Lesson 9

(BETA) Coding a recipe



Introduction

Hey, what's your favourite dish?

Can you write down your recipe for it in HTML^1 so that anyone on the Web can enjoy making it too?





Activity Checklist

Follow these INSTRUCTIONS one by one



Test your Project

Click on the green flag to TEST your code



Save your Project

Make sure to SAVE your work now

Step 1: Are you ready?



you find it?

Here is a list of things to check before you dig into your recipe.

1. Once your code aditor. Do you have an annual your computer	
1. Open your code editor. Do you have an app on your computer to write your code?	
 NO. Talk to your teacher or volunteer about 	
installing a code editor: we recommend Sublime	
Text 2.	
• YES. Great, move on.	
2. Create a new file.	
3. Here is the bare skeleton of an HTML document, copy-paste it	
into your new file.	
December 14 to the fear 18 and 2	
Does it look familiar?	
html	
<html> <head></head></html>	
<title>Code Club recipe</title>	
 HELLO!	
1. Save your file. You can save it as whatever you want to call it.	
Just remember to end your file name with .html so that your	
computer knows it's an HTML file. For instance, you could call	
your file recipe.html. Can you think of a less boring name?	
2. Do you know where your HTML file has gone?	
 NO. Ok, it's somewhere on your computer. Can 	

	 YES. Good, let's move on. 	
3.	Open your browser ² .	
4.	From your browser, open your HTML file . Does it say HELLO!?	
5.	Go back to the code editor. Can you change the HELLO! text	
	to something else?	
6.	Save your HTML file.	
7.	Back to your browser, can you refresh ³ the page where you	
	opened your HTML file?	
8.	Great! Now you've got your tools ready: code editor to write	
	your code, browser to debug ⁴ your code.	
S	step 2: How do you make a list?	
	Activity Checklist	
Do v	you make lists? For instance, a list of things to do for a party, or a	olavlist
-	our favourite videos you know what we're talking about.	- · - · / · · - ·
·		
You	can make lists in HTML too! Here's a code example:	
<	ul>	
	this is a bullet point this is another point	
	you get the point	
<,	/ul>	
4		
1.	Copy-paste the code above in your HTML file. Where? After	
	the <body> opening tag, and before the </body> closing	
2	tag. Save go to your browser and refresh the page What do you	
۷.	Save, go to your browser and refresh the page. What do you	
	see?	

· this is a bullet point

- · this is another point
- ...you get the point

Challenge

Can you make a list of ingredients for your recipe?

Step 3: How do you order your lists?



Activity Checklist

Not all lists are the same. In some lists, the order of things doesn't matter.

HTML calls these lists
 which stands for Un-ordered List. In these kind of lists, you put List Items in no particular order, a bit like in your bedroom:)

Now, can you guess what stands for?

Exactly.

Challenge

In a recipe, it's quite important to list the steps in a particular order. Because you can't bake a cake, if you haven't prepared the mix first.

Can you list the steps to make your favourite dish, from start to finish?

Step 4: How do you add images?



Activity Checklist

So far, you have the basics for your recipe:

- A list of ingredients
- A <oI> list of steps, to turn these ingredients into a tasty dish

Some people like to see what a dish will look like once it's made, to decide if they want to make it or not.

Why not add an image or two to whet their appetite?

HTML calls images and wants you to write down exactly where to find an image's source, or src.

1.	Copy-paste the	banana.jpg image, from this project's
	Resources folder	into the folder where you saved your HTML
	file.	

1.	Add	<img src="ban</th><th>ana.jpg"/>	to your	· HTML	document	. Save	
	go to	o your browser	and refre	sh your	page, y	you should	see
	some freshly chopped banana slices. Yummy?						

Challenge Can you make some images of your ingredients? Can you add these images to your recipe's HTML file?

Step 5: How do you add extra info?



Activity Checklist

Your recipe looks much better now, don't you think?

Still, some people want to know how long it would take them to make this recipe, whether it's an easy or difficult one, how many people it serves, what to call this recipe, and so on.

For a starter, you could add the name of your recipe at the top of your HTML document, using a <h1>, which stands for Heading 1 and it's what HTML calls the most important piece of information in a document. What is your recipe called?

Challenge

How can you help people decide? What kind of information would they want to find in your recipe?

Think of what extra information you want to add to your recipe. Then code it!

Step 6: How do you make things look stylish?



Now your recipe contains all the information one may want.

Should we try and make it look as nice as it tastes?

Ok, have you heard of CSS⁵? You can use this language to style your recipe.

You can write your CSS inside a <style> tag, placed in the <head> of your HTML document, like in the code example below.

```
<!DOCTYPE html>
<html>
<head>
<title>Code Club recipe</title>
<style>

/* WRITE YOUR CSS UNDER HERE */

</style>
</head>
...
</html>
```

Just like HTML, CSS needs to be written in a particular way for your browser to make sense of it.

```
body
{
   max-width: 600px;
   margin: 30px auto;
}
```

Challenge Copy-paste the code above into your HTML document. Where? Anywhere between the <style> opening tag and the </style> closing tag. Using your browser's Inspector⁶, can you work out what the max-width: 600px; and margin: 30px auto; rules do? Step 7: How do you make things easier to read? **Activity Checklist** Now your recipe should sit in the middle of the page, instead of sticking to the Using CSS, you can tell your browser how to display your text, for example: 1. Use font-size to make text xx-large, xx-small or anything in hetween⁷

left.

more room

2. Use text-align to make text stick to the left, right or center

4. Use line-height to squish text lines together, or to give them

3. Use font-weight to make text bold, bolder or lighter

5. Use font-family to choose the font⁸ for your text

Challenge

- Play around with the CSS properties above.
- Can you make your recipe easier to read, so that even a granny can read it?

You can start from this code example. Place it inside the CSS rule for body.

font-family: courier, monospace;

font-size: 20px; line-height: 1.5;

Banana ice cream



- 2 bananas
- · a few spoons of yoghurt
- · chocolate chips

Step 8: How do you add colours?



Using CSS, you can get creative with colours. Do you want your text to look like tomatoes on peachpuff? No problem.

1. Copy-paste the code example below into your HTML document.

Place it inside the CSS rule for body.

color: tomato;

background-color: peachpuff;

1. Save, go to your browser and refresh your page. What do you see?



クウ命

Banana ice cream

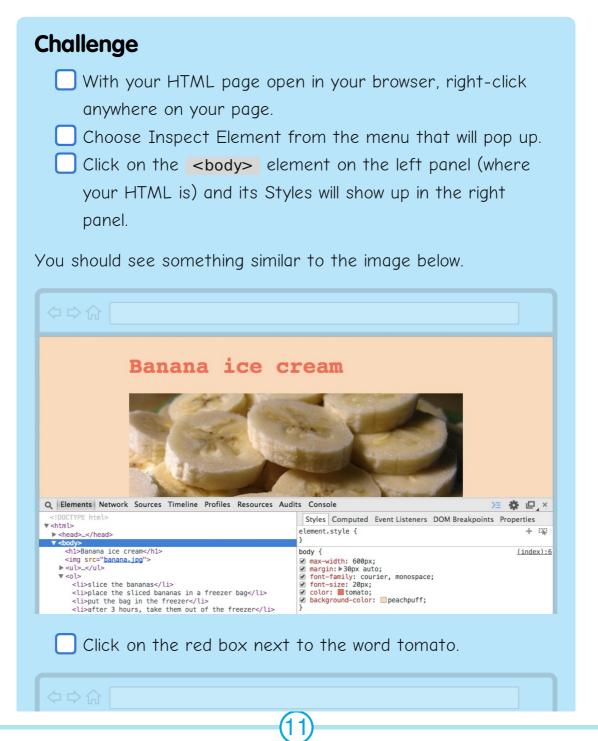


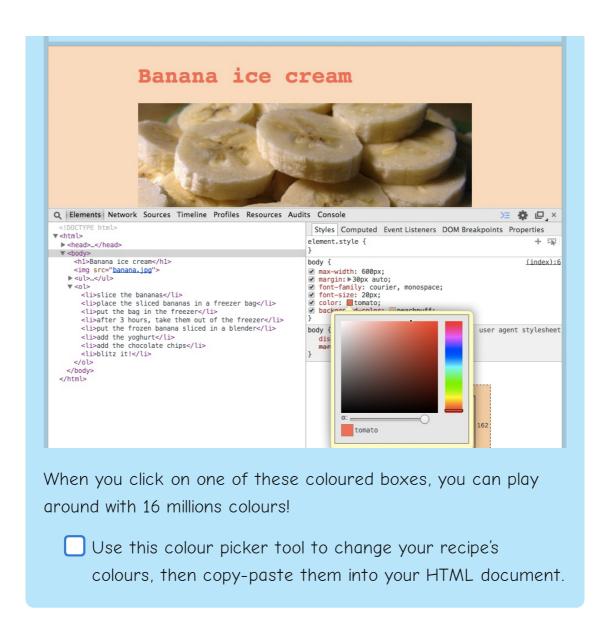
- 2 bananas
- · a few spoons of yoghurt
- · chocolate chips

Now, how many colours do you know? Your browser knows more than 16 million colours. Pretty impressive, isn't it?

The good thing is that you can choose between those millions, and tell your browser exactly which colours you want.

Also, there's no need for you to remember any of those colours, because you can use your browser's Inspector to pick the colours you like.





EXTRA How do you make specific styles?



Activity Checklist

What if you want to make only some parts of your HTML a certain colour?

CSS and HTML use different ways to call the same things. In HTML you say $\langle body \rangle \dots \langle body \rangle$ and in CSS you say $\langle body \rangle \dots \rangle$

1. To change the colour of your <h1> HTML element, add this CSS.



```
h1
{
    color: maroon;
}

1. Save, go to your browser and refresh your page. What do you see?

Now <h1> has a new color, while the rest of your page inherits the color you gave to the <body>.
```

The h1 color takes precedence over the body one, because the selector h1 is more specific than body. CSS likes specificity.

Challenge

- Can you make the ingredients a different colour than the steps?
- What else can you make, using specific CSS rules?

Footnotes

- HTML stands for How To Make Lunch... well, no. HTML stands for HyperText Markup Language, which is the language that every website in the World "speaks". To make a website, you teach your computer how to "translate" your ideas into HTML.
- What's a browser? A web browser is a special app that knows how to interpret text files written in HTML. The most popular browsers are Internet Explorer, Google Chrome and Mozilla Firefox ←

- What's debugging? Debugging means to find and correct glitches in your code. It takes both patience and speed, just like catching a flying bug. Luckily, debugging HTML code in your browser is easy: right-click anywhere on a page and choose Inspect Element. This will pop open your browser's Inspector, where you can see every page's source code and much more. When you hover over the source code with your mouse, the corresponding HTML element on the page will light up.←
- CSS deals with how we Cook, Style and Serve food... well, no. CSS stands for Cascading Style Sheets and it's the language you can use to tell your browser to change colours, sizes and many other stylistic aspects of your HTML documents.←
- What's a browser's Inspector? In your browser, right-click
 anywhere on a page and choose Inspect Element. This will pop
 open your browser's Inspector, where you can see every page's
 source code, styles and much more. When you hover over the
 source code with your mouse, the corresponding HTML element
 on the page will light up. When you click on an HTML tag in the
 source code (left panel), you'll see all its CSS styles (on the right
 panel).←
- How can you control the size of things in CSS? Using px, which stands for pixel. Try to go really close to your computer screen: do you see little dots? Every little dot on your computer screen is a pixel. So, 20px means 20 of those little dots.
- What's a font? You can think of a font as the "dress code" for
 the letters of the alphabet, numbers and punctuation. You can
 use fonts to "dress" the same text in many different ways, and
 express certain moods or feelings, for example this, this,
 this or this. You can explore and use hundreds of free fonts
 on Google Fonts.↔

