXERCISES

- See assignments lab 1 on Canvas