Basics of CSS Style

- Name classes semantically
  - What the style is intended for ...
  - ... not what it does

- Define and apply styles efficiently
  - Choose selectors wisely
    - Tags to change in general
    - Classes to change occasionally
    - Context for specific situations
  - Avoid duplicating rules for different elements
    - Structure rules to apply to elements which share style settings
Examples to Avoid

- Consider creating a "highlighter" effect:

```css
.yellowBackground {
  background-color: yellow;
}
```

- What if you want to change the colour to green?
  - Name no longer makes sense

```css
.highlighter {
  background-color: yellow;
}
```

- Consider changing the colour for some list items:

```html
<ul>
  <li class="issue">...</li>
  <li class="issue">...</li>
</ul>
```

- Every list item must specify the class
  - Imagine a list with dozens of entries

```html
<ul class="issues">
  <li>...</li>
  <li>...</li>
</ul>
```
Lists and Tables

- **Lists**
  - `list-style-type`
    - Specifies bullets or numbering used
    - Value: `none`, `circle`, `square`, `lower-roman`, `upper-roman` ...

- **Tables**
  - `caption-side`
    - Specifies placement of the caption
    - Value: `top` or `bottom`
  - Can also apply styles to `td` and `th`

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**Containing Elements**

- **Two types of elements**
  - **Block elements**
    - Significant sections
  - **Inline elements**
    - Smaller items

- **Elements can be nested**
  - Blocks within blocks
  - Inline within blocks
  - Inline within inline

- **All elements have containing elements**
  - `<body>` or parent block element
Span

- `<span class="...">content</span>`
  - Inline element
  - "A tag for when there is no tag"
    - Used for inline content without tags
    - Applies style to that content
  - Has no other semantics

```
<p>
  There was one <span class="error">error</span> and three <span class="warning">warnings</span> detected.
</p>
```

Div

- `<div class="...">content</div>`
  - Block element
  - Specifies a significant section of the document
    - Applies style to that content
  - Has no other semantics

```
<div class="authorProfile"> ... </div>
<div class="photoGallery"> ... </div>
<div class="rateAndReview"> ... </div>
```
Box Model

- Method for specifying layout
  - Can be applied to block elements

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Content

- **width**
  - Sets width of content
  - Value: Unit value or %
    - % of containing block

- **height**
  - Sets height of the content
  - Value: Unit value or %

- Fills containing block by default

- Can also specify min and max
  - min-width, max-width, ...

- Applies to blocks, images and **floats**

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Floats are covered later in this class
Padding

- **padding**
  - Sets space around content
  - Value: Unit value or \%
- Can specify on each side
  - padding-top, padding-bottom
  - padding-left, padding-right
- Shares background colour with content

Border

- **border-style**
  - Specifies the border's style
  - Value: none, dotted, dashed, ...
  - Can specify on each side
    - border-left-style, ...
- **border-color**
  - Sets the border's colour
  - Value: name, RGB, or hex
  - Can specify on each side
    - border-top-color, ...
Border

- **border-width**
  - Specifies the border's width
  - Value: unit value, %, or named
    - thin, medium, or thick
  - Can specify on each side
    - border-bottom-width, ...

- **border-collapse**
  - Sets border to a single line
  - Value: collapse or separate
  - Can also be applied to tables
    - Change borders for td and th

Margins

- **margin**
  - Sets space around the border
  - Value: unit value or %
  - Can specify on each side
    - margin-right, ...

  - Does not share background with content

  - Be careful of *margin collapse*
    - Two stacked block elements
    - Margins may merge
      - Top element's bottom margin
      - Bottom element's top margin