

[the academy_of_code]

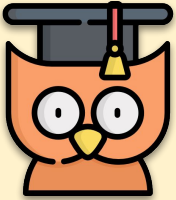
Grade 3/4

Unit 3

HTML and CSS

www.theacademyofcode.com/handouts

Lesson 1 - Getting Started



Learning Outcomes:

- How to edit HTML code
- Learning about the <head>, <body>, <h1> <div> and <p> tags
- Creating a comic Strip with HTML and CSS



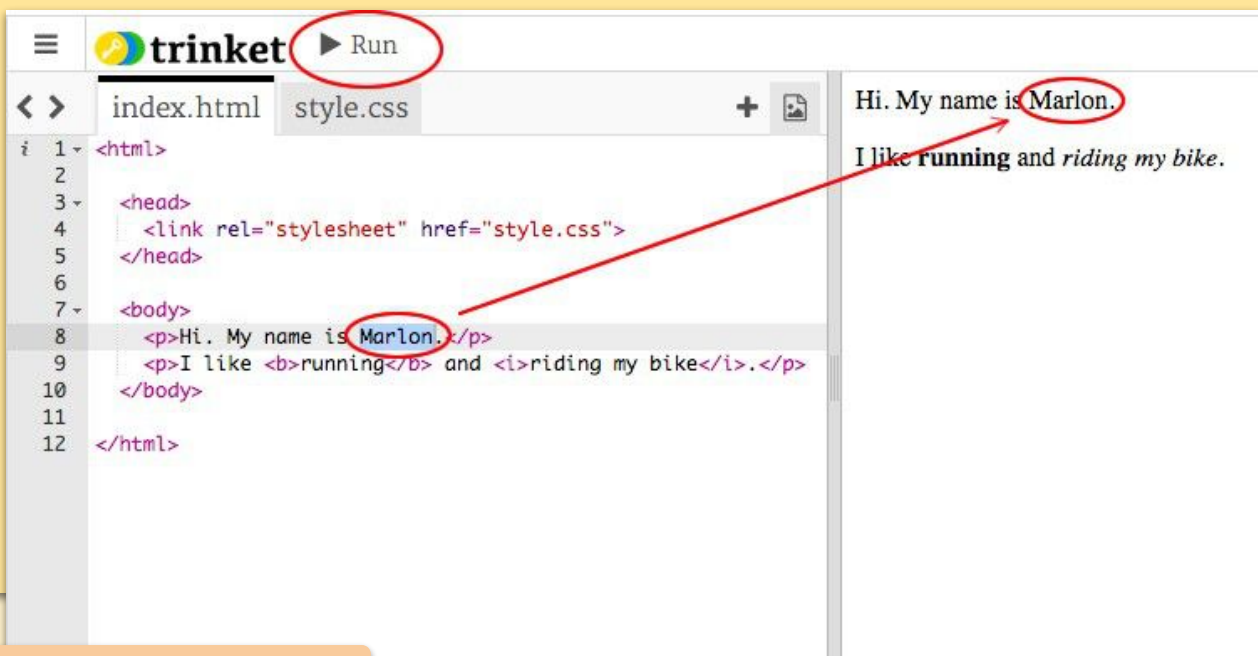
HTML/CSS/Javascript

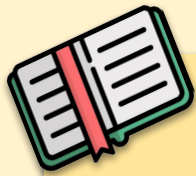
We're going to be using HTML and CSS to design webpages. But first, what are they?

Watch this video



We'll be using a site called ***www.trinket.io*** to learn about how they work. If you edit code on the left, your results will appear on the right. **Hold CTRL** and **click** on the following link: www.bit.ly/aocwebdevintro. **Customise the text** below so that it says your details. Add in another line of text a tag. Edit the **CSS file** to change the colour of the background, the size of the font or the font-face itself.





HTML/CSS/Javascript - The Differences

There are three web languages that web developers must learn. They are all interconnected.

1) **HTML is 'The Builder'**

It is there to **define the content** of web pages



2) **CSS is 'The Artist'**

It is there to specify the **design and layout** of web pages



3) **JavaScript is 'The Wizard'**

It is there to program the behavior of web pages. Javascript is a programming language to add interactive content to pages. It can:

- Validate forms
- Utilize cookies
- Control browser functions
- Inform users



JavaScript was invented by Brendan Eich in 1995. Eich also co-founded and developed Firefox, a popular web browser.



Let's Get Coding

Knock Knock



In this project, you'll learn how to create your own webpage to tell a story, joke or poem.

Decide on a story

Before you get coding, you'll need to **decide on a story** to tell. Think about the story/joke that you want to tell. It could be a famous story, a story you have made up, something that has happened to you or someone you know. It doesn't even have to be a story. It could be a joke, a poem, or anything else you want. But make sure you have a plan.

Editing your story

Let's start by editing the HTML content and CSS style of the story webpage.

CTRL + Click: www.bit.ly/trinketcomic.



Let's Get Coding

Go to line 7 of the code, and you will see the webpage content, which is inside `<body>` and `</body>` tags. Can you tell which tags are used to create the different parts of the webpage?

```

6
7 <body>
8
9     <h1>Add your title here!</h1>
10
11 <div>
12     
13     <p>Add your own text here!</p>
14 </div>
15
16 </body>
17

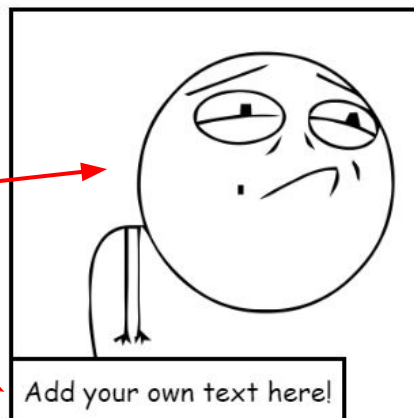
```

```

1 <html>
2
3 <head>
4   <link rel="stylesheet" href="style.css">
5 </head>
6
7 <body>
8
9   <h1>Add your Title here</h1>
10
11 <div>
12   
13   <p>Add your own text here!</p>
14 </div>
15
16 </body>
17
18 </html>
19
20
21
22

```

Add your Title here



- `<h1>` is a heading. You can use the numbers 1 to 6 to create headings of different sizes. It needs a `</h1>` closing tag.
- `<div>` is short for division, and is a way of grouping stuff together. In this webpage, you'll use it to group together all the stuff for each part of your story. It needs a closing `</div>` tag.
- `` is an image. It does **not** need a closing tag.
- `<p>` is a paragraph of text. It needs a closing `</p>` tag.

Changing the Images

Can you find the HTML for the image (Hint: it's on line 12)? Click on the **image library** icon to find a different image title. Change the name from "meme (483).jpg" to another one and you'll see the image change! You can use any of the images in the library. We've loaded these in already.





Adding Another Frame

1

Use **CTRL + C** to copy these lines, the first frame and it's text. Paste (**CTRL + V**) a copy including the `<div>` and `</div>` tags to create a second picture.

```
<div>
  
  <p>Hey Sad Larry, guess what?</p>
</div>
```

```
7 <body>
8
9   <h1>Sad Larry</h1>
10
11   <div>
12     
13     <p>Hey Sad Larry, guess what?</p>
14   </div>
15
16   <div>
17     
18     <p>What?</p>
19   </div>
20
21 </body>
22
23 </html>
24
25
26
```

Sad Larry

Hey Sad Larry, guess what?

What?

2

Add a new line of text inside your new `<div>` tag.

3

Add an image to your new box, by adding this code inside your `<div>` tag, ``. For HTML images, you need to add the source of the image, inside the speech marks.

4

With *Trinket.io*, you can upload downloaded images if you have an account but if you don't, don't worry. You can insert images links/URLs directly in your `` tag.

- Open image in new tab
- Save image as...
- Copy image
- Copy image address
- Search Google for image

Inspect

Ctrl+Shift+I

Right click on an image online, copy the image address and Paste the URL between the speech marks in your `` tag. You should see your image appear.

```
15
16 <div>
17   More text here!</p>
19 </div>
20
```



Finish your story

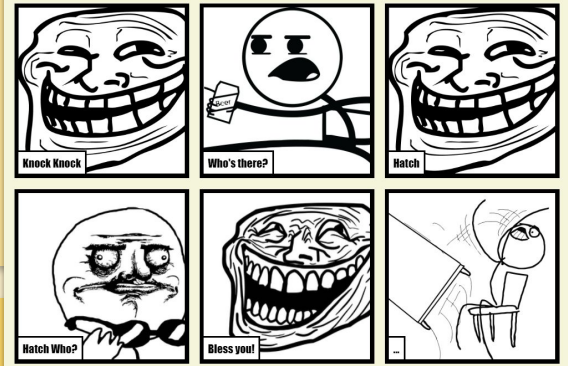
Use what you have learned to create a finished project telling your story.



Challenge - Meme Review

Update this lesson - Make a 'meme review' magazine based on the best memes from the previous year.

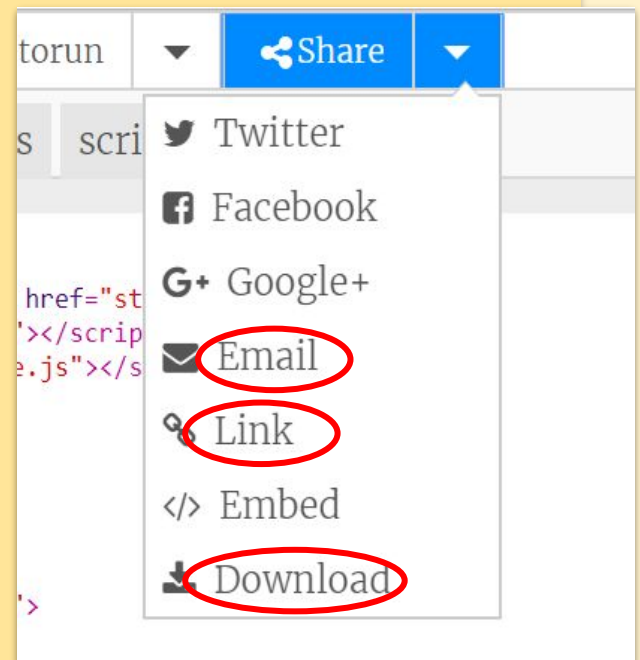
Knock Knock



Saving your work

You have a few saving options accessible via the **Share** menu at the top of the screen. Save the **link** or you can send the link in an **email**.

Alternatively you can hit **download** to save all of your files (including pictures) in one zipped file. This can then be saved on your USB or in a specific folder on your computer.



Using Bit.ly

Your link may be a bit long. www.bit.ly is a URL shortening tool so that you can easily and quickly share your long link with your tutor, friends or family.

Help us out - Clear your History

Once you've saved your work, you'll need to delete the history so that the next student can start fresh and not with your work.

Press **Ctrl+H**, Click **Clear browsing data** and clear your history from the last 24 hours.

Chrome history

Tabs from other devices

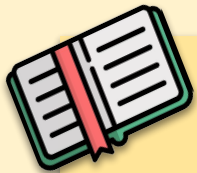
Clear browsing data

Lesson 2 - Making a Personal Profile



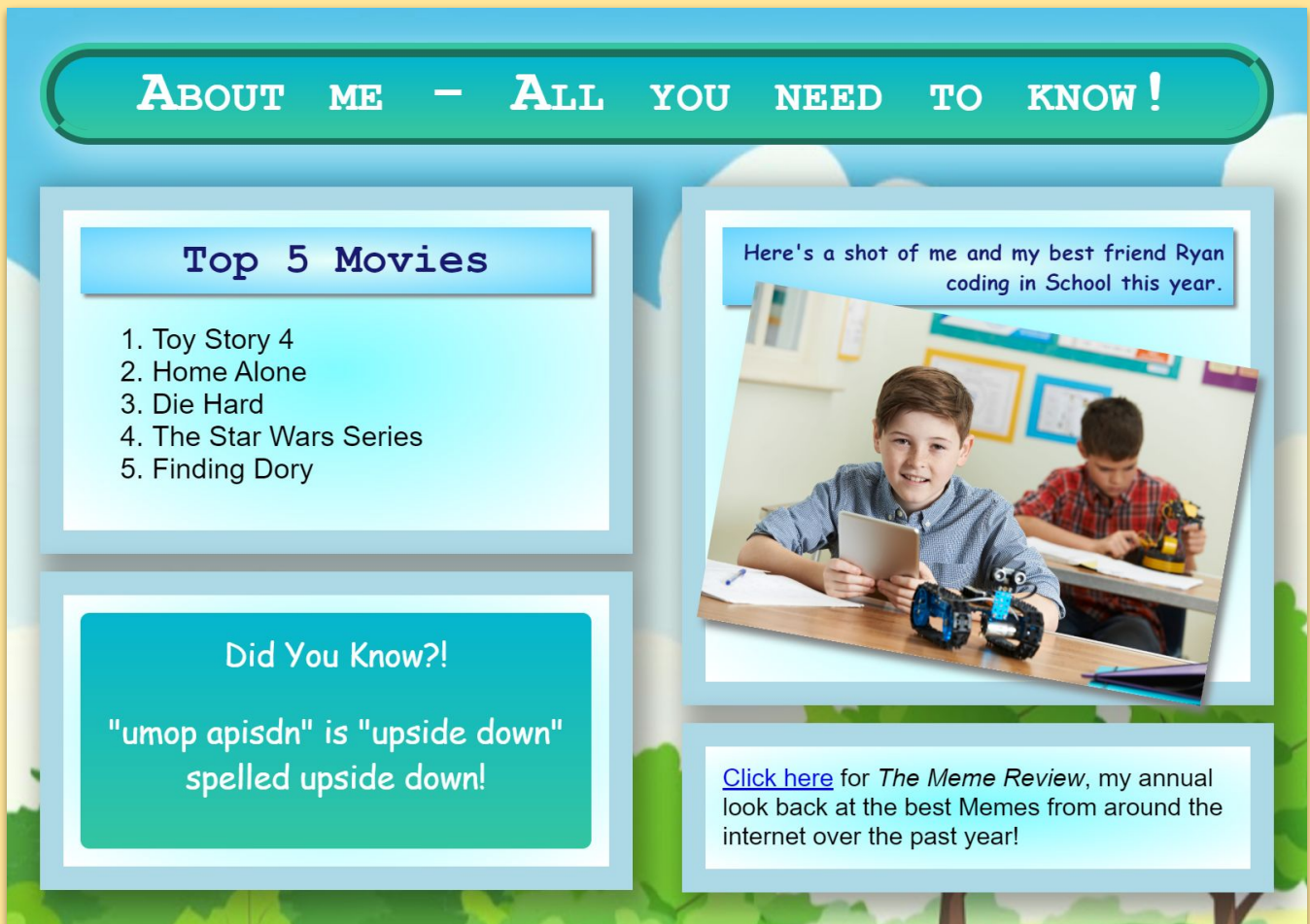
Learning Outcomes:

- Revising what we know about HTML and CSS to make a personal profile
- Using columns and class selectors



Making a Personal Profile

In this project, you're going to use HTML and CSS to create a personal profile which is split into different sections. You will be using code from www.htmlcheatsheet.com to spice up a very basic template. In the end, the first page of your site should look something like this:



To start with, open this link: www.taoc.ie/personalprofile



Let's get coding!

- 1 Within the body tags put a **<h1> tag** with a title for your site like so:

```
<body>
  <h1>About me - All you need to know!</h1>
</body>
```

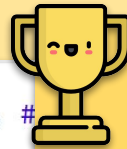
- 2 **Style your <h1> tag** in the CSS file which should be empty. As it stands, all of your HTML that have <h1> tags will have now this style.

```
h1 {
  text-align: center;
  color: white;
  background: teal;
  padding: 5px;
}
```

My Magazine

- 3 Now **CTRL + CLICK** www.html-css-js.com/css/generator and use the **Gradient Generator** to insert a gradient in the **body** selector.

```
body {
  background: radial-gradient(ellipse at center, #
  padding: 15px;
  font-family: Arial;
}
```



Challenge - Background Image

Using this *CSS Generator* link, get a image as your background!

- 4 Now we're going to create columns - our site will have two of them. Add in the lines below in your **HTML (below)** and position them in your **CSS (below)**. Put something in side one of your columns to test that they work.

```
<h1>About me - All you need to know!</h1>
<div class="column1">
</div>
<div class="column2">
</div>
```

```
.column1 {
  width: 48%;
  float: left;
}
.column2 {
  width: 48%;
  float: right;
}
```

- 5 Find an image off the internet and click **Copy Image Address**. Paste this image into your code within one of the **<div>** tags.

```
<div class="item">
  <h1>Here's a shot of me and Ryan coding in School this year.</h1>
  
</div>
```

- 6 You'll notice that the image is positioned badly on your page. We're going to use CSS Selectors to apply a 'tag' onto this picture so that we can style it (and only it). Notice `class="photo"` above. This is a kind of a 'tag' and like when we use a variable in **Scratch** or **Processing**, it can have any name. Attach one of these tags to your image (like we have done above) and put the code below in your CSS.

N.B. You'll need to put a full-stop before class name to style it properly.

```
.photo {
  max-width: 50%;
  box-shadow: 4px 4px 4px gray;
  transform: rotate(10deg);
}
```

Make some changes to the code on the right until you're happy with its style.

- 7 In your HTML, add in some other tags like **<h2>** or **<p>** and style those. You can use some of the CSS for inspiration, or try grabbing something off of

www.htmlcheatsheet.com

```
h2 {
  color: white;
  padding: 5px;
  margin: 0px 0px 10px 0px;
  box-shadow: 2px 2px 2px gray;
  text-align: center;
  background: firebrick;
}

.otherh2 {
  color: white;
  font-size: 12px;
  text-align: right;
}

.item {
  padding: 10px;
  margin-bottom: 10px;
  border: 3px dashed teal;
}
```



Challenge - Make an Ordered List

In the column on the left, make an **Ordered List** `` of your favourite Youtubers, Movies, Sweets, holiday destinations - The choice is yours! Check the image on the right to make sure you are using proper syntax.

```
<div class="item">
  <h2>Top 5 Movies</h2>
  <ol>
    <li>Toy Story 4</li>
    <li>Home Alone</li>
    <li>Die Hard</li>
    <li>The Star Wars Series</li>
    <li>Finding Dory</li>
  </ol>
</div>
```



Challenge - Make fact box

In the same column as this list (but in a separate row) add in a fact that uses:

- A font that you haven't used before.
- A smaller text size to the rest of the webpage.
- A styled background which uses a gradient or colour.

Did You Know?!

"umop apisdn" is "upside down"
spelled upside down!



Adding a Second Page

index.html style.css **SecondPage.html** ⚙️

Your site has a second page. It will be quite similar to the first page, so if you want, you can copy and paste text from your **index.html** file. Both pages will have the same CSS sheet.

- 1 Add a new title for this page - "My Favourite XYZ"
- 2 Link both of your pages. Here is an example of how ours looked in the code:

```
<div class="item1"><a href="page2.html">Click here</a> for
<i>The Meme Review</i>, my annual look back at the best Memes
from around the internet over the past year!</div>
```

[Click here](#) for *The Meme Review*, my annual
look back at the best Memes from around the
internet over the past year!



Challenge - Add a Link on the Second Page to the First

Add a link back to the first/home page. It should be within a sentence (like on the previous page).



Challenge - Finish your second page

Finish your second page and style it in a different way to your first page.



Adding in a page mascot

- 1 Find a PNG of a page mascot online. Make sure you have permission to use it.
- 2 Click on **Copy Image Address** NOT **Copy Link Address**
- 3 Add the following code to your HTML and paste the link (src=" here ")



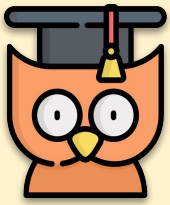
``

- 4 Add this code to your CSS to get the mascot sliding in from the top left corner like in the above video. Try changing around the numbers to see how it affects your result. **SAVE YOUR WORK!**

```
.dabbingpug {
  height: 80px;
  position: absolute;
  left: -200px;
  animation: slide 10s infinite;
}

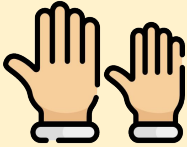
@keyframes slide {
  0% { left: -200px }
  50% { left: 0 }
  100% { left: -200px }
}
```

Lesson 3 - HTML and CSS II - Linked Rooms

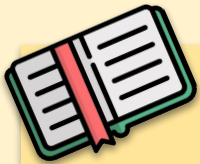


Learning Outcomes

- To create a customised room with doors in HTML and CSS
- To use class selectors and links to link different doors to their corresponding rooms



REMEMBER: Put up your hand. We love to help!



Classes and Custom Tags

In this lesson, we'll be refreshing what we've worked on in the previous HTML/CSS lessons about giving items individual 'class' tags to make a multi-paged room, the starting point for a mystery game perhaps.

You will create and customise a set of linked rooms where each room is a different web page which you can decorate with HTML and CSS.





Stage One: Getting Started

- 1 Open this trinket link: www.taoc.ie/rooms
- 2 We want to get from one website (room) to another. To get to **tvroom.html**, we've added a link in green inside the **<div>** with the class selector **'room'**:

```
<html>
<head>
  <link rel="stylesheet" href="style.css">
</head>
<body>
  <div class="roomname">Hall</div>

  <div class="room">
    <a href="tvroom.html">TV Room</a>
  </div>

  <div class="description">You are in the hall.</div>
</body>
</html>
```

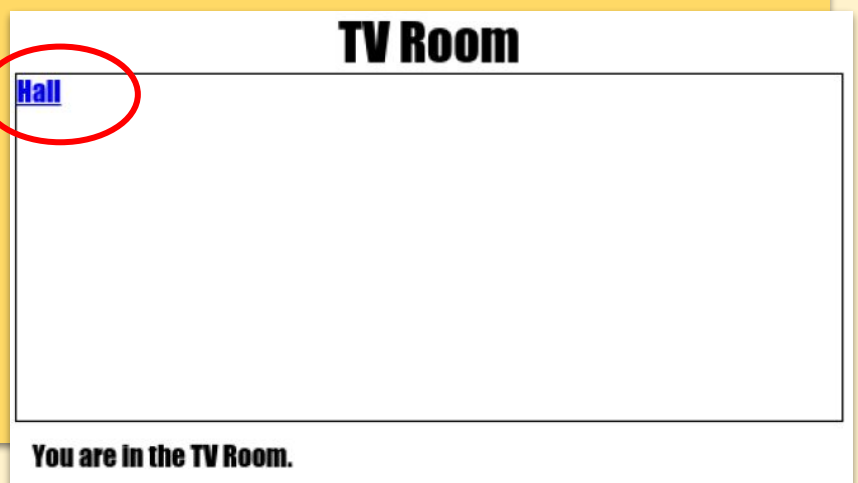
Test your trinket by clicking on the TV Room link to see the **tvroom.html** webpage. Note that **tvroom.html** also has **its own tvroom.css** style file which defines the layout for this page.



Must-Do Challenge: Add another link

Add an **<a>** link to the **tvroom.html** page to get you back to the Hall webpage which is called **index.html**. The link text should be 'Hall'.

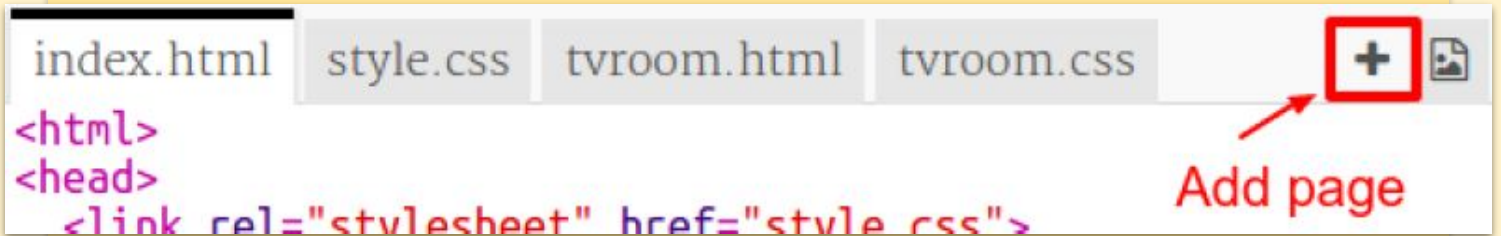
Make sure you test your code. You should be able to move from the Hall to the TV Room and back again by clicking on links (shown with the red circle)





Stage Two: Add another room

- 1 We're now going to add another room, a games room! Type **gamesroom.html** as the page name.



- 2 The HTML for the Games Room is very similar to **tvroom.html** so **copy that and paste it into gamesroom.html**. Edit the highlighted items so they say Games not TV.

```
<html>
<head>
  <link rel="stylesheet" href="gamesroom.css">
</head>
<body>
  <div class="roomname">Games Room</div>
  <div class="room">
    </div>
  <div class="description">You are in the Games Room.</div>
</body>
</html>
```

- 3 Your **gamesroom.html** now uses **gamesroom.css** which doesn't exist yet. Create **gamesroom.css** by clicking on the add page + button. The CSS for the Games Room is very similar to **tvroom.css** so copy that and paste it into **gamesroom.css**.

Add a link from the Hall to the Games room.



Must-Do Challenge: Style and link the games room

Edit the HTML and CSS for the Games Room so that the webpage looks like this.





Stage Three: Making the Links look like doors

Links don't have to be just text. We're going to make a clickable door using a `<div>` to make a clickable area like a button.

- 1 Open **index.html** and add a `<div>` around the TV Room link text. It needs to be inside the `<a>` to make it clickable. Add `id="hall2tv"` to label it as the door from the Hall to the TV Room so that you can style the door.

```
<div class="room">
  <a href="tvroom.html"><div id="hall2tv">TV Room</div></a>
  <a href="gamesroom.html">Games Room</a>
</div>
```

- 2 Click on the style.css tab, go to the bottom and add the following CSS to change the **size and colour** of the door.

- 3 Now let's make it look a bit more like a door by **adding a border** around three sides.

- 4 And let's add some CSS to make the **text on the door** look better.

- 5 You've probably noticed that the door is floating in the air. Let's fix that by positioning the door inside the room. **Test your link** by clicking on the door.

```
#hall2tv {
  width: 50px;
  height: 100px;
  display: inline-block;
  background-color: burlywood;
  border: 10px ridge burlywood;
  border-bottom: none;
  padding: 10px;
  color: black;
  text-align: center;
  position: absolute;
  bottom: 0;
  left: 10;
}
```



Challenge: Customise your door

Use www.html-css-js.com/css/generator/background to place a custom door (sourced from Google Images) in your CSS. You'll need to add **background-size** similar to our example below

```
background: #F5EA7A url("https://img.edilp
background-size: 250px 132px;
```





Must-Do Challenge: Add more doors!

Turn the other links in your project into doors in the same way. Position the door using **bottom:** and **left:** or **right:**.

For each door you'll need to:

- Edit the door link to use a `<div>` with an id such as **hall2games** so that you can style it.

For example:

```
<a href="gamesroom.html"><div id="hall2games">GamesRoom</div></a>
```

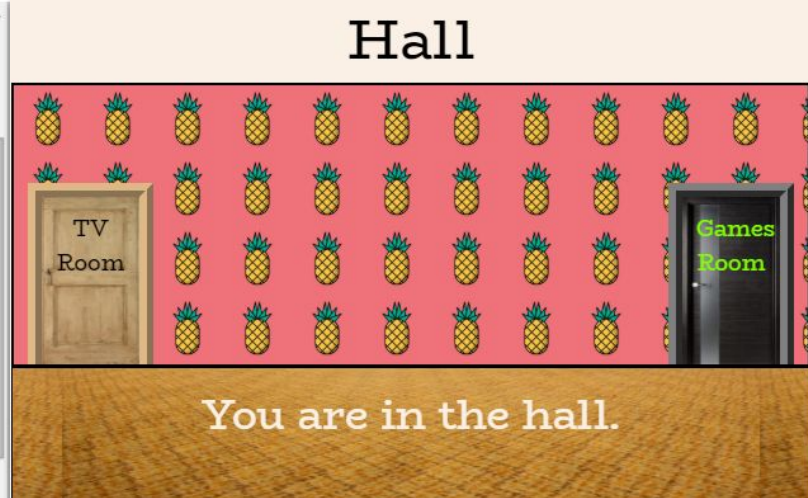
- Add CSS for the door id to the **.css** file for its room. **Use copy and paste to save time.** Make each door look different.



Stage Four: Adding a background image

Edit the style.css to add a background image to the Hall. We've included some images (like this pineapple) in the Image Library, but you can source one online. Remember, you should always make sure you have permission to use the images you find online!

```
.room {  
  position: relative;  
  height: 200px;  
  border: 2px solid black;  
  background-image: url(pineapple.PNG);  
  background-size: 50px 50px;  
}  
  
.description {  
  padding: 10px;  
  text-align: center;  
  font-size: 30px;  
  color: linen;  
}
```





Challenge

- Decorate the games room and TV Room with a background image similar to the examples below. You'll need similar code to the one on the previous page.
- Position a TV in each room (see code below).
- Add a Youtube link into each TV (see code below).

The body section of our TV Room code looked like this:

```
<body>
  <div class="roomname">TV Room</div>
  <div class="room">
    <div class="tv"><iframe Copy an "Embed" link from Youtube to here! ="http
  <a href="index.html"><div id="tv2hall">Hall</div></a>
  </div>
  <div class="roomcarpet">
  <div class="description">You are in the TV Room.</div>
</body>
```



Challenge: Make it yours!

Add more rooms to your project. **Use copy and paste** to save time and then just change the things that need to be different.

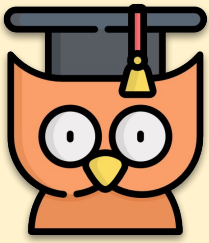
For each room you will need to:

- Create HTML and CSS files
- Add door links to and from the new 'room'
- Create a .css file with the styles for your new room and its doors.

Try creating a mystery/decision game where people need to make decisions to find their way out of a building or scenario.

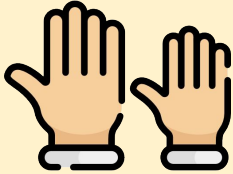
SAVE YOUR WORK!

Lesson 4 - HTML/CSS III - Ransom Note



Learning Outcomes

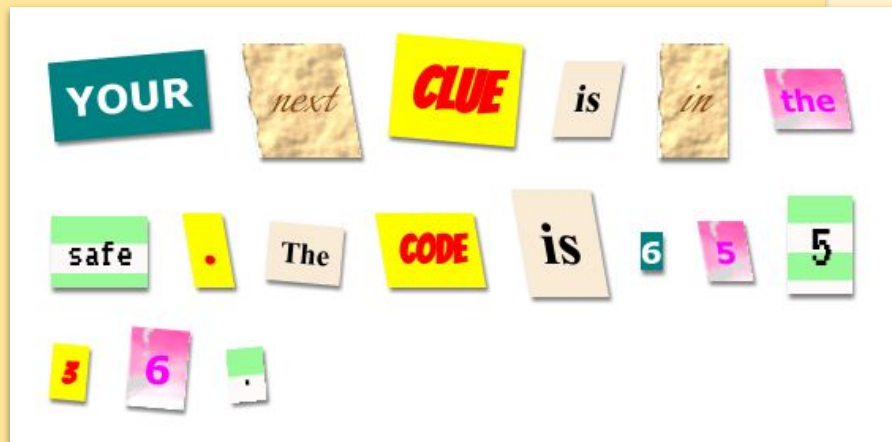
- How to create CSS within HTML Pages
- Creating a ransom note with HTML and CSS



REMEMBER: Put up your hand. We love to help!

Introduction

In this project, you'll create a mystery letter that looks like each word has been cut from a different newspaper, magazine, comic or other source.



Choose Your Message

Ransom notes are used in films and books to send secret messages.

Think of a mystery message; 12 words is about the right length. If you can't think of a message you can use the example: **'Your next clue is in the safe. The code is 65536.'** (12 'words' including the full stop!)

Either make a note of your message in **WordPad** or **NotePad** or remember it.

Go to www.taoc.ie/ransom



Let's Get Coding!

index.html
style.css
prefix
+

```

<html>
<head>
  <title>Mystery Letter</title>
  <link rel="stylesheet" href="style.css">
  <script src="prefixfree.js"></script>
</head>

<body>

  <p>
    <span class="">Replace</span>
    <span class="">these</span>
    <span class="">words</span>
  
```

Result
Instructions

Replace these words with your
own mystery message . Make it
about 12 words long .

The `` tag is used style different parts of text. Change the words to your message by putting one word in each ``. You will need to add or remove `` tags if your message is a different length.

```

<p>
  <span class="">Your</span>
  <span class="">next</span>
  <span class="">clue</span>
  <span class="">is</span>
  <span class="">in</span>

```

```

<body>

  <p>
    <span class="">Replace</span>
    <span class="">these</span>
    <span class="">words</span>
    <span class="">with</span>
    <span class="">your</span>
    <span class="">own</span>
    <span class="">mystery</span>
    <span class="">message</span>
    <span class="">.</span>
    <span class="">Make</span>
    <span class="">it</span>
    <span class="">about</span>
    <span class="">12</span>
    <span class="">words</span>
    <span class="">long</span>
    <span class="">.</span>
  </p>

</body>

```

Using Class Styles

Did you notice the `class=""` in the `` tags? You can use this to style more than one thing in the same way. Add the **magazine1 class selector** to a few of your `` tags and test your webpage.

```

<p>
  <span class="magazine1">Your</span>
  <span class="">next</span>
  <span class="">clue</span>
  <span class="">is</span>
  <span class="magazine1">in</span>
  <span class="">the</span>
  <span class="">safe</span>
  <span class="">.</span>
  <span class="">The</span>
  <span class="">code</span>
  <span class="">is</span>
  <span class="magazine1">6</span>

```

YOUR next clue is IN the safe
. The code is 6 5 5 3 6 .



More Class Styles

You can add more than one class to an element. Just leave a space in between.

Add the `big` class to one of your `` tags. Test your page.

```
<p>
<span class="magazine1 big">Your</span>
<span class="">next</span>
<span class="">clue</span>
<span class="">is</span>
<span class="magazine1">in</span>
<span class="">the</span>
<span class="">safe</span>

```

YOUR next clue is **IN** the
safe . The code is 6 5 5 3 6 .

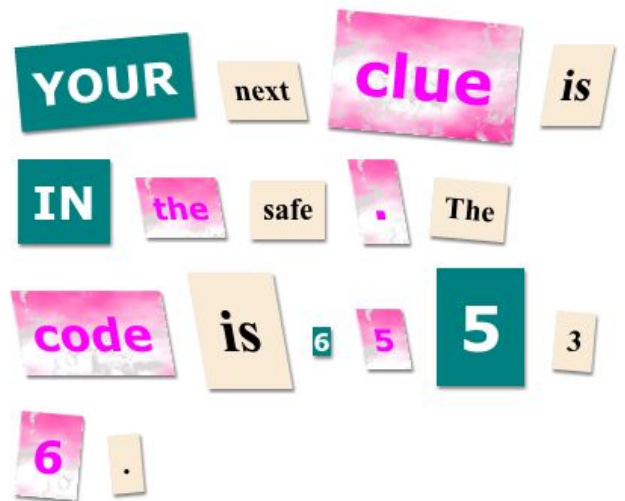
Task: Styling your Message

Use the provided styles to make your message look like a mystery letter.

Add these classes to your `` tags:

- `newspaper`, `magazine1`, `magazine2`
- `medium`, `big`, `reallybig`
- `rotateleft`, `rotateright`
- `skewleft`, `skewright`

Don't add more than one from each line to a particular ``. This message here is roughly how your letter could look.



Click on the '**style.css**' tab. Find the style for the `newspaper` CSS class that you have been using.

```
.newspaper {
  background-color: antiquewhite;
  font-family: "Times New Roman";
  font-weight: bold;
}
```

Notice that there's a dot (full stop) '.' before the name of the class in the CSS file but not in the `` tag in your HTML document.

Now look at the other CSS classes that you used to style your mystery letter. Can you find:

- How the `magazine1` style changes the text to all uppercase (capital) letters.
- How the `magazine2` style puts an image behind the text.

```
.magazine1 {
  background-color: teal;
  color: white;
  font-family: Verdana;
  font-weight: 900;
  text-transform: uppercase;
}

.magazine2 {
  background-image: url('pink-pattern.png');
  color: fuchsia;
  font-family: Verdana;
  font-weight: 900;
}
```



More Class Styles

What happens if you change the `background-image` for `magazine2` to `canvas.png`? If you prefer `pink-pattern.png` you can change it back. You can also change the colours in the magazine styles if you like. Find the CSS used to rotate and skew (tilt) your words.

```
.rotateleft {  
  transform: rotate(-5deg);  
}  
  
.rotateright {  
  transform: rotate(5deg);  
}  
  
.skewleft {  
  transform: skewX(10deg);  
}  
  
.skewright {  
  transform: skewX(-10deg);  
}
```

Try changing the numbers to create different effects and then testing your page.

Creating a New Class

Let's create a style that looks like it has been cut from a Comic. Go to fonts.google.com which provides loads of **fonts** that are free to use.

Add a `comic` class in the **style.css** file. After `magazine2` is a good place. Don't worry if you get a warning saying that **'The Rule is empty'**; we'll fix that next.

```
.magazine2 {  
  background-image: url('pink-pattern.png');  
  color: fuchsia;  
  font-family: Verdana;  
  font-weight: 900;  
}  
  
.comic {
```



Don't forget the dot in front of the class name!

Now add some CSS to the comic CSS class. You can use different colours if you like. There's a list of loads of colours at

www.trinket.io/docs/colors

```
.comic {  
  background-color: yellow;  
  color: red;  
  font-weight: bold;  
}
```



Using your New Class

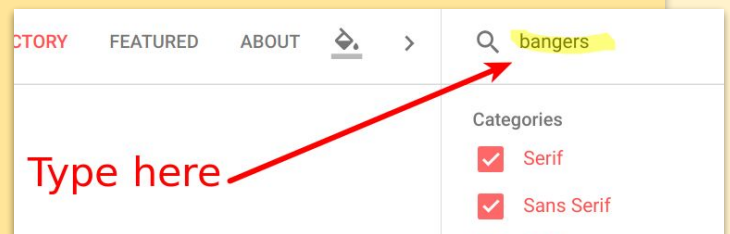
Use the comic style in some of the `` tags in your HTML document and test your page:

```
<p>
<span class="magazine1 big rotateleft">Your</span>
<span class="newspaper medium skewleft">next</span>
<span class="comic reallybig rotateright">clue</span>
<span class="newspaper big skewright">is</span>
<span class="magazine1 big">in</span>
<span class="magazine2 medium skewleft">the</span>
<span class="newspaper medium">safe</span>
<span class="comic big skewleft">.</span>
<span class="newspaper medium rotateright">The</span>
<span class="comic big skewleft">code</span>
<span class="newspaper reallybig skewleft">is</span>

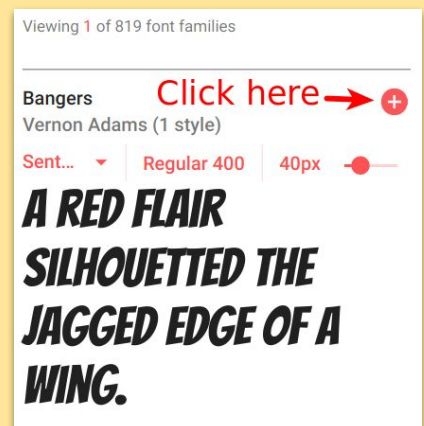
```



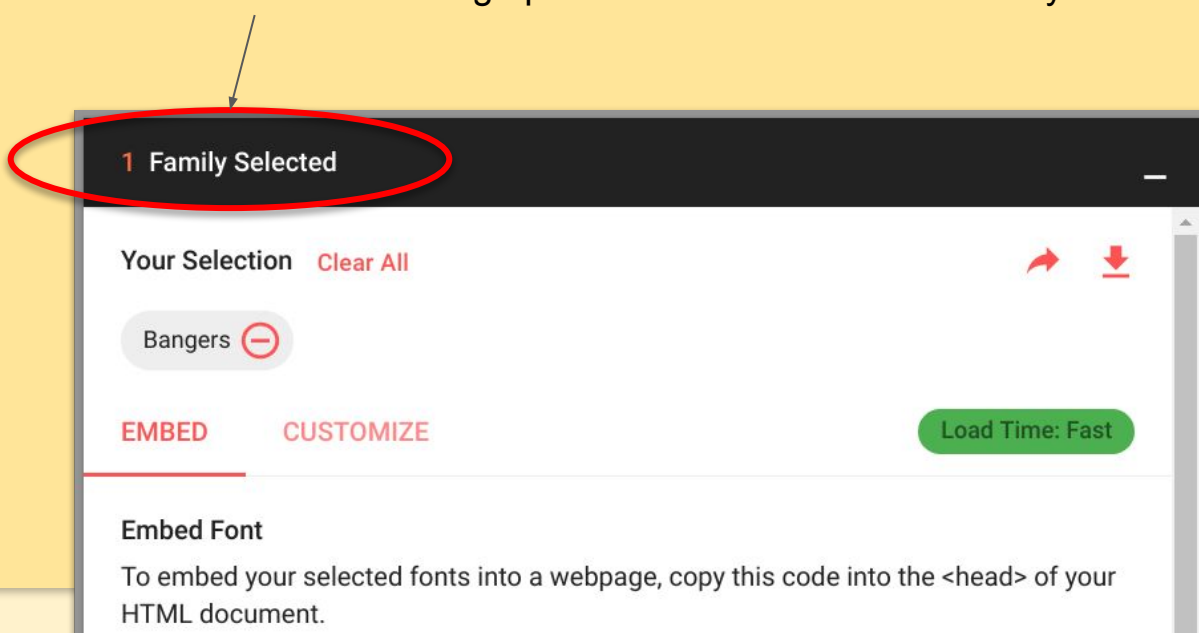
Now you can add a fun font. Open a new browser tab or window. Go to fonts.google.com, click on the search icon, and search for 'bangers'.



Click on the Bangers font Select button. A new header will appear at the bottom of the page.



Click on the box header to bring up information about how to use your fonts:





STANDARD @IMPORT

```
<link href="https://fonts.googleapis.com/css?family=Bangers" rel="stylesheet">
```

Copy the highlighted code and paste the `<link>` code that you just copied from Google fonts into the `<head>` of your webpage.

```
<head>
<title>Mystery Letter</title>
<link rel="stylesheet" href="style.css">
<link href='https://fonts.googleapis.com/css?family=Bangers' rel='stylesheet' type='text/css'>
```

This allows you to use the Bangers font in your webpage. Return to Google fonts and scroll further down the page and copy the font-family code.

Specify in CSS

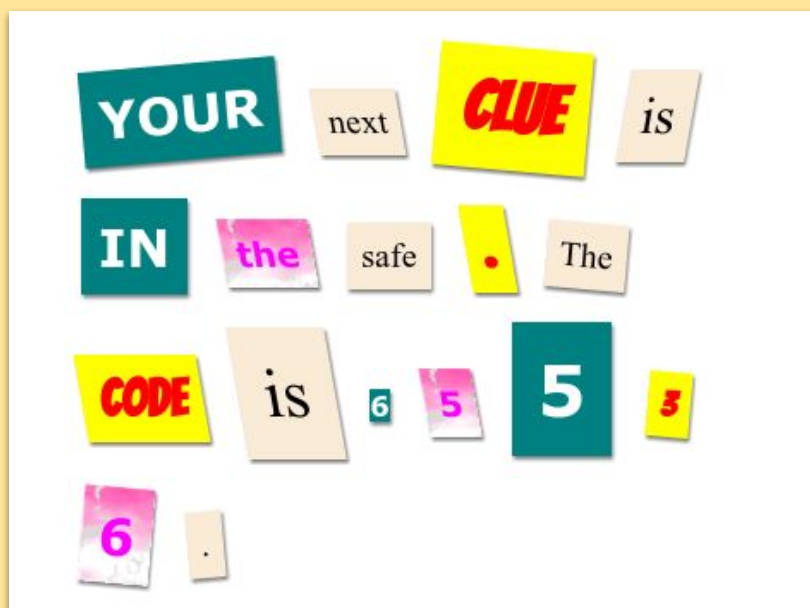
Use the following CSS rules to specify these families:

```
font-family: 'Bangers', cursive;
```

Now go back to your **'style.css'** file in trinket and paste the font-family code into the comic style:

```
.comic {
  background-color: yellow;
  color: red;
  font-weight: bold;
  font-family: 'Bangers', cursive;
}
```

Test your webpage. The result should look something like this:





Challenge

Create an old-fashioned computer print style and apply it to some of the words.



You will need:

- The **VT323** font family from fonts.google.com. Look back at Step 5 if you need a reminder on using Google fonts.
- The **computer-printout-paper.png** background image. Look back at back to the **editing classes** section if you need a reminder on using background images.

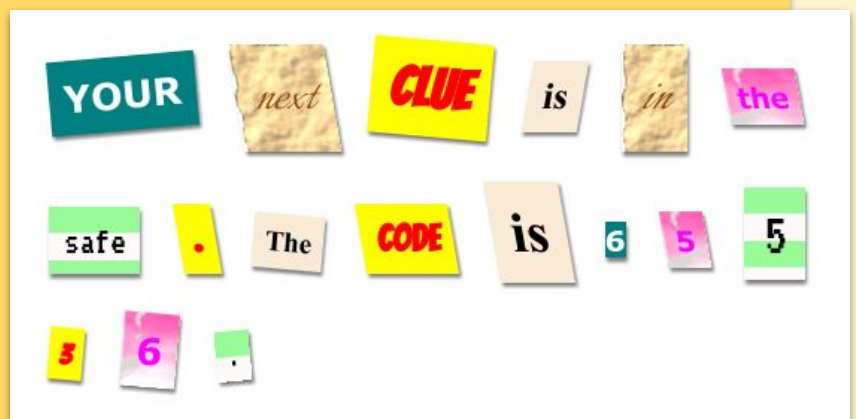


Challenge

Now create your own class styles and make your mystery letter even more interesting. Use the CSS that you have learnt in previous projects and look at the examples in **style.css** for ideas. Here's an example:

You can see the images that are available to use by clicking on the Images tab in trinket. Try setting image backgrounds using one of the included images:

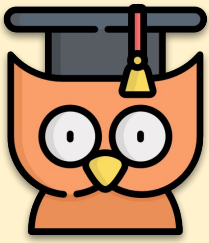
- `rough-paper.png`
- `canvas.png`



If you have a trinket account, you can upload images of your own as you may have done in the **'Tell a Story'** Project.

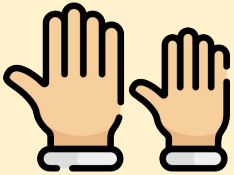
Find fonts that you like on fonts.google.com and copy their `<link>` and CSS code into your trinket to use them.

Lesson 5 - HTML/CSS II - Your First Site



Learning Outcomes

- Making a website on a chosen topic
- Bringing in images
- Learning about what parts of a HTML document mean
- Styling our Sites with CSS



REMEMBER: Put up your hand. We love to help!



Lets get Coding!

In this lesson we're going to code a web page from the bottom up using HTML and CSS. **Pick a topic** that is of interest to you, in our example, we've picked the Three-Toed Sloth.

Three-Toed Sloths



The Perfect Pet

I love sloths so much, maybe a little too much. When I'm older, I'd like to work in a sloth sactuary in Costa Rica. There, they have many different species and volunteers work tirelessly to help them. This would be my **dream** job.

Facts about Sloths

- Sloths are clumsy on land but are great swimmers
- Sloths are arboreal animals, so they spend most of their time in trees
- Sloths only go to the toilet once a week.
- Contrary to their reputation, sloths only sleep about 10 hours a day.
- Algae grows on their fur, which camouflages them, making them turn green.

Check out this video about baby sloths in onesies at [this link!](#)





Lets get Coding!

Open *this blank trinket template*

www.bit.ly/blankhtmltemplate and

customise the code for your topic.

```
<html>
<head>
  <link rel="stylesheet" href="style.css">
  <title>Page Title</title>
</head>
<body>
  <h1>My First Heading</h1>
  <p>My First Paragraph</p>
</body>
</html>
```

```
<html>
<head>
  <link rel="stylesheet" href="style
  <title>Page Title</title>
</head>
<body>
  <h1>My First Heading</h1>
  <p>My First Paragraph</p>
</body>
</html>
```

- The text between **<html>** and **</html>** describes a HTML document
- The text between **<head>** and **</head>** provides information about the document
- Links the HTML code to the CSS Style sheet code
- The text between **<title>** and **</title>** provides a title for the document
- The text between **<body>** and **</body>** describes the visible page content
- The text between **<h1>** and **</h1>** describes a heading
- The text between **<p>** and **</p>** describes a paragraph



Lets Get Coding - Your Project

- 1 Pick a topic and write the code below, customising it for your topic.

```
<html>

  <head>
    <link rel="stylesheet" href="style.css">
    <title>Your Favourite Thing</title>
  </head>

  <body>
    <h1>A Topic I like</h1>
    <h2>A One-Liner about your topic</h2>
    <p>Here is some information about your favourite thing</p>
  </body>

</html>
```

- 2 Update the text - fill in some details about a topic at all you find interesting.

- 3 Experiment with each of these other tags, and figure out what they do:

```
<table></table>
<th></th>
<tr></tr>
<td></td>
```

```
<br/>
<blockquote>
</blockquote>
<ol></ol>
<ul></ul>
<il></il>
```

```
<em></em>
<strong></strong>
<h1></h1>
<h2></h2>
<h6></h6>
<font size="?">
<font color="?">
<sub></sub>
<sup></sup>
<del></del>
<code></code>
```



Adding images from the Internet

Images make websites look more interesting. Find some images and links and add these two types to your site. **Right click** on an image online, copy the image address and

Paste the URL between the speech marks in your `` tag.

```

```

You should then see your image appear.

Open image in new tab
Save image as...
Copy image
Copy image address
Search Google for image
Inspect Ctrl+Shift+I



Styling your site

Using some of the CSS ideas on the right, style your **<body>**, **<p>**, **<h1>** and **<h2>** sections.

You can find more CSS colour names at

www.trinket.io/docs/colors

```
trinket  C Autorun
index.html style.css
1 body {
2   background-color: lightblue;
3 }
4
5 h1 {
6   color: white;
7   text-align: center;
8   font-family: Georgia, serif;
9   font-size: 60px;
10 }
11
12 p {
13   font-family: verdana;
14   font-size: 20px;
15 }
16
17 h2 {
18   color: white;
19   text-align: center;
20   font-family: Georgia, serif;
21   font-size: 40px;
22 }
23
24 h3 {
25   text-align: left;
```

Styling your images

Our Sloth site has two images that are styled differently. To do this we need to **declare a class**/ give the image a name.

Inside the **img** brackets for one of your images add **class="your image name"** (we went for "*image2*") here.

```

```

In your CSS file, style each image separately, taking inspiration from the example on the right.

DON'T FORGET to put a full stop behind the image name eg "*.image1*".



```
.image1 {
  border-radius: 50%;
  display: block;
  margin-left: auto;
  margin-right: auto;
  height: 25em;
  width: 25em;
}

.image2 {
  float: right;
  margin-right: 40px;
  margin-left: 20px;
  height: 15em;
  width: 22em;
}
```



Finish your page

Using what you've learned over the previous three lessons, finish your site being sure to include:

- ❑ `<h1>` and `<h2>` headings
- ❑ A number of `<p>` paragraphs
- ❑ An ordered/unordered list.
- ❑ At least two pictures
- ❑ Different and appropriate CSS styling for each of these.

Three-Toed Sloths



The Perfect Pet

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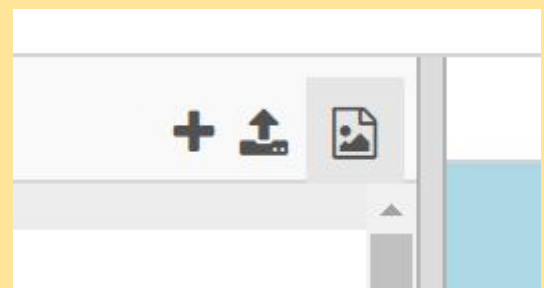


Check out this video about baby sloths in onesies at [this link!](#)

Adding another page and linking it up

Add another page to your site. If you (for example) picked Chelsea FC, this other page could be about your favourite player or the stadium.

Click on the + icon to add a new page and call it "PageName.html". We must then link the page to our index page using the following code (with your own text).



```
<p><a href="Recipe2.html">Click Here</a> to see another cool recipe.</p>
```

To link this page back to the original, you would need to put in a similar line:

```
<p><a href="index.html">Click Here</a> to go back to the first Recipe.</p>
```



Extra Challenges

Have a look over what we learned in the last lesson and see if you can:

- add a moving gif image to the document.
- embed a youtube video
- add a hyperlink to a one of your favourite things
- Bring what you've learned in these lessons into **Notepad++** to make and save another site. You'll need to save a HTML file, but also, you'll need to click **File** and **New** to create your CSS file which will appear like a tab. You can copy and paste from your HTML and CSS files.
DON'T forget to link your CSS sheet to your HTML (see below)

```
<head>  
  <link rel="stylesheet" href="style.css">  
</head>
```

Toy Story



Toy Story is a 1995 American computer-animated buddy adventure comedy film produced by [Pixar Animation Studios](#) and released by [Walt Disney Pictures](#).

The feature-film directorial debut of John Lasseter, it was the first feature-length film to be entirely computer-animated, as well as the first feature film from Pixar. The screenplay was written by Joss Whedon, Andrew Stanton, Joel Cohen, and Alec Sokolow from a story by Lasseter, Pete Docter, Stanton, and Joe Ranft.

The film features music by Randy Newman, and was executive-produced by Steve Jobs and Edwin Catmull. The film features the voices of [Tom Hanks](#), Tim Allen, Don Rickles, Wallace Shawn, John Ratzenberger, Jim Varney, Annie Potts, R. Lee Ermey, John Morris, Laurie Metcalf and Erik von Detten.

Taking place in a world where anthropomorphic toys come to life when humans are not present, its plot focuses on the relationship between an old-fashioned pullstring cowboy doll named Woody and an astronaut action figure Buzz Lightyear as they evolve from rivals competing for the affections of their owner Andy to friends who work together to be



