



# IF.03.01\_BASIC WEB TECHNIQUES

HTML, CSS, Javascript



# BASIC WEB TECHNIQUES

Motivation, Overview, Basic Setup, Organizational, First Html  
Page

# GOALS FOR THIS UNIT

- You have an overview of the whole course
- You have a rough picture how things work in the web
- You have a working setup
- You know the organizational stuff about this course
- You have written a “Hello World” html page
- You know the list of projects

# COURSE OVERVIEW



# TOPICS

1. Introduction
2. Basic html and css
3. Advanced html and css
4. Css mastership
5. Forms and first steps in html
6. Introduction to JavaScript

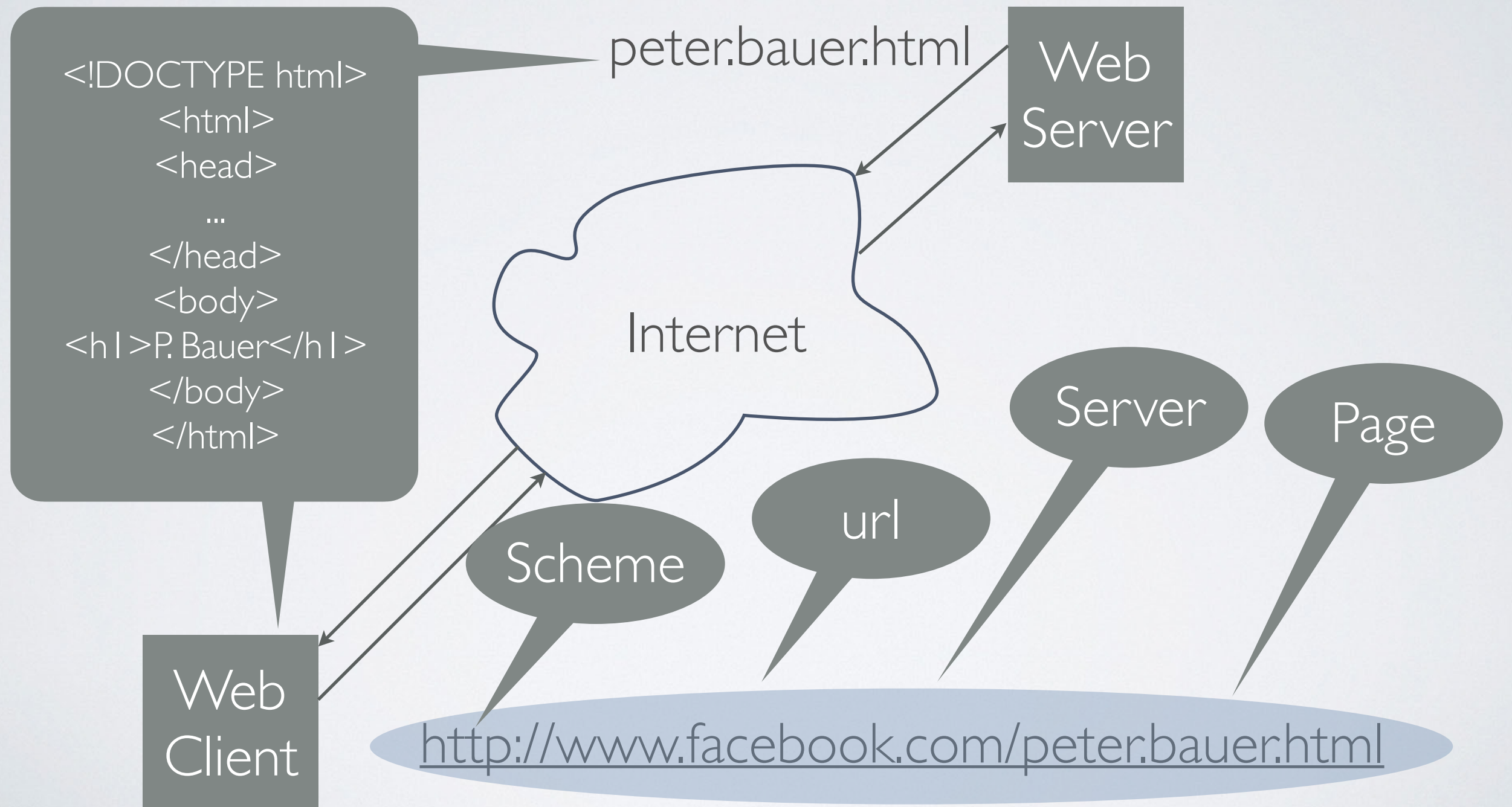
# PRE-REQUISITES

- Good knowledge in programming
  - IF.01.02 Programming
- Knowledge in technical informatics
  - IF.01.01 TINF

# THE WORLD WIDE WEB IN ROUGH PICTURES



# THE BIG PICTURE – EXTREMELY SIMPLIFIED





# COMMON WEB SERVERS AND WEB CLIENTS



Web  
Server



# SERVER SIDE STATIC

```
<!DOCTYPE html>
<html>
<head>
...
</head>
<body>
<h1>P. Bauer</h1>
</body>
</html>
```

peter.bauer.html

Web  
Server

get file

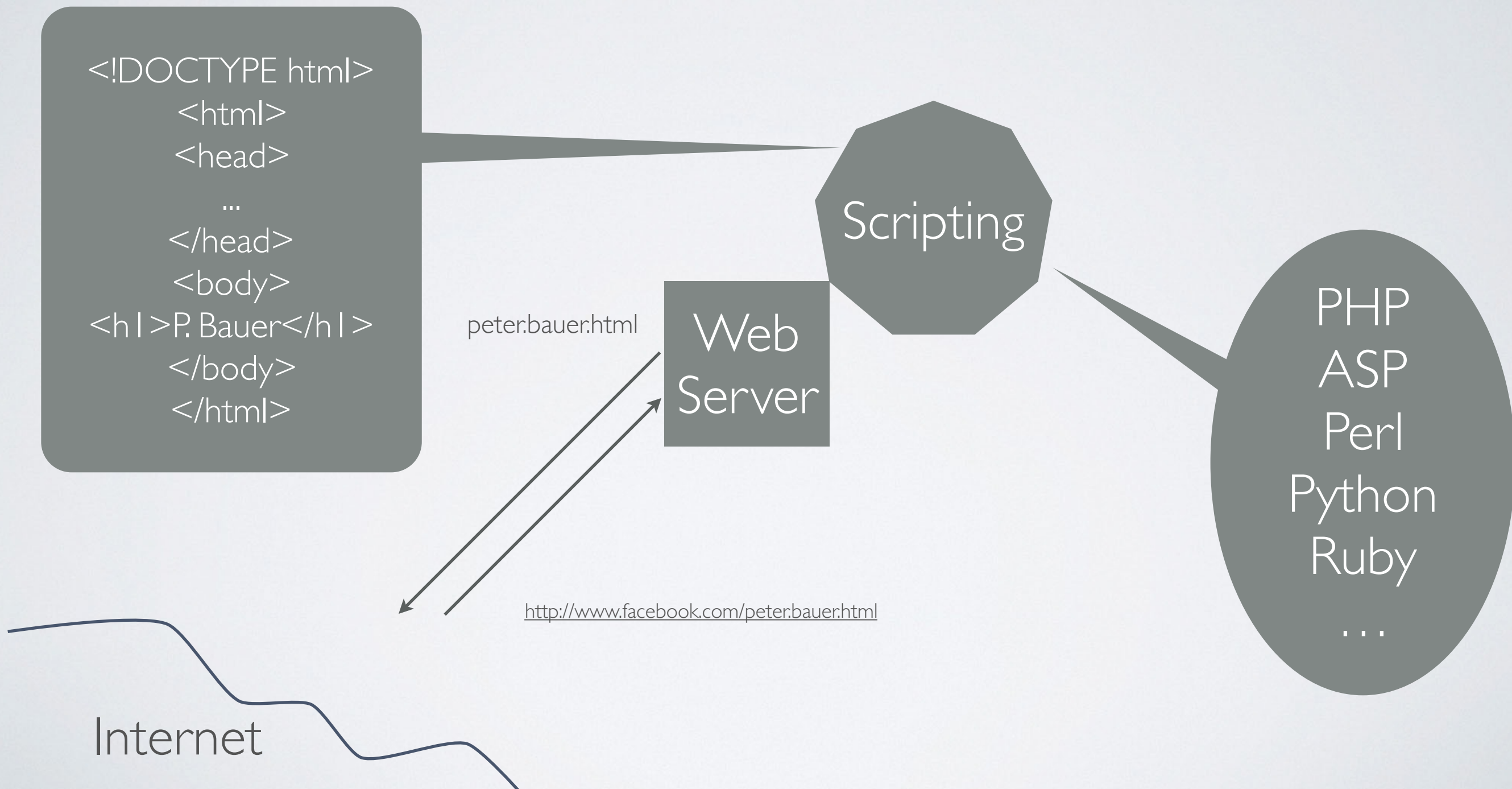
<http://www.facebook.com/peter.bauer.html>

Internet

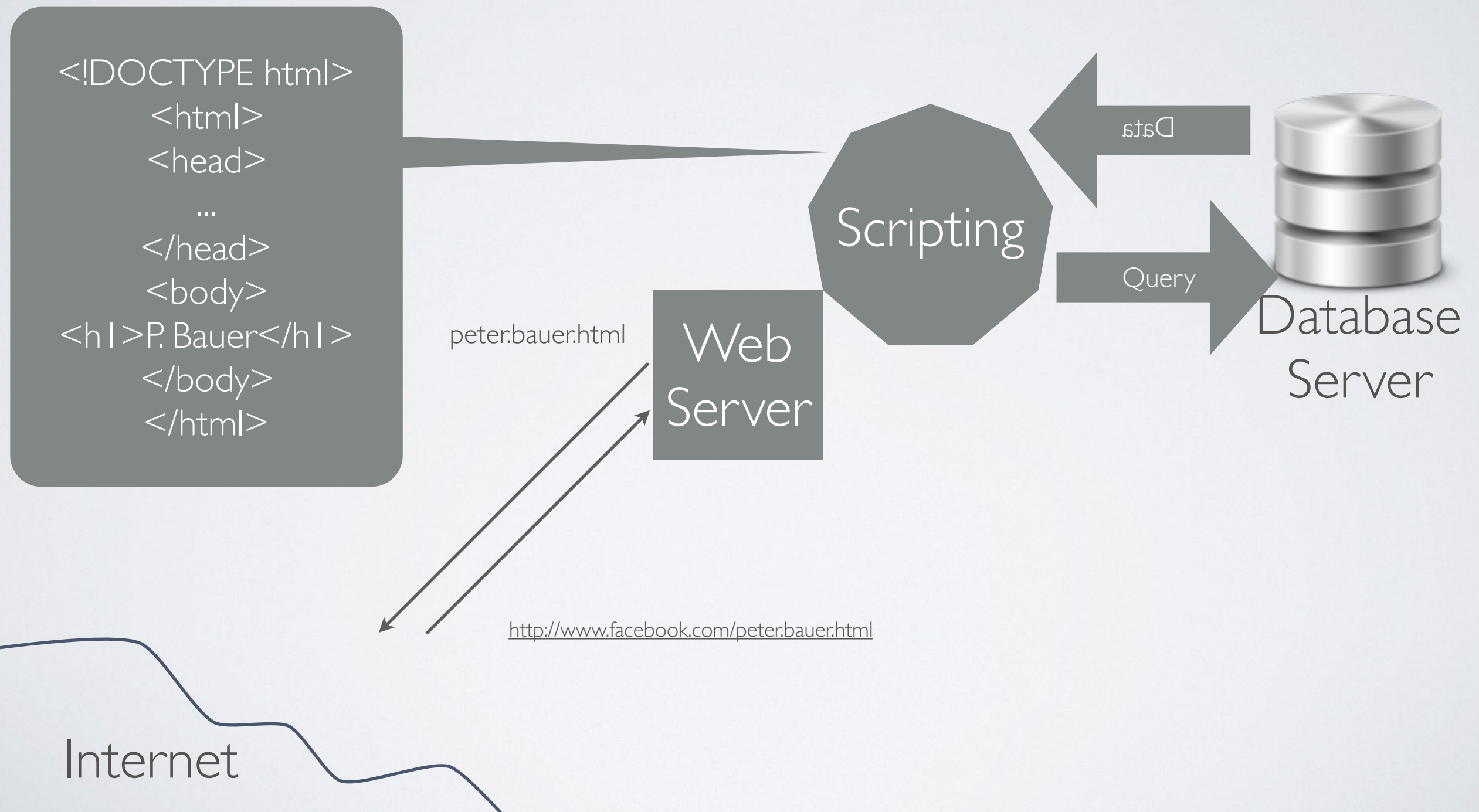
```
Terminal — bash — 74x16
Peters-MacBook-Pro:MyBasicWebTSite peter$ ls -l
total 14264
drwxr-xr-x  6 peter  admin   204 Jul 12 19:02 10_cv_project
-rw-r--r--  1 peter  admin  5501 Jul 12 19:56 assignments.php
-rw-r--r--  1 peter  admin  6977 Jul 12 20:18 course_structure.php
drwxr-xr-x  7 peter  admin   238 Jul 12 14:33 css
-rw-r--r--  1 peter  admin  1240 Jul 12 15:13 cv_project.php
-rw-r--r--  1 peter  admin 7269078 Jul  8 08:30 de_neu.dic
-rw-r--r--  1 peter  admin  1820 Jul  8 10:22 hangman.php
drwxr-xr-x  6 peter  admin   204 Jul 11 08:43 img
drwxr-xr-x  5 peter  admin   170 Jul 12 13:43 include
-rw-r--r--  1 peter  admin  2433 Jul 12 14:14 index.php
drwxr-xr-x  6 peter  admin   204 Jul  8 08:30 js
-rw-r--r--  1 peter  admin  3197 Jul 12 20:14 resources.php
Peters-MacBook-Pro:MyBasicWebTSite peter$
```



# SERVER SIDE DYNAMIC

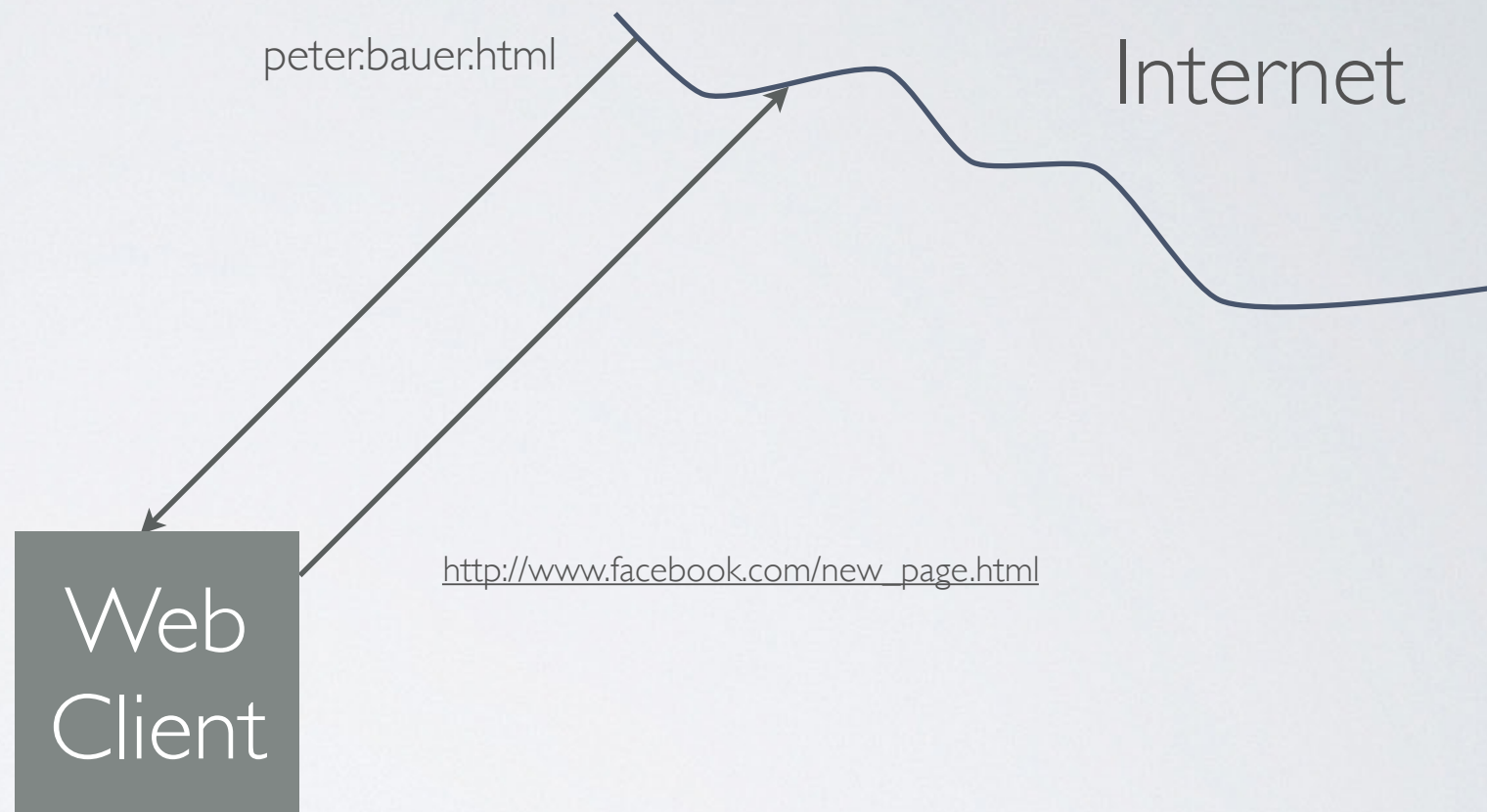
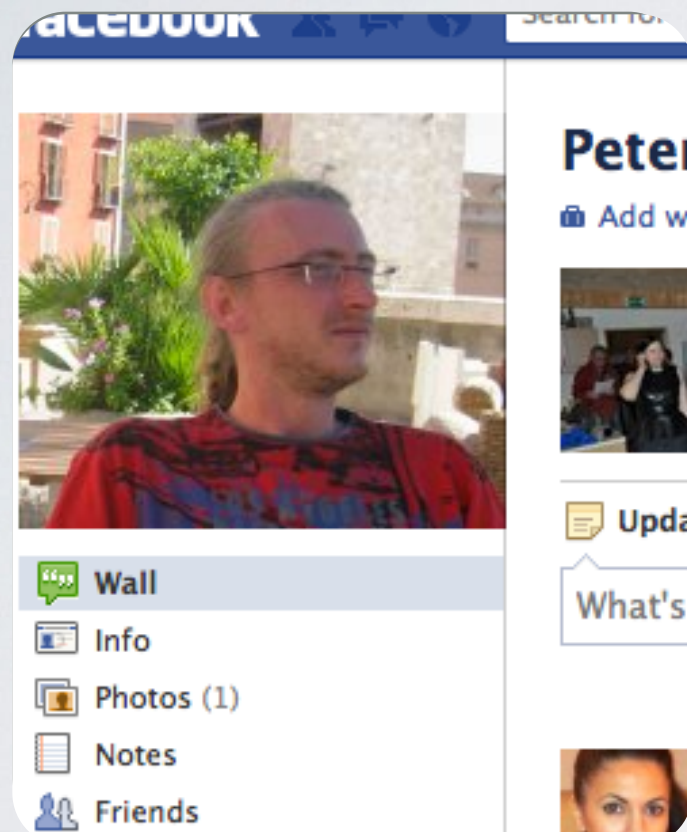


# SERVER SIDE DATA BASE DRIVEN





# CLIENT SIDE



- ✦ Rendering
- ✦ Local input evaluation

- ✦ Animations and other fancy GUI stuff
- ✦ Requests new page

ADMINISTRIVIA



# GRADING

- Your personal web site
- In teams of two
- Regular reviews
- Based on coding assignments
- Several quizzes
- Alone
- Kahoot!
- Based on reading assignments

# RUBRICS

- Give a detailed view what we expect from you
- Available on Piazza(?)
- Link the specific content of this course to the competences your grade is based on



# STATE STANDARDS

Id	Description
<b>BWT.3.1</b>	Students know basic components and elements of languages for designing web pages
<b>BWT.3.2</b>	Students can design web pages by means of script languages, can include dynamic elements, and can create design templates

# RUBRICS – EXAMPLE

Unit	ID	Standard ID	Advanced	2	3	4	Unsatisfactory
All	Web Knowledge	BWT.3.1	Knows all basic components of web sites and apps (web server, web client, how these components work together, http, html elements, css declarations) in detail		Knows most of the basic components of web sites and apps (web server, web client, how these components work together, http, html elements, css declarations)		Does not know the basic components of web sites and apps (web server, web client, how these components work together, http, html elements, css declarations)
2	Internal structure	BWT.3.1	HTML code is clearly structured into sections and subsections	HTML code is mostly structured. Some parts are missing this structure	HTML code is structured. Several parts are missing this structure		Most of the HTML code is without any structure.
	Scale		87 ... 100	75 ... 86	63 ... 74	50 ... 62	0 ... 49



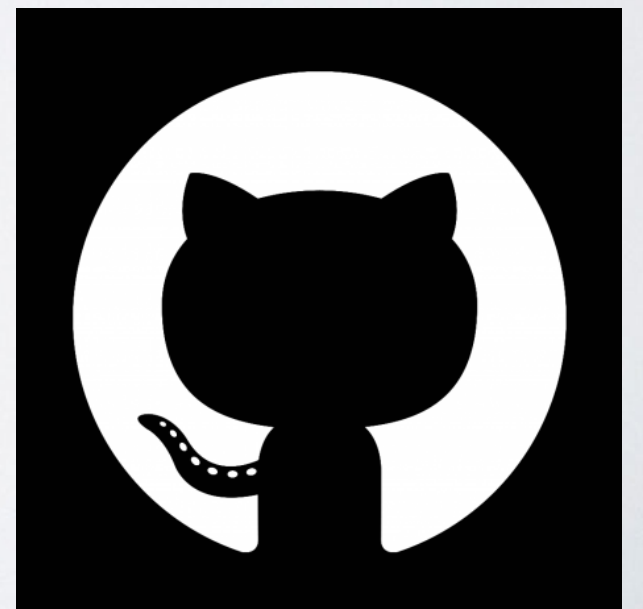
# COMMUNICATION

- Moodle
  - General announcements
  - Communication about tasks and assignments
  - Enroll
    - Course name: WEBT 2AHIF Bauer I 6 I 7
    - Key: WEBT2AHIF I 6 I 7
- Skype / e-mail (Bauepete / p.bauer@htl-leonding.ac.at)/Piazza?
  - Short hand communication
- GitHub

# WORKING SETUP



# MACOS, ATOM, SAFARI, GOOGLE CHROME, GITHUB



# DEMO

- Create a new folder in Finder
- Start Atom
- Create a “hello world” html page
  - doctype, html, head, body, meta, title, em, strong
- Have a look into the Browser
- Download first assignment from GitHub



# THE PROJECTS

# LIST OF PROJECTS

- A brief description of each project (1 min each)
- Both by technical and language teacher
- Then start of first project assignment
  - Find project partners and choose one



# A FIRST HTML PAGE

To be moved into the second unit

# FIRST PAGE – INDEX.HTML

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta http-equiv="Content-Type" content="text/html" />
```

```
<title>My Personal Web Technique Site</title>
```

```
</head>
```

```
<body>
```

```
<article>
```

```
<h1>Hello World (Wide Web)</h1>
```

```
<section>
```

```
<h1>Mission</h1>
```

```
<p>
```

```
This course is for me ...
```

```
</p>
```

```
</section>
```

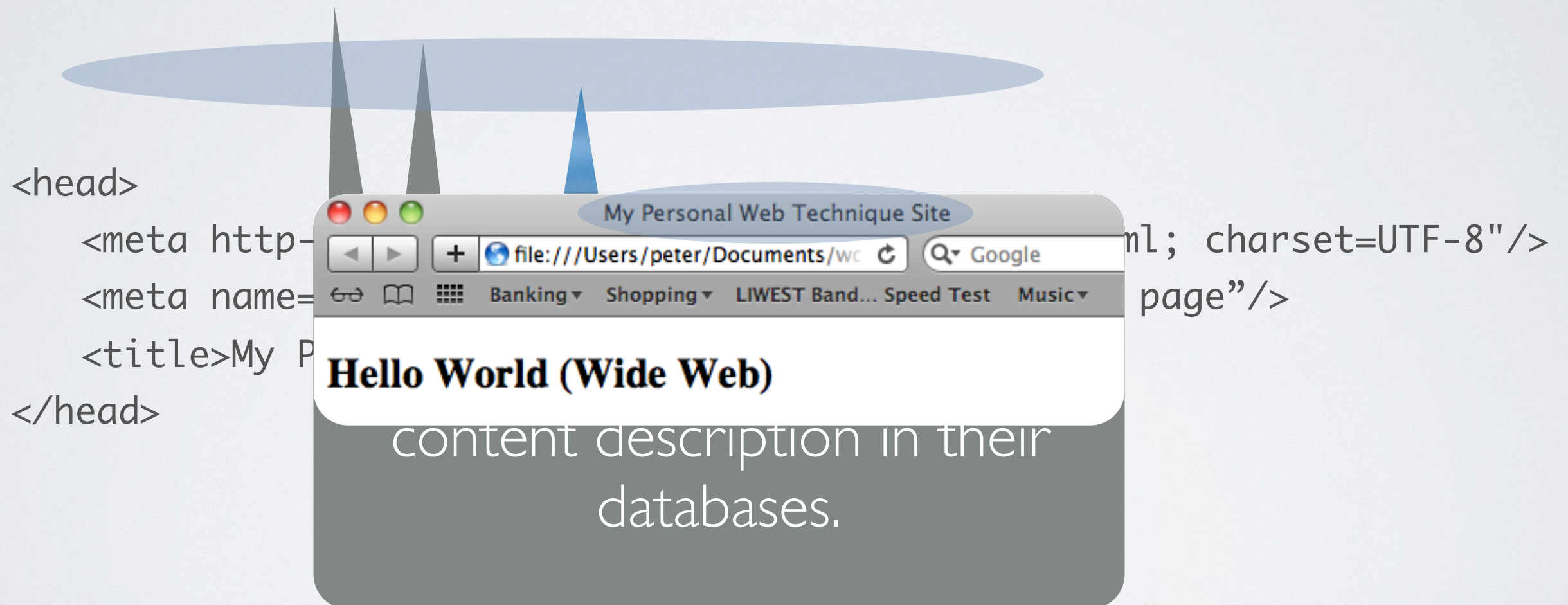
Most html tags are two-fold and embrace other elements, e.g., `<html>` and

The section-tag may be used to further structure your content.

Again one may define several sections on a page and sections may contain other sections.



# THE HEAD IN DETAIL



# THE BODY IN DETAIL

```
<body>
  <article>
    <h1>Hello World (Wide Web)</h1>
    <section>
      <h1>Mission</h1>
      <p>This course is for me
      ...</p>
    </section>
    <section>
      <h1>Personal Goals</h1>
      <p>
        I want to learn in this
        course ...
      </p>
    </section>
  </article>
</body>
```

