

CodeSoc: Web development

...

Class 7: Advanced CSS

Last time

- Learnt how to use the CSS selector for element types, id attributes and class attributes
- Learnt to use an external *stylesheet* to hold all of our styling

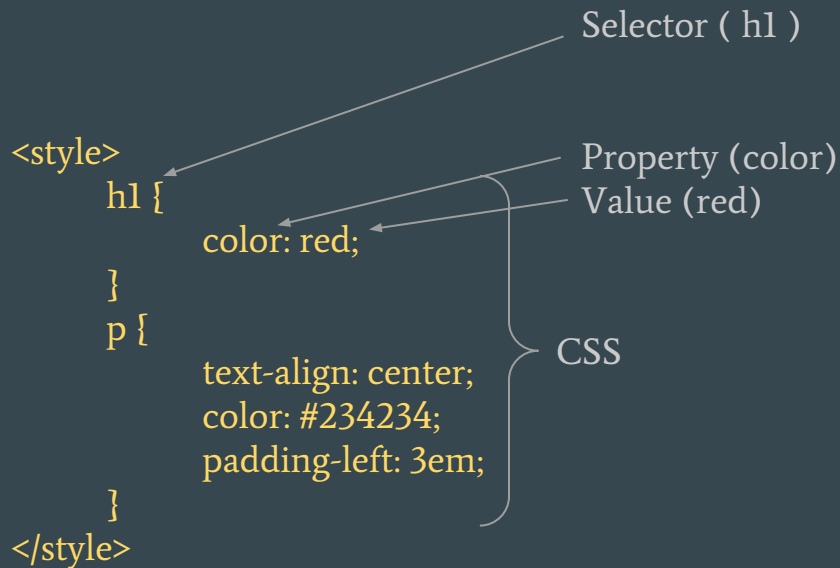
Outline

1. Introduction and creation of simple example website
2. (Today) The HTML document - Page structure, content types & best practises
3. More HTML elements & adding style (part i)
4. More HTML elements & adding style (part ii) - consolidating what we know
5. Multi-page sites & navigation
6. External style
7. **Advanced CSS**
8. Introduction to Javascript

Today

- CSS box model
- Drop down menus
- Various CSS tricks

CSS recap



The diagram illustrates the components of a CSS rule. It shows a code block with a `<style>` tag containing two rules. The first rule is for `h1` with a `color: red;` property. The second rule is for `p` with `text-align: center;`, `color: #234234;`, and `padding-left: 3em;` properties. Labels with arrows point to these elements: 'Selector (h1)' points to the `h1` in the first rule; 'Property (color)' points to the `color` part of `color: red;`; 'Value (red)' points to the `red` part of `color: red;`; and a large bracket labeled 'CSS' encompasses the entire content between the curly braces of both rules.

```
<style>
  h1 {
    color: red;
  }
  p {
    text-align: center;
    color: #234234;
    padding-left: 3em;
  }
</style>
```

Selector (h1)

Property (color)

Value (red)

CSS

Everything inside the { }

is called the declaration

CSS recap

- Selectors
 - `<h1>` = `h1 { }`
 - `<h1 id= "myId">` = `#myId { }`
 - `<h1 class= "myClass">` = `.myClass { }`

The box model

- Made up of the content, padding, border and margin
 - Content is simply the space taken up by the element
 - Padding clears an area around the content - it's transparent
 - The border surrounds the combined padding and content
 - The margin adds a further spacing around the border - it's also transparent



Drop down menus

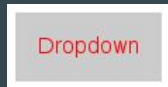
- We know most of the CSS to be able to do this already
- The HTML is very simple, most of the work is done in the styling
- Note the class attributes we are using to select in CSS later...

```
<div class="dropdown">
  <button class="dropbtn">Dropdown</button>
  <div class="dropdown-content">
    <a href="http://www.facebook.com"> Facebook</a>
    <a href="http://www.google.com"> Google </a>
    <a href="http://www.bbc.co.uk"> BBC </a>
  </div>
</div>
```


Drop down menus

- First we style the button which will drop down the menu

```
.dropbtn {  
  background-color: #cccccc;  
  color: red;  
  padding: 16px;  
  font-size: 16px;  
  border: none;  
  cursor: pointer; ←  
}
```



Drop down menus

- Next add some necessary style to the div that holds our content together
- This stops the drop down activating when we hover next to the button
 - This is due to the block/inline levels (from the class on spans and divs)

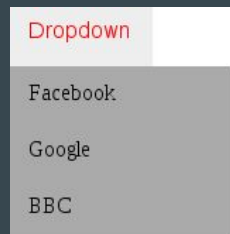
```
.dropdown {  
  position: relative;  
  display: inline-block;  
}
```

Drop down menus

- Next we style the content of our menu and each link
- Note we use `display:none` - this hides the element from view (whilst we don't want the menu shown)

```
.dropdown-content {  
  display: none;  
  position: absolute;  
  background-color: #aaaaaa;  
  min-width: 160px;  
}
```

```
.dropdown-content a {  
  color: black;  
  padding: 12px 16px;  
  text-decoration: none;  
  display: block;  
}
```



Drop down menus

- This is the magic that makes it work - when we hover over the menu, we override display so it shows the menu!

```
.dropdown:hover .dropdown-content {  
  display: block;  
}
```

```
.dropdown-content a:hover {background-color: #cccccc}
```

```
.dropdown:hover .dropbtn {  
  background-color: #eeeeee;  
}
```

Link selectors

- We have seen the use of :hover in some of our selectors
- These are styles that depend on the *state* of the element
- The following states are available to use:
 - a:link - an unvisited link
 - a:visited - a visited link
 - a:hover - when the user is hovering over the link
 - a:active - the moment the link is clicked
- Hover can be used on any element, and the rest on anything that is “clickable”

Aligning

- We saw that we couldn't use `text-align:centre` to centre images or other block level elements
- We can however use a different method, by changing the margin and width of the element in CSS

```
.centred {  
    display: block;  
    margin: auto;  
    width: 50%;  
}
```

More niche parts of CSS

- The CSS covered in the classes has been all the commonly needed parts
- There is a whole host of different things you can do using CSS
 - Many are silly to teach as they are all things you use only once
- The best way to look through the cool things you can do is on W3schools
- It's possible to do animation, transitions between pages
 - Catz ball example

Next time

- Working with javascript - more coding where HTML/CSS is designing