Happy birthday

Introduction

In this project, you'll be introduced to HTML and CSS by learning how to make your own customised birthday card.

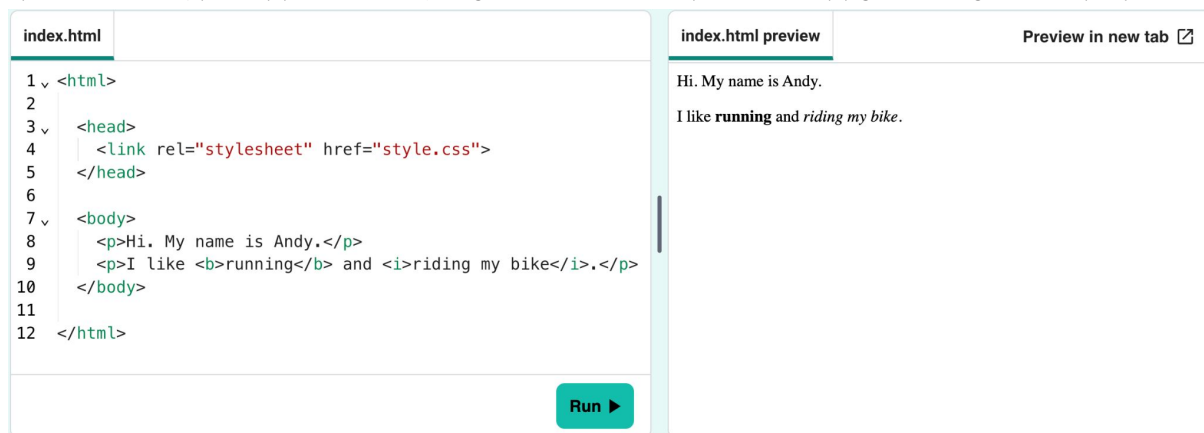### What you will make

Open the URL (rpf.io/pp-web-hb-1) in your browser preview **index.html** to see what you will make.

Page 1   Page 2

What is HTML?

HTML stands for **Hypertext Markup Language**, the language used to make webpages. Let's have a look at an example!

Open the URL (rpf.io/pp-web-hb-3) in your browser to open the Happy Birthday starter project.

The code that you can see on the left is HTML. When you click **Run**, you can see the webpage that the HTML code has made on the right.

HTML uses **tags** to build webpages. Look for this HTML code on line 8 of your code:

```
<p>Hi. My name is Andy.</p>
```

`<p>` is an example of a tag, and is short for **paragraph**. You can start a paragraph with `<p>`, and end a paragraph with `</p>`.

Can you spot any other tags?

One other tag you might have spotted is `<b>`, which stands for **bold**:

```
<b>running</b>
```

Here are some more:

- <html> and </html> mark the start and end of the HTML document
- <head> and </head> is where stuff like CSS goes (we'll get to that later)
- <body> and </body> is where your website content goes

```
1 ▾  <html>
2
3 ▾    <head>            ←—— Webpage CSS styling goes here
4
5      </head>
6
7 ▾    <body>            ←—— Webpage HTML content goes here
8
9      </body>
10
11  </html>
```

Make a change to one of the paragraphs of text in the HTML file (on the left). Click **Run**, and you should see your webpage change (on the right)!

Index.html

```
7   <body>
8      <p>Hi. My name is Nic.</p>
9      <p>I like <b>running</b> and <i>riding my bike</i>.</p>
10  </body>
```

If you have made a mistake and want to undo all of your changes, you can press and hold the **Ctrl**, then press the **z** key.

You need an account to save your projects!

If you have a Raspberry Pi account, the easiest way to save your webpage is to click the log in to save button on the top right of the project. This will save a copy of the project on your profile.
If you do not yet have a Raspberry Pi open the URL(rpf.io/signup) in your browser to create one..

Challenge: add another paragraph

- Can you add a third paragraph of text to your webpage, below the other two?

Remember that your new paragraph should start with a <p> tag, and end with </p> tag.

Here's how your webpage might look:

Hi. My name is Franky.

I like running and riding my bike.

My birthday is on the 30th of June.

Can you add **bold** and underlined text to your new paragraph? Use <u> and </u> tags for underlined text.

What is CSS?

CSS stands for **Cascading Style Sheets**, and it is a language used to style webpages and make them look nice.

This code links your webpage to a CSS file — see if you can find it in the <head> of the HTML document:

Index.html

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

CSS lists all of the **properties** for a particular tag.

Click on the `style.css` file on the left to see the CSS code for your webpage.

Project files

+ Add file

`<>` **index.html**

`#` **style.css**   ⋮

Happy Birthday Starter   ✏️

index.html   **style.css**   ✕

```
1   body {
2       background: white;
3   }
4   p {
5       color: black;
6   }
```

Find this code:

style.css

```
4   p {
5       color: black;
6   }
```

This CSS code determines a property for paragraphs (p), which says that the text colour should be black. Notice the American spelling: 'color'.

Change the word 'black' in the CSS code to 'blue'. You should see the text colour of all paragraphs change to blue, when you click on **Run**.
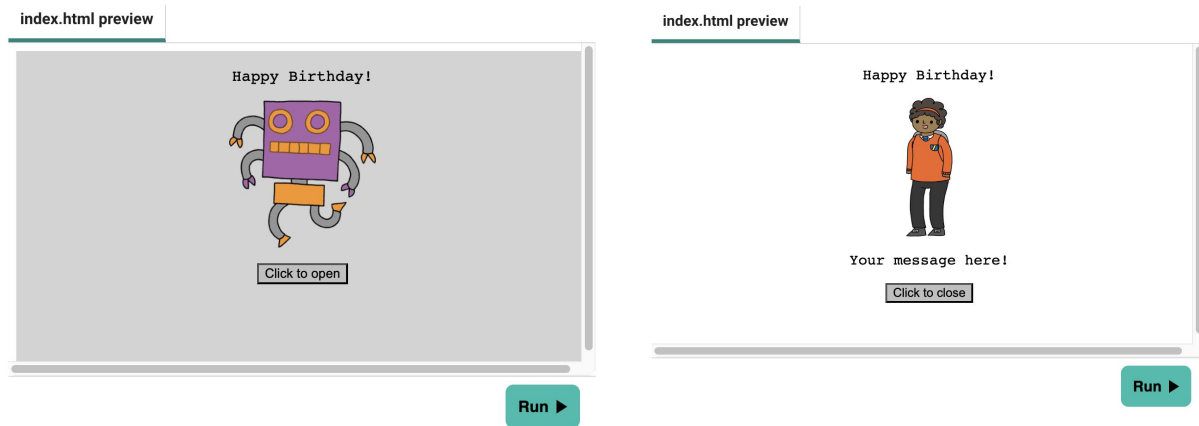
style.css.html

```
4   p {
5       color: blue;
6   }
```

Challenge: add more styles

● Can you make the paragraphs of text orange?
● Can you make the background grey by changing the `body` property?

Making a birthday card

Let's use what you've learnt about HTML and CSS to make your own custom birthday card.
Open the URL (rpf.io/pp-web-hp-4) in your browser to open the second **Happy Birthday starter project.**

We've written a lot of code to get you started, but the birthday card looks pretty boring so far, so you're going to make some changes to the HTML and CSS code.

Click **Run** and then the button on the front of the card, and you should see it open to reveal the inside.

Go to line 14 of the HTML code. Try editing the text to customise your card.

index.html

```
13    <p id="outside-title">
14        Happy Birthday 🎉🎂🎁🎊
15    </p>
```

Can you find the HTML code for the robot image, and change the word robot to sun?

 I need a hint

Look on line 17 to find the code and change the word robot to sun. You'll see the image change when you click on **Run.**

index.html

```
13    <p id="outside-title">
14        Happy Birthday 🎉🎂🎁🎊
15    </p>
16
17    <img id="outside-pic" src="sun.png">
```

You can use any of the words boy, diamond, dinosaur, flowers, girl, rainbow, robot, spaceship, sun, tea, or trophy for a birthday card, or cracker, elf, penguin, present, reindeer, santa, or snowman if you would prefer to make a Christmas card.

You can also edit the CSS code of the birthday card.

Click on the file for style.css. The first part is all of the CSS styles for the **outside** of the card.

Change the background-color to lightgreen.

style.css

```
1    #outside {
2        z-index: 1;
3        position: absolute;
4        background-color: lightgreen;
5        width: 100%;
6        height: 100%;
```

You can also change the size of an image. Go to the #outside-pic CSS code, and change the width and height of the outside image to 200px (px stands for pixels).

style.css

```
23   #outside-pic {
24      width: 200px;
25      height: 200px;
26   }
```

The font can be changed too. Go to the #outside-title CSS and change the font-family to Comic Sans MS and the font-size to 16pt.

style.css

```
16   #outside-title {
17      color: black;
18      font-family: Comic Sans MS;
19      font-size: 16pt;
20      text-align: center;
21   }
```

You can use other fonts, for example:

- arial
- Impact
- Tahoma

Challenge: create a personalised card

Use everything you've learnt about HTML and CSS to finish making a personalised card. And it doesn't have to be a birthday card, it could be one for Christmas or any other occasion!

Open the URL (rpf.io/pp-web-hb-5) to preview the index.html example.

Open the URL (rpf.io/pp-web-hb-6) in your browser to explore more CSS colour names.

Congrats! Project complete!