

Labs

Labs will definitely start next week. The assignment isn't on the website yet, he tends to wait until the lab or so to make it available.

Submission will be by file upload and also by providing a URL.

The first assignment will be to make a <DL> with module codes and descriptions of them. We will also be styling them in later labs, which he will explain today.

HTML (cont.)

There used to be a <blink> tag that people used (visible in pages from the 90s) that made terrible blinking text.

Nowadays, html provides content and structure, and CSS provides layout information. These are combined by the browser to display the page.

CSS is one way in which we can create responsive webpages which display differently on different screen sizes. There are also other markup languages besides html (for example XML, extended markup language) which can do these kinds of things.

Getting Sidetracked (XML)

With XML you can emphasise only on structure.

E.g.:

```
<MEAL>
<NAME>Indian Curry 37</NAME>
<INGREDIENTS>
```

```
<ITEM>...</ITEM>
```

```
<ITEM>...</ITEM>
```

```
</INGREDIENTS>
```

```
</MEAL>
```

XML tags can be made up on the spot, and then you define how they are rendered, which can be pretty useful. There are no defined tags (I think?).

Also, tags only have structural meaning.

XML is much more versatile because you can use the same code for many different things like printing booklets, displaying webpages, etc.

He suggests that if the web were invented today, it would be much more similar to XML than HTML.

XSLT is the equivalent of CSS for XML, it gives the layout information, and can be very powerful.

XML is a good example of the shortcomings with html.

He suggests being disciplined by avoiding tags that wouldn't fit in an XML-style thing i.e. any tags that define formatting like font colour, etc.

CSS

There are three ways of applying style:

- Inline style
- Internal style sheet
- External style sheet (preferred)

He showed us an example on his page wgrothaus.ucc.ie/~frank where the style information was specified in the `<STYLE>` tag. This was an example of an internal style sheet.

External style sheets are where the formatting is stored in a separate file, which is then linked to/imported in the html code. External style sheets are useful because you can use one file across many html files.

In his example he used `class="highlight"` within a `` tag and then a `<DIV>` tag. Then, within the `<STYLE>` tags he had:

```
.highlight
{
    color: red;
    font-weight: bold;
}
```

This specifies the formatting for any members of the class "highlight".

Note that the formatting commands are surrounded by `{}`. This is programming syntax, as opposed to the `<>` in markup languages.

His second example was text that becomes highlighted when you hover over it. There were a couple of differences to the code.

He used ID instead of class, which means the html looks slightly different, but is mostly the same.

The main difference:

```
#here:hover
{
}
```

The :hover makes this a pseudoclass (which I didn't catch the full explanation of), and makes the formatting only visible when you hover over the specified text.

A typical CSS rule:

```
DT{  
    color:red; font-weight:bold;  
}
```

In this code, DT is a *selector*, color:red; is a *declaration*, color is a *property*, and red is a *value*.

Question: "Can you spell color as colour, or will that not work?"

Answer: "No, that mostly won't work. Some browsers will interpret it correctly, but you shouldn't depend on it."