



🌟 Coding @ Twitter 🌟

Welcome to Twitter!



What we'll be doing

1. HTML
2. CSS
3. Embedding YouTube Videos, Maps & Fonts
4. Saving your websites for later
5. Q & A



Hack the News

aka 'How to Use Chrome Developer Tools'

- 1 Open Google Chrome**
(Even if you use another browser usually, Chrome's Developer Tools are the best)
- 2 Go to [bbc.com/sports](https://www.bbc.com/sports)**
- 3 Right click on the page and choose "inspect element"**
This opens the Chrome Developer Tools, which shows the HTML that makes up the page
- 4 Click the pointer in a box icon (in the top left of the Chrome Developer Tools) to inspect the page**
It'll turn blue when it's active
- 5 Click on the part of the page you want to change**
It should get highlighted when you hover over it
- 6 Edit the HTML to change the page!**



Hack the News

*not really, honest, really

1

Using Chrome Devtools,
we can change the
HTML on a page

2

That allows us to change
text and images

3

But luckily, only on *our*
computers - when we
refresh it changes back
(phew!)



HTML



Hyper Text Markup Language



**HTML is the language used to build
every website on the Internet**

(it really is *that* important!)



**HTML defines the structure and
content of a web page**

(not what the page looks like - that comes later)



What do we mean by structure?



Headings
Links
Images
Forms and buttons



But not what those elements *look* like



**Here are some websites with only the
HTML displayed**

[Homepage](#)

Accessibility links

- [Skip to content](#)
- [Accessibility Help](#)

[BBC iD](#)

- [Home](#)
- [News](#)
- [Sport](#)
- [Weather](#)
- [iPlayer](#)
- [Sounds](#)
- [CBBC](#)
- [CBeebies](#)
- [Food](#)
- [Bitesize](#)
- [Earth](#)
- [Arts](#)
- [Make It Digital](#)
- [Taster](#)
- [Local](#)
- [Tomorrow's World](#)
- [TV](#)
- [Radio](#)
- [Menu](#)

[Search](#)

Search the BBC Search the BBC

BBC Homepage

Welcome to the BBC

Tuesday, 6 November

[England recover in first Test against Sri Lanka. Live now.](#)

[From Cricket](#)

[British sailor admits killing wife at sea](#)

[From UK](#)

[Five men arrested over Grenfell Tower bonfire video](#)



bbc.co.uk



Your device may support a newer version of Twitter. Would you like to try it out?

Yes

Not now

Horatio Humblebrag

[@monkchips](#)

4m

making a video. current status arguing about whether the rocket would have flames coming out of the boosters in space.

[View details](#)

Horatio Humblebrag

[@monkchips](#)

16s

Replying to [@monkchips](#)

[twitter.com/physicistdanny...](#)

[View conversation](#)

Samantha Baines 🙌

[@samanthabaines](#)

34s

IM SO EXCITED 🙌 [twitter.com/spicegirls/sta...](#)

[View details](#)

Chelsea Slater 🏠

[@ slates](#)

43s

SO excited for this one, 5 amazing speakers & over 120 people registered 🙌 [twitter.com/agent_academy/...](#)

[View details](#)

Norfolk Developers retweeted

Lenore

[@LenoreRocks](#)

55m

My latest tech piece with my copywriting hat on is all about Deep Tech. Which is not an all robot recasting of the X-Files, much to my disappointment. But is still pretty cool.... [nakedelement.co.uk/deep-tech-is-a...](#)

[View details](#)

James O'Brien retweeted

Richard Humphries

twitter.com



**They look kinda ugly, but the
structure and content are all still there**



So, let's try writing some HTML!



**During class we'll write our code
down here, and the results will display
over here**





Coding in HTML



**HTML uses `<tags>` to tell the browser
the structure you want**



**There are different HTML `<tags>` for
different structural elements,
like headings, links, and buttons**



**But they all (well, almost all) follow
the same format so they're easy to
remember**



HTML

```
<h1>Hello world!</h1>
```

opening tag



closing tag





The `<h1></h1>` is a heading.

It makes whatever you type inside the tag into a big bold heading.



Exercise 1

Use the `<h1>` tag to add you and your pair's name as a heading on your site



But there are other types of heading...



<h1> . . . </h1>

<h2> . . . </h2>

<h3> . . . </h3>

<h4> . . . </h4>

<h5> . . . </h5>

<h6> . . . </h6>



Exercise 2

Add some different headings to your website.

Can you work out what the different headings do?



The six levels of headings are for sub-headings

<h1> being the *most* important and biggest
<h6> being the *least* important and smallest



Exercise 3

Using the `<p>` tag, add two paragraphs to your page - about you and your pair.



Other text elements:

`...`

`<small>...</small>`

`...`



Exercise 4

Can you work out what the ``, `<small>` and `` tags do?



Awesome!

**** - important text

<small> - smaller text

**** - emphasised text



**But a website with just text would be
pretty boring...**



That's where `` comes in!



```

```



Exercise 5

Try this out below, see what happens:

```

```



Where's the closing `` tag?



Some tags don't need to be closed

These tags, like ``, are
self-closing



**Only tags with content inside them,
“containers”, like headers, paragraph
and tables need closing**



The value of `src=""` in our `` code is the *path* of the image - where it is on the internet



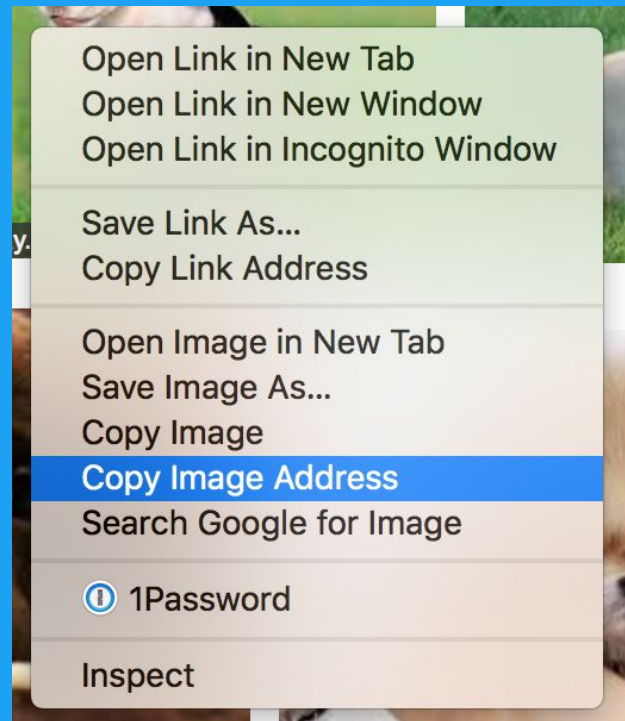
**We can use *any* image we like - we
just need to know the URL**



**That's the link you get when you
Right Click -> Copy URL
on a picture**



Copies the URL for the image





Exercise 7

Copy a link to an image from a Google image search to add to your website

Use the `` tag to add the image to your web page



**Now we've got the structure of your
website with HTML**



**It's time to start thinking about the
design...**



Learning CSS



Cascading Style Sheets



**Allow us to control the style
and layout of our site**



What do we mean by style?



Fonts
Colours
Background images
Borders
Gradients



What do we mean by layout?



Positioning Alignment Margins



**So with CSS and HTML together, we
can make some really impressive
websites**



<http://www.csszengarden.com/>



So how do I write CSS?



```
<style>...</style>
```

**is an HTML tag that says anything
inside the tag is CSS**



Where do I put `<style>`?



Right at the top of your HTML file!



CSS

```
<style>  
  h1 {  
    color: blue;  
  }  
</style>
```

opening style tag

your css!

closing style tag



Exercise 8

Add your first bit of CSS to your site by adding the following to the top of your code:

```
<style>
  h1 {
    color: blue;
  }
</style>
```



Noticed what happened?



All our `<h1>` elements went **blue!**



Ok, let's break that down



CSS

```
h1 {  
  color: blue;  
}
```

selector

attribute

value

The diagram illustrates the components of a CSS rule. The text 'h1 { color: blue; }' is shown. A green arrow points from the label 'selector' to the 'h1' part of the rule. Another green arrow points from the label 'attribute' to the 'color:' part. A third green arrow points from the label 'value' to the 'blue;' part. The labels are in green text.



The CSS selector tells the browser
which HTML elements to style



This styles `<h1>` tags

```
h1 {  
  color: blue;  
}
```

selector

attribute

value



This styles `<p>` tags

```
p {  
  color: pink;  
}
```

selector

attribute

value



The attribute and value make up a rule about *how* the element should be styled



What are these { } ?



CSS

```
h1 {  
  color: blue;  
}
```

selector

attribute

value

The diagram illustrates the components of a CSS rule. The text 'h1 { color: blue; }' is shown. A green arrow points from the label 'selector' to the 'h1' part of the rule. Another green arrow points from the label 'attribute' to the 'color:' part. A third green arrow points from the label 'value' to the 'blue;' part. The labels are in green text.



**They tell the browser which styles to
apply**



Anything inside the curly braces gets applied to all the elements that match the selector



So what styles can I apply?



LOADS!



Waaay too many to memorise!



**But they all follow the same format
(just like it did in HTML)**



Exercise 9

Add text-decoration to your h1 CSS and try different values: *underline*, *overline*, *line-through*

```
h1 {  
    text-decoration: underline;  
}
```



Exercise 10

Try font-size:

```
h1 {  
    text-decoration: underline;  
    font-size: 50px;  
}
```



The *px* is for how many *pixels* tall the font should be



Exercise 11

Inside your `<style>` tag, add the following:

```
p {  
  color: white;  
  background-color: FireBrick;  
}
```



**background-color changes the
background color of the element**



Exercise 12

Try the following:

```
img {  
    border: solid 5px green;  
    border-radius: 3px;  
}
```



Let's break that border down



border tells us the what kind of
border, how thick it is, and what
colour it is



**border-radius rounds the corners
of an element**



Where are these **colors** coming from?



Yes, American **colors - without the 'u'!**



Lots of standard colours you can use!

FireBrick

Cyan

Green

Plum

SeaGreen

Yellow

Red

Olive

Beige



But there are **16777216** colors to
choose from!



But not all of them have names - the browser can also understand colours given as a code, like **#000000** or **#ffff00**



Exercise 13

Let's try the colour picker in Google Chrome Developer Tools together!



Shiny extras

Videos, maps and fonts



Let's embed a YouTube video!



**We can embed other things - like
maps!**



**And we can also have custom fonts,
using Google Fonts:**

<https://fonts.google.com/>



Saving your code

So you can have it later



<http://codepen.io>



Questions?

Ask a Twitter Software Engineer!