



# Projects

## Recipe

Create a webpage of your favourite recipe, so that your friends can make it!

HTML / CSS



### Step 1 Introduction

In this project, you'll learn how to create a webpage for your favourite recipe.

#### Banana Milkshake



#### Ingredients:

- 1 banana
- 250ml milk
- 3 ice cubes

#### Additional information for club leaders

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



Club leader notes

## Introduction:

In this project, children will learn about HTML lists and CSS colours. They will create their own recipe, adding ingredient and method lists.

## Online Resources

We recommend using **trinket** (<https://trinket.io/>) to write HTML & CSS online.

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

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

- **'Recipe' Finished – trinket.io/html/c0fd9b40cd** (<https://trinket.io/html/c0fd9b40cd>)

## 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:

- template/index.html
- template/style.css

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

- recipe-finished/index.html
- recipe-finished/style.css
- recipe-finished/banana.jpg

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

## Learning Objectives

- Writing HTML:
  - `<ul>`, `<ol>` and `<li>` list tags;
  - `<hr/>` tag;
  - Consolidating the use of nested tags.
- Writing CSS:
  - Colours (names & hexadecimal codes).

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

"More ingredients" - adding more items to an unordered list;  
"More steps" - adding more items to an ordered list;  
"More colours" - adding colour names, rgb values and hex codes;  
"Reviews" - adding another unordered list;  
"More styling" - adding images and fonts.

## Completing this project offline

If children are completing this project offline, they'll need to save images they intend to use in the same folder as their Template.html file.

They can then just add the name of the file in their `<img>` tags:

```

```

## Project materials

### Project resources

- **.zip file containing all project resources** (<https://projects-static.raspberrypi.org/projects/recipe/2c63625476a6a250e22d678aeb30060d8f51b271/en/resources/recipe-project-resources.zip>)

- **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/recipe/2c63625476a6a250e22d678aeb30060d8f51b271/en/resources/template-index.html>)
- **template/style.css** (<https://projects-static.raspberrypi.org/projects/recipe/2c63625476a6a250e22d678aeb30060d8f51b271/en/resources/template-style.css>)

### Club leader resources

- **.zip file containing all completed project resources** (<https://projects-static.raspberrypi.org/projects/recipe/2c63625476a6a250e22d678aeb30060d8f51b271/en/resources/recipe-volunteer-resources.zip>)
- **Online completed Trinket project** (<https://trinket.io/html/c0fd9b40cd>)
- **recipe-finished/index.html** (<https://projects-static.raspberrypi.org/projects/recipe/2c63625476a6a250e22d678aeb30060d8f51b271/en/resources/recipe-finished-index.html>)
- **recipe-finished/style.css** (<https://projects-static.raspberrypi.org/projects/recipe/2c63625476a6a250e22d678aeb30060d8f51b271/en/resources/recipe-finished-style.css>)
- **recipe-finished/banana.png** (<https://projects-static.raspberrypi.org/projects/recipe/2c63625476a6a250e22d678aeb30060d8f51b271/en/resources/recipe-finished-banana.png>)

## Step 2 Decide on a recipe

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Before you get coding, you'll need to decide on a recipe.

- Think about a recipe you want to share with your friends. It could be:
  - A recipe you found online;
  - Your favourite meal;
  - Something you made up!

The example recipe you'll see in this project is for a banana milkshake. You can copy this recipe if you can't find one of your own.

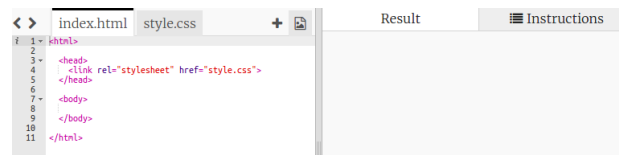
## Step 3 Ingredients

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Let's list the ingredients that are needed for your recipe.

- Open this template trinket: **jump to.cc/html-template** (<http://jump to.cc/html-template>).

The project should look like this:



- For your list of ingredients, you're going to use an **unordered list**, using the `<ul>` tag. Go to line 8 of the template and add this HTML, replacing the text in the `<h1>` title with the name of your own recipe:

```
<h1>Banana Milkshake</h1>
```

```
<h3>Ingredients:</h3>
```

```
<ul>
```

```
</ul>
```

- View your webpage, and you should see your two headings.

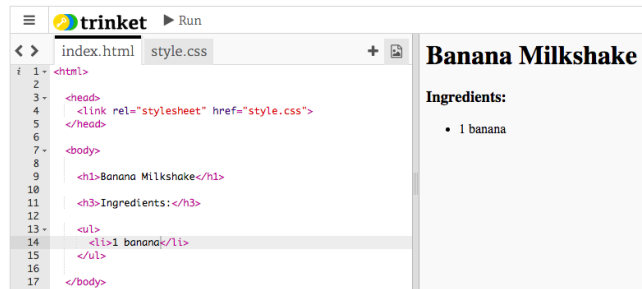
**Banana Milkshake**

**Ingredients:**

You won't see your list yet though, because you haven't added any list items to it!

- The next step is to add list items into your list, by using the `<li>` tag. Add the following code inside your `<ul>` tag:

```
<li>1 banana</li>
```



As your list is unordered, there are no numbers next to the list items, just bullet points.

## Step 4 Challenge: More ingredients

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Can you add all of the ingredients for **your** recipe?

Your webpage should look something like this:

# Banana Milkshake

## Ingredients:

- 1 banana
- 250ml milk
- 3 ice cubes

## Step 5 Method

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Next, let's explain how to make your recipe.

- You're going to use another list to write your method, but this time you'll be using an **ordered list**, by using the `<ol>` tag.

An ordered list is a numbered list, which you should use when the order of the steps is important.

Add this code underneath your ingredients list, making sure that it's still inside your `<body>` tag:

```
<h3>Method:</h3>
```

```
<ol>
```

```
</ol>
```

## Banana Milkshake

### Ingredients:

- 1 banana
- 250ml milk
- 3 ice cubes

### Method:

- Now you just need to add list items into your new ordered list:

```
<li>Peel the banana and add to a blender</li>
```

## Banana Milkshake

### Ingredients:

- 1 banana
- 250ml milk
- 3 ice cubes

### Method:

1. Peel the banana and add to a blender

Notice that the list items are automatically numbered!

## Step 6 Challenge: More steps

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Can you add all of the steps for making **your** recipe?

Your method should look something like this:

### Banana Milkshake

#### Ingredients:

- 1 banana
- 250ml milk
- 3 ice cubes

#### Method:

1. Peel the banana and add to a blender
2. Add the milk and ice cubes to the blender
3. Turn on the blender for 30 seconds
4. Drink!

## Step 7 Colours!

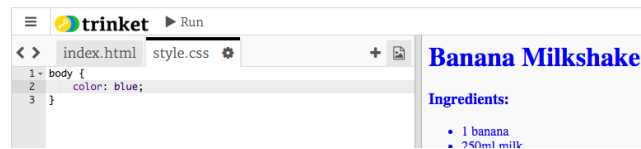
---

Let's add some colour to your recipe webpage.

- You've already learnt how to add coloured text to a webpage. Add this code inside your `style.css` file, to make all of the text in the website body blue:

```
body {  
    color: blue;  
}
```

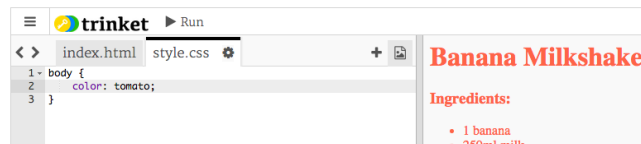




- Your browser knows colours like **blue**, **yellow** and even **lightgreen**, but did you know that your browser actually knows the **names** of over 140 different colours?

There's a list of all the colour names you can use: [jump.to/cc/colours](http://jump.to/cc/colours) (<http://jump.to/cc/colours>), which includes colour names like **tomato**, **firebrick** and **peachpuff**.

Change the text colour from **blue** to **tomato**.



- Your browser knows the names of 140 colours, but actually knows the **colour values** of more than 16 million colours!

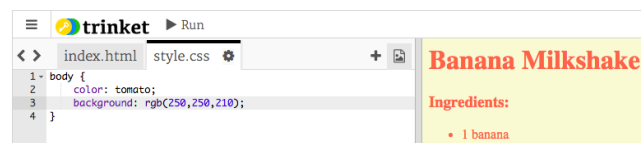
To tell the browser which colour to display, you just need to let it know how much red, green and blue to use.

The amounts of red, green and blue are written as a number between **0** and **255**.

Red Green Blue  
 ↓       ↓       ↓  
**background: rgb(250,250,210);**

Add this code to the CSS for the body of the webpage, to display a light yellow background:

**background: rgb(250,250,210);**

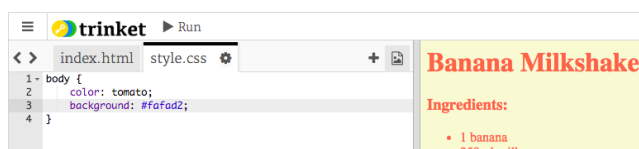


- If you prefer, you can tell the browser which colour to display by using a hexadecimal code (or **hex code**). This works in a similar way to the `rgb()` code above, except that hex codes always start with a `#`, and use hexadecimal 'numbers' between `00` and `ff` for the amount of red, green and blue.

Red   Green   Blue  
  
**background: #fafad2;**

Replace the `rgb()` code in your CSS with this hex code:

```
background: #fafad2;
```

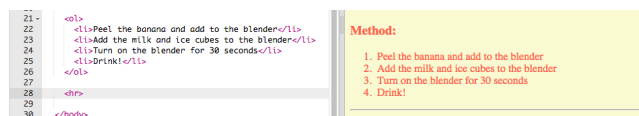


You should see the same light yellow as before!

## Step 8 Finishing touches

Let's add a little more HTML and CSS to improve your webpage.

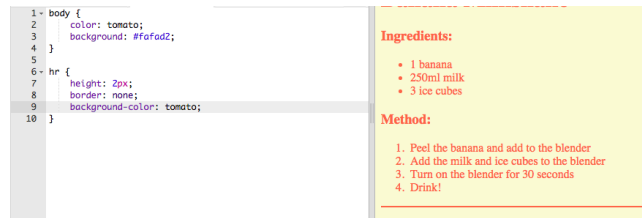
- You can add a horizontal line at the end of your recipe, by using the `<hr>` tag.



Notice that this tag doesn't have an end tag, just like the `<img>` tag.

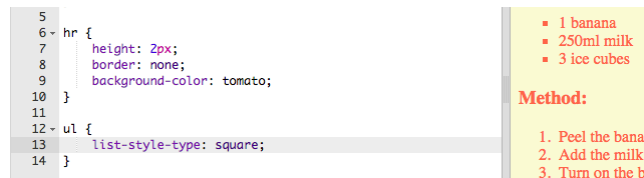
- The line you've just added doesn't match the style of the rest of your webpage. Let's fix that by adding some CSS code:

```
hr {
  height: 2px;
  border: none;
  background-color: tomato;
}
```



- You can even change how your bullet points look with this CSS code:

```
ul {
  list-style-type: square;
}
```



## Step 9 Challenge: More colours!

Change the colours in your code by using colour names, `rgb()` values and hex codes. There's a list of loads of colours at [jump.to/cc/colours](http://jump.to/cc/colours) (<http://jump.to/cc/colours>), or you can go to [jump.to/cc/colour-picker](http://jump.to/cc/colour-picker) (<http://jump.to/cc/colour-picker>) and create your own colours!

Here are some example colours:

- Red can be written as:
  - `red` (obviously!)
  - `rgb(255, 0, 0)` (loads of red, no green and no blue)
  - `#ff0000`

- Olive can be written as:
  - `olive`
  - `rgb(128, 128, 0)` (a bit of red and green, and no blue)
  - `#808000`

Try to make sure that the colours you use match your recipe!

## Step 10 Challenge: Reviews

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Ask a few of your friends to leave a review for your recipe. You'll need to make another list to do this.

### Reviews:

- Marcus: this was really simple to make - 9/10
- Adeel: ok, but another banana would improve the flavour - 7/10

## Step 11 Challenge: More styling

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Can you add an image into your webpage? Or change the font? Here's how your webpage could look:

## Banana Milkshake



### Ingredients:

- 1 banana
- 250ml milk
- 3 ice cubes

Here's some code that will help you:

```
font-family: Arial / Comic Sans MS / Courier /  
Impact / Tahoma;  
font-size: 12pt;  
font-weight: bold;  
  

```

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**View project & license on GitHub** (<https://github.com/RaspberryPiLearning/recipe>)