HTML history

- 11 year gap between HTML 4.01 and HTML5!
- there are problems inherent in mixing content and presentation.
- XML (eXtensible Markup Language), which shuffles all the presentation off onto XSLT (XML stylesheets).
- Browsers (particularly IE) were slow to implement full XML/XSLT support. That coupled with resistance from web developers effectively killed the move to XML.
- In practice, splitting content and presentation is accomplished by proper usage of HTML and CSS.

More on Tags

- [<hr /> tag (horizontal rule).](#)
  - Adjusting the appearance of a horizontal rule can be done in CSS… (more on this soon!)

  The image tag is [<img />.](#)
  - [src (the source file) and alt (a text description of the image).](#)

Tags you've seen!

- <div>
  - defines a division or a section in an HTML document.
  - used to group block-elements to format them with styles.

Example (w3schools.com)

```
<!DOCTYPE html>
<html>
<body>

<h3>This is a header</h3>
<p>This is a paragraph.</p>

<div style="color:#00FF00">
  <h3>This is a header</h3>
  <p>This is a paragraph.</p>
</div>

</body>
</html>
```
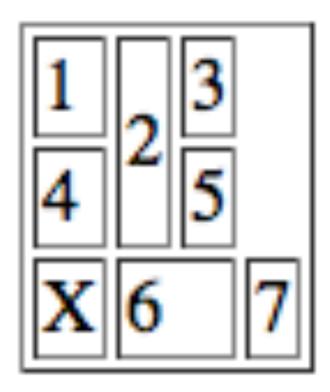
Output

This is a header

This is a paragraph.

This is a header

This is a paragraph.

Tables!

Easy! (try it!)

```html
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">
<html>
    <head>
        <title>Column and Row Spanning</title>
    </head>
    <body>
        <table border="1">
            <tr>
                <td>1</td>
                <td rowspan="2">2</td>
                <td>3</td>
            </tr>
            <tr>
                <td>4</td>
                <td>5</td>
            </tr>
            <tr>
                <td>X</td>
                <td colspan="2">6</td>
                <td>7</td>
            </tr>
        </table>
    </body>
</html>
```

Loads of tags to play with

- Not going to be testing you on them!
- Eventually you will get to know more
- Important point
  - Understand the relationship between HTML tags and CSS

Cascading Style Sheets

- CSS
- Goes into the HTML as

```
<head>
    <title>MY TITLE! </title>
    <link rel="stylesheet"
        type="text/css"
        href="example-class.css"
     />
</head>
```

  - The **href** attribute should point to the css file.

- Rules relate properties to tags in HTML
  - **selector** { properties }

cascading?

- the cascade defines the order of **precedence** for how conflicting styles should be applied
  p { color: #ff0000; }
  p { color: #0000ff; }

- conflicted! Which one do you USE?!!
  - What if they were in a different order?
  - For more see http://www.htmldog.com/guides

precedence rules (some of)!

- look in the style sheet for a selector matching the element. If there are no defined styles, then use the **default rules** in the browser

- look in the style sheet for selectors marked **!important** and apply those to the appropriate elements.

- if two rules apply to the same element and have the same selector precedence, the one that was loaded **last** will be applied.

Example of a CSS file

```
h1
{
    color: red;
    font-family: Impact;
    text-align: right;
}

ul
{
    list-style-type: square;
    font-family: Comic Sans MS;
}

hr
{
    color: green;
    background-color: green;
    width: 60%;
    height: 8px;
}
```

OTHER selectors!

- HTML tags can be selectors
- You can also define your own selectors in the form of **Class** and **ID** selectors.
  - Class start with .
  - ID start with #

```
#top {
    background-color: #ccc;
    padding: 1em
}


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

Example

```
<div id="top">

<h1>Chocolate curry</h1>

<p class="intro">This is my recipe for making curry purely with chocolate</p>

<p class="intro">Mmm mm mmmmm</p>

</div>
```

Difference?

- an ID can be used to identify one element,
- a class can be used to identify more than one
- Can get tricky!
  - p.jam { whatever }
  - will only be applied to *paragraph* elements that have the class 'jam'.

Loads you can do...

```css
.red
{
    color: red;
}
```

```html
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">
<html>
    <head>
        <title>CSS Class Example</title>
        <link rel="stylesheet" type="text/css" href="example-class.css" />
    </head>
    <body>
        <div class="red">Here's a little text from class red.</div>
    </body>
</html>
```

Shows on a webpage as...

Here's a little text from class red.

Colour

- CSS brings **16,777,216** colours to your disposal
  - They can take the form of a **name**, an **rgb** (red/green/blue) value or a **hex** code.
    - We can adjust the color of any element using the color property.
    - Similarly, you can adjust the color of the background with the background-color property.
- You can find colour pickers online to help!

Font

- There are a number of font properties which can be adjusted with CSS.
- You can list multiple fonts
  - The browser will try to use the first font in the list that is available on the user's machine.
- You can adjust the size of text with font-size
  http://www.w3schools.com/cssref/pr_font_font-size.asp

Hungry for more!?

- Start here!http://www.htmldog.com/guides/ (others??!)

HTML Beginner Tutorial - A step-by-step tutorial to HTML basics. If you're completely new to web design, start here.

CSS Beginner Tutorial - A step-by-step tutorial to CSS basics. Go here if you're comfortable with basic HTML.

HTML Intermediate Tutorial - Some HTML bits-and-bobs that might be useful to beginners and advanced HTMLers alike.

CSS Intermediate Tutorial - Various odds-and-sods building on the basics of CSS.

HTML Advanced Tutorial - Pushing HTML to its full standards-compliant, accessible potential.

CSS Advanced Tutorial - Exploiting the versatile depths of CSS.