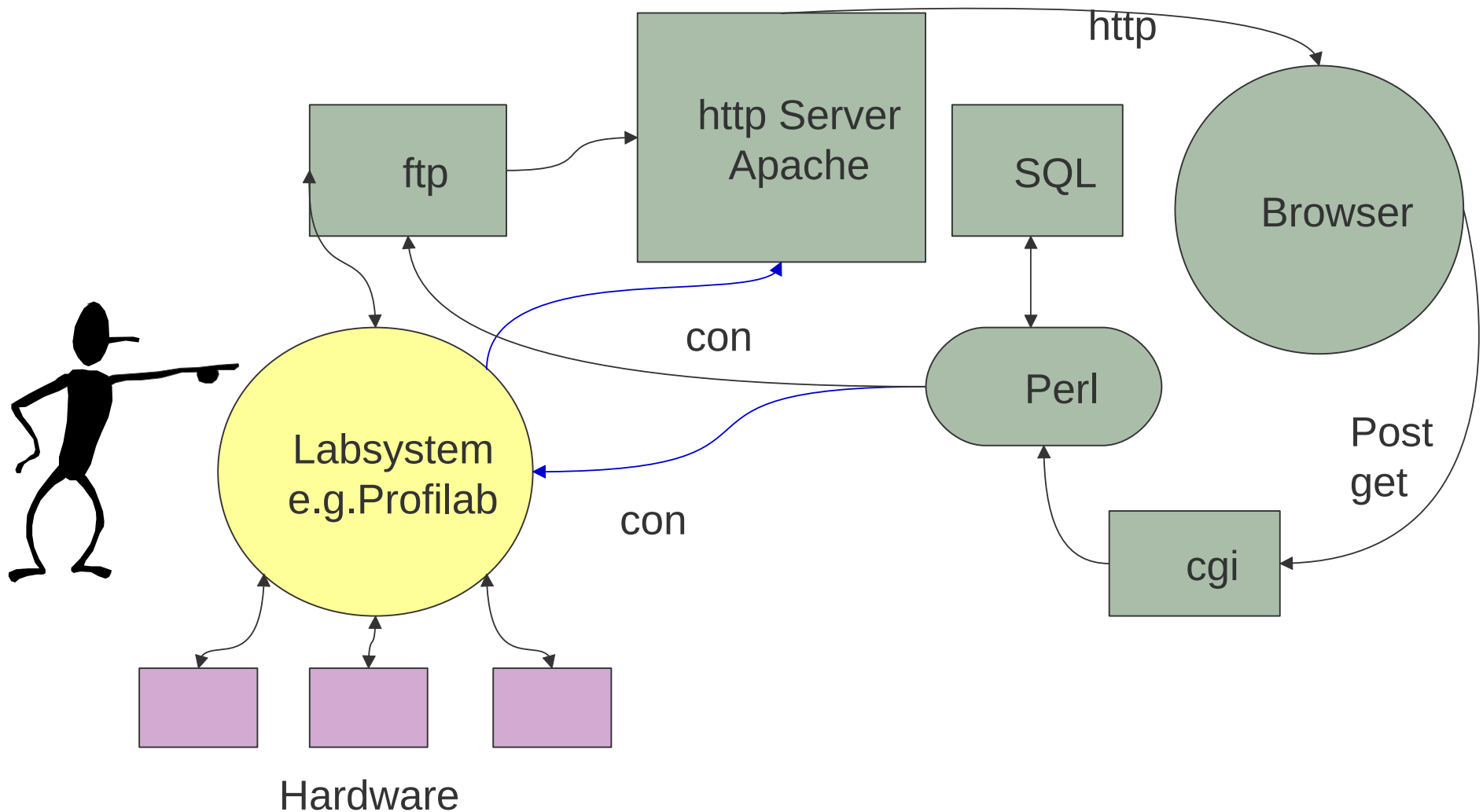


Communication & Visualisation

Karlsruhe University of Applied Sciences
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What it all is about



HTML (1)

- Hypertext Markup Language
 - ASCII readable layout language for media including documents.
 - Formatting of a certain text or function of text is defined by tags at the beginning and end of the text. Special symbols can be inserted by symbol tags. Interpretation of tags can be varied by tag attributes.
 - Geometric arrangement is done by tables or divs.

HTML (2)

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2 //EN">  
<html>  
<head>  
<title>Titel</title>  
<!-- Meta information -->  
</head>  
<body>  
  <!-- Content -->  
</body>  
</html>
```

HTML (ctd.)

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML  
3.2. //EN">
```

This means:

The rules of the language version are defined in a *.DTD document, which is publicly accessible at W3C. The version is 3.2 and the description is in English. Optional the exact address can be added.

HTML (ctd.)

```
<html>
```

```
<head>
```

```
<title>Titel</title> Text for the window titel bar
```

```
<!-- Meta Information -->
```

```
</head>
```

```
<body>
```

```
<!-- Content --> Comment
```

```
</body>
```

```
</html>
```

HTML (ctd.)

```
<head>
```

```
<title>Titel</title>
```

```
<meta http-equiv="refresh" content=3; URL=URI">
```

```
<!-- other meta Information --
```

```
</head>
```

Meta tag example: refresh page from source URI after 3 seconds.

Other meta tags define author, date, search words, behaviour of search machines, content description and so on.

HTML (ctd.)

`<body background="URI" >` Wallpaper

`<h1>Headline</h1>` Bigger headline

`text1
text2` Text with line feed

`<table>` 2X2 Table

`<tr><td>field00</td><td>field01</td></tr>`

`<tr><td>field10</td><td>field11</td></tr>`

`</table>`

`Text to click` Hyperlink

``

 Picture with size

`</body>`

HTML (ctd.)

```
<table>
```

```
<tr><td>00</td><td colspan =2 >01</td></tr>
```

```
<tr><td rowspan =2>10</td>  
    <td>11</td><td>12</td></tr>
```

```
<tr><td>21</td><td>22</td></tr>
```

```
</table>
```

00	01	
10	11	12
	21	22

Assignment 2:

Please create a webpage that introduces yourself:

- With information as text
- with a picture of your choice
- ... up to you, please be creative

a.) Do a first version without CSS

b.) Do a second version with CSS

For now it is ok to just display your webpage as a local file, with no web server involved.
This will be changed in one of the next steps.

In a second step please use cascading style sheets (in an extra file) to change the appearance of your web page. Open it in your browser (best is: try different and compare) and also check for browser built-in support for web pages and checks.

Please always avoid loading external things from third party servers.
That will give these servers possibilities to track your viewers.

At the end:

Install a local web server like the tiny one on windows or a full apache or nginx version.

Please submit a short documentation with screenshots and explanation of wireshark showing communication with your page and the source code of the web page.

Tiny server including perl: see matrix room.

HTML/CSS (1)

- Quick Tutorial:

- <https://www.w3schools.com/css/>

- Embedding directly:

```
<STYLE TYPE="text/css"
MEDIA=screen>
<!--
    BODY { background:
url(foo.gif) red; color: black }
    P EM { background: yellow;
color: black }
    .note { margin-left: 5em;
margin-right: 5em }
-->
</STYLE>
```

- Loading a file (inside head):

```
<LINK REL=StyleSheet HREF="style.css" TYPE="text/css" MEDIA=screen>
<LINK REL=StyleSheet HREF="color-8b.css" TYPE="text/css" TITLE="8-bit
Color Style" MEDIA="screen, print">
<LINK REL="Alternate StyleSheet" HREF="color-24b.css" TYPE="text/css"
TITLE="24-bit Color Style" MEDIA="s
```

HTML/CSS (2)

- Format of a style definition:

`selector { property: value }`

- Defining a style for a group of selectors:

`sel1, sel2, sel3 { property: value }`

- Defining a style for a special combination:

`sel1 sel2 sel3 { property: value }`

– e.g.:

`P EM { background: yellow }`

Only changes emphasised paragraph text.

HTML/CSS – Example 1

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN">
<html><head>
<title>Element-Selektor</title>
<style type="text/css">
body { background-color:#FFFFCC;
      margin-left:100px; }
* { color:blue; }
h1 { font-size:300%; color:#FF0000;
     font-style:italic; border-bottom:solid thin black; }
p,li { font-size:110%; line-height:140%;
       font-family:Helvetica,Arial,sans-serif;
       letter-spacing:0.1em; word-spacing:0.3em; }
</style>
</head>
<body>
<h1>Big headline</h1>
<p>standard text line</p>
<ul>
<li>a list item</li>
<li>another list item</li>
</ul>
</body>
</html>
```

Big headline

standard text line

- a list item
- another list item

```

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN">
<html><head>
<title>Klassen-Selektor</title>
<style type="text/css">
.beitrag { border:1px outset gray; margin:.5em; padding:.5em;
background-color:#efd;}
.uebersetzung { border-bottom:1px dotted #900; }
.autor { font-style:italic; }
.datum { font-size:80%; color:#444; }
</style></head><body>
<div class="beitrag">
  <p>Wo finde ich weitere Information über HTML?
  <p class="autor">Moritz Ratlos, <span
class="datum">21.05.2006</span></p></div>
<div class="beitrag">
  <p>Beispielsweise in der
    <a href="http://www.w3.org/TR/REC-html40/">HTML 4.01-
    <span lang="en" title="Empfehlung"
class="uebersetzung">Recommendation</span></a>.</p>
  <p class="autor">Max Hilfreich, <span class="datum">22.05.2006</span></p>
</div>
<div class="beitrag">
  <p>Vielen Dank für den <span lang="en" title="Verweis"
class="uebersetzung">Link!</span></p>
  <p class="autor">Moritz Ratlos, <span class="datum">22.05.2006</span></p>
</div>
</body>
</html>

```

(see de.selfhtml.org)

HTML/CSS – Example 2 – look

Wo finde ich weitere Information über HTML?

Moritz Ratlos, 21.05.2006

Beispielsweise in der [HTML 4.01-Recommendation](#).

Max Hilfreich, 22.05.2006

Vielen Dank für den [Link](#)!

Moritz Ratlos, 22.05.2006

[zurück](#)

HTML – Exercise

- Please write a web page that introduces you.
 - first version plain html
 - second version html and css