Guide to my country 1.0

Learn to make a website

HTML / CSS

Step 1 Introduction

Learn how to code your first website!

What you will make

Build a website about your home country, like the one in the trinket below.

What you will learn

- Using an online editor to create a website made up of HTML files and a CSS file
- Building a HTML website that has headings, paragraph text, lists, and images
- Using CSS code to control the look of your website, including designing a simple menu bar and changing colours, backgrounds, and borders
- Linking pages to each other, and linking to other websites
- Creating a table that includes headings and multiple rows

What you need

Hardware

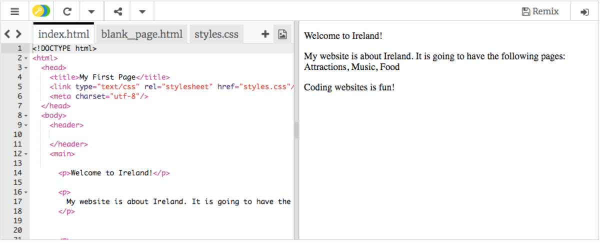
- A computer capable of accessing **trinket.io** (https://trinket.io)

Software

This project can be completed in a web browser using **trinket.io** (https://trinket.io).

Step 2 Getting set up

- Go to **the starter trinket** (http://dojo.soy/html-b-start). You will see a box containing an example website project. On the right-hand side is the website, and on the left-hand side is the code that makes the website.



```
<!DOCTYPE html>
<html>
  <head>
    <title>My First Page</title>
    <link type="text/css" rel="stylesheet" href="styles.css"/
    <meta charset="utf-8"/>
  </head>
  <body>
    <header>

    </header>
    <main>

      <p>Welcome to Ireland!</p>

      <p>
        My website is about Ireland. It is going to have the
      </p>
```

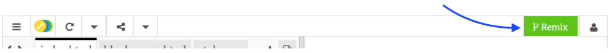
Welcome to Ireland!

My website is about Ireland. It is going to have the following pages: Attractions, Music, Food

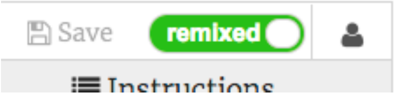
Coding websites is fun!

I have a Trinket account

- Click the **Remix** button at the top right of the project. If you are not signed in, you will be prompted to do so. Once you've signed in, you'll need to click **Remix** again. Clicking this button creates a copy of the project for you to work with.



It should say **remixed** after you click it:



I don't have a Trinket account

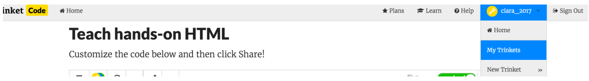
You can save your work by using one of the options in the **Share** menu. You will get a link that you can either save somewhere, for example in a document, or send to someone via email.
Note: each time you make a change, you will get a new link.

If you want to create an account on Trinket, follow the steps below. This will allow you to access your work easily from any computer, and to **remix** projects somebody else has shared with you. Remixing means you will save a copy of a project so you can make your own changes to it.

- Go to **the Trinket website** (http://dojo.soy/trinket) and click **Sign Up For Your Free Account**. You will need an email address to sign up.

- Enter your email address and choose a password, or ask somebody to do this for you.

- You can now access all your saved or remixed projects by clicking on your username and going to **My Trinkets**.



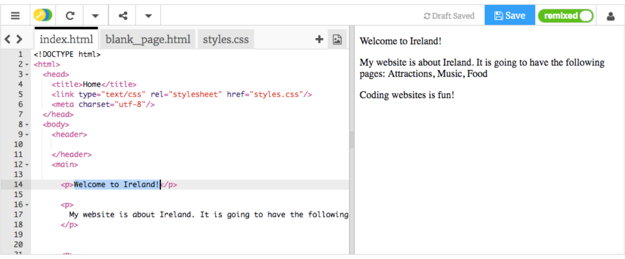
Teach hands-on HTML

Customize the code below and then click Share!

Let’s start coding!

Step 3 Your first webpage!

- In the left-hand panel, the **code panel**, click on the tab that says `index.html`.
- Find the line that says `Welcome to Ireland!` and change it to your own message — be careful **not** to delete the tags`<p>` at the start of the line and `</p>` at the end of the line. You should see your webpage update in the right-hand panel.



```
<!DOCTYPE html>
<html>
  <head>
    <title>Home</title>
    <link type="text/css" rel="stylesheet" href="styles.css"/>
    <meta charset="utf-8"/>
  </head>
  <body>
    <header>

    </header>
    <main>

      <p>Welcome to Ireland!</p>

      <p>
        My website is about Ireland. It is going to have the following
      </p>
```

Welcome to Ireland!

My website is about Ireland. It is going to have the following pages: Attractions, Music, Food

Coding websites is fun!

- Now on the same line, change the `<p>` and `</p>` to `<h1>` and `</h1>`. Do you notice any change in the result on the right?

```
<h1>Welcome to Ireland!</h1>
```

HTML and tags explained

HTML is the code that makes a webpage.

The `.html` in the file name tells the browser that the file is a webpage, so the browser knows to look for **tags** telling it what to display. (A browser is the program you use to look at websites, for example Chrome or Firefox.)

HTML tags such as `<p>` and `</p>` define different pieces of a page, for example paragraphs, headings, or the body. The pieces are all called **elements**. Think of them as building blocks.

Why do I need two tags?

You need an **opening** and a **closing** tag to tell the browser where elements **start** and **end**. So for a paragraph, the opening `<p>` tag says “Here comes some text that I want you to display as a paragraph.” The closing `</p>` tag tells the browser where the paragraph ends.

Everything in between the `<body>` and `</body>` tags is your webpage.

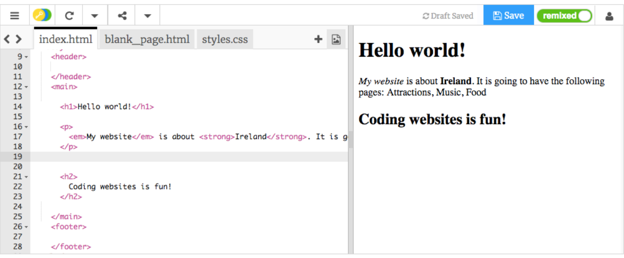
- Notice how the closing tag **always** has a forward slash `/`.

- Try changing the numbers in your **heading** tags to see the different sizes they give you. They can go from `<h1>` all the way up to `<h6>`. Remember to change both the opening and closing tag so that they match.

- Find the code for the paragraph that says `My website is about Ireland.` and change it so that it looks like this:

```
<p>
  <em>My website</em> is about <strong>Ireland</strong>.
  It is going to have the following pages: Attractions,
Music, Food
</p>
```

Can you work out what the `<em> </em>` and `<strong> </strong>` tags do?



```
<header>

</header>
<main>

  <h1>Hello world!</h1>

  <p>
    <em>My website</em> is about <strong>Ireland</strong>. It is g
  </p>


  <h2>
    Coding websites is fun!
  </h2>

</main>
<footer>

</footer>
```

Hello world!

My website is about **Ireland**. It is going to have the following pages: Attractions, Music, Food

Coding websites is fun!

Challenge: add some more text of your own

- Try adding a new paragraph or heading to your page using some of the tags you've learned about.

The code for headings looks like this:

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

Headings will normally be displayed bigger or bolder than the paragraphs.

Congratulations, you've built your first webpage! On the next card, you'll find out how to control how it looks.

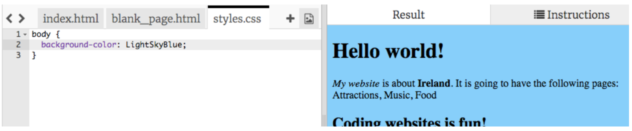
Step 4 Controlling how it looks

The code that describes what a website looks like is called **CSS**.

- Look at the tabs at the top of the code panel, and go to the file `styles.css` by clicking on the tab with that name.
  The file contains the following text:

```
body {
    background-color: white;
}
```

- Change the `white` colour to `LightSkyBlue` and see what happens. Your website should now have a blue background!



```
body {
  background-color: LightSkyBlue;
}
```

Hello world!

My website is about **Ireland**. It is going to have the following pages: Attractions, Music, Food

Coding websites is fun!

How does it work?

If you look at the top of the `index.html` file, you will see the following line:

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

The above line tells the browser to look for a special file named `styles.css`. This special file is called a **style sheet**. You can recognise a style sheet file by the `.css` in its name.

A style sheet contains **rules** for what each element on your webpage should look like.

The curly braces `{ }` and the code in between them are a set of **CSS rules**. The word `body` means that the rules are for all the `<body>` elements on your website. We call the bit in front of the curly braces a **selector**. So in this case, it is the selector for the body elements.

Each rule inside the curly braces is made up of:

- A **property** on the left, followed by a colon symbol `:`
- A **value** for the property on the right-hand side after the colon
- A semi-colon symbol `;` at the end

- Lets add rules to change how the text looks. Add two new lines inside the curly braces:

```
body {
  background-color: LightSkyBlue;
  font-family: "Helvetica", sans-serif;
  color: purple;
}
```

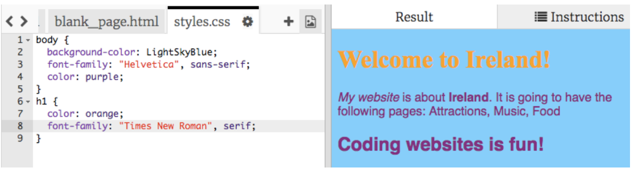
Look at how this has changed the webpage.

The `color` property is always for text. Here, you are setting the colour of all text in the body of your webpage.

- You can also write separate rules for the headings and the paragraphs. For `<h1>` headings, you use the `h1` selector. Below the closing curly brace containing the CSS rule for the body, add the following code.

```
h1 {
  color: orange;
  font-family: "Times New Roman", serif;
}
```

Your heading text should be orange now, with the paragraph in purple as before.



```
body {
  background-color: LightSkyBlue;
  font-family: "Helvetica", sans-serif;
  color: purple;
}
h1 {
  color: orange;
  font-family: "Times New Roman", serif;
}
```

Welcome to Ireland!

My website is about **Ireland**. It is going to have the following pages: Attractions, Music, Food

Coding websites is fun!

Notice how the letters also look different as well as being a different colour? This is because you changed their **font family**. You can find some more fonts **here** (http://dojo.soy/web-font-families).

- Try adding a set of rules for the `<h2>` headings, using the `h2` selector.

- Why not experiment with different colour combinations for the text and background? There are lots of colours available to use. Find a full list of them **here** (http://dojo.soy/web-color-names).

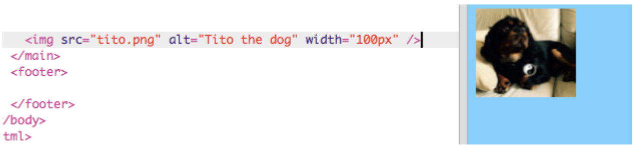
Step 5 Adding pictures

Let's add a picture!

- Go to the tab named `index.html`. Find the `</main>` tag and type the following **above** it:

```
<img src="tito.png" alt="Tito the dog" width="100px" />
```

Here's what the result should look like:



```
  <img src="tito.png" alt="Tito the dog" width="100px" />
 </main>
 <footer>

 </footer>
/body>
tml>
```

Notice that this tag has extra bits of information inside it. They are called **attributes**.

- Find the bit of code that says `width="100px"` and try experimenting with different numbers to see if you can figure out what this attribute does. Don't delete the letters `px`!

How the `img` tag works

Notice that the `<img>` tag is different from the other tags you've used so far — there is no closing `</img>` tag. Instead, this tag is **self-closing**: it has `/>` at the end. This is because there is no 'start' and 'end' to an image element like there is for text on the page.

The tag contains **attributes** with extra information:

- The `src` attribute tells the browser what file to use for the picture.
- The `alt` attribute is a short description that the browser will show if it cannot display the picture. 'alt' is short for 'alternative'. This text also helps people using a screen reader to know what the picture is.
- The `width` attribute tells the browser how wide to make the picture. `100px` means one hundred **pixels**, which are the tiny dots that make up what you're seeing on your screen. If you don't include this attribute, the picture will be displayed in its original size.

Now that you know the code to put a picture on your website, you probably want to change the picture, right?

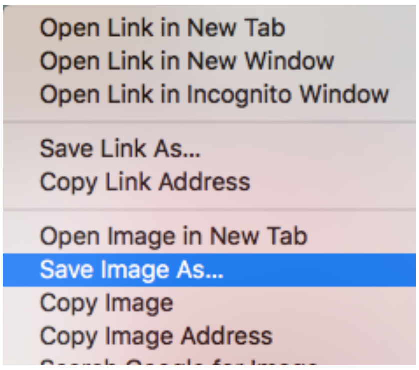
- The first thing you will need is, of course, a picture! You can either use one you've already got on your computer, such as a photograph you took, or you can get one from the internet.

Getting pictures from the internet

- Search for images of the thing you want a picture of.

- When you find a picture that you like, click on it to open it up full size.

- Then right-click the picture, and select **Save Image As…**. Be sure you haven't selected **Save Link As…**.



- Type a short name in the box provided.

- Before you click **Save**, make a note of which folder your image file will be saved to. You will need to remember this to find the picture later! You can select a specific folder if you wish. When you're sure you'll find the image again, click **Save**.

Note: not all images you will find on the internet are free for anyone to use. If you download a picture, you should make sure it is one that you are allowed to use. Find out more about this here:

Finding images with permissions to use

Because of copyright law, you cannot use everything you find on the web. Here you will learn how to find images that you can use in your digital making without breaking copyright laws.

Understanding copyright law

Copyright law is designed to protect creators of artistic, literary, musical, and dramatic works from having their work exploited or misused. This means that copyright law applies to all manner of materials offline and online, including images and art work.

Anyone who uses a copyrighted work without the owners' permission is guilty of copyright infringement. This is sometimes true even if a lot of things have been changed about the work.

Many images on the internet are protected by copyright. The copyright symbol © does not have to be present in the image for copyright to exist.

If you want to use an image for which you require permission, you will need to obtain permission from all the copyright owners. Otherwise, you can search for images that are free for you to use through Creative Commons licensing.

Creative Commons

Creative Commons licensing allows the creator of an image to select which permissions they want to give to people to their work for free. With Creative Commons licensing you can give away all rights to your work, or just some of them. There is an online form on the **Creative Commons website** (https://creativecommons.org/) that helps you to figure out exactly which of your rights you want to give away.

Creative Commons licensing makes it easier for people to find images that they have permission to use. On the Creative Commons site, there is a **search tool** (https://search.creativecommons.org/) you can use to find images that have a Creative Commons license. Another good place to look for images available under a Creative Commons license is **Wikimedia Commons** (https://commons.wikimedia.org/wiki/Main_Page).

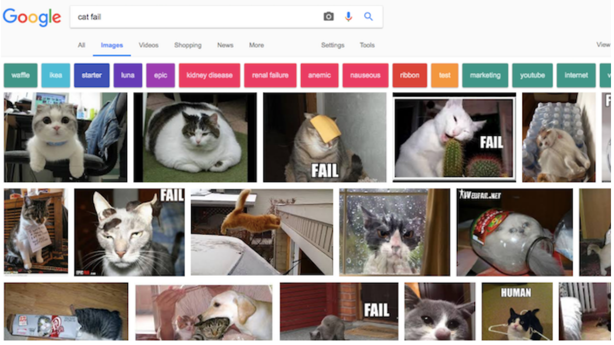
Many search engines also feature a way to search for images with a Creative

Commons license, so that people can avoid breaking copyright law.

Searching for images with Google

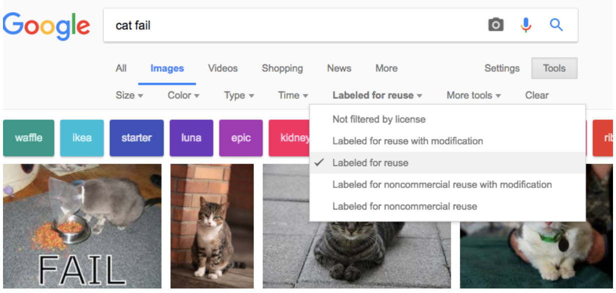
If you are using Google, follow the instructions below to find an image you can use in your digital making:

- Go to Google Images and type in what you are searching for. Here, we searched for `cat fail`:



cat fail

- Click on **Search Tools**, then **Usage Rights**, and select **Labeled for reuse**.

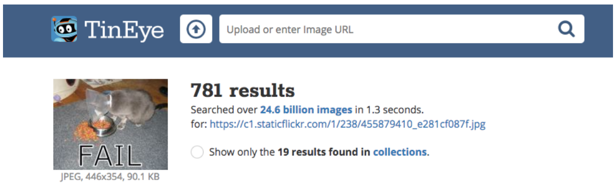


cat fail

Not filtered by license
Labeled for reuse with modification
✓ Labeled for reuse
Labeled for noncommercial reuse with modification
Labeled for noncommercial reuse

- Choose an image.

- Double-check whether it is free to use. You can use a reverse image search tool like **TinEye** [(https://www.tineye.com/)](https://www.tineye.com/) or **Image Raider** [(https://www.imageraider.com/)](https://www.imageraider.com/) to check for any further usage rights. Here, I copied the image link from the Google search, pasted it into TinEye, and pressed **Search**. As you can see, the image has been used many times (781!) all over the internet, so it is likely that it is free to use. If in doubt, you should write to the owner and ask for permission.



781 results
Searched over 24.6 billion images in 1.3 seconds.
for: https://c1.staticflickr.com/1/238/455879410_e281cf087f.jpg

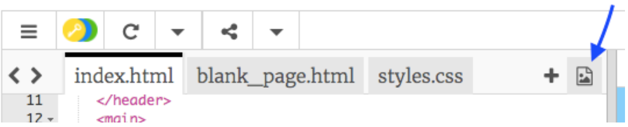
○ Show only the 19 results found in collections.

Online safety

If you **accidentally discover an image you find upsetting** (https://www.thinkuknow.co.uk/11_13/Need-advice/Things-you-see-online/), close your browser immediately and tell an adult.

Once you have a picture, you can **upload** the file to Trinket:

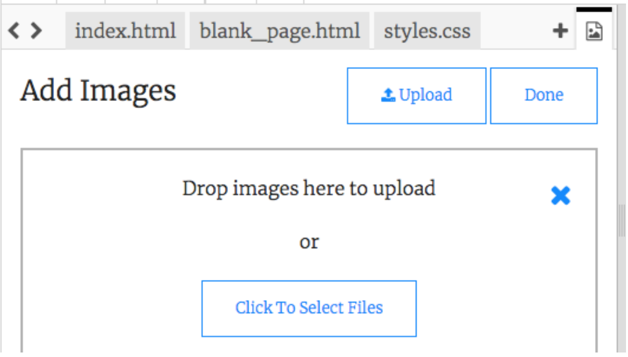
- In your trinket, click on the **image** icon next to the **+** sign.



```
11      </header>
12      <main>
```

This is where you can see the pictures that you are able to use on your website. You should see the picture of Tito, the CoderDojo dog.

- Click the button **Add Image** and then click **Upload**.
- Click on the button **Click To Select Files**. Find and double-click your image file in the window that opens.
- Click **Done**.



Your picture will be uploaded and should be ready to use.

- Go to the file `index.html` and find the `<img>` tag. Change the text `tito.png` so that it exactly matches the name of the image file you've chosen. Note that its name might end in `.jpg` instead of `.png`!

The text you just changed is the attribute called `src`, which tells the browser which file to display.

Note: the value you type for an attribute must have quotation marks `""` around it!

Challenge: change the alt text of the picture

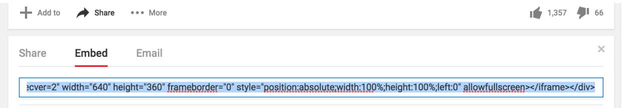
- Find the `alt` attribute of your image element and change the text in it to a short description of your picture.

Step 6 Adding a map or video

YouTube provides an easy way to add its videos to your website. Adding elements from other online sources to your website is also called **embedding**.

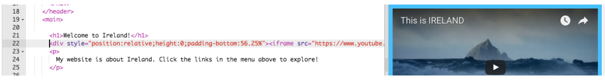
- Find a video on YouTube that you want to show on your website.
- Click on the **Share** button below the video. Select the option **Embed**.

You will see a text box with all the text selected. If you accidentally unselect the text, you can select it all again by clicking on it and pressing the `Ctrl` (or `cmd` on a Mac) and `A` keys at the same time.



```
ecver=2" width="640" height="360" frameborder="0" style="position:absolute;width:100%;height:100%;left:0" allowfullscreen></iframe></div>
```

- Press the `Ctrl` (or `cmd` on a Mac) and `C` keys together to copy the text.
- Then go back to your website's HTML code, and click in the place where you want to put the video, for example below a heading or paragraph. **Paste** the code by pressing `Ctrl` (or `cmd` on a Mac) and `V` on your keyboard at the same time. Don't worry about understanding all the code you just pasted!



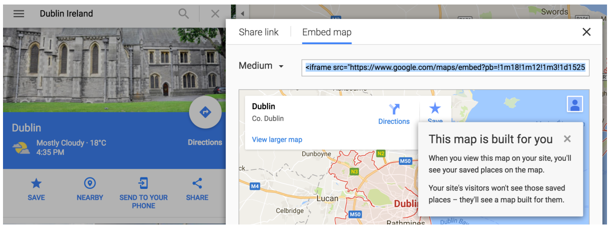
```
  </header>
  <main>

    <h1>Welcome to Ireland!</h1>
    <div style="position:relative;height:0;padding-bottom:56.25%"><iframe src="https://www.youtube.
    <p>
      My website is about Ireland. Click the links in the menu above to explore!
    </p>
```

You should see the video appear on your webpage.

The same technique works for Google maps as well. Give it a go!

- Go **here** [(http://dojo.soy/google-maps)](http://dojo.soy/google-maps) and search for a place you want to show on your website. **Note:** do **not** share personal information such as your home address on a website!
- Click on the result, then click the **Share** button, and copy the code and add it to your website as above.



```
<iframe src="https://www.google.com/maps/embed?pb=!1m18!1m12!1m3!1d1525
```

This map is built for you

When you view this map on your site, you'll see your saved places on the map.

Your site's visitors won't see those saved places – they'll see a map built for them.

- If you look carefully, you should find `width` and `height` **attributes** in the pasted code. You can change their values to make the map appear bigger or smaller.

```
8660" width="400px" height="200px" frameborder="0" style="border:0" allowfullscreen></iframe>
```

Places to Visit in Dublin

Dublin is the capital city of Ireland. Here are some of the things

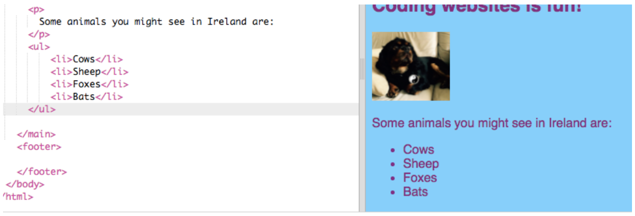
Step 7 Making a list

Now you will learn how to turn a list of items, such as “unicorns, robots, cats”, into a nicer-looking list that you can do cool things with later.

- In the `index.html` file, add the following code just above the line with `</main>` on it:

```
<ul>
    <li>Cows</li>
    <li>Sheep</li>
    <li>Foxes</li>
    <li>Bats</li>
</ul>
```

The result should be a nice list like this:



```
    <p>
      Some animals you might see in Ireland are:
    </p>
    <ul>
        <li>Cows</li>
        <li>Sheep</li>
        <li>Foxes</li>
        <li>Bats</li>
    </ul>

  </main>
  <footer>

  </footer>
</body>
/html>
```

Coding websites is fun!

Some animals you might see in Ireland are:

- Cows
- Sheep
- Foxes
- Bats

Notice that there is a separate pair of `<li> </li>` tags around each item in the list.

This is a list of some animals you might see in Ireland. You can change the items on the list to things that make sense for your website, and add a paragraph above the list to describe what it’s a list of, if you like!

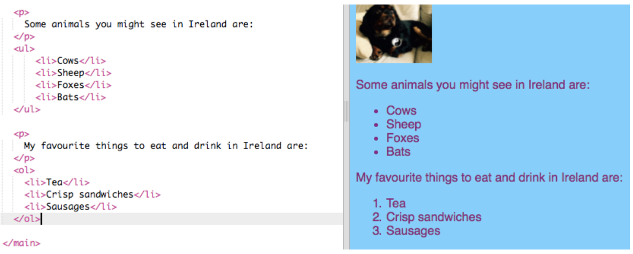
How about if you wanted a numbered list? It’s almost the same, but instead of `<ul>`, you use `<ol>`. A numbered list is also called an **ordered** list.

- Add the following code below the code you just wrote — make sure it’s **below** the `</ul>` tag!

```
<p>
    My favourite things to eat and drink in Ireland are:
</p>
<ol>
```

```
    <li>Tea</li>
    <li>Crisp sandwiches</li>
    <li>Sausages</li>
</ol>
```

Here's what it should look like now:



```
<p>
  Some animals you might see in Ireland are:
</p>
<ul>
    <li>Cows</li>
    <li>Sheep</li>
    <li>Foxes</li>
    <li>Bats</li>
</ul>

<p>
  My favourite things to eat and drink in Ireland are:
</p>
<ol>
  <li>Tea</li>
  <li>Crisp sandwiches</li>
  <li>Sausages</li>
</ol>

</main>
```

Some animals you might see in Ireland are:

- Cows
- Sheep
- Foxes
- Bats

My favourite things to eat and drink in Ireland are:

1. Tea
2. Crisp sandwiches
3. Sausages

Challenge: add style to your lists

- See if you can add **CSS rules** to your stylesheet to change how your lists look.

Step 8 Creating links

On this card you'll learn how to make a link that takes you to another page when it's clicked.

- Add the following code to the body section of `index.html`:

```
<a href="">Click here</a>
```

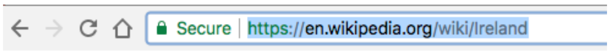
The `<a> </a>` tags turn whatever is in between them into a link.

- Try clicking your link to see what happens. It does nothing, right?

That's because the `href` attribute is empty at the moment. It needs to contain the **URL** (web address) of the page that you want to link to.

- Go to Wikipedia and find a page about something on your website. I'm going to use the page about Ireland.

- Click in the address bar and select all of the text in i5. That's the complete URL of the page you're on. Press the Ctrl (or cmd) and C keys at the same time to copy it.

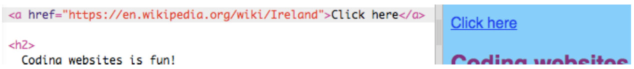


Secure | https://en.wikipedia.org/wiki/Ireland

- In your trinket, click in between the quotation marks after `href=` and press the Ctrl (or cmd) and V keys at the same time to paste in the URL you just copied. Your code should look something like this now:

```
<a href="https://en.wikipedia.org/wiki/Ireland">Click
here</a>
```

You just created your first link! Click on it to see if it works now.



```
<a href="https://en.wikipedia.org/wiki/Ireland">Click here</a>

<h2>
  Coding websites is fun!
```

Links to other websites

Trinket has trouble with some web addresses. You can try URLs of websites other than Wikipedia if you like, but they may not work in your trinket. However, if you were to download your project and view the files in a web browser, you would see the links working.

- Try putting a picture in between the `<a> </a>` tags instead of the words `Click here`, like this:

```
<a href="https://en.wikipedia.org/wiki/Ireland">
    <img src="tito.png" alt="Tito the dog" width="100px"
/>
</a>
```

- Click on your picture. Do you see that it was turned into a link?

You can put a link into other elements of your webpage too, such as in a paragraph or even in a list. Here is an example of a sentence with a link in it:

```
<p>
  <a href="https://en.wikipedia.org/wiki/Ireland">Click
here</a> to read the Wikipedia page!
</p>
```

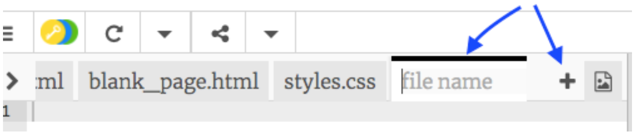
Challenge: put a link into a list

- See if you can make a list that contains a link inside one of the list items.

Step 9 Adding more pages

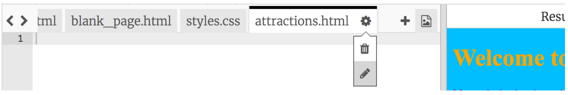
This card will show you how to add more pages to your website.

- At the top of the code panel, click on the **+** symbol next to the tabs, and type in a name for your new file. It must end in `.html` (including the dot!) so that the browser knows it's a webpage.



Renaming or deleting a file

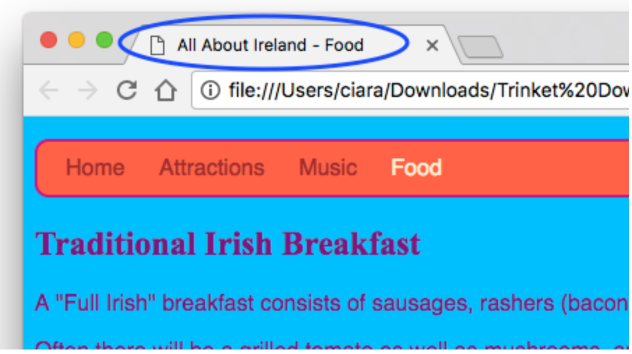
If you want to change the name of a file, click on the **cog** icon to the right of the file name, and then click the **pencil** icon. Type in the new name and press **Enter**. You can also delete a file by clicking the **bin** icon instead of the **pencil** icon.



You might be wondering why you can't change the name of the `index.html` file. `index.html` is a special name used for the **homepage** of a website. That's the first page you land on when you visit a website. Whenever you go to a website's homepage, the browser looks for the file called `index.html` and displays it on your screen.

- Find the file `blank_page.html` and copy and paste all of the code from it into your new file. Since you want to copy the whole thing, you can click anywhere on the code and use the keyboard shortcut `Ctrl` (or `cmd`) and `A` to select all of it at once.

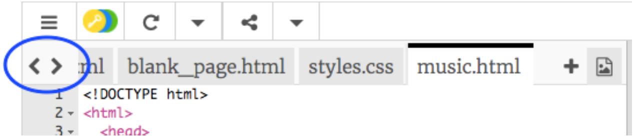
- Change the text in between the `<title> </title>` tags so your new page has a suitable title. Trinket won't display the title, but you can see it at the top of your browser window if you download your project.


All About Ireland - Food
file:///Users/ciara/Downloads/Trinket%20Dov
Home
Attractions
Music
Food
Traditional Irish Breakfast
A "Full Irish" breakfast consists of sausages, rashers (bacon

- In between the `<main> </main>` tags in the new file, use the tags you have learned about to add stuff to the page, such as paragraphs, headings, images, and lists!

- Repeat the steps above for each new page that you want to add.

When there are too many tabs for Trinket to show at once, you can use the **<** and **>** icons in the top left-hand corner of the tabs to scroll between them.



```
<!DOCTYPE html>
<html>
  <head>
```

Now you need to make links so that you can get to each of your new pages! Let's put all the links in a list.

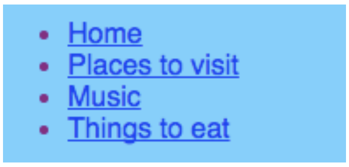
- In the `index.html` file, add the following code to the body of your webpage:

```
<ul>
    <li><a href="index.html">Home</a></li>
    <li><a href="attractions.html">Places to visit</a>
</li>
    <li><a href="music.html">Music</a></li>
    <li><a href="food.html">Things to eat</a></li>
</ul>
```

- Change the value of the `href` attribute for each link (remember, that's the text inside the quotation marks) so that it exactly matches the name of each HTML file that you have created.

- Change the text in between the `<a> </a>` tags to suitable descriptions of your pages.

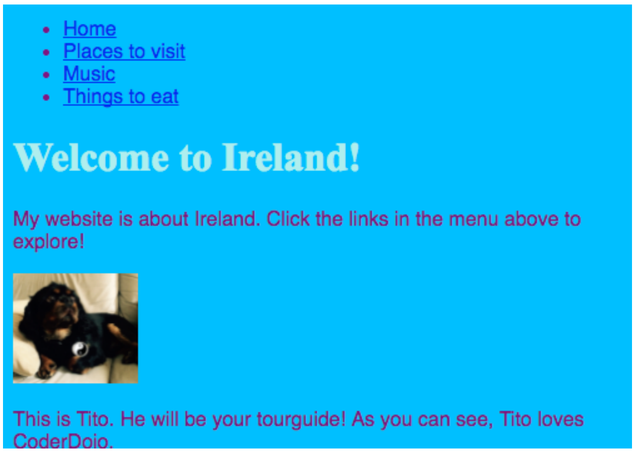
Now you can navigate to your new pages!



- Home
- Places to visit
- Music
- Things to eat

Step 10 Navigating your website

Many websites have a **navigation** menu to help visitors move between pages. Now that you've got a bunch of pages, a homepage, and links to each page, let's move the list of links to a navigation section at the top of every page.



- Home
- Places to visit
- Music
- Things to eat

Welcome to Ireland!

My website is about Ireland. Click the links in the menu above to explore!

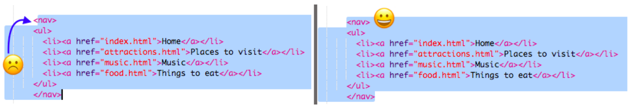
This is Tito. He will be your tourguide! As you can see, Tito loves CoderDojo.

- Find the code for your list of links that you created in the previous step.

- Just before the opening `<ul>` tag, press **Enter** to create a new blank line, then on the new line type the following tag: `<nav>`. Trinket automatically adds the closing tag right after, but you can delete that — it's not in the right place.

- Just **after** the closing `</ul>` tag, press **Enter** to create a new blank line, and type in the closing tag `</nav>` there.

- Now select your entire `<nav>` section and list by clicking just before the opening `<nav>` tag and dragging the mouse all the way down to just after the closing `</nav>` tag, so that all of the text including the opening and closing tags becomes highlighted. Make sure all of the **angle brackets** `<` and `>` at the start and end are highlighted as well!



```
<nav>
<ul>
  <li><a href="index.html">Home</a></li>
  <li><a href="attractions.html">Places to visit</a></li>
  <li><a href="music.html">Music</a></li>
  <li><a href="food.html">Things to eat</a></li>
</ul>
</nav>
```

```
<nav>
<ul>
  <li><a href="index.html">Home</a></li>
  <li><a href="attractions.html">Places to visit</a></li>
  <li><a href="music.html">Music</a></li>
  <li><a href="food.html">Things to eat</a></li>
</ul>
</nav>
```

- You are going to **cut** this time instead of copying. Hold down the `Ctrl` (or `cmd`) key, and while holding it, press the `X` key. The highlighted code will disappear, but don't panic!

- At the top of the file, click in the space between the `<header> </header>` tags. Make sure you see the cursor flashing there. Now paste in the code by pressing `Ctrl` (or `cmd`) and `V` as usual. The code should look something like this:

```
<header>
    <nav>
        <ul>
        <li><a href="index.html">Home</a></li>
        <li><a href="attractions.html">Places to visit</a>
</li>
        <li><a href="music.html">Music</a></li>
        <li><a href="food.html">Things to eat</a></li>
        </ul>
    </nav>
</header>
```

Undo!

If you make a mistake, you can **undo** it by pressing `Ctrl` (or `cmd`) and `Z` together. You can usually press this key combination a few times to undo the last few changes. This is another handy keyboard shortcut that you can use in many programs!

- Try out your links to make sure they are still working.

Challenge: navigation menus for all pages

- Put this code section into the header section of each HTML file that you've created. This will make the navigation menu appear at the top of every page on your website.

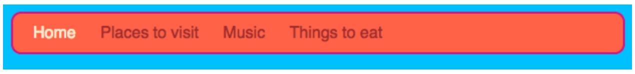
  Select the entire `<nav>` section like you did before, and press the `Ctrl` (or `cmd`) and `C` keys together to copy it.

  Then, in each of your `.html` files, click inside the `<header> </header>` section and paste the code exactly like you did earlier.

Now you will be able to click the links no matter which page you are on.

Step 11 Making a menu bar

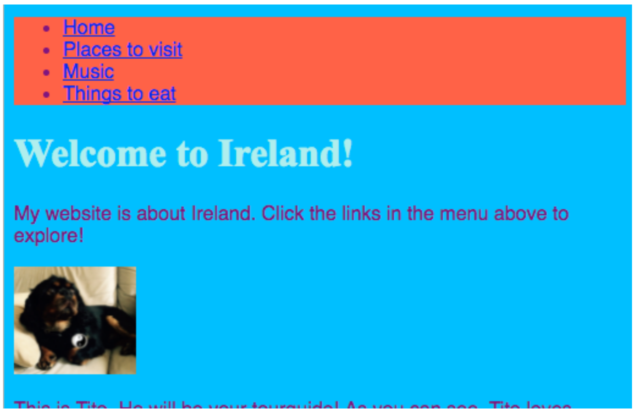
On this card you will see how you can transform your navigation menu into a cool-looking menu bar, just by adding more CSS rules in the style sheet.



- Go to the style sheet file in the `styles.css` tab. Click **below** a closing curly brace `}`, and press **Enter** to create a new blank line. Add the following CSS rule:

```
nav ul {
    background-color: tomato;
}
```

Notice how you used two selectors instead of one? If you used the `ul` selector on its own, the rule would affect all unordered lists on your website. Adding the `nav` selector as well makes it only apply to lists that are in between `nav` tags.



Welcome to Ireland!

My website is about Ireland. Click the links in the menu above to explore!

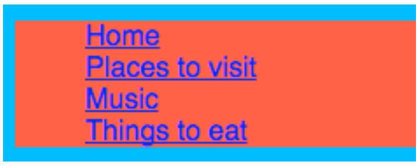
This is Tito. He will be your tourguide! As you can see, Tito loves

Let's get rid of the bullet points. Those are the dots in front of each list item.

- Add the following to the `styles.css` file. Again, type it on a new line after a `}` so it's not inside any other block of rules.

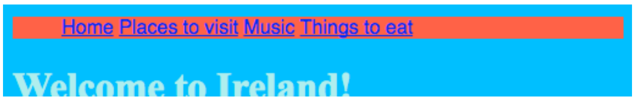
```
nav ul li {
    list-style-type: none;
}
```

Notice this set of rules has three selectors: it selects all `li` elements that are in a `ul` list which is inside a `nav` section. Phew!



Now let's make the list horizontal (across) instead of vertical (down).

- Inside the new CSS rule you just created, add the following line: `display: inline;`.



- The menu items are now all squashed together, so let's also add the properties `margin-right` and `margin-left` to space them out a bit. The block of CSS code should look like this now:

```
nav ul li {
    list-style-type: none;
    display: inline;
    margin-right: 10px;
    margin-left: 10px;
}
```

Remember: `10px` means ten pixels.

How about making the menu change to tell you which page you are on? This part won't be in the style sheet.

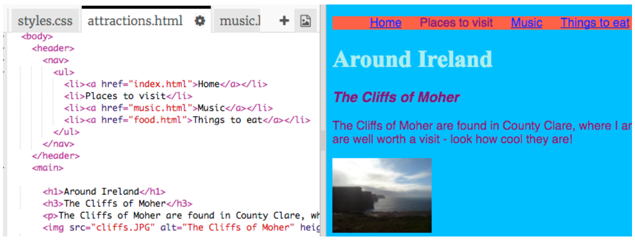
- Start with the homepage. Go to the `index.html` file. In the list of menu links, remove the link tags before and after the word `Home`, so that the list item for the homepage is just text in between `<li> </li>` tags, like this: `<li>Home</li>`.

- Now go to each of your other files, and do the same thing, each time removing the link tags for the page you are editing. So, for example, on the `music.html` file, I've removed the link tags in the `Music` list item:

```
<header>
    <nav>
```

```
            <ul>
            <li><a href="index.html">Home</a></li>
            <li><a href="attractions.html">Places to visit</a>
</li>
            <li>Music</li>
            <li><a href="food.html">Things to eat</a></li>
            </ul>
      </nav>
</header>
```

- Explore your pages by clicking the links. See how the menu bar shows the page you're on as plain text instead of a link?



```
<body>
  <header>
    <nav>
      <ul>
        <li><a href="index.html">Home</a></li>
        <li>Places to visit</li>
        <li><a href="music.html">Music</a></li>
        <li><a href="food.html">Things to eat</a></li>
      </ul>
    </nav>
  </header>
  <main>

    <h1>Around Ireland</h1>
    <h3>The Cliffs of Moher</h3>
    <p>The Cliffs of Moher are found in County Clare, wh
    <img src="cliffs.JPG" alt="The Cliffs of Moher" heig
```

Around Ireland

The Cliffs of Moher

The Cliffs of Moher are found in County Clare, where I ar are well worth a visit - look how cool they are!

On the next card you'll learn even more CSS tricks to make the menu bar look awesome.

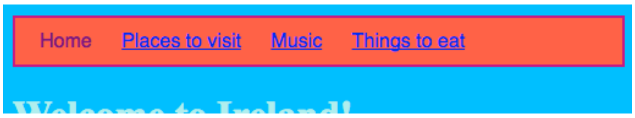
Step 12 Styling the menu bar

With CSS, the possibilities for making your menu bar look great are endless.

- Move to the `styles.css` file again — the place where the cool stuff happens!
- Find your `nav ul` selector, and add more rules so that it looks like this:

```
nav ul {
  background-color: tomato;
  border-style: solid;
  border-color: MediumVioletRed;
  border-width: 2px;
  padding: 10px;
}
```

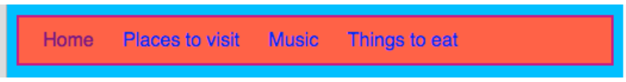
The `padding` property adds space. Can you work out what each of the other properties do? Try experimenting with different colours and numbers of pixels.



- To get rid of the underlining of the links, add the following code on a new line after the closing curly brace `}` for the `nav ul li` rules. You could put it after any `}`, but it's a good idea to keep related stuff together so it's easier to find!

```
nav ul li a {
    text-decoration: none;
}
```

The above rule applies to links `<a>` inside list items `<li>` in an unordered list `<ul>` inside a navigation section `<nav>`. Wow, that's four selectors!



Remember how you removed the link tags from some list items in the `<nav>` so you can easily see what page you're on? Why not also change the text colour of those navigation list items which are not links!

- Find your `nav ul li` selector, and **inside** the curly braces add the line:

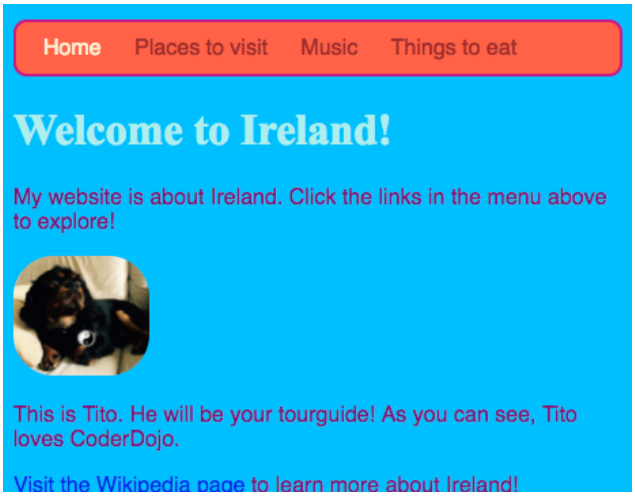
```
color: PapayaWhip;
```

You can choose any colour you like!

You can add the `color` property to the `nav ul li a` rule as well if you want the menu links to be a different colour from other links on your website.

- How about some rounded corners for your menu? Try adding the following code to the `nav ul` rule to see what happens: `border-radius: 10px;`.

The `border-radius` property is a really easy way to make anything look cooler!



Welcome to Ireland!

My website is about Ireland. Click the links in the menu above to explore!

This is Tito. He will be your tourguide! As you can see, Tito loves CoderDojo.

Visit the Wikipedia page to learn more about Ireland!

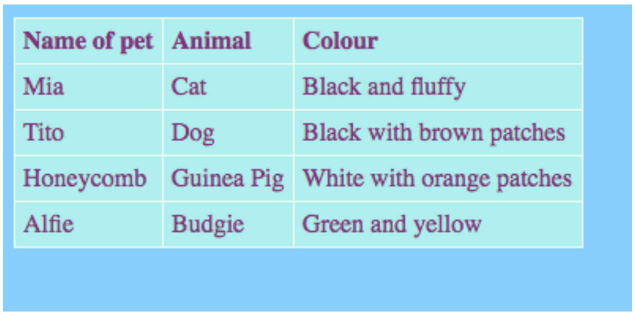
Challenge: make your pictures have rounded corners

- In your style sheet, create a new set of rules for pictures using the `img` selector, and add in a `border-radius` rule there.

Step 13 Adding a table

Sometimes it can be useful to show information in a table. For example, you might want to list member information on a website for a local sports club or school, or information about your top ten favourite songs.

A table is a grid made up of **rows** and **columns**. Most tables also include titles at the top of each column, called the **header**. Here's an example:



Name of pet	Animal	Colour
Mia	Cat	Black and fluffy
Tito	Dog	Black with brown patches
Honeycomb	Guinea Pig	White with orange patches
Alfie	Budgie	Green and yellow

- Go to the file `page_with_table.html`. There you will see a bunch of code in between `<table> </table>` tags.

- Select all of the code from the start of the `<table>` tag to the end of the closing `</table>` tag and copy it. Then go to one of your files where you would like to put a table, and paste in the code.

At the moment your table is empty.

- Have a go at filling your table with anything you like! Simply put text in between the `<td> </td>` tags and in between the `<th> </th>` tags. You can add more tags if you need them.

Example code

The HTML code for the table shown above looks like this:

```html
<table>
  <tr>
    <th>Name of pet</th>
    <th>Animal</th>
    <th>Colour</th>
  </tr>
  <tr>
    <td>Mia</td>
    <td>Cat</td>
    <td>Black and fluffy</td>
  </tr>
  <tr>
    <td>Tito</td>
```

```
      <td>Dog</td>
      <td>Black with brown patches</td>
    </tr>
    <tr>
      <td>Honeycomb</td>
      <td>Guinea Pig</td>
      <td>White with orange patches</td>
    </tr>
    <tr>
      <td>Alfie</td>
      <td>Budgie</td>
      <td>Green and yellow</td>
    </tr>
  </table>
```

To add another **row**, add another set of `<tr> </tr>` tags. In between them, you put the same number of **data** items with `<td> </td>` tags as you have in the other rows.

To add another **column**, add an extra **data** item with a set of `<td> </td>` tags to **every** row. Also add an extra **header** item to the first row, using `<th> </th>` tags.

How does it work?

Let's have a look at all those tags. It's a bit like the code for a list (remember `<ul>` and `<ol>`) but with more levels.

Each pair of `<tr> </tr>` tags is a row, so everything in between them will be displayed on one line.

The first row contains `<th> </th>` tags. These are used for the headers, so the column titles go in between them. There is one pair for each column you have in your table.

The `<td> </td>` tags define what's called table data, and that's what goes in all the other rows. These are similar to the list item tags `<li> </li>`: everything in between them is one item in your table row.

- If you look at the end of the `styles.css` file, you will see the CSS code that describes how the table should look. You don't have to understand all of it! But you can experiment with changing the text, border, and background colours to design your own style.

```
table, th, td {
  border: 1px solid HoneyDew;
  border-collapse: collapse;
}
tr {
  background-color: PaleTurquoise;
}
th, td {
  vertical-align: top;
  padding: 5px;
  text-align: left;
}
th {
  color: purple;
}
td {
  color: purple;
}
```

Notice how some of the selectors use commas, for example `table, th, td`? That's a **list of selectors**: it means it applies to all `<th>` elements and all `<td>` elements. It saves typing out the same set of rules for each selector!

Step 14 What next?

Now that you've built your first website, why not take a look at the **Intermediate HTML/CSS Sushi** (https://projects.raspberrypi.org/en/projects/cd-intermediate-html-css-sushi/) project? There you can build upon your existing HTML/CSS skills, add to your website and gain more control over how it looks.