Lesson 10

(BETA) Coding a comic



Introduction

Do you like comics? Do you have a story to tell? Can you turn a bunch of images into your own Web-comic?





Activity Checklist



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Test your Project

Save your Project

Follow these INSTRUCTIONS one by one

Click on the green flag to TEST your code

Make sure to **SAVE** your work now

Step 1: Are you ready?



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

- 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 skeleton of an $HTML^1$ document.

Copy-paste it into your new file.

```
<!DOCTYPE html>
<html>
    <head>
        <title>Code Club comic</title>
        <style>
            * { box-sizing: border-box; position: relative; }
            html, body { height: 100%; }
            body
            {
                max-width: 600px;
                margin: 0 auto;
                padding-left: 10px;
            }
        </style>
    </head>
    <body>
        <h1>HELLO!</h1>
```

</th <th colspan="3"></th>			
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 comic.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 		
	you find it?		
	 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 <code>HELLO!</code> text		
	to the title of your comic?		
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.		

</body>

Step 2: How do you make a panel?



What makes a comic, a comic?

ANATOMY OF A COMIC







To make a comic you put a bunch of images and text in sequence and place them next to each other.

You frame each moment of your comic into a panel.

To make a sequence you need at least two panels.

Let's start with one panel

<section class="panel">
</section>

1. Copy-paste this code inside your HTML document. Where?

Anywhere between the <body> opening tag and the </body>



closing tag.

Using the class attribute you can classify your HTML elements.

Here we have a particular kind of <section> which we called "panel". You could call it whatever you like, for example "comic panel" or "cute cat": class names are entirely up to you. Since we're making a comic panel, it makes sense to just call it "panel".

1. Save, go to your browser and refresh the page. Do you see a panel?

No, indeed. That's because your <section class="panel"> is empty and can't be seen.

You can use CSS^5 to make it visible.

```
section[class="panel"]
{
   border-bottom: 10px solid white;
   border-right: 10px solid white;

   background-color: yellow;

   height: 300px;
   width: 100%;
}
```

Copy-paste this code into your HTML document. Where?
 Anywhere between the <style> opening tag and the
 </style> closing tag.

Using your browser's Inspector ⁶ , can you work out what those CSS rules do?
Now that you have one panel, can you make another panel under the first one?
◇◇☆
WWWELLO!

Step 3: How do you add images?



see?

So far, you have the building block of your comic: the panel.

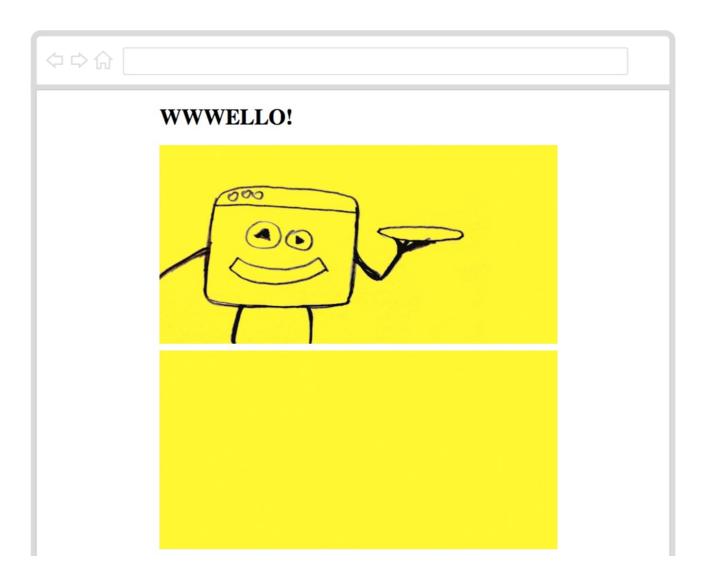
No matter how many <section> elements you add to your HTML document, as long as you classify them with class="panel" your browser will give them all the same "yellow box" style.

class names are useful for shared rules.

Now, empty panels don't really tell a story, do they? Why not add images to get your story off the ground?

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

1.	Copy-paste the waiter.png image, from this project's	
	Resources folder into the folder where you saved your HTML	
	file.	
2.	Add inside one of your panels. That	
	means the image will be nested between the <section< td=""><td></td></section<>	
	class="panel"> opening tag and the closing tag.	
3.	Save, go to your browser and refresh your page. What do you	



Challenge

- Can you make (or find online) images for the first two panels of your comic?
- Can you add these images to your comic?

Step 4: How do you make a speech bubble?



Activity Checklist

Now that you have images, you can start writing your story.

In comics, you can use speech bubbles to make your characters "talk". A speech bubble is usually a short paragraph, which HTML calls . 1. Can you add a element inside your panel, after the ? 2. Since this is a special kind of paragraph, can you think of an appropriate class name for it? How about this? Hello, I am your browser. Would you like to order something to drink? 1. Save, go to your browser and refresh the page. What do you see? Nothing, indeed. That's because your speech bubble appeared under the image. Challenge Can you move your speech bubble on top of the image? Using position: absolute; you can position texts and images within your panel, no matter where your browser initially puts them. p[class="bubble"] {

background-color: white;

padding: 10px;

position: absolute:

margin: 0;

Copy-paste the code above into your HTML document. Where? Anywhere between the <style> opening tag and the </style> closing tag. Save, go to your browser and refresh the page. Where is your speech bubble now? You can use these CSS properties to move your speech bubble around: top left right bottom For example, you can try with top: 30px; and then tweak it. WWWELLO! Hello, I am your browser. Would you like to order something to drink?

Step 5: How do you make many speech bubbles?



What if you want another speech bubble? What if you want many speech bubbles, all in different positions?

class won't cut it this time, you need another HTML attribute.

Meet id.

```
Hello, I am your browser. Would you like to order something to drink?
```

Unlike class, which you can can give to as many HTML elements as you please, there can be only one element in your HTML document with a certain id.

An id is unique, just like you :)

1. In your <style> can you add a new CSS rule, only for one speech bubble? Where? Anywhere between the <style> opening tag and the </style> closing tag.

For example, this rule will apply only to the one bubble identified as panel1-bubble1.

```
p[id="panel1-bubble1"]
{
    top: 30px;
    left: 300px;
    width: 300px;
}
```

Challenge
Do you know your classes from your ids?
Can you make many more speech bubbles, give them unique id names and position them inside your panels?
You can call them whatever you like: id names are entirely up to you.

Step 6: How do you get many panels on the same row?



Activity Checklist

Your story is coming to life now. How many panels have you got?

You can use id to make panels unique too!

For example, you may want to change the width or height of your panels:

```
section[id="panel2"]
{
    width: 300px;
}
section[id="panel3"]
{
    width: 200px;
}
```

1.	Copy-paste the code above into your HTML document. Where?	
	Anywhere between the <style> opening tag and the</td><td></td></tr><tr><td></td><td></style> closing tag.	
2.	Can you give the correct id names to two panels in your	

HTML document?

Challenge What if you want to have those two panels in the same row? Can you add float: left; inside your section[class="panel"] CSS rule? Save, go to your browser and refresh the page. What do you see? WWWELLO! Hello, I am your browser. Would you like to order something to drink?

Step 7: What if images are bigger than panels?



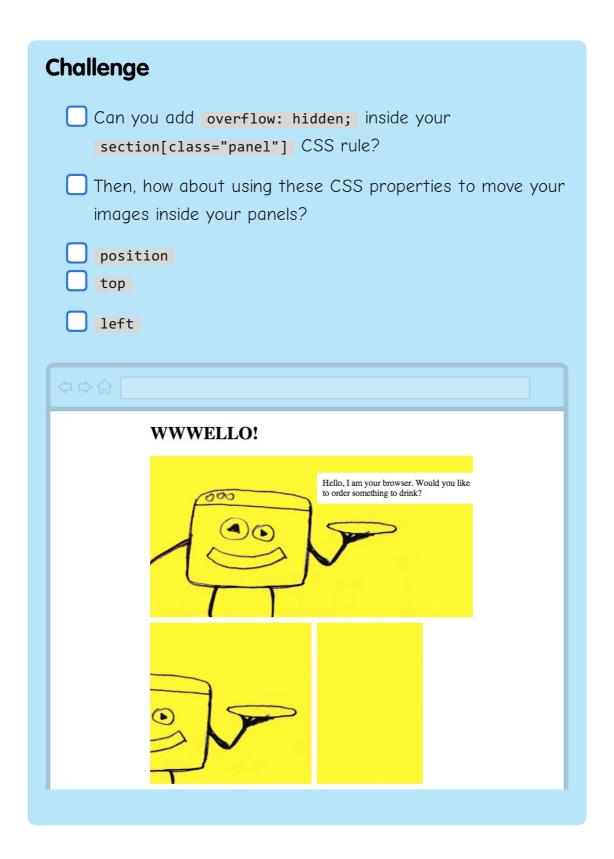
Now you know how to change the width or height of your panels.

What if you have an image that is too big for its panel? So big that it overflows

into other panels?

Well, there's a CSS property for that.

overflow: hidden;



EXTRA How do you make different voices?



Activity Checklist

While you were busy styling panels and images, your browser has taken care of styling texts inside your speech bubbles.



What if you want to change the way your texts look?

You can use fonts to "dress" your texts in many ways and express different voices, moods or feelings, for example a whispering voice or A SCREAMING VOICE.

Experiment with these CSS properties to make your speech bubbles more expressive:

1.	font-family	
2.	font-size	
3.	text-transform	
4.	letter-spacing	

Challenge

Your browser gives you a handful of font families, out of the box. There's more to comics than that!

- Go to Google Fonts and find fonts that suit your story.

 That page will tell you how to choose, review and use the fonts you like.
- Can you add your chosen fonts to your comic?

EXTRA How do you make a speech bubble arrow?



Have you noticed that your speech bubbles are missing something?

Yes, that little arrow pointing at your character, which makes it clear who's

```
p[class="bubble"]:after
    content: " ";
    position: absolute;
    border-width: 30px;
    border-style: solid;
}
p[id="panel1-bubble1"]:after
    top: 100%;
    left: 30px;
    border-top-color: white;
    border-left-color: red;
    border-bottom-color: green;
    border-right-color: blue;
}
```

- 1. Copy-paste the code above into your HTML document. Where? Anywhere between the <style> opening tag and the </style> closing tag. 2. Save, go to your browser and refresh the page. What do you
- see?

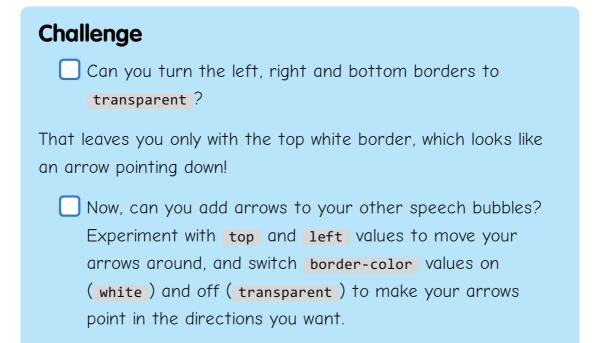


A white-red-green-blue "jewel" has appeared after your speach bubble.

1. Right-click on your speech bubble, then choose Inspect Element to see what is going on.

That "jewel" is, technically speaking, an empty element with a very fat border: 30px.

The top border is white, just like the rest of your speech bubble. The left border is red, the bottom border is green and the right border is blue.



Footnotes

- 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, 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).←
- 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).←