CSS - Part 1

Department of Computing, Maths & Physics Waterford Institute of Technology

http://www.wit.ie

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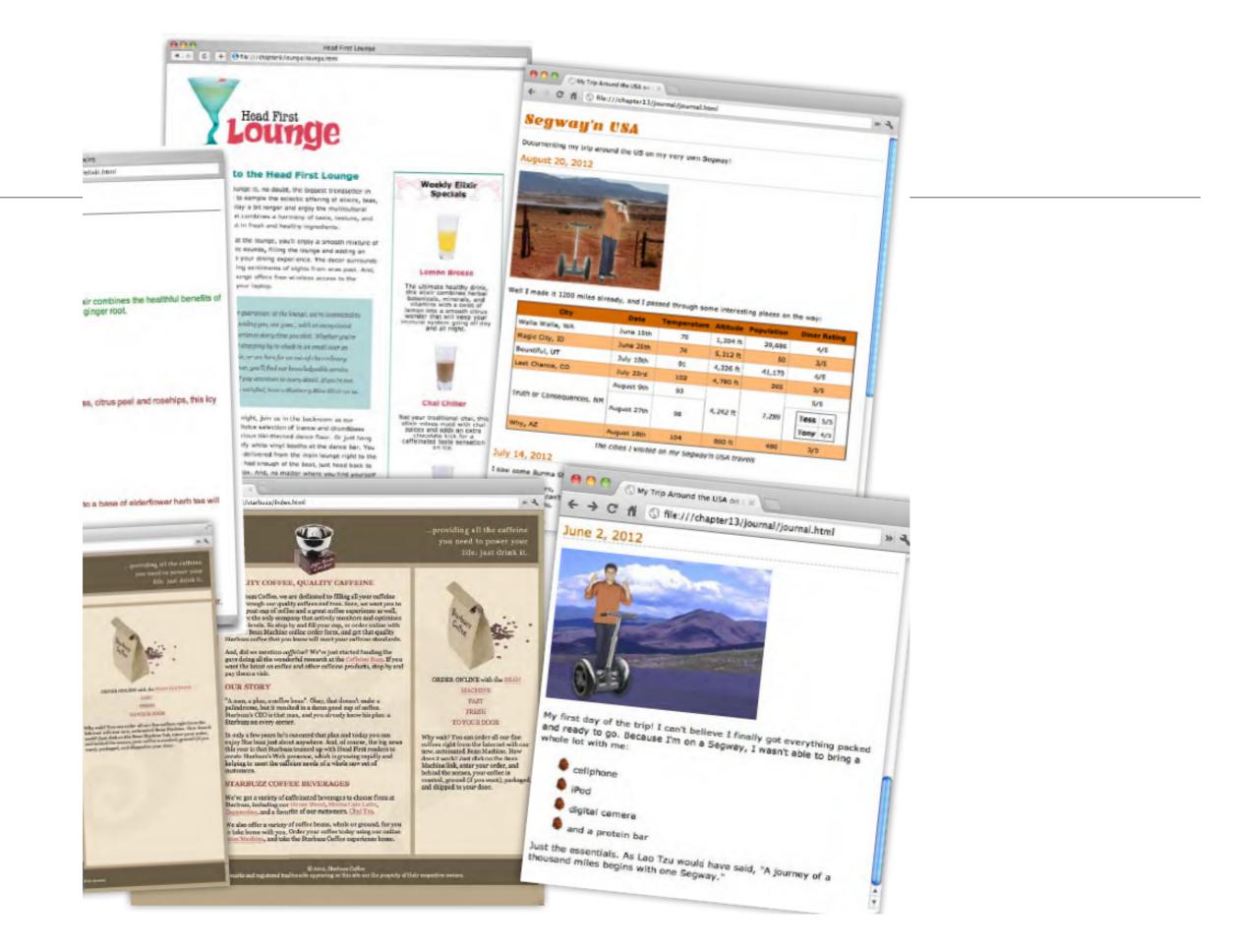
Waterford Institute of Technology

Agenda

Use of CSS for styling

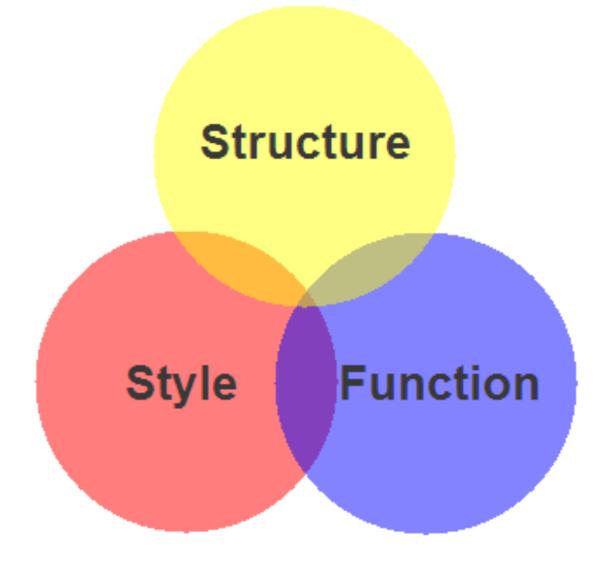
CSS

- Rules, Selectors, Declarations, Properties, Values
- CSS Binding



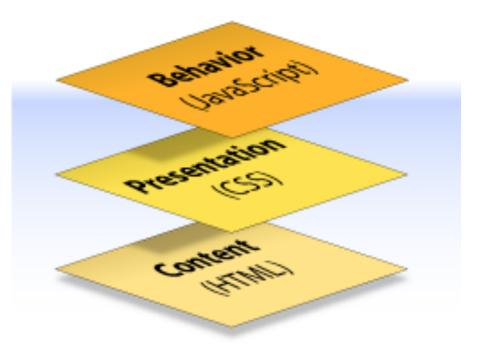
Markup, Style, Function

- Markup (XHTML, HTML)
 - Structure
 - Content
- Style (CSS)
 - Style
 - Presentation
 - Appearance
- Function (Javascript)
 - Actions
 - Manipulations



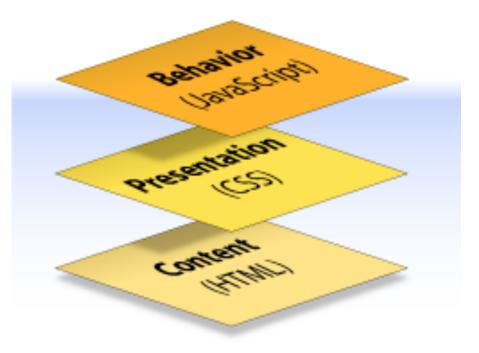
Content, Presentation, Behavior

- Content comprises the information the author wishes to convey to his or her audience, and is embedded within HTML or XHTML markup that defines its structure and semantics.
- Most of the content on the Web today is text, but content can also be provided through images, animations, sound, video, and whatever else an author wants to publish



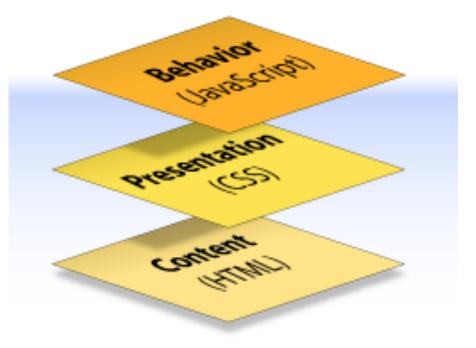
Content, Presentation, Behavior

- Presentation defines how the content will appear to a human being who accesses the document in one way or another
- The conventional way to view a web page is with a regular web browser, of course, but that's only one of many possible access methods. For example, content can also be converted to synthetic speech for users who have impaired vision or reading difficulties



Content, Presentation, Behavior

- **Behavior** layer involves real-time user interaction with the document.
- This task is normally handled by JavaScript.
- The interaction can be anything from a trivial validation that ensures a required field is filled in before an order form can be submitted, to sophisticated web applications that work much like ordinary desktop programs.



Separation of Concerns

- It's possible to embed all three layers within the same document
 - eg and can be used to control the presentation of text, and <hr> will insert a visible rule element.
 - Sometimes called *Presentational Markup*, these types of elements embed presentation-layer information within the content layer, they negate any advantage we may have gained by keeping the layers separate.
- Keeping them separate gives us one valuable advantage:

 We can modify or replace any of the layers without having to change the others.

What is CSS?

- Cascading Style Sheets is the recommended way to control the presentation layer in a web document.
- The main advantage of CSS over presentational HTML markup is that the styling can be kept entirely separate from the content.
- e.g. it's possible to store all the presentational styles for a 10,000-page web site in a single CSS file.
- CSS also provides far better control over presentation than do presentational element types in HTML.

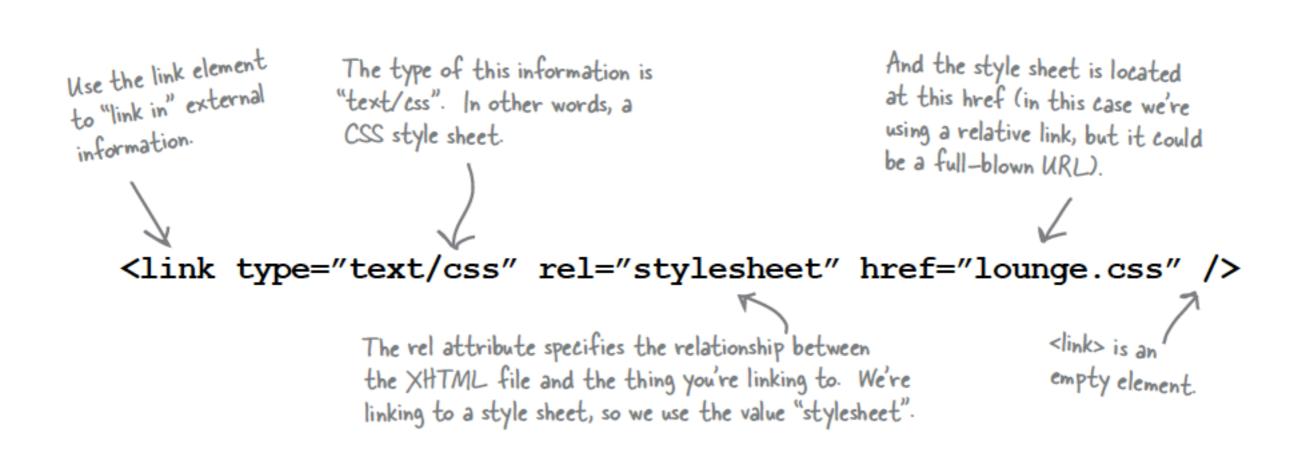
Advantages of CSS

- All styling is kept in a limited number of style sheets.
- Saving on bandwidth: The style sheet is cached (kept on client machine) after the first request and can be reused for every page on the site, it doesn't have to be downloaded with each web page. Could reduce bandwidth usage—by more than 50% in many documented cases.
- The separation of content from presentation makes it easier for site owners to reuse the content for other purposes, such as RSS feeds or text-tospeech conversion.
- Separate styling rules can be used for different output media. We no longer need to create a special version of each page for printing—we can simply create a single style sheet that controls how every page on the site will be printed.

Separating Style Sheets from HTML

- Ideally, a site may have a single style sheet for most purposes. It is possible to include the css rules within your html files but this is not advisable.
- In a separate style.css file the rules are written.
- It is then necessary to link from the html file to the style.css file

k> element



One Stylesheet - Multiple html pages

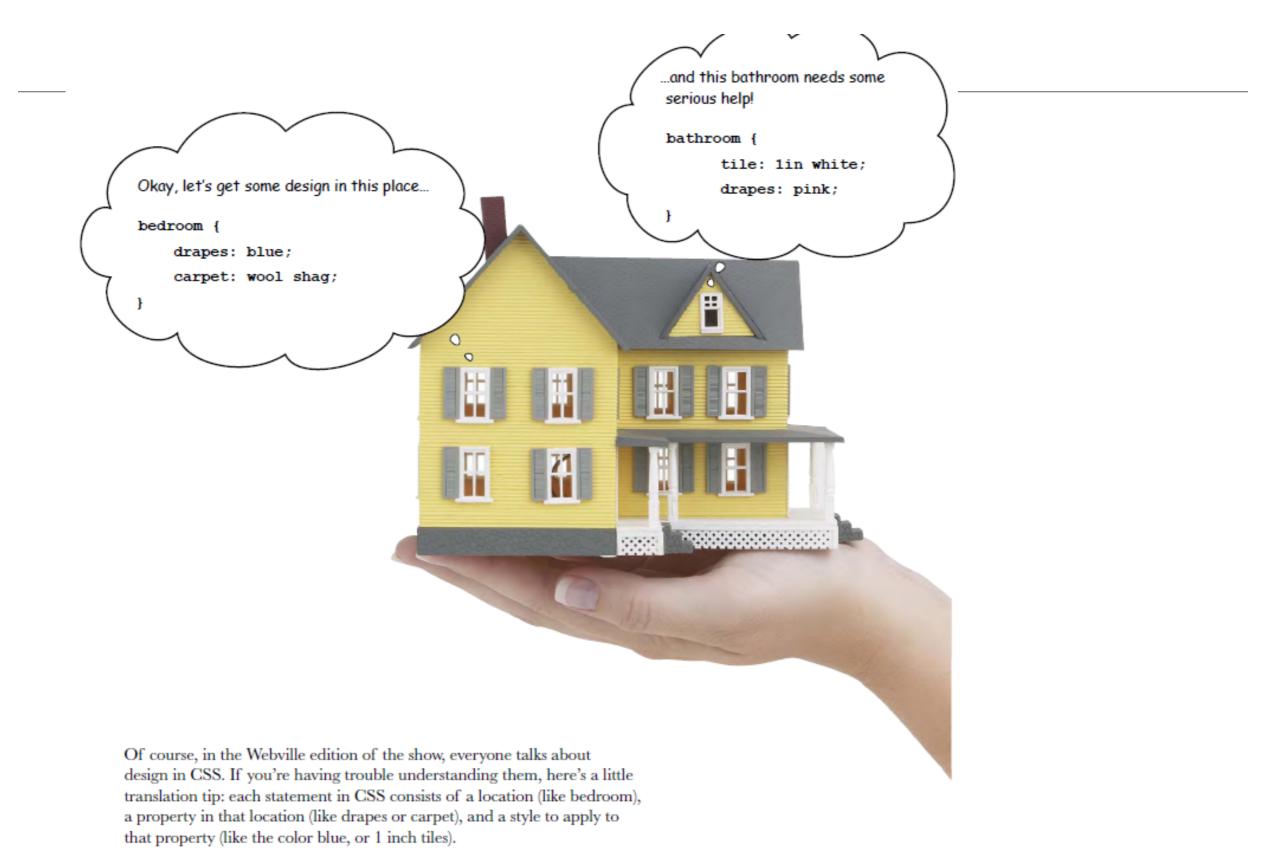


Agenda

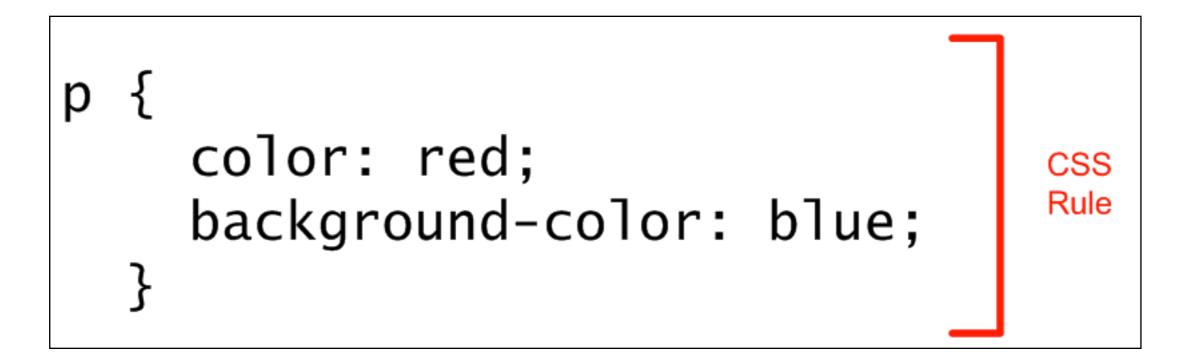
Use of CSS for styling

CSS

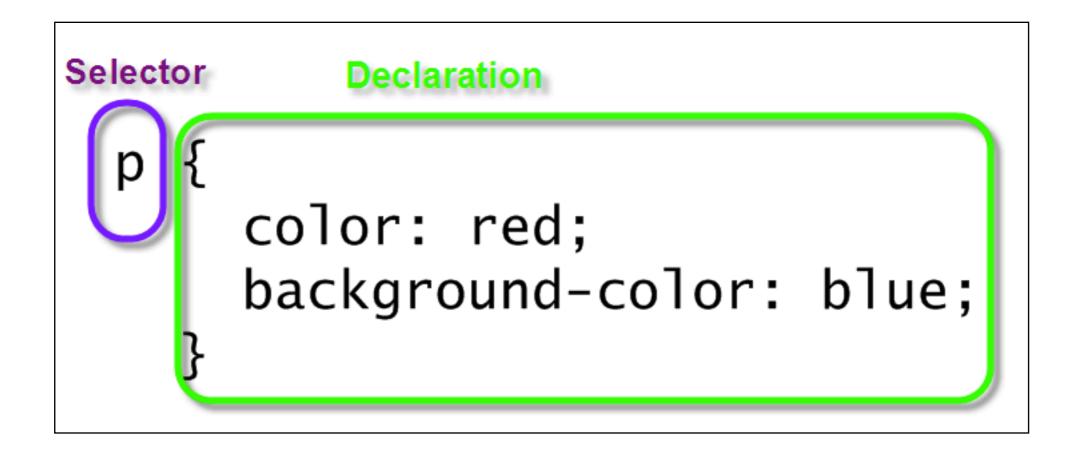
• Rules, Selectors, Declarations, Properties, Values



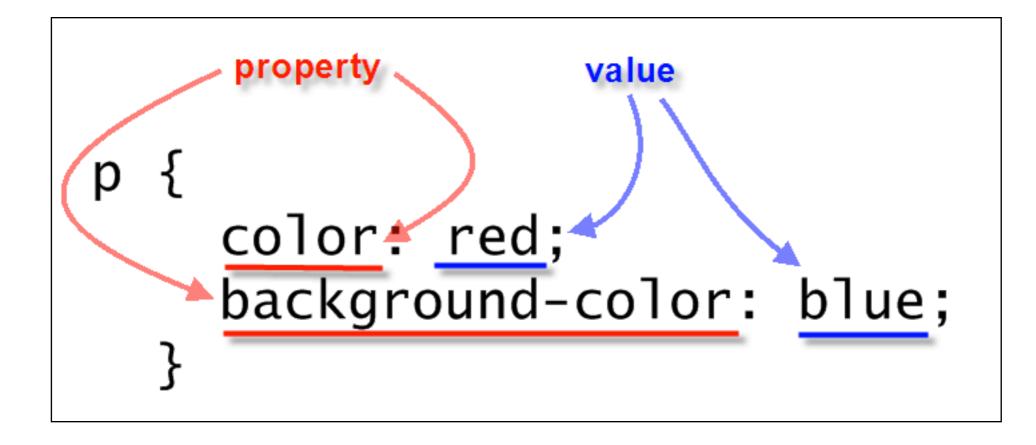
CSS Rule



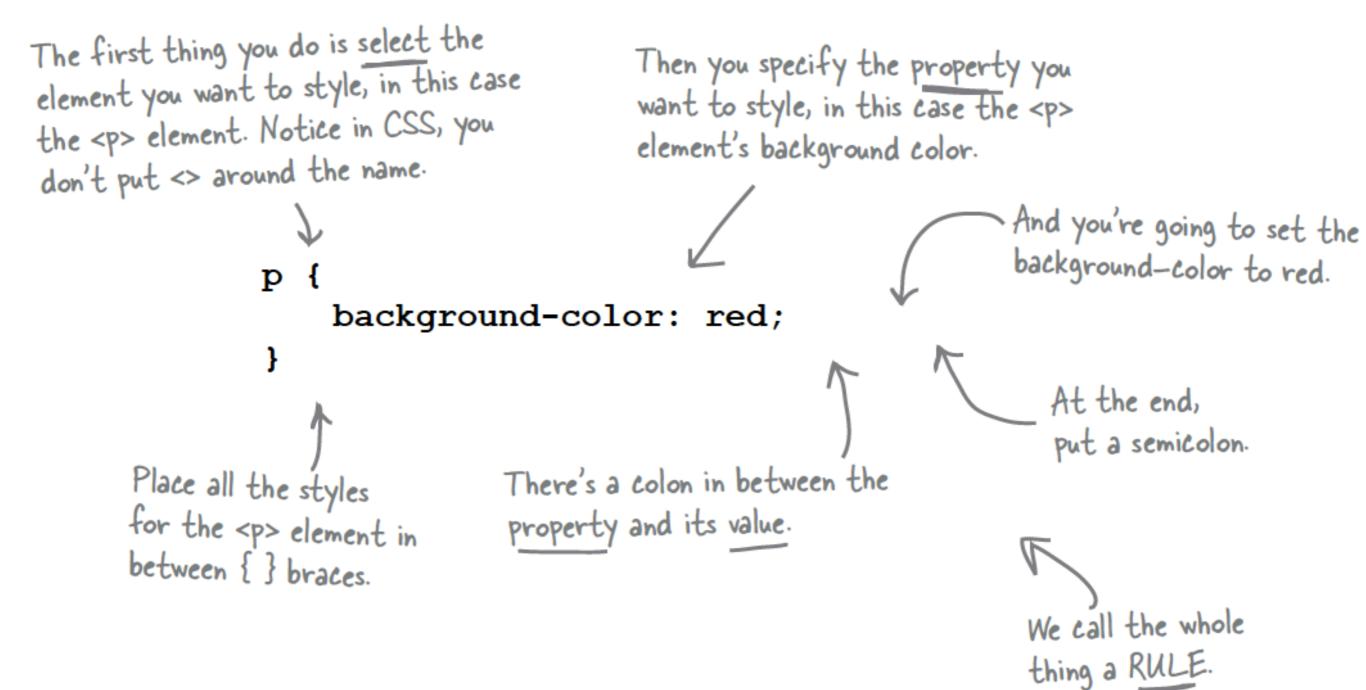
Selector and Declarations



Properties & Values



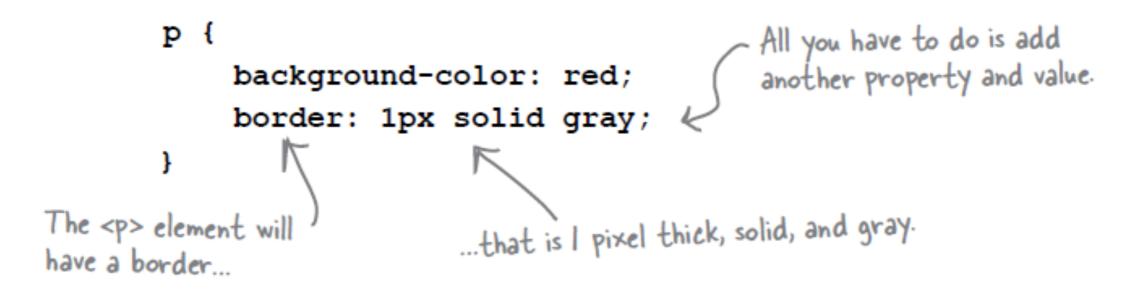
A CSS Rule



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More Properties...

- You can add as many properties and values as you like in each CSS rule.
- To put a border around your paragraphs:



If you have errors in your CSS, usually what happens is all the rules below the error are ignored. So, get in the habit of looking for errors now, by doing this exercise. BE the Browser Below, you'll find the CSS file "style. css", with some errors in it. Your job is to play like you're the browser and locate all the errors. After you've done the exercise, look at the end of the chapter to see if you caught all the errors.

```
The file "style css"
```

```
body {
    background-color: white
h1, {
    gray;
    font-family: sans-serif;
}
h2, p {
    color:
}
<m>>
{
    font-style: italic;
}
```