

Styles and CSS

Cascading Style Sheets

In the past...

CSS? What CSS?

“

In the late '90s to early '00s

There were `` tags mixed with the page together with `bgcolor`, `cellpadding`, and even `<center>`, `<right>`, and `<left>` tags which meant that it's hard to keep pages looking the same as the other and it's hard to tell content from style apart in code.

Today

CSS is standard in web development

“

CSS is very helpful

CSS allows web developers to re-use and uniformly apply style rules across multiple pages

“

To best understand CSS...

Imagine a box surrounding every element in your page. You get to control almost everything about that box – size, borders, backgrounds, and more. Rules applied to that box applies to all elements inside that box. In-short, the rules “cascade”

A <div> with the following styles {
font-family: Arial;
color: Red;
}

An inner <div> with the added style {
background-color: LightCyan;
}

This inner <div> adapted the style because it cascaded inside.

“

All elements have a style attribute

CSS rules are placed inside this style attribute

```
<p style="color: papayawhip; font-family: Arial">E</p>
```

All rules sit inside quotation marks and separated by semicolons ;

“

In-line styling

When you use the style attribute to put individual styles on elements.

Not very useful for if you want to re-use rules on your page.

“

The `<style>` tag

The style tag (not attribute) lets you apply your rules to the **entire page**, not just individual elements.

The style tag sits inside the `<head>` tag so it won't interfere with the page content.

“ CSS ties up rules with elements / tags

```
<style>
```

```
tag{  
    font-family: Arial;  
    color: #660000;  
}
```

```
</style>
```

“ CSS ties up rules with elements / tags

```
h1 {  
    font-family: Arial;  
    color: #660000;  
}
```

“ CSS ties up rules with elements / tags

`h1` { h1 is referred to as the selector – indicates which element to apply the rule to

font-family: Arial;
color: #660000;

}

The part inside the braces defining what style to apply is called the declaration

They come in property – value pairs:
property: value;

“ CSS ties up rules with elements / tags

```
body {
```

```
    background-color: PapayaWhip;
```

```
    /* you can also put comments */
```

```
}
```

“ You can also apply it to multiple elements

```
h1, p { /* use the comma */  
    font-family: Arial;  
    color: #660000;  
}
```

Other techniques for selecting elements can be found in W3Schools (see CSS Selectors) or the Learning Guides

“

Remember: Rules go in the style tag

```
<style>
```

```
tag{
```

```
  font-family: Arial;
```

```
  color: #660000;
```

```
}
```

```
</style>
```


“

Note

Using the style tag is good for keeping page elements uniform – but they don't help much if you're making many pages already.

CSS lets us link to external files for re-usability.

“

To use external CSS

```
<link href="mystyle.css" type="text/css"  
rel="stylesheet">
```

Add this to your <head> tag and you're good to go.

All the styles you made added in one line.

Back to the box

The CSS Box Model

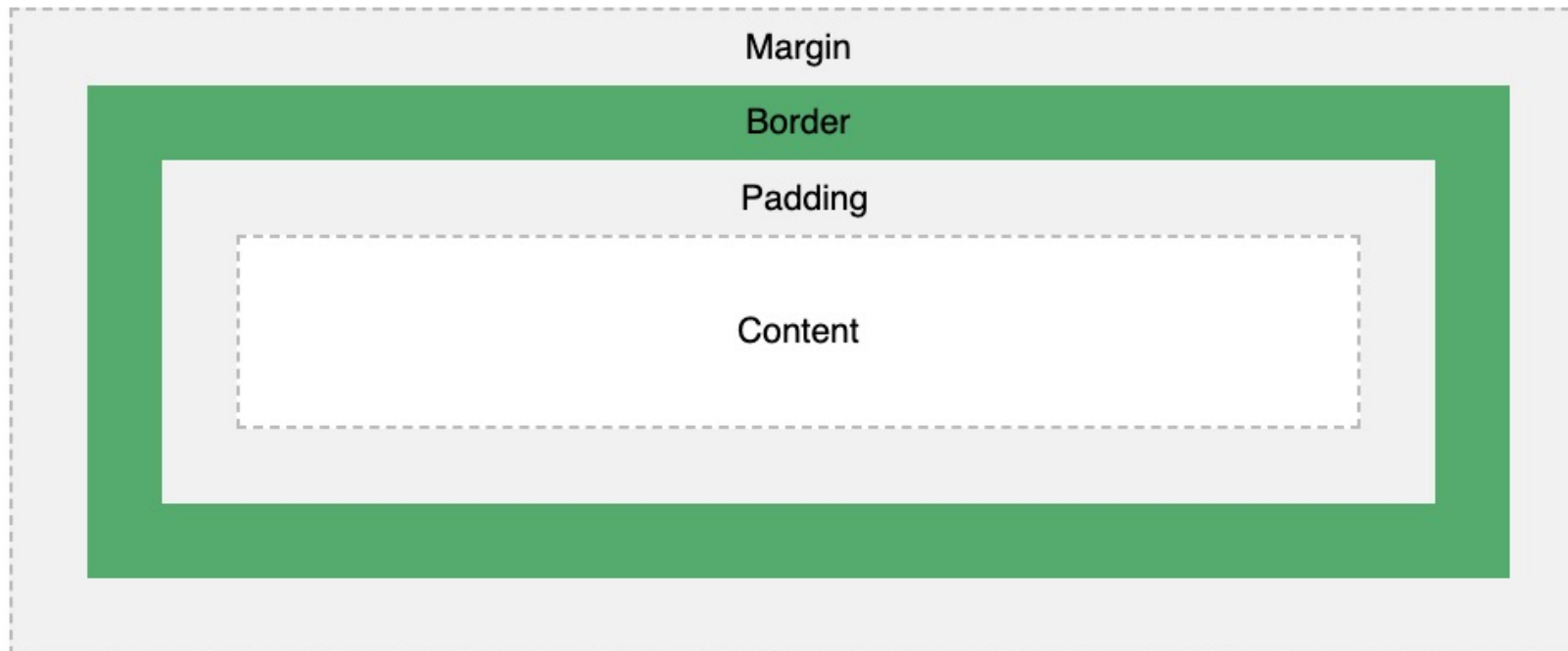


The CSS Box Model

As illustrated by W3Schools (https://www.w3schools.com/css/css_boxmodel.asp)

Note: You can't really put text in the padding, border, or margin

```
div {  
  width: 320px;  
  padding: 10px;  
  border: 10px solid green;  
  margin: 10px;  
}
```



The Box Code

Width specifies how much space there is for the content inside

Padding is the space between content and border.

Border is the visible part (if you want it to) enclosing the padding and content.

Margin is the space between the border and the next element.

```
div {  
  width: 320px;  
  padding: 10px;  
  border: 10px solid green;  
  margin: 10px;  
}
```



**The Box uses
380px worth of
width**

320 pixels for the content.

20 pixels (left and right) for
the padding.

20 pixels (left and right) for
the border.

20 pixels (left and right) for
the margin.

```
div {  
  width: 320px;  
  padding: 10px;  
  border: 10px solid green;  
  margin: 10px;  
}
```



The border as coded has been shorthand

Value includes the width, style, and color of the border, respectively.

You can also get specific per line by using the following properties:

- `border-width`
- `border-style`
- `border-color`

```
div {  
    width: 320px;  
    padding-left: 10px;  
    border-top: 10px solid green;  
    margin-bottom: 10px;  
}
```

You can also get specific

Padding, border, and margin can also be made specific if it's the top, bottom, left, or right.

This also means only the top border will have the specified style.

“ **Box, block-level, and inline elements**

The box's properties completely apply to block-level elements like divs, headings, and paragraphs.

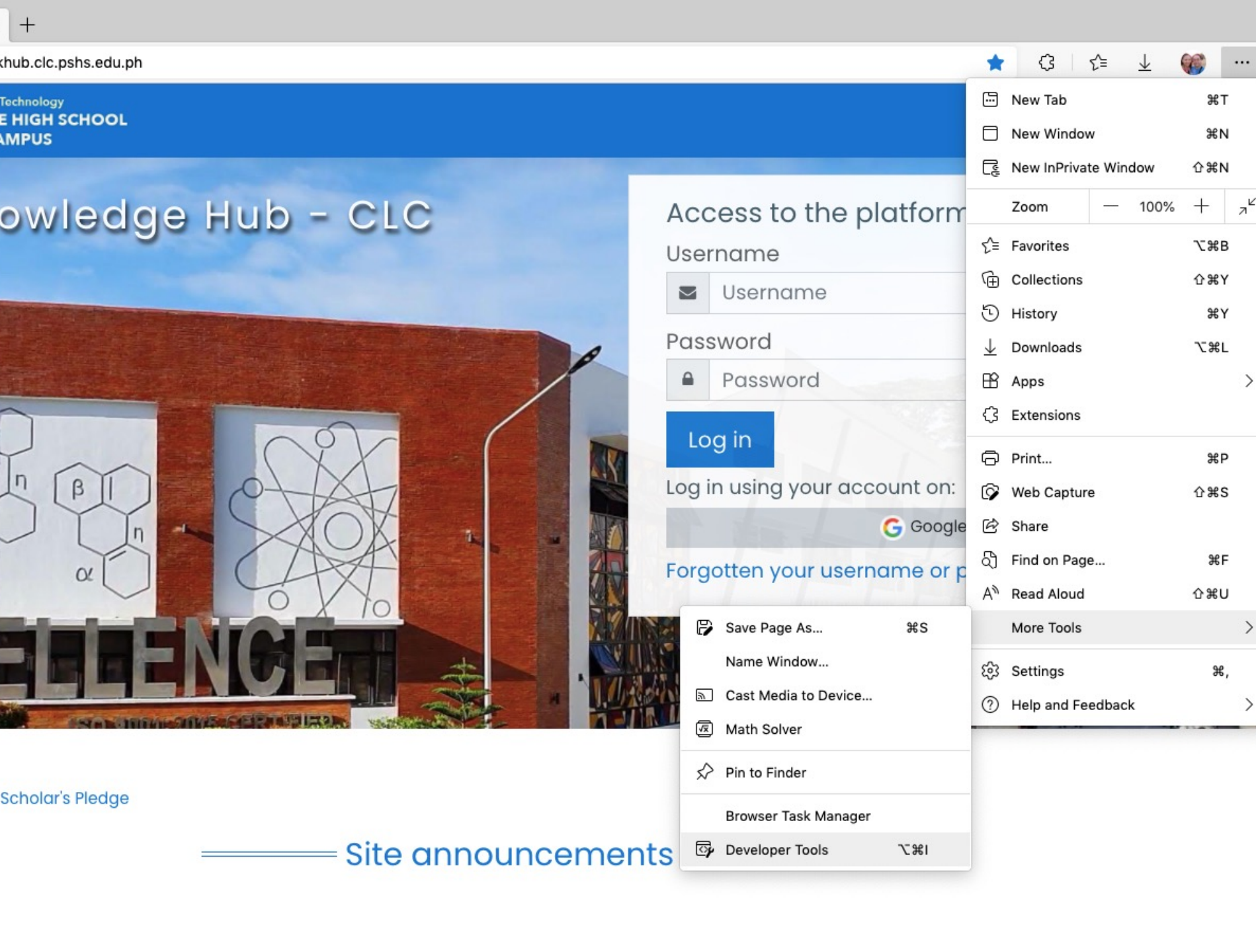
Inline elements like spans and images can also have those properties but may behave differently.

A golden retriever is the central figure, wearing black safety goggles and looking directly at the camera with its tongue out. It is surrounded by chemistry equipment: a round-bottom flask with orange liquid on a stand to the right, a beaker with blue liquid and a cartoon character on the table in front, and a small bottle with a 'DANGER' label. The background is a blue and purple gradient.

**I HAVE NO
IDEA WHAT
I'M DOING**

Sir...

My CSS isn't working well.
How do I fix whatever this
is?



In Google Chrome or Microsoft Edge


Press F12; or

Select the meatball (...) menu on the upper right, More Tools, Developer Tools.

Or you can also right click an element in the page and click 'Inspect'

Users/michaelibanez/Desktop/Arayat/sampledesign.html

Dimensions: Responsive 890 x 728 100% No throttling



Elements

<!DOCTYPE html>
<html>
 <head>...</head>
 <body>
 <h1>My Cat</h1>

 <p>...</p>
 <p>...</p>
 <p>...</p>
 </body>
</html>

html body p

Styles

element.style {
}

p {
 color: #251D26;
 font-family: 'Roboto Slab', 'Palatino', serif;
}

p {
 display: block;
 margin-block-start: 1em;
 margin-block-end: 1em;
 margin-inline-start: 0px;
 margin-inline-end: 0px;
}

margin 16

border -

padding -

964x161

Issues

Accessibility

The Developer Tools

You can explore the code element by element, see all the applied styles, and see the box model as rendered by the browser.

You can also simulate device views in Developer Tools though sometimes you can just resize the browser window.