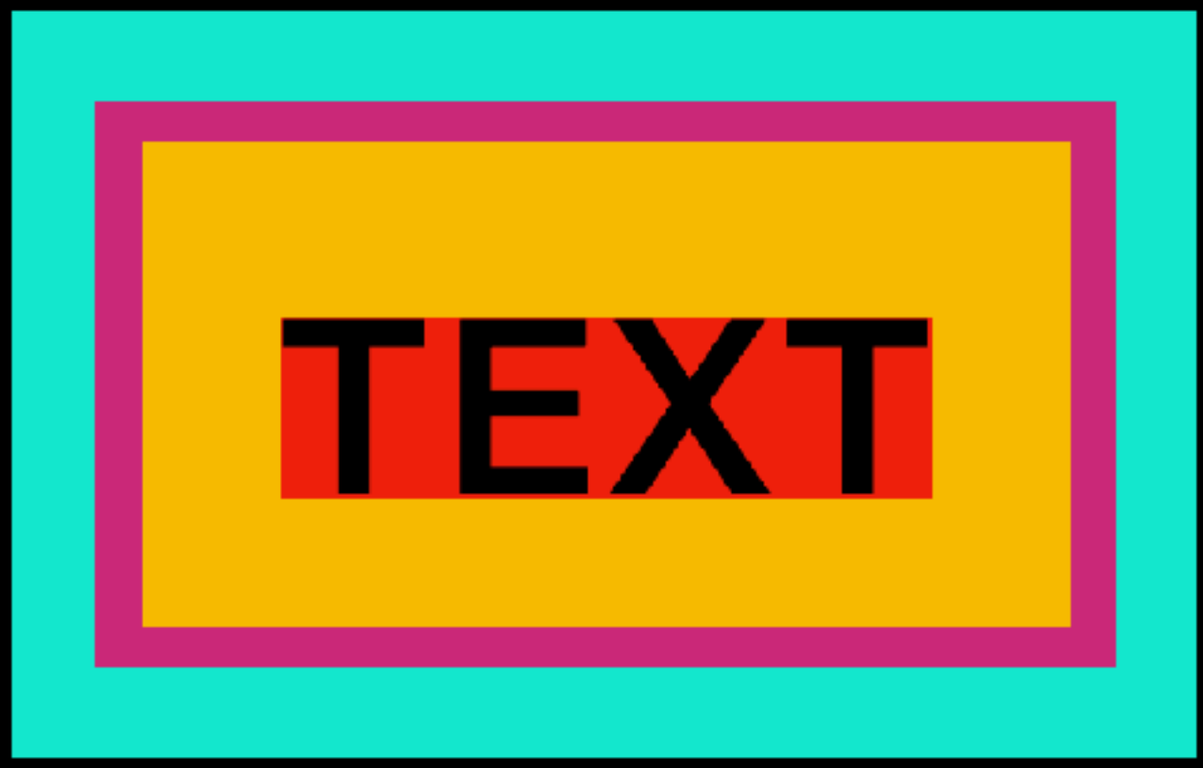
the Box Model

Border

All boxes have borders even if invisible or 0px wide. It separates the edge of one box from another.

Padding

Padding is the space btw the border + any content contained within it. More padding increases the readability of its contents.



Margin

Margins sit outside the edge of the border. You can set the width to create a gap btw borders of adjacent boxes.

Content

Display Property

```
display: none;   —- html elements default visible

                 —- override default html position
display: inline;
display: block;

          —- responsive way to deal with positioning
display: flex;
display: grid;
```

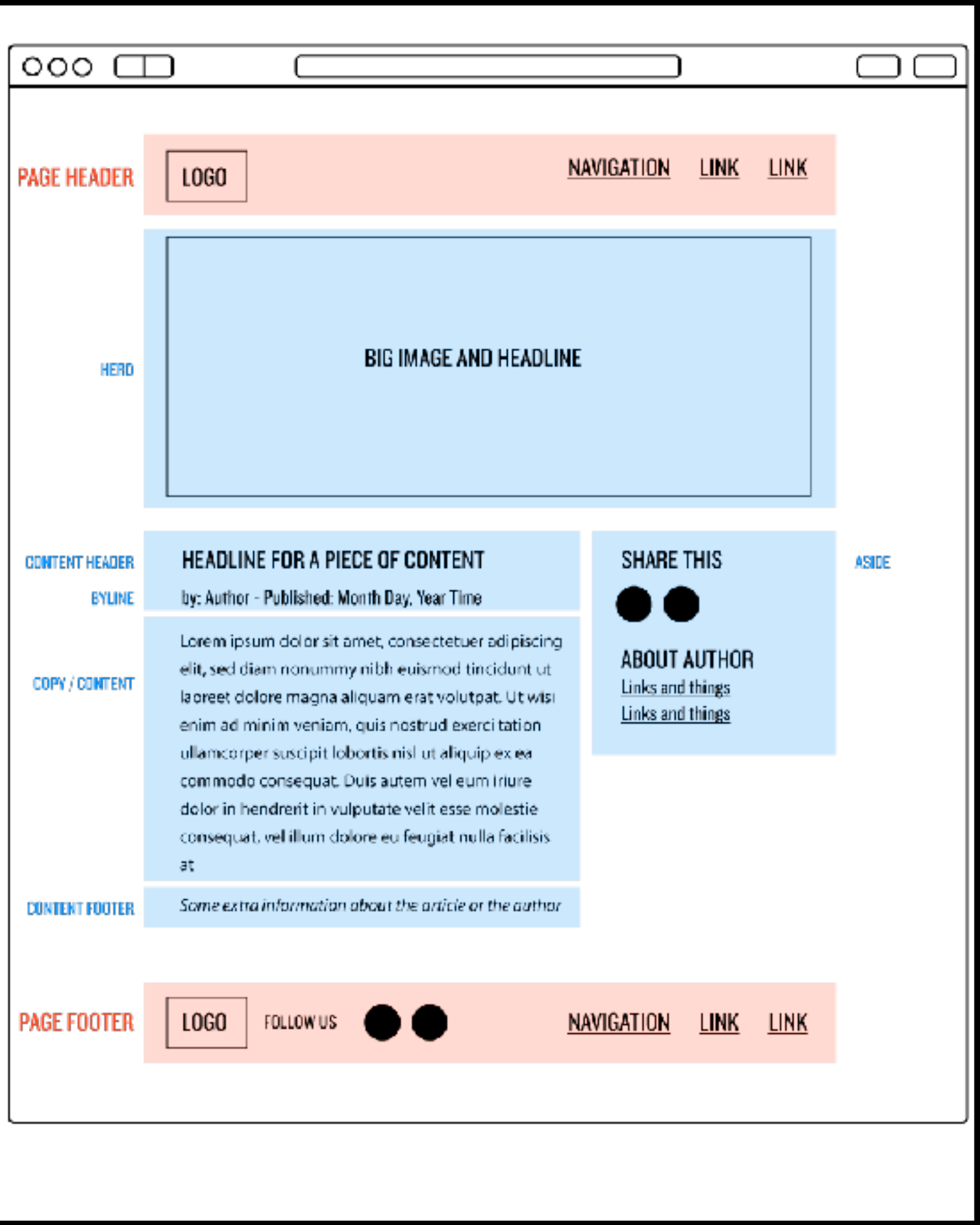
Overriding Default Display

Changing an inline element to a block element, or vice versa, can be useful for making the page look a specific way, and still follow the web standards.

```
li {
    display: inline;
}

span {
    display: block;
}
```

Note: Setting the display property of an element only changes how the element is displayed, NOT what kind of element it is. So, an inline element with display: block; is not allowed to have other block elements inside it.

css layout



— Learn Enough CSS + Layout

So basically up until now I've instructed to do things a particular way. Bc w/ html, git, unix, etc there is only one way to do something (or a piece of software over the process). W/ CSS - there is no "right" answer. When designing websites many solutions to yr problem will exist - which means subjective judgment is the rule rather than the exception.

— Learn Enough CSS + Layout

You have to get used to the idea that no site is going to be exactly the same when viewed by different people. You'll learn to design (or implement other people's designs) in a way that allows room for CSS's inherent ambiguity. Unlike the tightly constrained world of print design, getting things to look exactly the same in every browser and on every operating system is just something you have to give up worrying about.

— Learn Enough CSS + Layout

VIEWPORT WIDTH // VIEWPORT HEIGHT

- Use units **vh** and **vw** to set height and width to the percentage of the viewport's height and width, respectively

- 1vh = 1/100th of the viewport height
- 1vw = 1/100th of the viewport width

```
div {
   width:10vw;
   height: 10vw;
 }
```

responsive text

The text size can be set with a "vw" unit, which means the "viewport width".

That way the text size will follow the size of the browser window.

```
div {
 font-size:10vw;
 }
```

Media Queries

the @media rule tells the browser to include a block of CSS properties only if a certain condition is true.

So this:

```
@media only screen and (max-width: 500px)  {
    body {
        background-color: light blue;
    }
}
```

Translates to:

```
if (the maximum width of the web page is 500 pixels) {
        then do this stuff
}
```

Mobile-first! (Images)

```
/* For width smaller than 400px: */
body {
    background-image: url(‘void_newspaper.jpg’);
}

/* For width 400px and larger: */
@media only screen and (min-width: 400px) {
    body {
        background-image: url('void.jpg');
    }
}
```

responsive

"A pixel is not a pixel"

— Peter Paul Koch

“If the pixel density of the output device is very different from that of a typical computer display, the user agent should rescale pixel values. It is recommended that the pixel unit refer to the whole number of device pixels that best approximates the reference pixel. It is recommended that the reference pixel be the visual angle of one pixel on a device with a pixel density of 96dpi and a distance from the reader of an arm's length.” — w3 consortium

```
<!
—  - Tells the browser to match the device's width for the viewport
    - Sets an initial zoom value -->

<meta name="viewport" content="width=device-width, initial-scale=1.0”>
```

<!- Moving forward this line of code should be in EVERY web page you author. —>

<meta name="viewport" content="width=device-width, initial-scale=1.0”>

without

with

flex display

Flex Basics

Flex layouts are composed of:

a **Flex container**, which contains one or more:

Flex item(s)

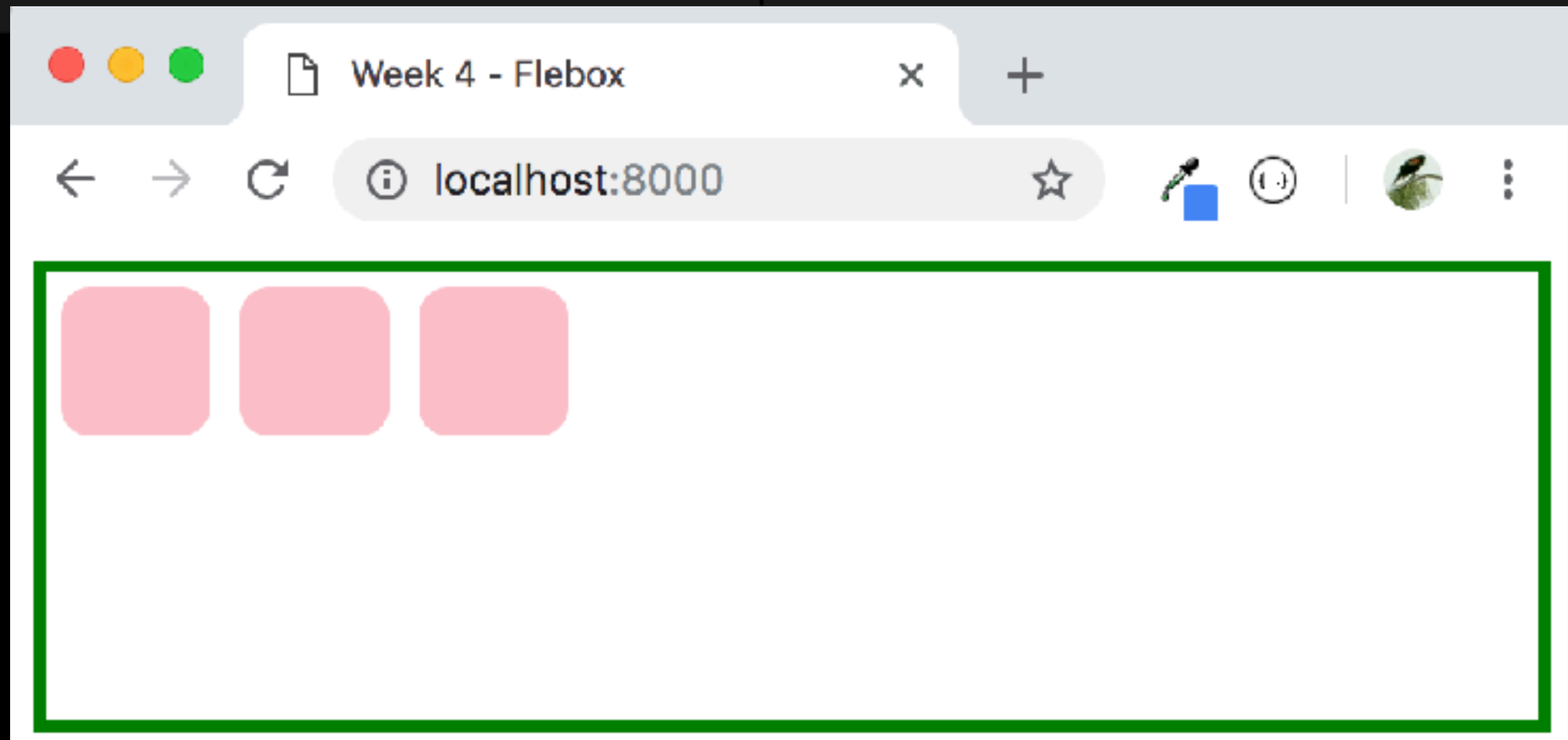
To make an element a flex container, change display:

- Block container: display: flex;
- Inline container: display: inline-flex;

Flex Basics

```
</head>

<body>

    <div id="flexBox">
     <div class="flexThing"></div>
     <div class="flexThing"></div>
     <div class="flexThing"></div>

    </div>
</body>
```

```
#flexBox {
    display: flex;
    border: 4px solid Green;
    height: 150px;
}

.flexThing {
    border-radius: 10px;
    background-color: pink;
    height: 50px;
    width: 50px;
    margin: 5px;
}
```



Flex Basis

Flex items have an initial width*, which, by default is either:

- The content width, or
- The explicitly set **width** property of the element, or
- The explicitly set **flex-basis** property of the element

This initial width* of the flex item is called the **flex basis**.

The explicit width of a flex item is respected **for all flex items**, regardless of whether the flex item is inline, block, or inline-block.*

*width in the case of rows; height in the case of columns

flex-shrink

The width* of the flex item can automatically shrink **smaller** than the **flex basis** via the **flex-shrink** property:

flex-shrink:

- If set to **1**, the flex item shrinks itself as small as it can in the space available
- If set to **0**, the flex item does not shrink.

Flex items have **flex-shrink**: **1 by default**.

*width in the case of rows;
height in the case of columns

flex-grow

The width* of the flex item can automatically **grow larger** than the **flex basis** via the **flex-grow** property:

flex-grow:

- If set to **1**, the flex item grows itself as large as it can in the space remaining
- If set to **0**, the flex item does not grow

Flex items have **flex-grow**: **0 by default**.

*width in the case of rows;
height in the case of columns

Look

Per US Department of Defense dictionary of Military and Associated Terms:

"A period during which a mine circuit is receptive of influence."