(X)HTML & CSS

Thierry Sans

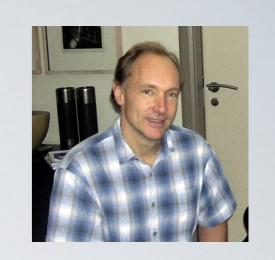
Client Side

| HTML | Content |
|------------|--------------|
| CSS | Presentation |
| Javascript | Processing |

Why bothering with HTML and CSS when there are great tools out there doing excellent job?

HTML - defining the content

HTML: Hyper-Text Markup Language



| HTMLI | invented by Tom Berners-Lee (1991) |
|--------|--|
| HTML 2 | first standard from W3C (1995) |
| HTML 4 | separation between content and presentation CSS (1997) |
| HTML 5 | multimedia (2008) |

Terminology

Markup: tags starting and ending with angle brackets

>

Content: Everything else (arguably)

this is something else

Terminology

Element: a start and end tag and the content in between

Content

Attribute: name/value pairs specified in a start tag

Comments: tags that will be ignored at rendering

```
<!-- This is a comment -->
```

Skeleton of an HTML document

```
<!DOCTYPE html>
<html>
 <head>
  <meta charset="utf-8"/>
  <title>My first page</title>
 </head>
 <body>
   Here is my first webpage!
 </body>
</html>
```

/head>

Loody

Selection of tags

| <h1> <h2> <h3> headers (<h1> is t</h1></h3></h2></h1> | the biggest by convention) |
|---|----------------------------|
|---|----------------------------|

delimitates a paragraph

 image

<a>> specifies an anchor (typically an hyperlink)

unordered list

list item

<div> delimitates a block

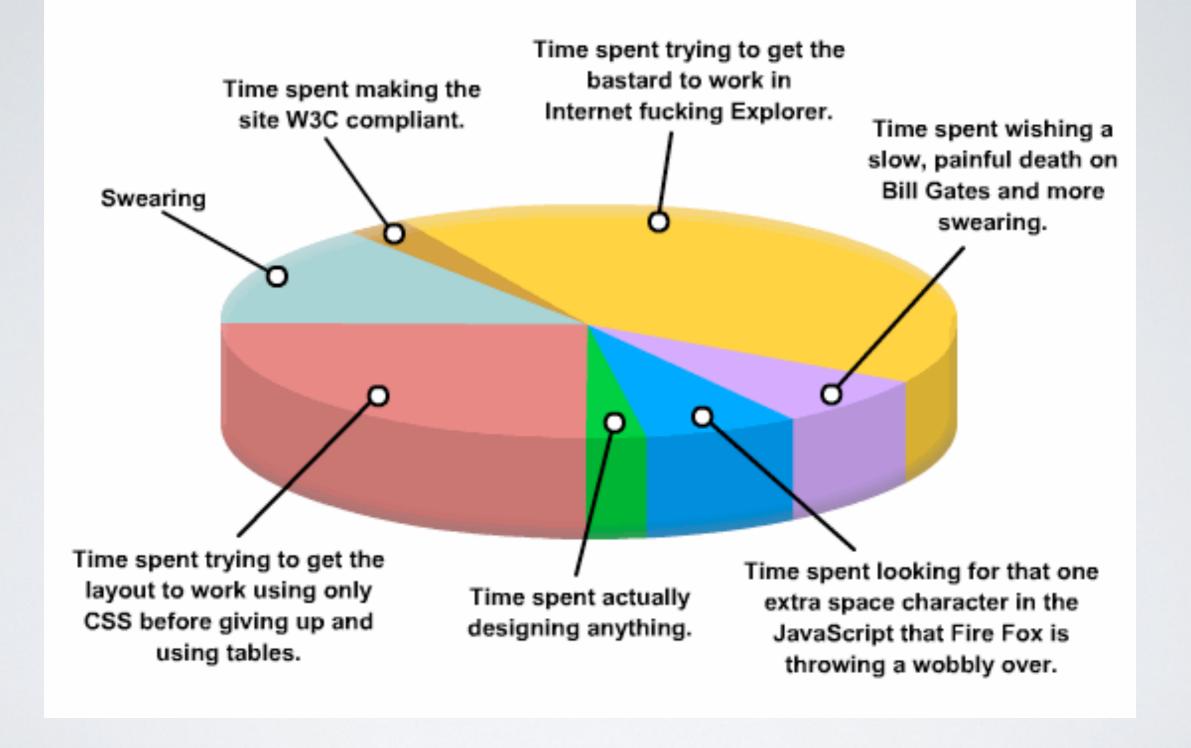
 group in-line document (use mainly for style)

Differences between XHTML and HTML

At first, browsers were quite forgiving about missing/ mismatched tags in HTML

- Different rendering across browsers
 - HTML became XHTML (aka HTML 4 and 5)
- ✓ Homogeneity across browsers (for the most part)
- ✓ Easier to parse in Javascript

TIME BREAKDOWN OF MODERN WEB DESIGN



Validate your (X)HTML

Check out W3C Markup Validation Service

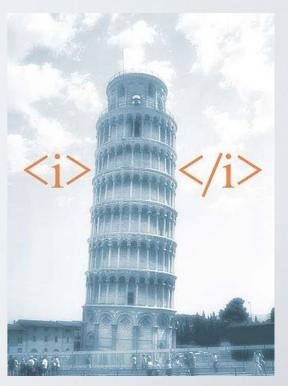
http://validator.w3.org/

Differences between XHTML and HTML

The styling disappeared in HTML 4 to become CSS

→ Elements related to styling became <u>deprecated</u>

<center> <i>
 <frameset> <frame> ...



Controversies among web developers

To use or not to use tables

http://programmers.stackexchange.com/questions/277778/why-are-people-making-tables-with-divs

CSS - defining the style

Is it really used and useful?

Let's look at your favourite websites without CSS

Why CSS?

Multiple pages - one style

Multiple platforms - different layouts

Multiple user abilities - custom layout

CSS format

```
selector {
    property: value;
    property: value;
    property: value;
}
```

CSS: Inline, embedded or separate file?

Inline: style attribute

```
 ...
```

Embedded: specified in the header (<head>)

```
<style TYPE="text/css">
    p{background: blue; color: white;}
</style>
```

Separate file: file locator in the header (<head>)

```
<link rel="stylesheet" type="text/css" href="style.css"/>
```

Classes

Classes are attributes of HTML elements for which we want to define **common properties**

```
<div class="special">...</div>
```

Define the same style for all elements of the same class

```
.special {
    margin-top: 10px;
    font-family: "Helvetica", "Arial";
}
```

IDs

IDs are attributes of HTML elements for which we want to identify uniquely

```
<div id="sale">...</div>
```

Define the style for the element with specific ID

```
#sale {
    padding: 20px;
    color: #000000;
}
```

The CSS Box Model

Let's look at

https://css-tricks.com/the-css-box-model/

Positioning and Floating (aka "The Big Headache")

Let's look at https://css-tricks.com/almanac/properties/p/position/

My favorite - flexbox https://css-tricks.com/snippets/css/a-guide-to-flexbox/

The newcomer - CSS Grid https://css-tricks.com/snippets/css/complete-guide-grid/