Projects

Magazine

Create a multi-page magazine website.

HTML / CSS

Step 1 Introduction

In this project, you'll learn how to use HTML and CSS to create a multi-page magazine website with a two page layout. You'll also revisit lots of HTML and CSS techiques from other projects.

Additional information for club leaders

If you need to print this project, please use the **Printer friendly version** (https://projects.raspberrypi.org/en/projects/magazine/print).

Club leader notes

Introduction:

In this project, children will learn how to create a two-column layout. They will also recap lots of the HTML & CSS that they have learned in other projects.

Online Resources

We recommend using **trinket** (https://trinket.io/) to write HTML & CSS online. This project contains the following trinkets:

- **'Magazine' starting point – jumpto.cc/web-magazine** (http://jumpto.cc/web-magazine)

Children can also make use of this blank trinket **(jumpto.cc/html-blank)** (http://jumpto.cc/html-blank) to write their own HTML & CSS, or alternatively they can use this template trinket **(jumpto.cc/html-template)** (http://jumpto.cc/html-template).

There is also a trinket containing a sample solution to the challenges:

- **'Magazine' Finished – trinket.io/html/a41e4e1c5c** (https://trinket.io/html/a41e4e1c5c)

Offline Resources

This project can be **completed offline** (https://www.codeclubprojects.org/en-GB/resources/webdev-working-offline/) if preferred. You can access the project resources by clicking the 'Project Materials' link for this project. This link contains a 'Project Resources' section, which includes resources that children will need to complete this project offline. Make sure that each child has access to a copy of these resources. This section includes the following files:

- intro/index.html
- template/template.html
- template/style.css
- magazine/index.html
- magazine/style.css
- magazine/script.js
- magazine/mutliple .png images

You can also find a completed version of this project's challenges in the 'Volunteer Resources' section, which contains:

- magazine-finished/index.html
- magazine-finished/style.css
- magazine-finished/script.js
- magazine-finished/kitten.jpg
- magazine-finished/recipe-finished.jpg
- magazine-finished/greenrobot.png
- magazine-finished/spacerobot.png

(All of the resources above are also downloadable as project and volunteer `.zip` files.)

Learning Objectives

- This project teaches children how to create a two-column magazine style layout using `float:`. It also recaps lots of the HTML & CSS that is covered in more detail in other projects. Examples are given so children will be able to complete this project even if they have not completed some of the earlier projects.

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).

Challenges

- “Add items to the left column” - placing items inside a floated element;
- “Add a link back to the first page” - creating links between pages in a project;
- “Fill in your second page” - recapping more HTML & CSS;
- “Add another animation” - recapping animations.

Project materials

Project resources

- **.zip file containing all project resources** (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36

664da20805a8086050/en/resources/magazine-project-resources.zip)

- **Online Trinket containing all 'Magazine' project resources** (http://jumpto.cc/web-magazine)
- **Online Trinket template** (http://jumpto.cc/trinket-template)
- **Online blank Trinket** (http://jumpto.cc/trinket-blank)
- **template/index.html** (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/template-index.html)
- **template/style.css** (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/template-style.css)
- **intro/index.html** (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/intro-index.html)
- **intro/style.css** (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/intro-style.css)
- **magazine/index.html** (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/magazine-index.html)
- **magazine/style.css** (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/magazine-style.css)
- **magazine/script.js** (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/magazine-script.js)
- **magazine/kitten.jpg** (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/magazine-kitten.jpg)
- **magazine/recipe-final.png** (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/magazine-recipe-final.png)
- **magazine/greenrobot.png** (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/magazine-greenrobot.png)
- **magazine/firerobot.png** (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/magazine-firerobot.png)

- magazine/spacerobot.png (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/magazine-spacerobot.png)
- magazine/dogrobot.png (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/magazine-dogrobot.png)

Club leader resources

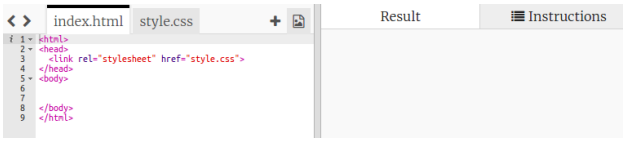
- .zip file containing all completed project resources (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/magazine-volunteer-resources.zip)
- Online completed Trinket project (https://trinket.io/html/a41e4e1c5c)
- magazine-finished/index.html (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/magazine-finished-index.html)
- magazine-finished/style.css (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/magazine-finished-style.css)
- magazine-finished/script.js (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/magazine-finished-script.js)
- magazine-finished/kitten.jpg (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/magazine-finished-kitten.jpg)
- magazine-finished/recipe-final.png (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/magazine-finished-recipe-final.png)
- magazine-finished/greenrobot.png (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/magazine-finished-greenrobot.png)
- magazine-finished/spacerobot.png (https://projects-static.raspberrypi.org/projects/magazine/f5380ae5759d5d1f038c36664da20805a8086050/en/resources/magazine-finished-spacerobot.png)

Step 2 Heading and Background

Magazine-style websites often have lots of small items on a page. First you're going to create a heading and background for your magazine.

- Open this trinket: **jumpto.cc/web-magazine** (http://jumpto.cc/web-magazine).

  The project should look like this:

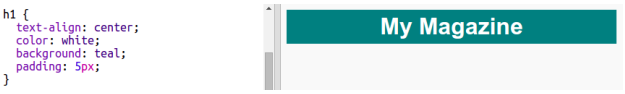


- Let's add a heading.

  You can think of a better title for your magazine.

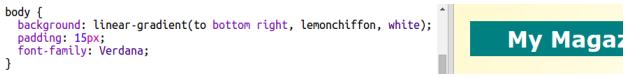
- Can you style the heading?

  Here's an example, but you can choose your own style:



- Now let's create an interesting background using a gradient and choose a font for the magazine.

  Here's some example style as a reminder of how to create a gradient:



Step 3 Creating Columns

Websites often use multiple columns. Let's create a two column layout for your magazine.

- First create two column `div`s.

  Add the highlighted HTML to `index.html`:

```
<h1>My Magazine</h1>
<div class="column1">
</div>
<div class="column2">
</div>
```

- Now style the column divs so that one floats to the left and the other floats to the right.

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

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

  Each column is less than 50% so there's room for padding.

  You'll need to add something to a column to see the effect.

- Let's add a kitten picture to the top of column 2.

```
<div class="column2">
  <img src="kitten.jpg">
</div>
```

  Notice that the kitten image is positioned about half-way across the page, in the second column.

  It's a bit big though!

- Let's use `max-width:` to make images fit within their container.

  Add the following style to `style.css`.

This will apply to all images you use in your magazine, not just the kitten.

- Now add a class `photo` to the image so that you can style it:

```
<div class="column2">
  <img class="photo" src="kitten.jpg"/>
</div>
```

- And style the image to add a shadow and a twist to make the photo pop out of the page:

Make some changes until you like the result.

Step 4 Style magazine items

Let's make the layout a bit more interesting.

- Add a `div` around your image with a `class` and add a `h2` heading:

- Now style the item and heading.

  Here's an example, but you can make changes:

```
h2 {
  color: white;
  background: teal;
  padding: 5px;
  margin: 0px 0px 10px 0px;
```

Step 5 Challenge: Add items to the left column

Can you add a ordered list and a gradient text sticker to the left column?

Here's an example:

This is the code for the example, but you can change it or come up with your own.

HTML:

```
<div class="column1">
  <div class="item">
    <h2>Top 5 Cakes</h2>
    <ol>
      <li>Chocolate Eclair</li>
      <li>Victoria Sponge</li>
      <li>Iced Bun</li>
      <li>Lemon Drizzle</li>
      <li>Jam Doughnut</li>
    </ol>
  </div>
  <div class="item">
    <div class="sticker" id="robots"> I &lt;3 <br>Robots</div>
  </div>
</div>
```

CSS:

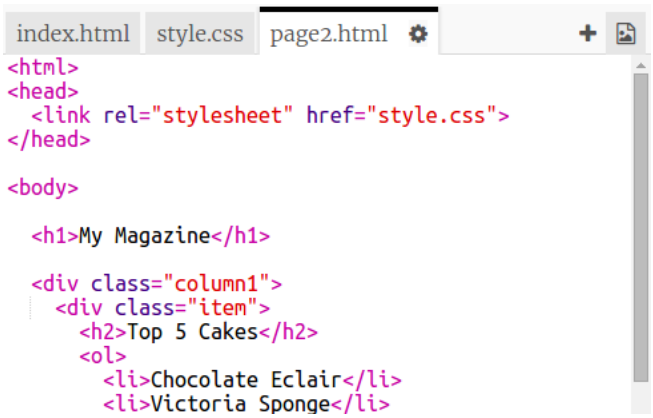
```
#robots {
  font-size: 30px;
  color: white;
  background: linear-gradient(green, yellow, orange, red, purple, blue);
  padding: 30px;
  border-radius: 5px;
  text-align: center;
}
```

Step 6 Add a second page

Let's add another page to your magazine website.

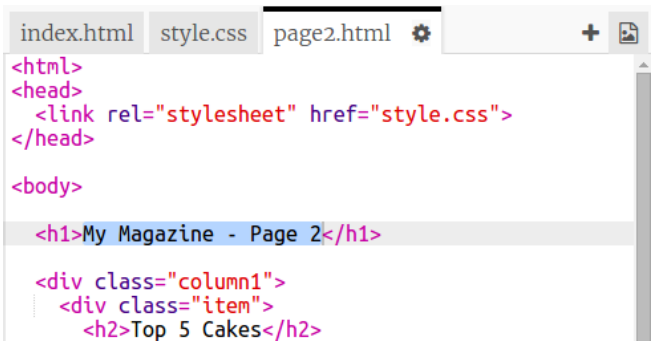
- Add a new page to your project and name it `page2.html`:

- Page 2 will be quite similar to the first page of your magazine so you can copy the html from `index.html` and paste it into `page2.html`.



Notice that both pages use the same `style.css` so they will share styles.

- Change the `<h1>` title for page2:



- Now you'll need links between your pages so you can get to page 2 and back to the front page.

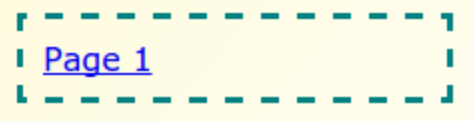
Go back to `index.html`. Add a link inside a div in column 2 in `index.html`:

- Test that you can click on your new link and move to page 2 of your magazine.

Step 7 Challenge: Add a link back to the first page

Can you add a link to `page2.html` so that you can click on it to get back to the first page?

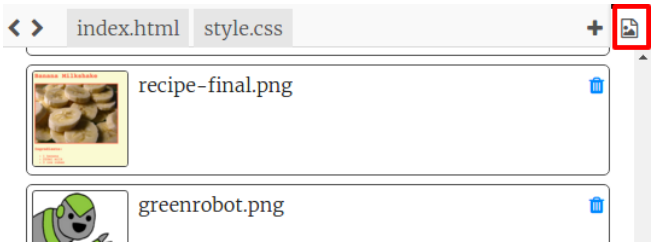
Hint: Look at the HTML you used to create a link to page 2.



Step 8 Challenge: Fill in your second page

Here's the code for the examples, but you can change the `div`s or come up with your own ideas.

Click the images icon to see the images that are available to use:



Remember that you can upload your own images to use. Make sure you have permission to use any images that you upload.

Step 9 Add an animation

Let's add a fun animation to your magazine.

- Go to `index.html` and include the `greenrobot.png` image at the top of your page.

- Now add the CSS to animate your robot:

```
#greenrobot {
  height: 100px;
  position: absolute;
  left: -200px;
  animation: slide 10s infinite;
}
```

Step 10 Challenge: Add another animation

Can you add an animation to the second page of your magazine?