CSS Trials

Before you are a series of CSS layout tasks, increasing in order of difficulty. For this exercise, recreate the layout presented in the screenshot of each task in separate HTML documents.

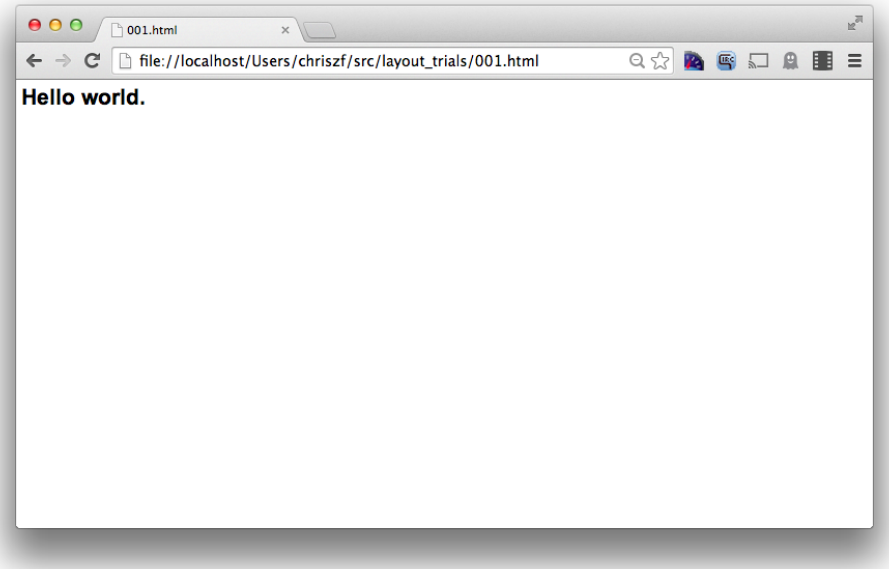
- Trial 01 - Hello World
- Trial 02 - The Red DIV
- Trial 03 - The Flag
- Trial 04 - Neighboring Boxes
- Trial 05 - Mixing and Matching
- Trial 06 - Mixing and Mixing
- Trial 07 - Vertical Aligning
- Trial 08 - Margins, Padding, and Borders

Setup

```
$ hbget css-trials
```

Trial 1: Hello World

This is the simplest of tasks. We'll start with a basic 'hello world' as the heading of the page. In setting this up, make sure you have all the necessary tags to be valid HTML.



Expected Tags

- html
- head
- style
- body
- h1

Expected CSS Styles

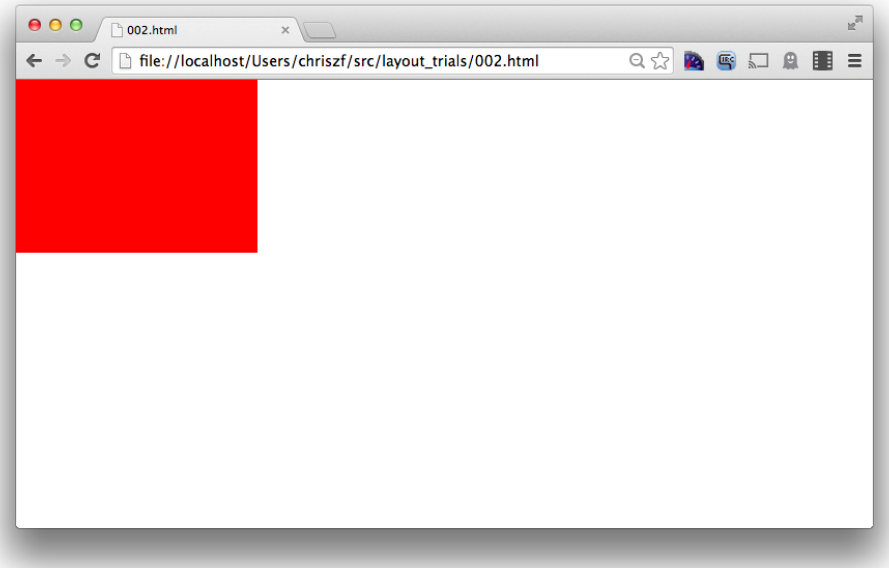
- font-family

Style Notes

- Pay attention to the font in the screenshot.

Trial 2: The Red Div

For our purposes, the div is the basic unit of layout in HTML. To make it really useful, we first need to bend it to our will. The first steps towards that are fixing it in size, shape and color. Place a basic red div on your page.



Expected Tags

- html
- head
- style
- body
- div

Expected CSS Styles

- margin
- height
- width
- background-color

Style Notes

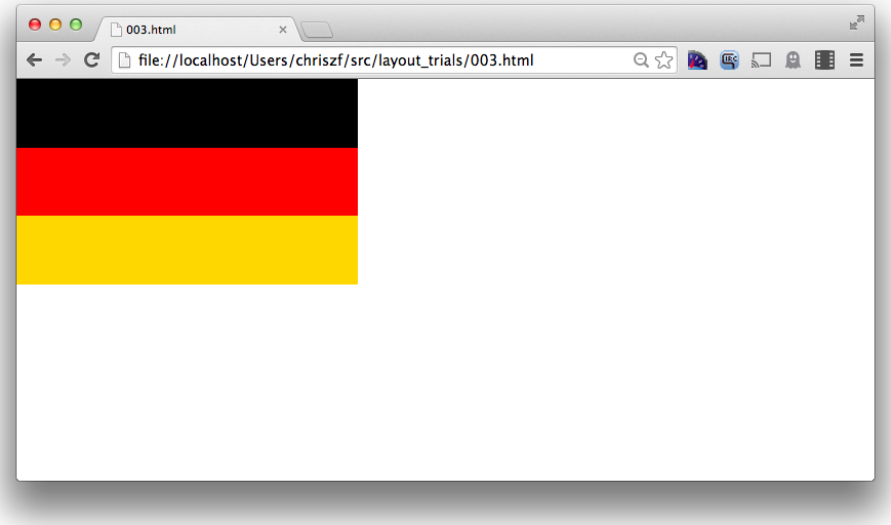
- The background color of the div is a solid red, ***#ff0000*** in hex.

Layout Notes

- The dimensions of the div are 350px by 240px.
- Notice that the div is flush against the window's edge. Try to match that. (Hint: use the inspector tool in your browser to find out why it's not flush to begin with.)

Trial 3: The Flag

As a block element, the natural behavior of the div is to stack on top of other block elements. We'll abuse this behavior to create a German flag.



Expected tags

- html
- head
- style
- body
- div

Expected CSS Styles

- margin
- height
- width
- background-color

Style notes

- The top bar is black.
- The middle bar is red.
- The bottom bar is 'gold', ***#ffd700*** in hex.

Layout notes

- Each of the bars is the same thickness.
- The width of the flag is 500px.
- The height of the flag is 300px.

General notes

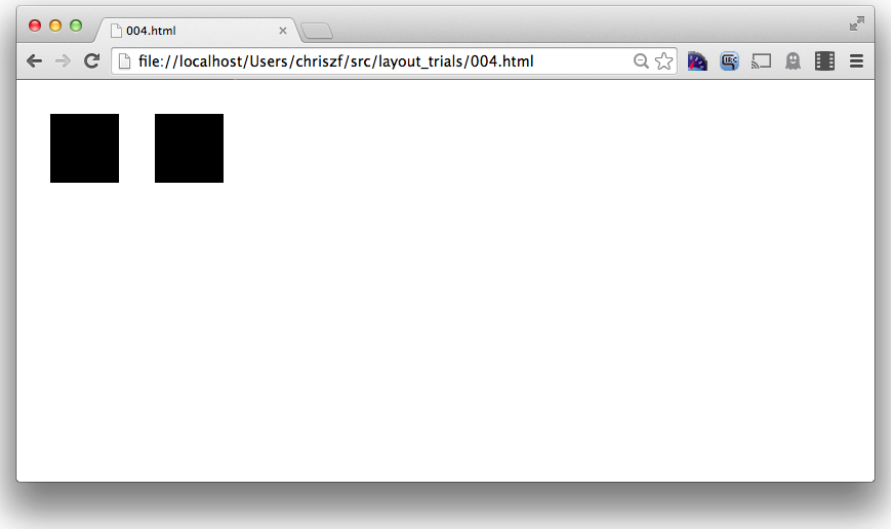
You will want to do some research about ***class*** and ***id*** selectors.

Trial 4: Neighboring Boxes

Given the previous exercise, it is unnatural to force divs to stack up next to each other horizontally. However, 'inline' elements such as spans do this naturally, but refuse to allow us to change their size and shape.

We can get the best of both worlds by marking an element as an ***inline-block***. This gives us an element we can reshape but stacks horizontally instead of vertically against other inline elements by default.

Use this CSS property to make two adjacent boxes.



Expected tags

- html
- head
- style
- body
- div

Expected CSS styles

- display: inline-block
- background-color
- margin

Layout notes

- The boxes are 100px square.

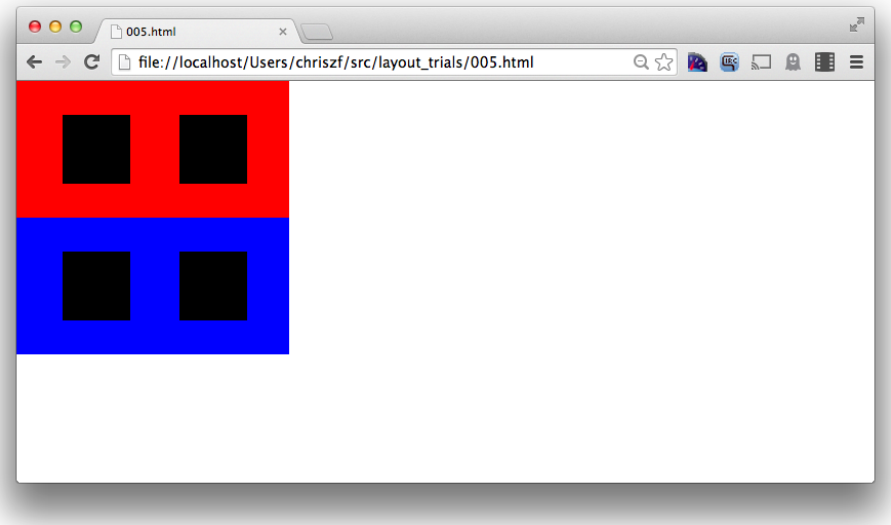
- There are 50px between the boxes and anything else.

Trial 5: Mixing and Matching

We're going to mix and match both the horizontal and vertical stacking behavior in this exercise.

Using divs, create two vertically stacked divs. Inside each of these divs, place two horizontally adjacent divs.

As you do this, use the CSS margin to make sure things are evenly spaced.



Expected tags

- html
- head
- style
- body
- div

Expected CSS styles

- display: inline-block
- margin-top
- margin-left

Style notes

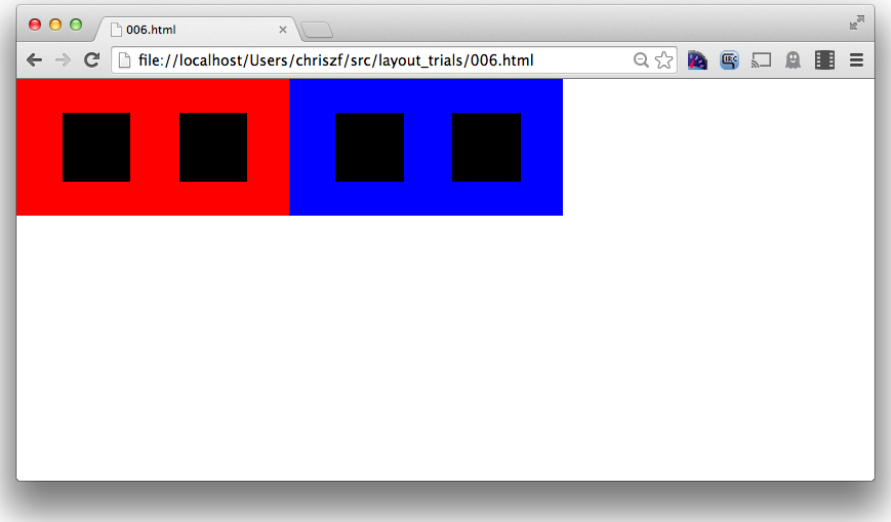
- The top bar is red.
- The bottom bar is blue.
- The inner boxes are black.

Layout notes

- The two vertically stacked bars are 350px by 200px.
- The inner boxes are all 100px by 100px.
- The inner boxes are evenly spaced from the edges of the outer boxes.

Trial 6: Mixing and Mixing

We're doing basically the same thing as before, but this time, everything is horizontal.



Expected tags

- html
- head
- style
- body
- div

Expected CSS styles

- display: inline-block
- margin-top
- margin-left

Style notes

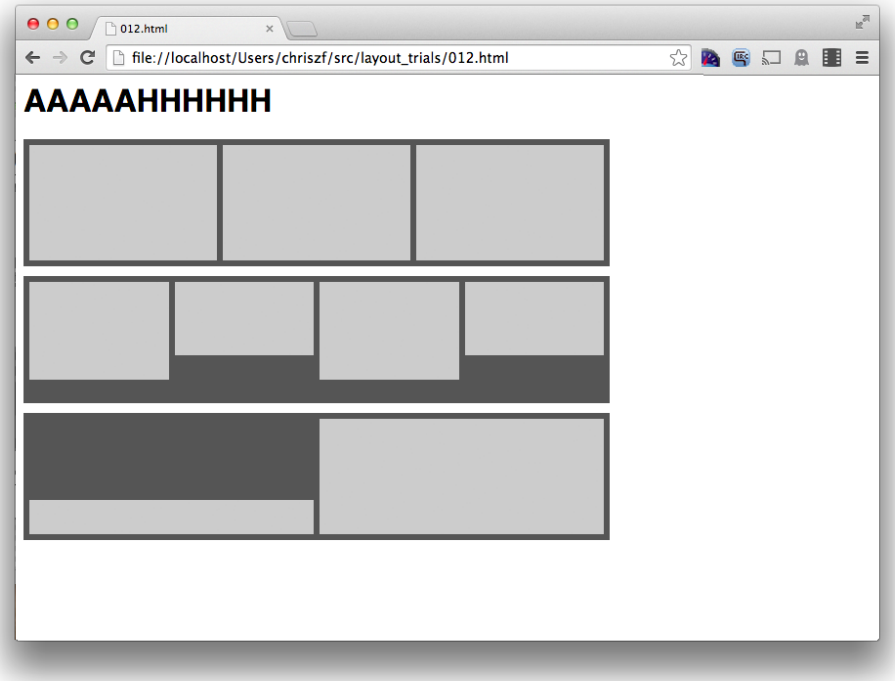
- The left bar is red.
- The right bar is blue.
- The inner boxes are black.

Layout notes

- The two horizontally stacked bars are 350px by 200px.
- The inner boxes are all 100px by 100px.
- The inner boxes are evenly spaced from the edges of the outer boxes
- **Important!** In our screenshot, there is no gap between the left and the right bar. image out how to do this. (Hint: this is not a CSS problem.)

Trial 7: Vertical Aligning

Here's a challenge with all the layout techniques you've seen so far, and a new one, ***vertical-align***.



Expected CSS Styles

- vertical-align

Style Notes

- The dark background boxes are dark gray, ***#555555*** in hex.
- The foreground boxes light gray, ***#cccccc*** in hex.

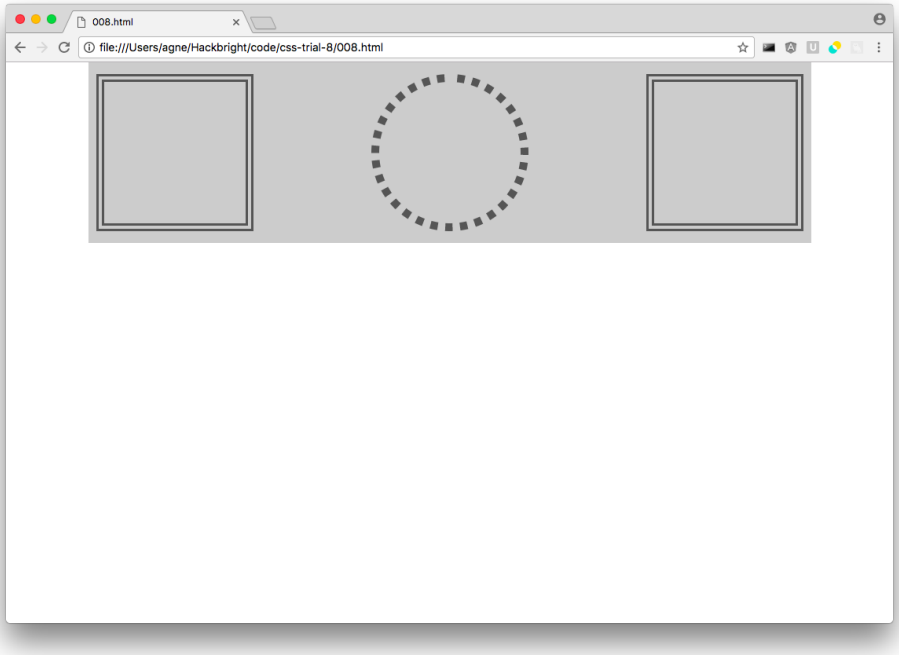
Layout Notes

- The background boxes are 130px high and 600px wide.
- The background boxes have a 10px margin between them.
- The inner boxes are divided as evenly across the horizontal width as possible and have a 6px margin between them.
- The middle row of boxes alternate between 100px and 75px in height.
- The box on the bottom left is 35px high.

Try using percents instead of pixel widths. Which do you prefer? When would you want to use pixels over percentages and vice versa?

Trial 8: Margins, Padding, and Borders

Now let's work with borders and more advanced margins.



Expected CSS Styles

- border
- margin
- padding

Style Notes

- The background container is light gray, ***#cccccc*** in hex.
- The borders are dark gray, ***#555555*** in hex.

Layout Notes

- The background container is 200px high, 900px wide, and centered horizontally.
- The container has 15px padding on top and bottom and 10px padding to the right and left.
- All three shapes inside the container are 180px by 180px.
- The shapes have borders that are 10px wide and no fill.
- The circle's border is dotted, while the squares have a double border.
- The shapes are horizontally justified (the circle is equidistant to each square).

Hint: Need help making a circle?

▼ *Click to hide*

If you set a border radius on a `<div>`, like this:

```
div {
  border-radius: 50%;
}
```

Your `<div>` will become a circle as long as its width equals its height.

Done?

If you have time, head on over to the further study.