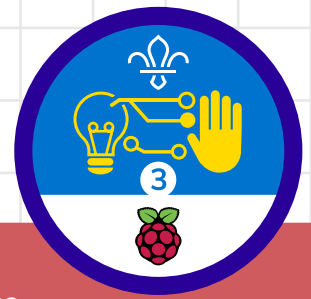


Make a website

1



Overview

This activity fulfills **Stage 3, Requirements 1 and 3** of the **Digital Maker Staged Activity Badge** ('In a coding language of your choice, create a basic program to meet a need of Scouting or your section'; 'Design and create digital graphics for use as part of one of the above'. The elements of the project should all fit within the project's specific purpose.) Young people will use HTML and CSS code to create a website that will show their Scouts or Scouts Group profile, and that will teach a Scouting skill they are interested in.

Key messages

- HTML (Hypertext Markup Language) is a key language with which all websites are built.
- You can add pictures, videos, and other media to your website using HTML code.
- CSS (Cascading Style Sheets) is a language that is used together with HTML code. CSS code changes the way things on websites look (e.g. colour, size, position, etc.).

Safety

If the young people are working online, tell them to ask for permission before viewing any other websites. It's a good idea to set up parental controls — you can find instructions for this on the NSPCC website ([rpf.io/scouts-nspcc-online](https://www.nspcc.org.uk/online-safety/)). You should also give each young person a Stay Safe leaflet ([rpf.io/scouts-staysafe](https://www.nspcc.org.uk/online-safety/)). This resource gets young people to create a profile, so if they are working online, make sure they do not share personal details such as full names, specific locations, or images of themselves.



45 – 90 minutes



Individual, pairs, or groups of three



If you're running this activity without access to WiFi, see the offline guide; you may also wish to print handouts.



Indoors, wherever you have access to computers

You will need:



- Laptops or desktop computers
- Activity handouts (at least one per group)

If your meeting place has WiFi

Use the online code editor Trinket in a web browser.

- This is the starter project on Trinket that young people will use:
[rpf.io/scouts-website-starter](https://trinket.io/scouts-website-starter)
- This is the finished code for the example website on Trinket:
[rpf.io/scouts-website-finished](https://trinket.io/scouts-website-finished)

If your meeting place doesn't have WiFi

Consult the Offline guide section of this document.

Leader instructions



- 1** Discuss with the Scouts what websites are and what kind of information might be found on them
- 2** Explain that the Scouts' challenge is to create a website that will show a Scout or Scouts Group profile (including what level they are at, what badges they have, and their favourite activities).
- 3** Explain that the Scouts will use HTML code to create their website, and CSS code to make it look nice.
- 4** Organise young people into groups if necessary, and give each individual or group a copy of the handout.

Alternatives



- See the 'Offline guide' section if you're working offline.
- If young people are working in groups, the first page of the website could be about their Scouts Group, instead of about an individual Scout.
- If you are pressed for time, get young people to make either page one or page two of the website.

Adaptability



- Consider pairing young people who have no knowledge of HTML with those who do.
- For a challenge, get young people to add more items to their profiles.
- If any young people get stuck, show them the finished code (found below) so they can see what their code should look like.

Community and sharing



Young people should have the opportunity to explain their code, or to explain how they found or fixed a bug, to the rest of their team.

There may be times when young people in your group will need to write HTML/CSS code offline. The following is a short guide to writing, editing HTML/CSS code and viewing pages you've coded offline.

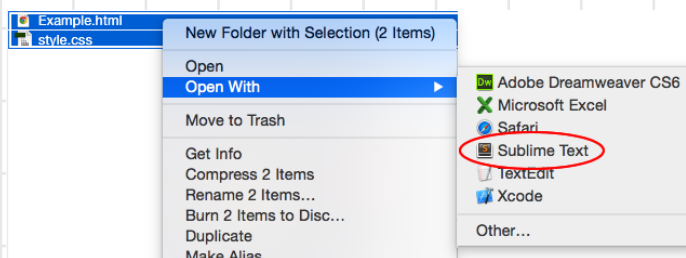
Writing the code

The project's downloadable resources (found here: **rpf.io/scouts-website-downloads**) contains all the starter code for the web page, including the following files:

- **index.html**
- **style.css**
- **page2.html**

Make sure that these files (as well as any images) are saved in the same folder. If you are adding any other pages, make sure you also create these in the same folder and save them with the file extension .html (for example, **page3.html**).

Open these files in an editor program. We recommend the Sublime Text 3 software (www.sublimetext.com/3), but there are lots of other good editors available. A simple, pre-installed text editor (Notepad on Windows, TextEdit on Mac, or Leafpad on Linux) also works. To open all the files for your web page at once, highlight them all and then right-click to open them.



First, you'll need to download the following ZIP folder that contains the starter code for the learners. You can put this folder on a USB drive and then copy it to computers that do not have access to the internet.

Go to this page:

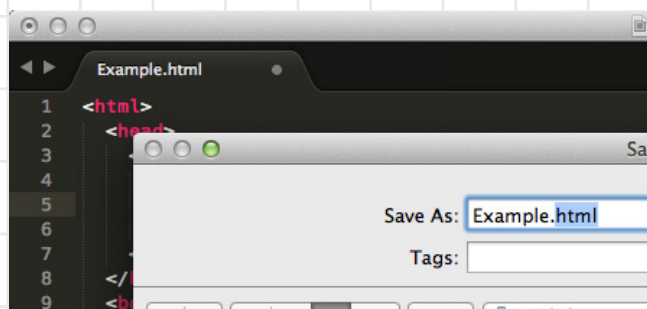
rpf.io/scouts-website-downloads

and click the Download button to copy the ZIP folder to your computer. To access the files in it, just double-click it, and your computer will unpack a regular file folder.

In case you have no access to the internet whatsoever, a copy of the finished code is also provided. Learners can build the website from scratch using this.

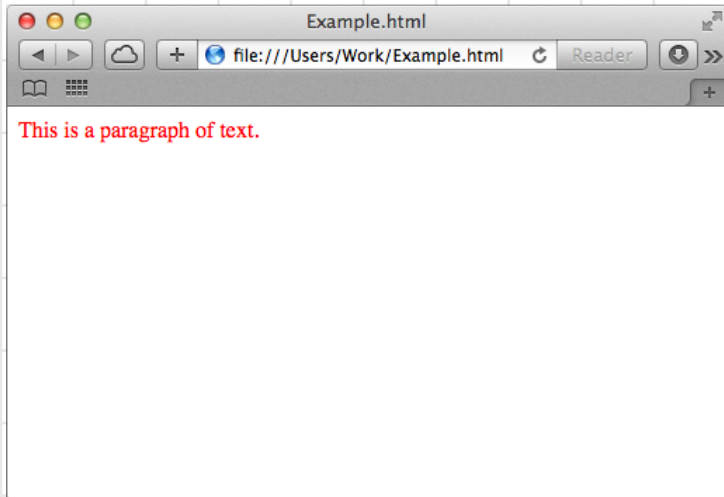
Saving the code

After writing your HTML and CSS code, save your files, making sure that the files have **.html** and **.css** file extensions.

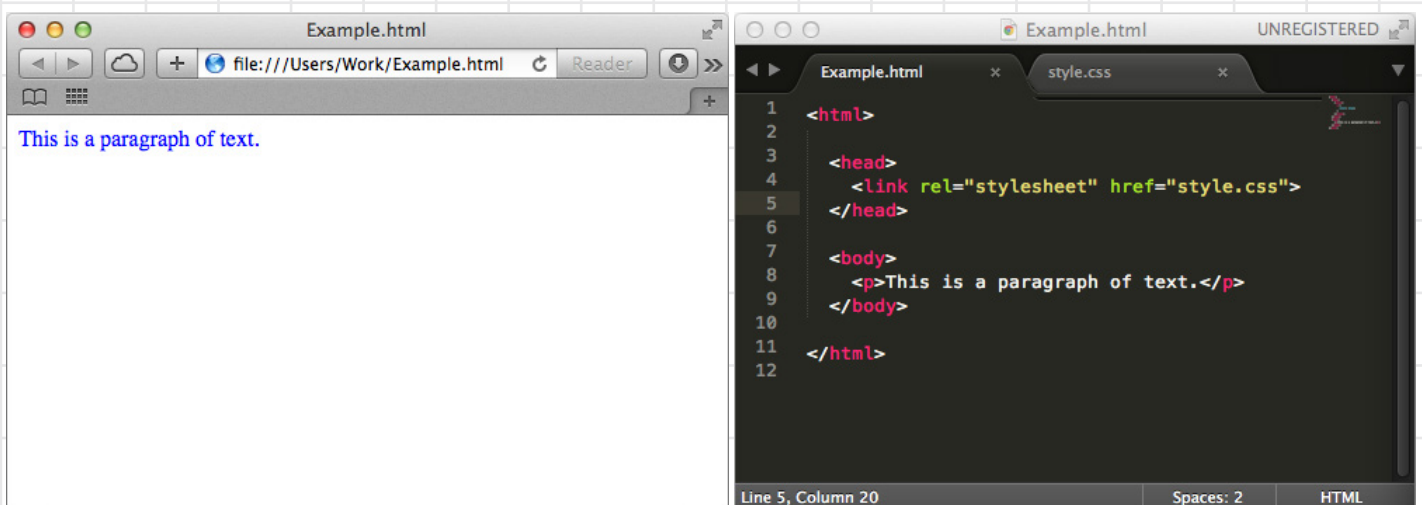


Viewing the web page

To view a web page, double-click the **index.html** file to open it in a browser. If it opens in a text editor and not a browser, make sure that it has a **.html** file extension in the name.



The easiest way to see the changes that you're making to your web page is by opening your files in both a browser and a text editor. You can then make changes in the text editor, save your changes and then click **Refresh** in the browser to see your updated web page.



index.html

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

  <h1>Raspberry Pi Scouts Profile</h1>

  <p> Hello, my name is Raspberry Pi. I am a very small
  computer. I like being used for a variety of indoor and outdoor
  activities. On this page, you can find information about my
  favourite Scouting activities and badges.</p>
  <div class="column1">
    <div class="item">
      <h2>Top 5 activities</h2>

      <ol>
        <li>Digital Programming</li>
        <li>Camping</li>
        <li>Photography</li>
        <li>Skateboarding</li>
        <li>Geocaching</li>
      </ol>

    </div>
    </div>

    <div class="column2">
      <div class="item">
        <h2>My Badges</h2>

        
        
        
        
        
      </div>

      </div>

      <div class="item2"><a href= "page2.html">Page 2</a></div></p>
</body>
</html>
```

page2.html

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

  <h1>Make a Stop-Motion Video</h1>

<div class="item2"><a href= "page2.html">Page 1</
a></div></p>

  <div class="column1">
    <div class="item">

      <h2>Instructions</h2>

      <ol>
        <li>First, get your section to make the
        'set' where their animation will be filmed. It's
        a simple set comprising a couple of pieces of
        white foam board, one for the base and one for the
        background. You'll need to prop the background board
        up against a heavy object. </li>
        <li>Using your smartphone or tablet,
        download free stop-motion software, such as JellyCam
        or qStopMotion. If you're using an iPhone or iPad,
        you can download Stop Motion Studio from iTunes.</
        li>
        <li>Show your section the demo run of
        the software you'll be using to make the film to
        familiarise yourselves with the process.</li>
        <li>Start shooting the movie! Each young
        person can have a go at creating a scene or short
        animation.</li>
      </ol>

    </div>
  </div>

  <div class="column2">
    <div class="item2">

      <h2>Picture</h2>

      
      <iframe width="560" height="315" src="https://www.
      youtube.com/embed/cMGyuucCmuY" frameborder="0"
      allow="autoplay; encrypted-media" allowfullscreen></
      iframe>
    </div>

  </div>
</body>
</html>
```


In this activity you are going to make a website that shows your Scouting profile and teaches a Scouting skill to other people. Here is an example of what it might look like:


Raspberry Pi Scouts Profile

Hello, my name is Raspberry Pi. I am a very small computer. I like being used for a variety of indoor and outdoor activities. On this page, you can find information about my favourite Scouting activities and badges.

Top 5 activities

1. Digital Programming
2. Camping
3. Photography
4. Skateboarding
5. Geocaching

My Badges



[Page 2](#)

Make a Stop-Motion Video

[Page 1](#)

Instructions

1. First, get your section to make the 'set' where their animation will be filmed. It's a simple set comprising a couple of pieces of white foam board, one for the base and one for the background. You'll need to prop the background board up against a heavy object.
2. Using your smartphone or tablet, download free stop-motion software, such as JellyCam or qStopMotion. If you're using an iPhone or iPad, you can download Stop Motion Studio from iTunes.
3. Show your section the demo run of the software you'll be using to make the film to familiarise yourselves with the process.
4. Start shooting the movie! Each young person can have a go at creating a scene or short animation.

Picture



Trivia

The internet and the World Wide Web are different things. The internet is a network of computers, while the World Wide Web acts as a bridge for accessing and sharing information across the internet. Websites are part of the World Wide Web. This is the first website ever made: info.cern.ch

1 Open the project at rpf.io/scouts-website-starter

The code that you can see on the left is in a language called **HTML**. On the right, you can see the web page that the HTML code has made. HTML uses **tags** to build web pages.

2 Can you see this HTML at line 7 of your code?

```
<h1> Write your website title here </h1>
```

`<h1>` is an example of a tag, and it stands for **heading 1**. You start the heading with a `<h1>` and end it with `</h1>`.

If you want a smaller heading, you can try `<h2>` or `<h3>` instead of `<h1>`.

3 Give your website a proper heading. Be careful not to share personal details such as your full name. Use a nickname or code name instead! Here's an example:

index.html style.css page2.html + ↕ 📄

```
1 <html>
2 <head>
3   <link rel="stylesheet" href="style.css">
4 </head>
5 <body>
6
7   <h1>Raspberry Pi Scouts Profile</h1>
8
9   <p> Hello, my name is Raspberry Pi. I am a very small compu
10 <div class="column1">
11 <div class="item">
12
13   <h2>Title one</h2>
```

Raspberry Pi Scouts Profile

Hello, my name is Raspberry Pi. I am a very small computer. I like being used for a variety of indoor and outdoor activities. On this page, you can find information about my favourite Scouting activities and badges.

Title one

Title two

4 On line 9, under the heading you just changed, code your own introductory paragraph using these tags: `<p>write your introduction in between the tags</p>`

Here's an example:

index.html style.css page2.html + ↕ 📄

```
1 <html>
2 <head>
3   <link rel="stylesheet" href="style.css">
4 </head>
5 <body>
6
7   <h1>Raspberry Pi Scouts Profile</h1>
8
9   <p> Hello, my name is Raspberry Pi. I am a very small compu
10 <div class="column1">
11 <div class="item">
12
13   <h2>Title one</h2>
```

Raspberry Pi Scouts Profile

Hello, my name is Raspberry Pi. I am a very small computer. I like being used for a variety of indoor and outdoor activities. On this page, you can find information about my favourite Scouting activities and badges.

Title one

Title two

- 5** Now change 'Title one' on line 13 to 'Top 5 activities', and change 'Title two' on line 22 to 'My Badges'.

index.html style.css page2.html

5 <body>

6

7 <h1>Raspberry Pi Scouts Profile</h1>

8

9 <p> Hello, my name is Raspberry Pi. I am a very small compu

10 <div class="column1">

11 <div class="item">

12

13 <h2>Top 5 activities</h2>

14

15

16 </div>

17 </div>

18

19 <div class="column2">

20 <div class="item">

21

22 <h2>My Badges</h2>

23

Raspberry Pi Scouts Profile

Hello, my name is Raspberry Pi. I am a very small computer. I like being used for a variety of indoor and outdoor activities. On this page, you can find information about my favourite Scouting activities and badges.

Top 5 activities

My Badges

- 6** Under the heading 'Top 5 activities', add your top 5 favourite Scouting activities using an **ordered list**, which is a list that is numbered.

To create your ordered list, use the following HTML tags:

```
<ol>
  <li>first item</li>
  <li>second item</li>
  <li>third item</li>
  <li>fourth item</li>
  <li>fifth item</li>
</ol>
```

You should end up with something similar to this:

index.html style.css page2.html

5 <body>

6

7 <h1>Raspberry Pi Scouts Profile</h1>

8

9 <p> Hello, my name is Raspberry Pi. I am a very small compu

10 <div class="column1">

11 <div class="item">

12

13 <h2>Top 5 activities</h2>

14

15

16 Digital Programming

17 Camping

18 Photography

19 Skateboarding

20 Geocaching

21

22

23 </div>

24 </div>

25

Raspberry Pi Scouts Profile

Hello, my name is Raspberry Pi. I am a very small computer. I like being used for a variety of indoor and outdoor activities. On this page, you can find information about my favourite Scouting activities and badges.

Top 5 activities

My Badges

1. Digital Programming
2. Camping
3. Photography
4. Skateboarding
5. Geocaching

7 Now it's time to add images of your badges below the 'My Badges' heading. Add this HTML code below the heading:

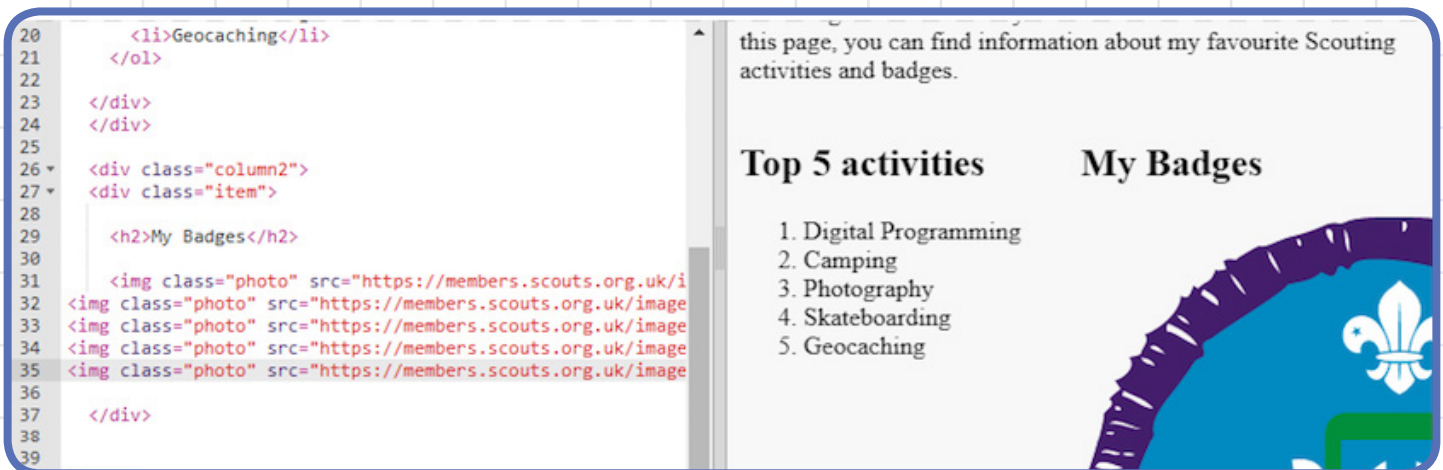
```

```

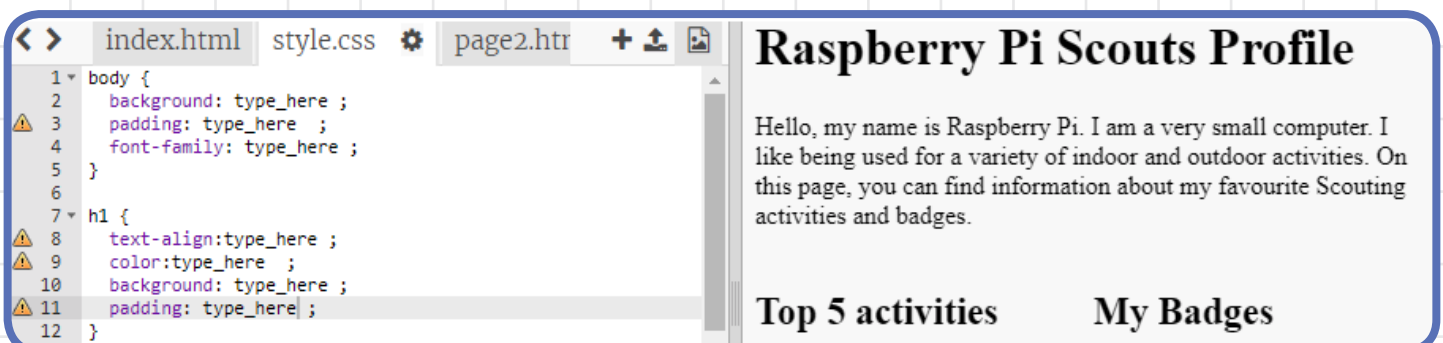
8 Find the image of a badge you have by searching online. Once you've found it, right-click the image and then, in the menu that appears, click on the option to open the image in a new tab. Switch to that new browser tab, copy the web image address from the address bar, and paste it into the code where it says paste the image address here.

Note: make sure you don't remove the "" quotation marks!

As an example, we've added a few different images:



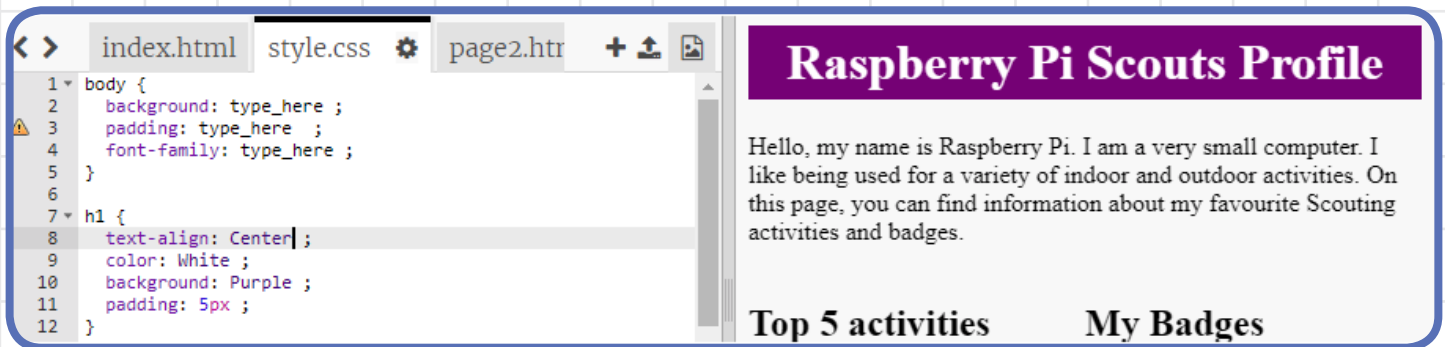
To change the look of your web page, you need to use a separate file to write code in a language called CSS. We have created this file, called **style.css**, for you already. You'll find it above the window with the HTML code, to the right of the **index.html** tab:



9 Switch to the **style.css** tab to begin styling your website.

10 Now find where the `h1` style rules go. This is where you will fill in your own style rules.

This is an example, but you can choose your own rules:



11 Find where the `body` style rules go. These are the rules that set what your text on your web page will look like.

12 Style your **background** colour and choose the font you will use.

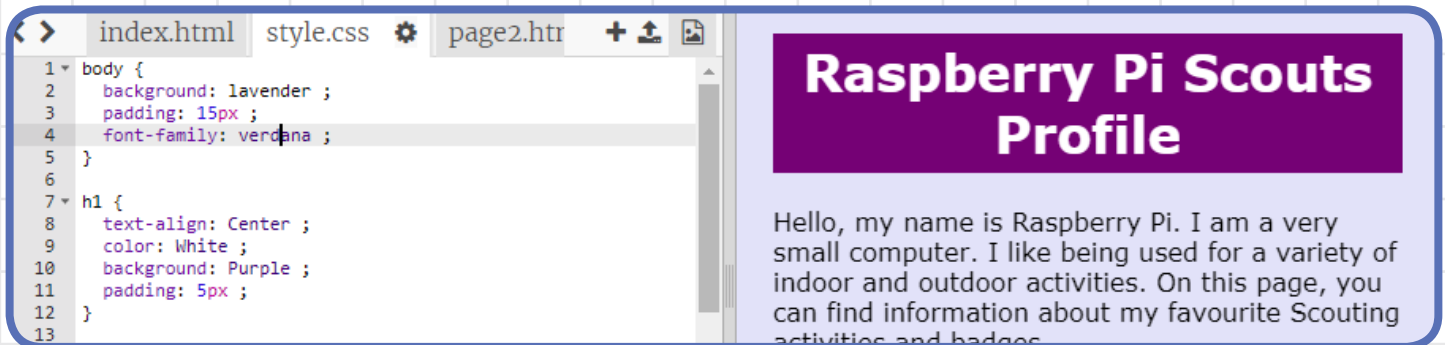
- Here are some colours you can use: trinket.io/docs/colors
- Here are some example fonts:

Arial

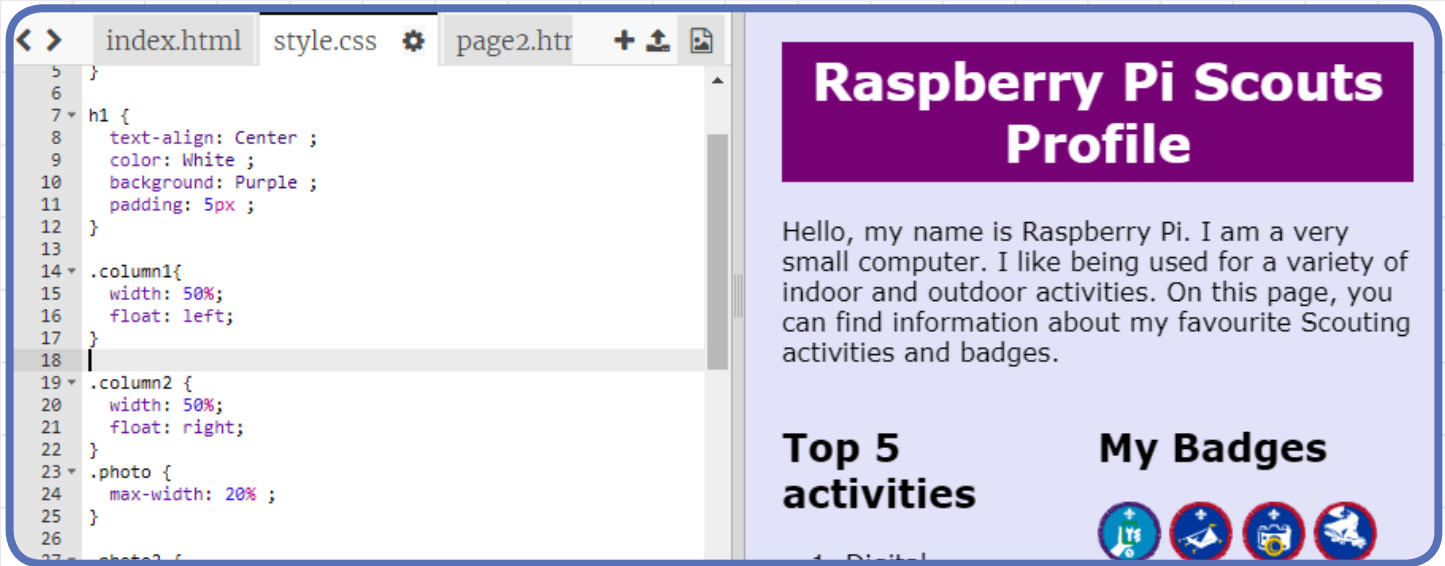
Comic Sans

Impact

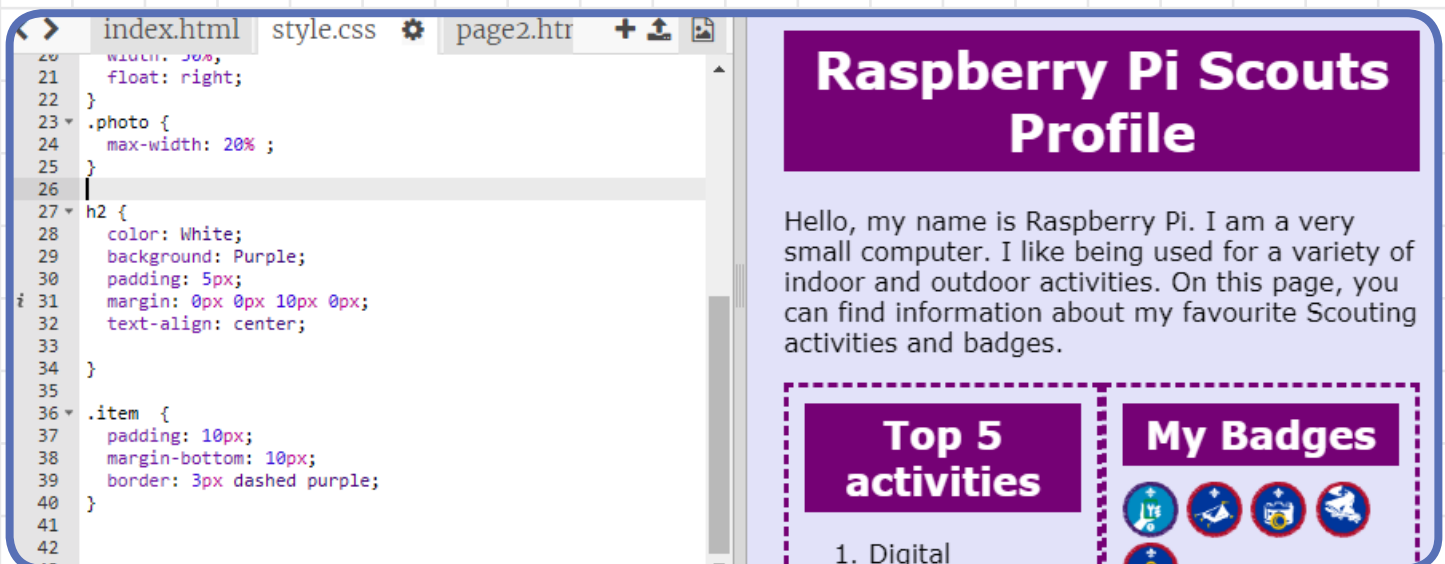
Tahoma



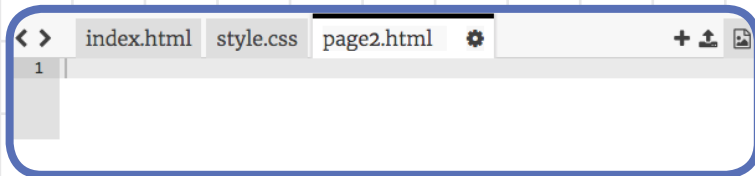
- 13** The badge images you added earlier might be a bit too big on your page. You can change that by adding style rules for them in the **style.css** tab. In the example, the `photo` width is set to 20% of the column width, but if you are not including badges and only have one picture, you can make this number 100%.



- 14** Style your headings and items however you want! Here's an example:

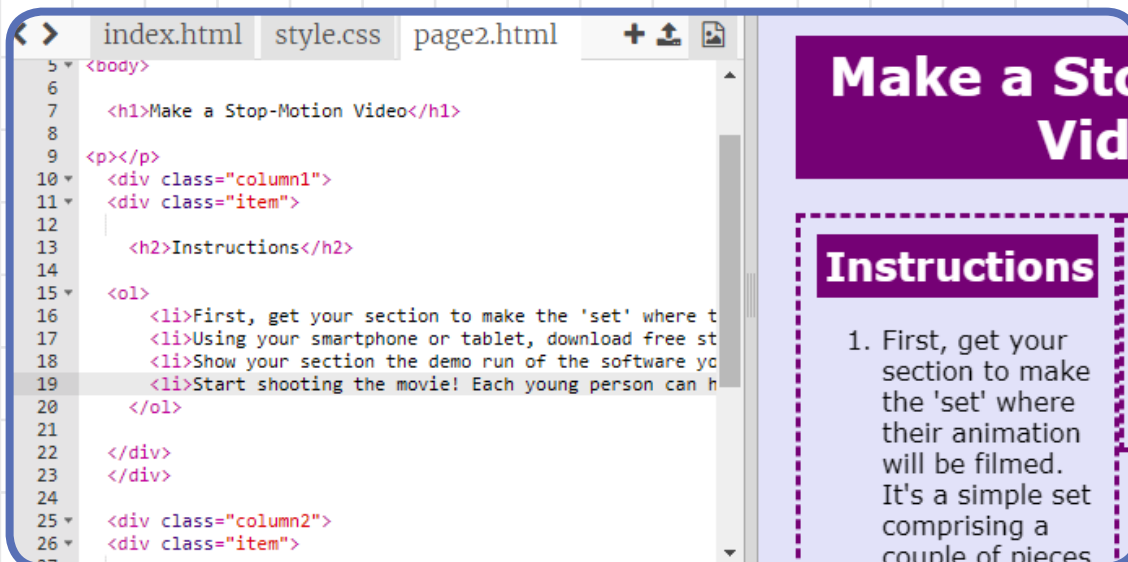


- 15** Now, begin adding code to your website's second page. You can go to the second page by clicking on the tab called **page2.html**.



- 16** This second page will be similar to your first page, so you can start by copying and pasting all the code from **index.html** into **page2.html**. To do this quickly:
- Press the keys **CTRL A** to select all the code in **index.html**
 - Then press **CTRL C** to copy the code you've selected
 - Switch to the **page2.html** tab
 - Then press the keys **CTRL V** to paste the code you've copied

- 17** For **page2.html**, change the main heading `<h1>` so that it says the skill you're going to teach. Then change the heading `<h2>` and the list items in the first column into a set of instructions for that skill.



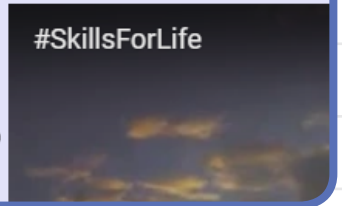
18 Include some pictures and/or videos to help people who visit your website learn.

```
7 </li>First, get your section to make the 'set' where their
8 </li>Using your smartphone or tablet, download free stop-mo
9 </li>Show your section the demo run of the software you'll
0 </li>Start shooting the movie! Each young person can have a
1 </ol>
2
3 </div>
4 </div>
5
6 <div class="column2">
7 <div class="item">
8
9 <h2>Picture</h2>
0
1 
4
```

section to make the 'set' where their animation will be filmed. It's a simple set comprising a couple of pieces of white foam board, one for the base and one for the background. You'll need to prop the background board up against a heavy object.



#SkillsForLife

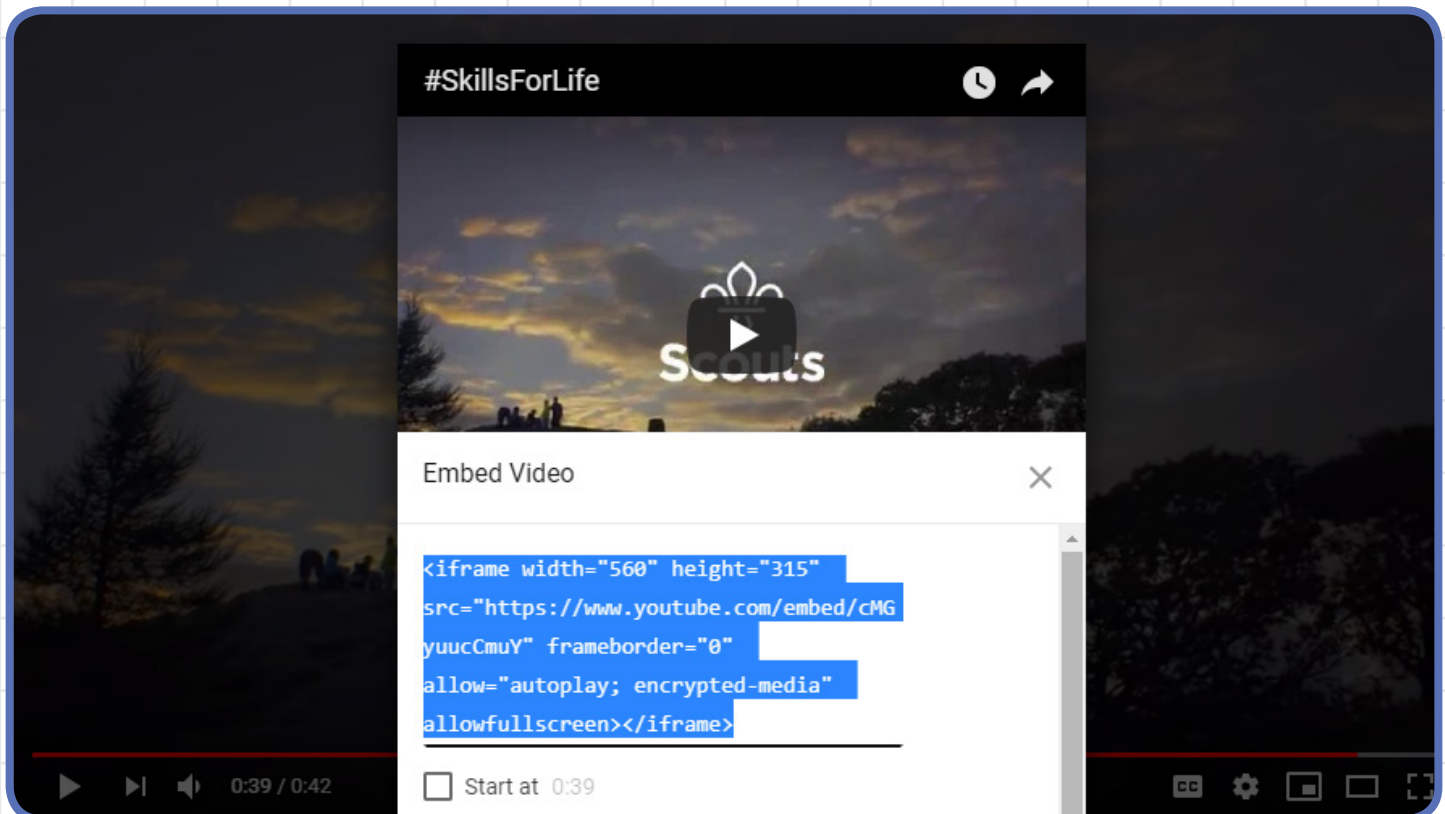


19 Here is the example code zoomed in. Notice that here in the `` tags, we've added the code `class = "photo2"` instead of `class="photo"`, which we used for **index.html**.

```
29 <h2>Pictures/Video</h2>
30 
31 
32 <iframe width="280" height="200" src="https://www.youtube.com/embed/_zHSfEhEqU"/>
33 </iframe>
```

You need this new code because on this page you have different types of images to the ones of the badges on the website's first page, and you'll want to use CSS code to style them differently later on.

- 20** To add YouTube video, you can get the embed code from the YouTube page. Under the video you want to insert, click **Share**, and then click **Embed**. Copy the code in the box that appears, and paste it into your **page2.html** code.



- 21** Make sure your newly added images are styled properly by going back to the **style.css** tab and adding style rules for them.

- 22** Add code to both **index.html** and **page2.html** to create links that will let you move between the two pages.

You could use this code on **index.html**:

```
<div class="item"><a href= "page2.html">Page 2</a></div></p>
```

```
32 
37 |
38 </div>
39
40 <div class="item"><a href= "page2.html">Page 2</a></div></p>
41
42 </body>
43
```

activities

1. Digital Programming
2. Camping
3. Photography
4. Skateboarding
5. Geocaching



[Page 2](#)

In the end, your website should look similar to the one shown at the top of these instructions.

Now that you've made your website, you can keep it up-to-date, as you get more badges or try new Scouting activities!