



Projects

Happy birthday

Make an online birthday card on a webpage

HTML / CSS

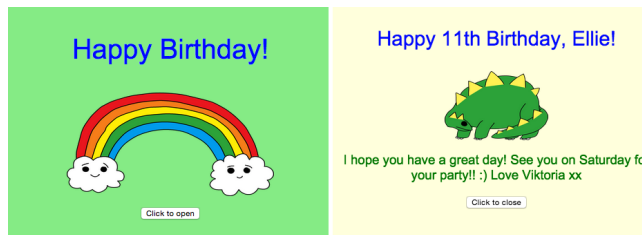


Step 1 Introduction

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

Click the button to open the birthday card:



What you will learn

This project covers elements from the following strands of the **Raspberry Pi Digital Making Curriculum** (<http://rpf.io/curriculum>):

- Design basic 2D and 3D assets (<https://www.raspberrypi.org/curriculum/design/creator>).

Additional information for educators

If you need to print this project, please use the **printer-friendly version** (<https://projects.raspberrypi.org/en/projects/happy-birthday/print>).

Use the link in the footer to access the GitHub repo for this project, which contains all resources (including an example finished project) in the 'en/resources' folder.

Step 2 What you will 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>).

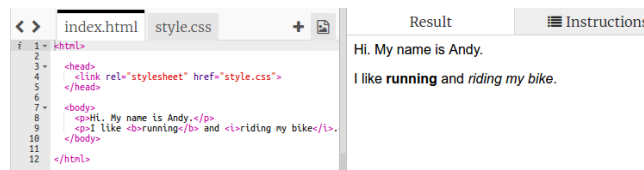
Step 3 What is HTML?

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

You'll be using a website called trinket.io to write HTML code.

- Open **this trinket** (<http://jumpto.cc/web-intro>).

The project should look like this:



The code that you can see on the left is HTML. On the right of the trinket, you can see the webpage that the HTML code has made.

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?

Answer

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

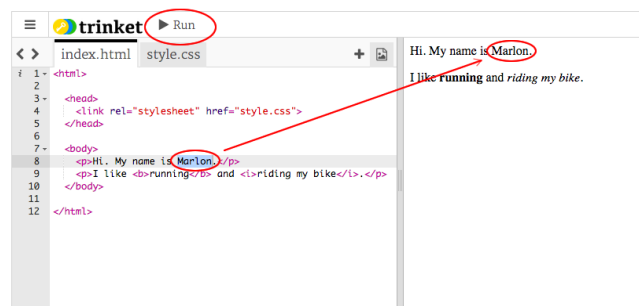
```
<b>running</b>
```

Here are some more:

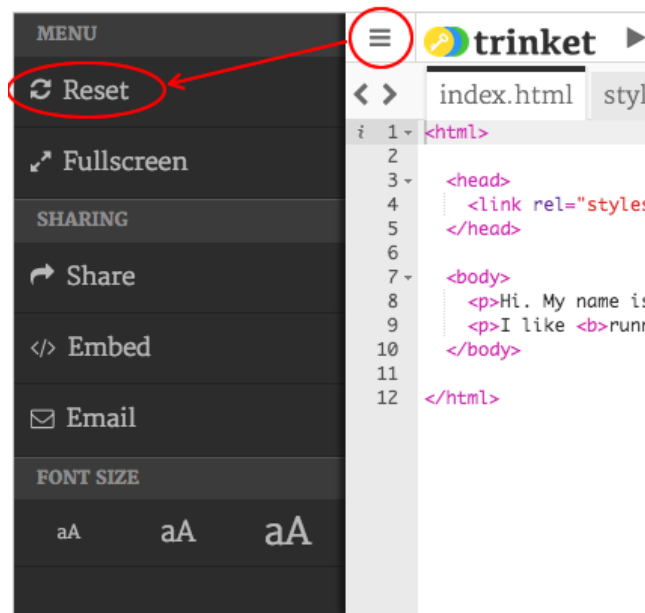
- `<html>` and `</html>` mark the start and end of the HTML document
- `<head>` and `</head>` is where stuff like CSS goes (we'll get to that later)
- `<body>` and `</body>` is where your website content goes

```
1 <html>
2
3 <head>
4   <!-- Webpage CSS styling goes here -->
5 </head>
6
7 <body>
8   <!-- Webpage HTML content goes here -->
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)!



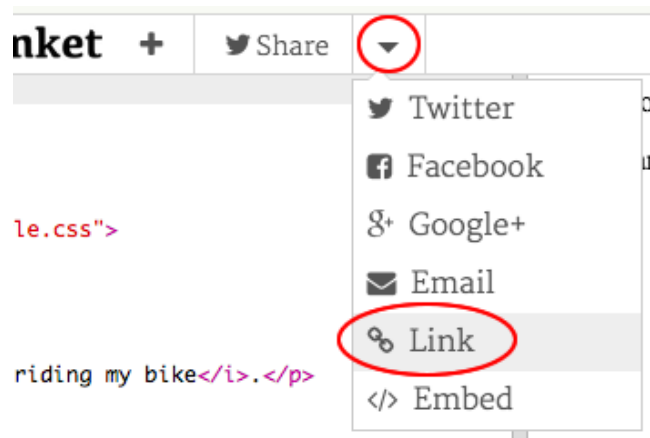
- If you have made a mistake and want to undo all of your changes, you can click the **menu** button and then click **Reset**.



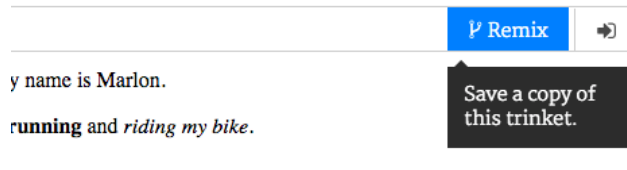
To undo just the last thing you did, you can press the **Ctrl** and **Z** keys together.

You don't need a Trinket account to save your projects!

If you don't have a Trinket account, click the **down** arrow and then click **Link**. This will give you a link that you can save and come back to later. You'll need to do this every time you make changes, as the link will change!



If you have a Trinket account, the easiest way to save your webpage is to click the **Remix** button on the top of the trinket. This will save a copy of the trinket on your profile.



Step 4 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 Marlon.

I like **running** and *riding my bike*.

My birthday is on 30th June.

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

Step 5 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:

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

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

- Click on the `style.css` tab to see the CSS code for your webpage.



- Find this code:

```
p {  
    color: black;  
}
```

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.



Step 6 Challenge: add more styles

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

```
Hi. My name is Marlon.  
I like running and riding my bike.
```

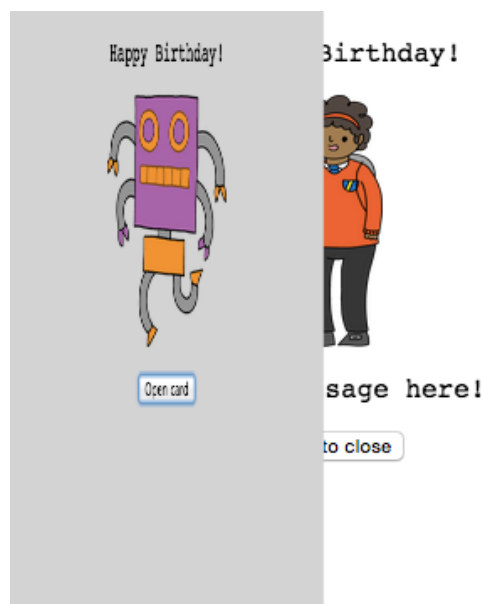
Step 7 Making a birthday card

Let's use what you've learnt about HTML and CSS to make your own custom birthday card.

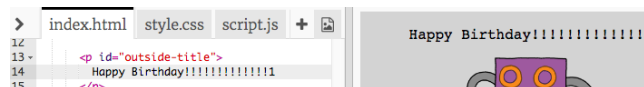
- Open **this trinket** (<https://trinket.io/html/b33e4f4ca8>).

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.

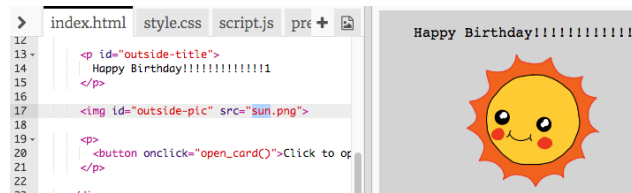
- Click the button on the front of the card, and you should see it open to reveal the inside.



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



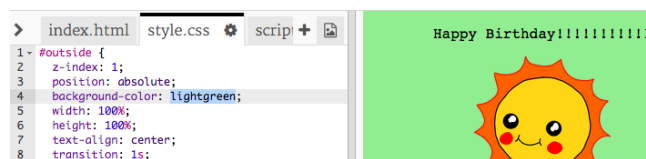
- Can you find the HTML code for the robot image, and change the word **robot** to **sun**?
- Look on line 17 to find the code.
- Change the word **robot** to **sun**, and you'll see the image change!



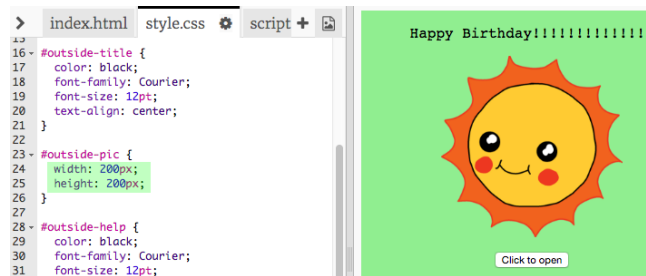
You can use any of the words **boy**, **diamond**, **dinosaur**, **flowers**, **girl**, **rainbow**, **robot**, **spaceship**, **sun**, **tea**, or **trophy** for a birthday card, or **cracker**, **elf**, **penguin**, **present**, **reindeer**, **santa**, or **snowman** if you would prefer to make a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

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

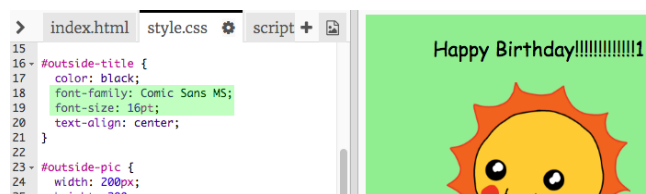
- Click on the tab for **style.css**. The first part is all of the CSS styles for the **outside** of the card.
- Change the **background-color** to **lightgreen**.



- 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).



- 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**.



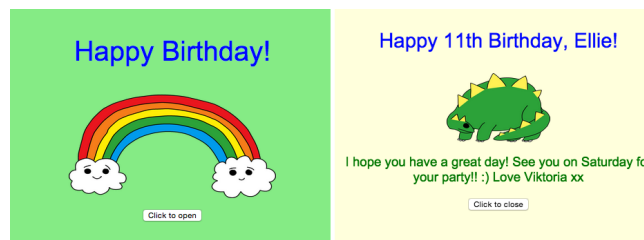
You can use other fonts, for example:

- `arial`
- `Impact`
- `Tahoma`

Step 8 Challenge: create a personalised card

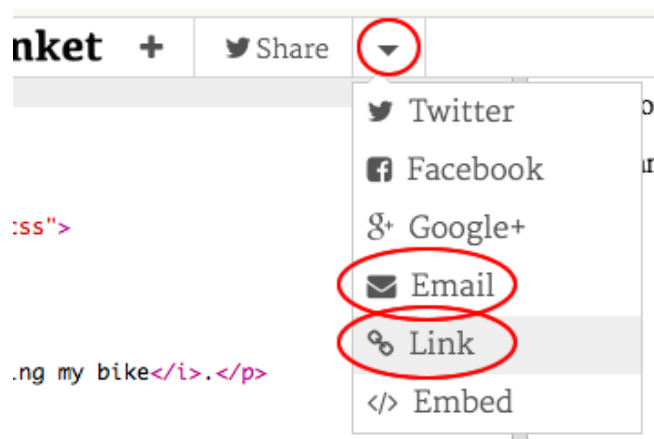
- Use everything you've learnt about HTML and CSS to finish making a personalised card. And it doesn't have to be a birthday card, it could be one for Christmas or any other occasion!

Here's an example:



You can find more CSS colour names **here** (<http://jumpto.cc/colours>).

- Once you've finished your card, you can share or email it to someone.



Published by **Raspberry Pi Foundation** (<https://www.raspberrypi.org>) under a **Creative Commons license** (<https://creativecommons.org/licenses/by-sa/4.0/>).

View project & license on GitHub (<https://github.com/RaspberryPiLearning/happy-birthday>)