

(X)HTML & CSS

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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



| | |
|---------------|--|
| HTML 1 | 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

`<p>`

Content: Everything else (arguably)

`this is something else`

Terminology

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

```
<p>Content</p>
```

Attribute: name/value pairs specified in a start tag

```

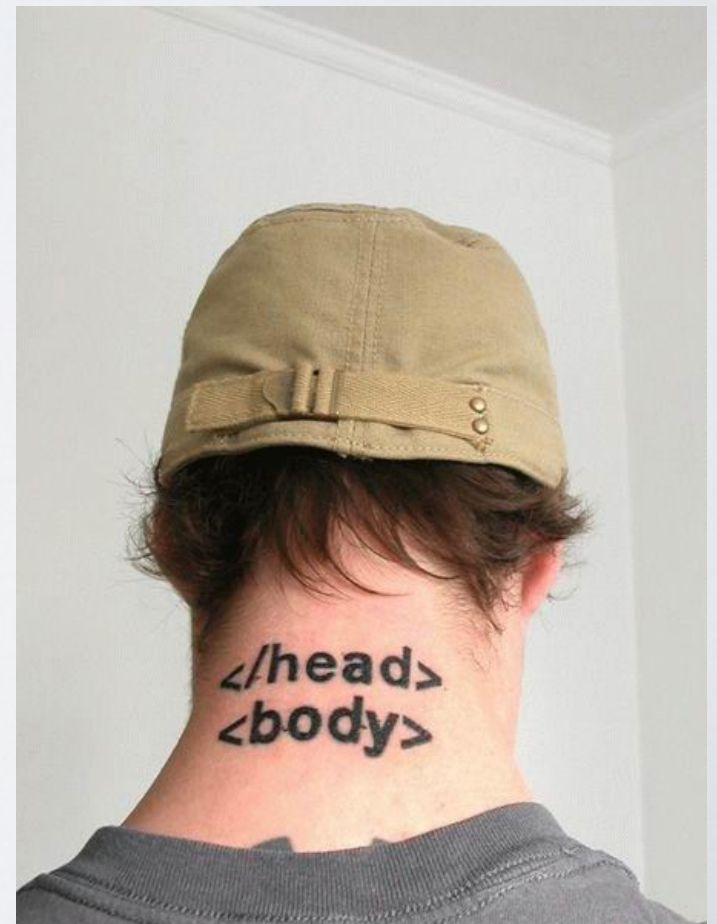
```

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>
```



Selection of tags

| | |
|---|---|
| <code><h1></code> <code><h2></code> <code><h3></code> | headers (<code><h1></code> is the biggest by convention) |
| <code><p></code> | delimitates a paragraph |
| <code></code> | image |
| <code><a></code> | specifies an anchor (typically an hyperlink) |
| <code></code> | unordered list |
| <code></code> | list item |
| <code><div></code> | delimitates a block |
| <code></code> | group in-line document (use mainly for style) |

Differences between XHTML and HTML

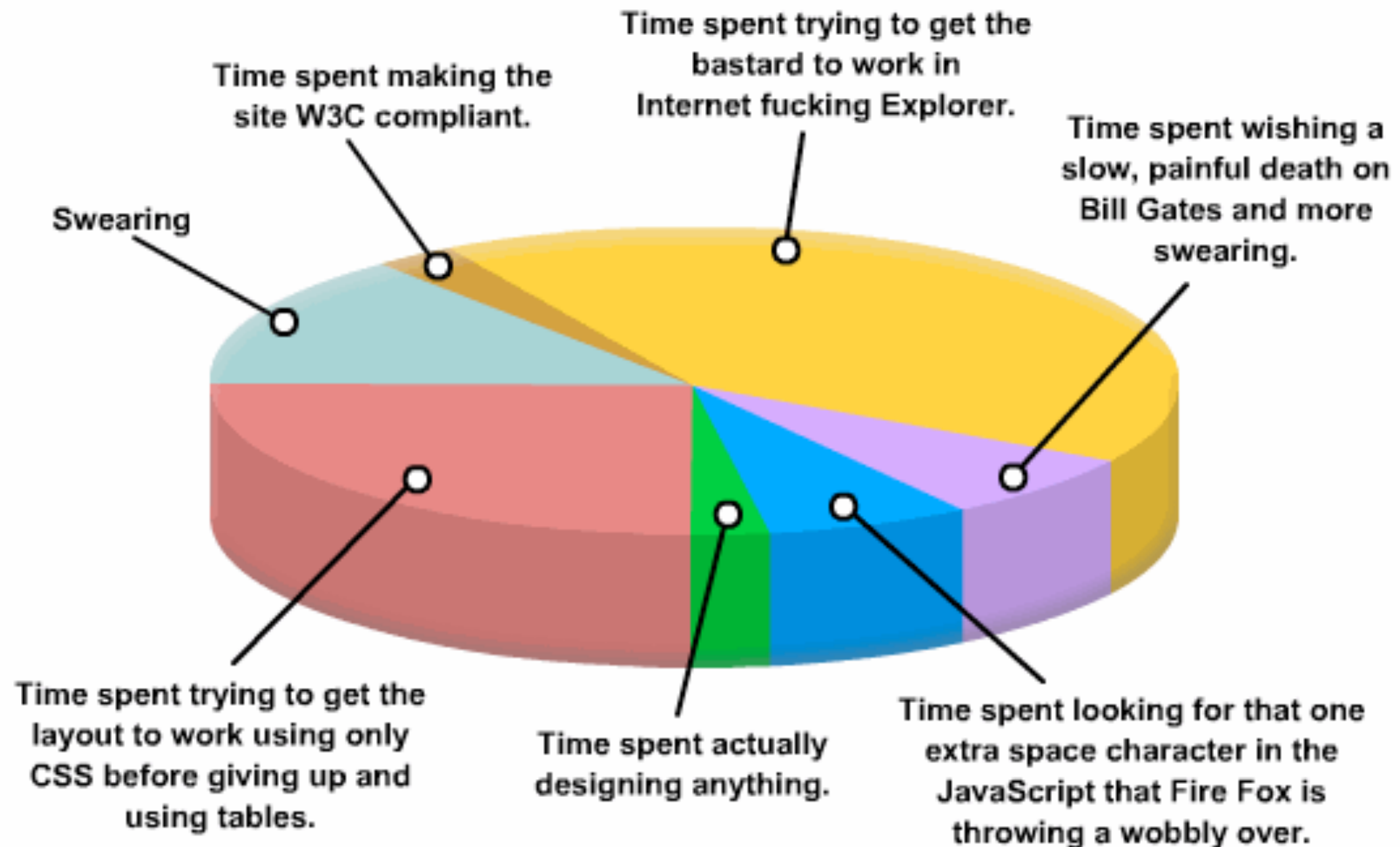
At first, browsers were quite forgiving about missing/mismatched tags in HTML

- 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

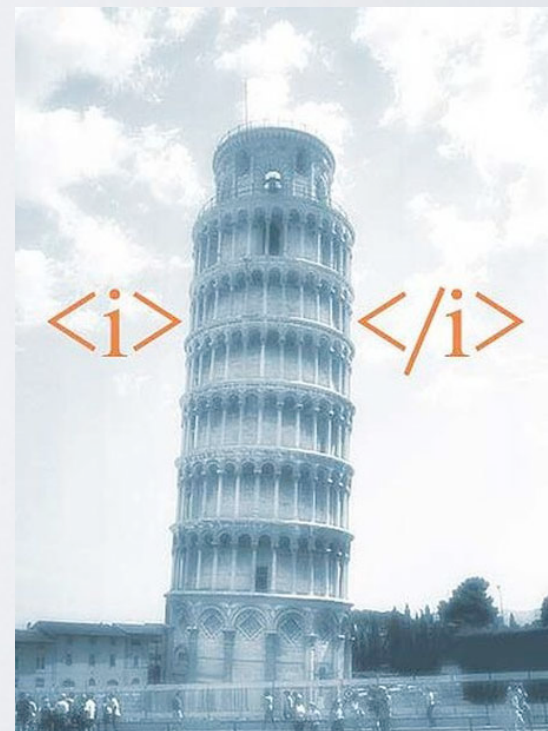
<http://validator.w3.org/>

Differences between XHTML and HTML

The styling disappeared in HTML 4 to become CSS

➔ Elements related to styling became deprecated

`<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

```
<p style="background: blue; color: white;"> ...
```

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/>