Creating a basic Web2.0-application with XHTML, CSS, JavaScript and PHP

Johannes Starlinger
What to expect

• Some necessary concepts
• Walk-through development of an exemplary app
• Basic introduction to the used languages
• Hopefully: “It's easy!”
• Hopefully: “It's fun!”
What NOT to expect

- Thorough introduction of the used languages
- Advanced techniques
- “Classic” slideshow lecture
Agenda

• Technology basics
  - Client vs server
  - Mini intro to the languages used
  - Apache webserver quick guide → use .public_html

• Creating a web page:
  - Mockup
  - HTML structure
  - JavaScript functions
  - CSS styles
  - [PHP content generation]
Technologies

Creating a basic Web2.0-application with XHTML, CSS, JavaScript and PHP
Technologies

XHTML, CSS, JavaScript and PHP

Web page **structure**

Web page **style**

Web page **function**

Content **generation**
 Technologies

XHTML, CSS, JavaScript and PHP

Web page structure

Web page style

Web page function

Evaluated on Client

Evaluated on Server

Content generation
Client vs Server

Evaluated on
Client

Evaluated on
Server
Client vs Server

Mozilla Firefox

File  Edit  View  History  Bookmarks  Tools  Help

New Tab

Go to a Website

index.htm
style.css
picture.jpg
index.php
other.php
Client vs Server

GET file/url xy

Deliver file xy

index.htm
style.css
picture.jpg
index.php
other.php
Client vs Server

GET file/url xy

index.htm
style.css
picture.jpg
index.php
other.php

Deliver output of xy
Client vs Server: AJAX

AJAX: Asynchronous HTTP request from within the page

GET file/url xy

Deliver (output of) file xy
Creating a basic Web2.0-application with XHTML, CSS, JavaScript and PHP
What you need

- An idea

- Graphics software for a mockup
  - or pen and paper

- Web server [with PHP]
  - Apache, lighttpd, nginx, Tomcat (Java)…

- Text editor
  - vim, emacs, notepad, …
  - Or WYSIWYG

- Browser
  - Firefox, Chrome, Opera, Safari, Internet Explorer
Name-A-Face

Search for a face:

Johannes
Create a Mockup
Create a Mockup

Name-A-Face

Search for a face:

Joh
Johann
Johanna
Johannes
Create a Mockup

![Image of a mockup for a face searching application named Name-A-Face.]
Where's all the technology?
Where's all the technology?

XHTML / CSS

Name-A-Face

Search for a face:

Name-A-Face

Search for a face:

Name-A-Face

Search for a face:

joh
johann
johanna
johannes

johannes

other result

other result

other result
Where's all the technology?

XHTML / CSS

JavaScript
Where's all the technology?

XHTML / CSS

JavaScript

PHP
Where's all the technology?

XHTML / CSS

JavaScript

PHP

Asynchronous JavaScript And XML
Project Overview

- Basic page with search form
  - Styles for the page
  - Functionality incl. AJAX
  - Searching
  - Autocompletion Suggestions

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>index.html</td>
<td>HTML document</td>
</tr>
<tr>
<td>name_a_face.css</td>
<td>CSS stylesheet</td>
</tr>
<tr>
<td>name_a_face.js</td>
<td>JavaScript program</td>
</tr>
<tr>
<td>search.php</td>
<td>PHP script</td>
</tr>
<tr>
<td>suggest.php</td>
<td>PHP script</td>
</tr>
</tbody>
</table>
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→ let's have a look at the code
Web App – Server Side

- **Data**
  - Store
    - As files
    - In database
    - In Lucene
    - In cloud

- **Application logic (Java, PHP, Perl, etc)**
  - Provides operations on the data
    - CRUD: Create, Read, Update, Delete
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Name-A-Face
Where to go from here

- Play!
- .public_html
  - In your home directory
  - Can do PHP
  - URL: http://www.informatik.hu-berlin.de/~username
- http://de.selfhtml.org
- http://www.google.de