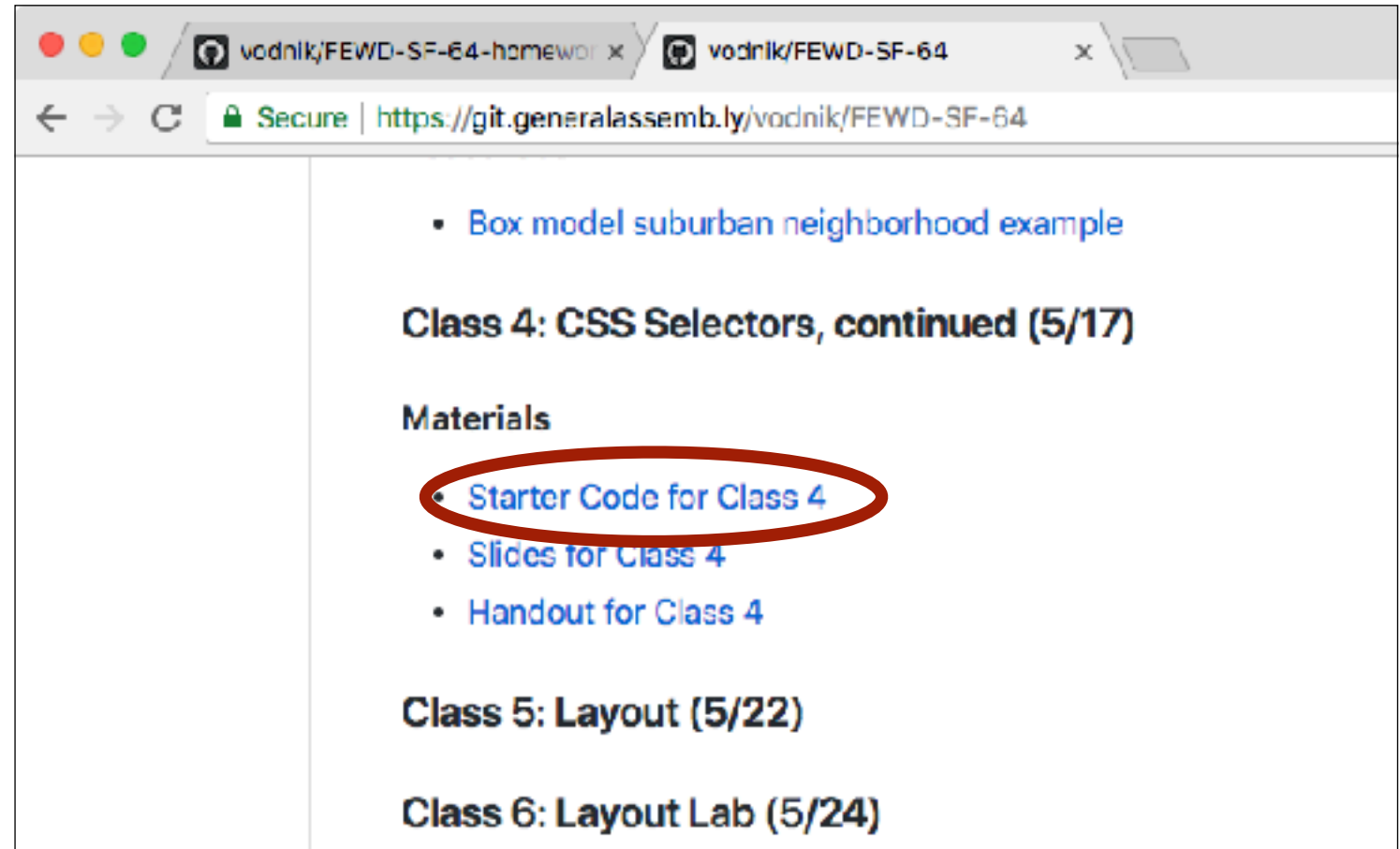


## HELLO!

- ▶ Go to the [class repo on GitHub Enterprise](#)
- ▶ Click the **Starter Code for Class 5** link to download the files
- ▶ Move the downloaded file to your FEWD folder
- ▶ Unzip the files



# LAYOUT

---

## WEEKLY OVERVIEW

---

### WEEK 3

Layout & Grid Systems / Layout Lab

### WEEK 4

Responsive Design / CSS Positioning

### WEEK 5

Forms / Final Project Lab

# LEARNING OBJECTIVES

- Differentiate between block and inline elements
- Create multi-column layouts with flexbox
- Describe a grid system
- Use classes to set up modular, multi-column layouts

---

# AGENDA

---

Review

CSS Specificity

Display

Flexbox & Multi-column Layouts

Monument Lab

# **EXIT TICKET QUESTIONS**

1. Besides anchor elements, what other children don't inherit their parent's properties?

---

---

# **HOMEWORK REVIEW**

---

# ACTIVITY

---



## EXERCISE

### **KEY OBJECTIVE**

---

- Review Monument blog and show off your work

### **TYPE OF EXERCISE**

---

- Groups of 3-4

### **TIMING**

---

*6 min*

1. Open Monument blog sites on laptops and display them proudly!
2. Give feedback to your peers: "I like" and "I wish/wonder"
3. Share a challenge you ran into in your project and discuss how other group members may have worked with it.



# ACTIVITY

---



## EXERCISE

### KEY OBJECTIVE

---

- Review final project ideas

### TIMING

---

*1 min*

1. Share your final project idea in the #homework channel on Slack

## ACTIVITY — REVIEW

---

- ▶ When would you want to use a **class** and when would you want to use an **id**?
- ▶ What are three ways we could select these anchors in our CSS?

```
<header>
  <h1><a href="">Nested Selectors</a></h1>
  <nav class="main-nav">
    <a href="">Home</a>
    <a href="">About</a>
    <a href="">Contact</a>
    <a href="">Blog</a>
  </nav>
</header>
```

# WHY IS CSS “CASCADING”?

---

**ADVANCED CSS**

---

# **SPECIFICITY GAME!!!**

---

## MORE ABOUT CASCADING — GENERAL TO MORE SPECIFIC

---

### SPECIFICITY:

The *more specific rule*  
will take precedence over  
the more general rule

General

Inheritance

Element selectors

Classes

IDs

Specific

Descendant  
Selectors

---

## CSS CASCADING — THE SPECIFICITY GAME

---

- ▶ If multiple style rules are targeted at the same element, which style will be applied?
- ▶ We can calculate the specificity of the selectors to find out!
- ▶ The styles for the more specific selector are the styles that will be applied.

```
p a {  
    font-size: 50px;  
}  
  
a {  
    font-size: 30px;  
}
```

---

## CSS CASCADING — THE SPECIFICITY GAME

---

TO CALCULATE SPECIFICITY,  
TAKE A LOOK AT THE ENTIRE "SELECTOR  
CHAIN"

```
  |  
p a {  
    font-size: 50px;  
}
```

---

## CSS CASCADING — THE SPECIFICITY GAME

---

If you have conflicting styles under the “p a” selector and the “a” selector... who will win?

p a                      a





---

## CSS CASCADING — THE SPECIFICITY GAME

---

Use a chart like this to calculate the specificity to find out!



# CSS CASCADING — THE SPECIFICITY GAME

2 ELEMENTS

```
p a {  
  font-size: 50px;  
}
```

IDs

0

Classes

0

Elements

2

SCORE: 2

# CSS CASCADING — THE SPECIFICITY GAME

1 CLASS

```
.about {  
  font-size: 50px;  
}
```

IDs

0

Classes

1

Elements

0

**SCORE: 10**

# CSS CASCADING — THE SPECIFICITY GAME

**ID**    **ELEMENT**

```
#about a {  
  font-size: 50px;  
}
```

IDs

1

Classes

0

Elements

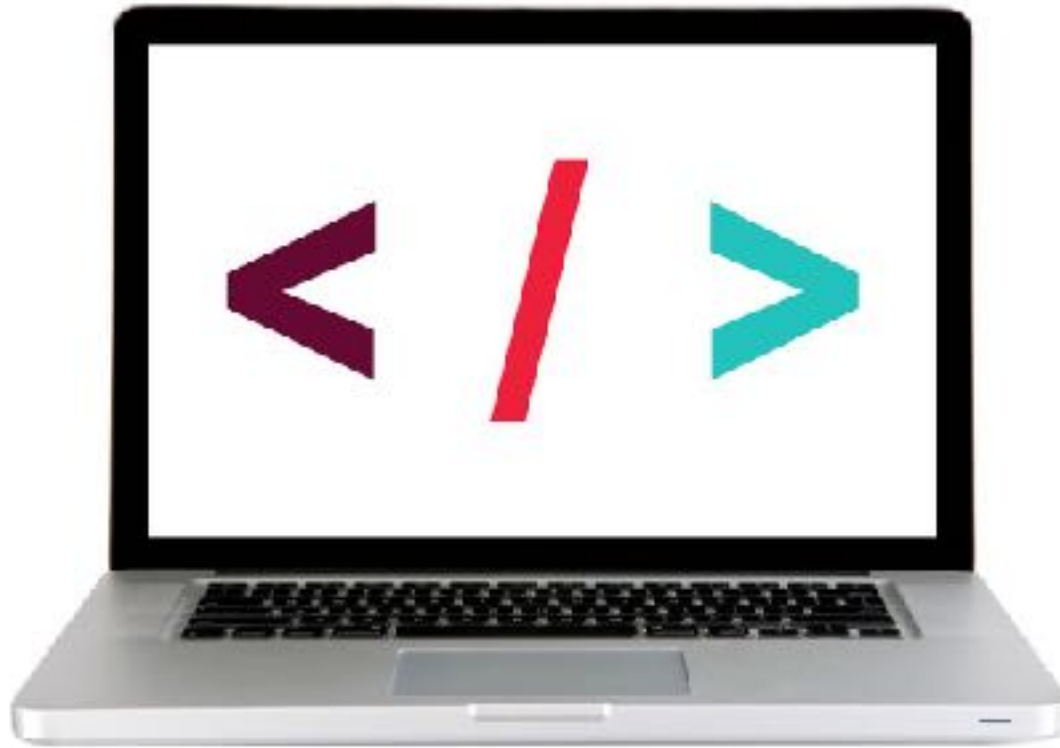
1

**SCORE: 101**

---

## DEMO: HOW MANY CLASSES TO OVERRIDE AN ID?

---



<https://codepen.io/svodnik/pen/PegwzR?editors=1100#0>

---

## CSS CASCADING — THE SPECIFICITY GAME

---

Write this down!

IDs

Classes

Elements

---

## CSS CASCADING — THE SPECIFICITY GAME

---

POLL: *Will the font-size for the anchor be 50px or 30px?*

**HTML:**

```
<p>Visit my <a href="#">Website</a></p>
```

**CSS:**

```
p a {  
    font-size: 50px;  
}  
  
a {  
    font-size: 30px;  
}
```

---

## CSS CASCADING — THE SPECIFICITY GAME

---

p a

IDs

Classes

Elements

0

0

2

**WINNER!**

a

IDs

Classes

Elements

0

0

1



---

## CSS CASCADING — THE SPECIFICITY GAME

---

POLL: *Will the font-size for the anchor be 50px or 30px?*

**HTML:**

```
<p>Visit my <a href="#">Website</a></p>
```

**CSS:**

```
p a { /* Score: 2 */  
    font-size: 50px;  
}
```

```
a { /* Score: 1 */  
    font-size: 30px;  
}
```

---

## CSS CASCADING — THE SPECIFICITY GAME

---

POLL: *Will the anchor with the class home be pink or blue?*

**HTML:**

```
<nav id="main-nav">
  <a href="#" class="home">Home</a>
  <a href="#">About</a>
  <a href="#">Resume</a>
</nav>
```

**CSS:**

```
#main-nav a {
  color: pink;
}

.home {
  color: blue;
}
```

---

## CSS CASCADING

---

**#main-nav a**

IDs	Classes	Elements
1	0	1

**.home**

IDs	Classes	Elements
0	1	0

**WINNER!**

---

## CSS CASCADING — THE SPECIFICITY GAME

---

POLL: *Will the anchor with the class home be pink or blue?*

**HTML:**

```
<nav id="main-nav">
  <a href="#" class="home">Home</a>
  <a href="#">About</a>
  <a href="#">Resume</a>
</nav>
```

**CSS:**

```
#main-nav a { /* Score: 101 */
  color: pink;
}
```

```
.home { /* Score: 10 */
  color: blue;
}
```

---

## MORE ABOUT CASCADING — GENERAL TO MORE SPECIFIC

---

### SPECIFICITY:

The *more specific rule*  
will take precedence over  
the more general rule

General

Inheritance

Element selectors

Classes

IDs

Specific

Descendant  
Selectors

---

**ADVANCED CSS**

---

# LAST RULE

---

## CSS CASCADING — THE SPECIFICITY GAME

---

POLL: *Will the anchor have an underline or no underline?*

**HTML:**

```
<li>  
  <p>Visit this <a href="#">cool</a> site.</p>  
</li>
```

**CSS:**

```
li a { /* Score: 2 */  
  text-decoration: underline;  
}  
  
p a { /* Score: 2 */  
  text-decoration: none;  
}
```

---

## LAST RULE

---

li a

p a

IDs

Classes

Elements

0

0

2

IDs

Classes

Elements

0

0

2

**TIE?!?**



---

## CSS CASCADING — THE SPECIFICITY GAME

---

POLL: *Will the anchor have an underline or no underline?*

HTML:

```
<li>  
  <p>Visit this <a href="#">cool</a> site.</p>  
</li>
```

CSS:

```
li a { /* Score: 2 */  
  text-decoration: underline;  
}
```

```
p a { /* Score: 2 */  
  text-decoration: none;  
}
```

**TIEBREAKER? LAST RULE WINS!**

---

## CSS CASCADING — THE SPECIFICITY GAME

---

Let's say we switched it...

**HTML:**

```
<li>  
  <p>Visit this <a href="#">cool</a> site.</p>  
</li>
```

**CSS:**

```
p a { /* Score: 2 */  
  text-decoration: none;  
}
```

```
li a { /* Score: 2 */  
  text-decoration: underline;  
}
```

**TIEBREAKER? LAST RULE WINS!**

# ACTIVITY

---



## EXERCISE

### KEY OBJECTIVE

---

- When multiple style rules apply to the same element, how can we figure out which one will be applied?
- How can we apply this principle to allow us to write less CSS in the long run?

### TYPE OF ACTIVITY

---

- Turn and Talk

### TASKS

---

*5 min*

1. Talk with your groups. Have one person write out your responses in Slack.

# THINGS YOU SHOULD USE IF YOU WANT TO BE



---

## INLINE STYLES

---

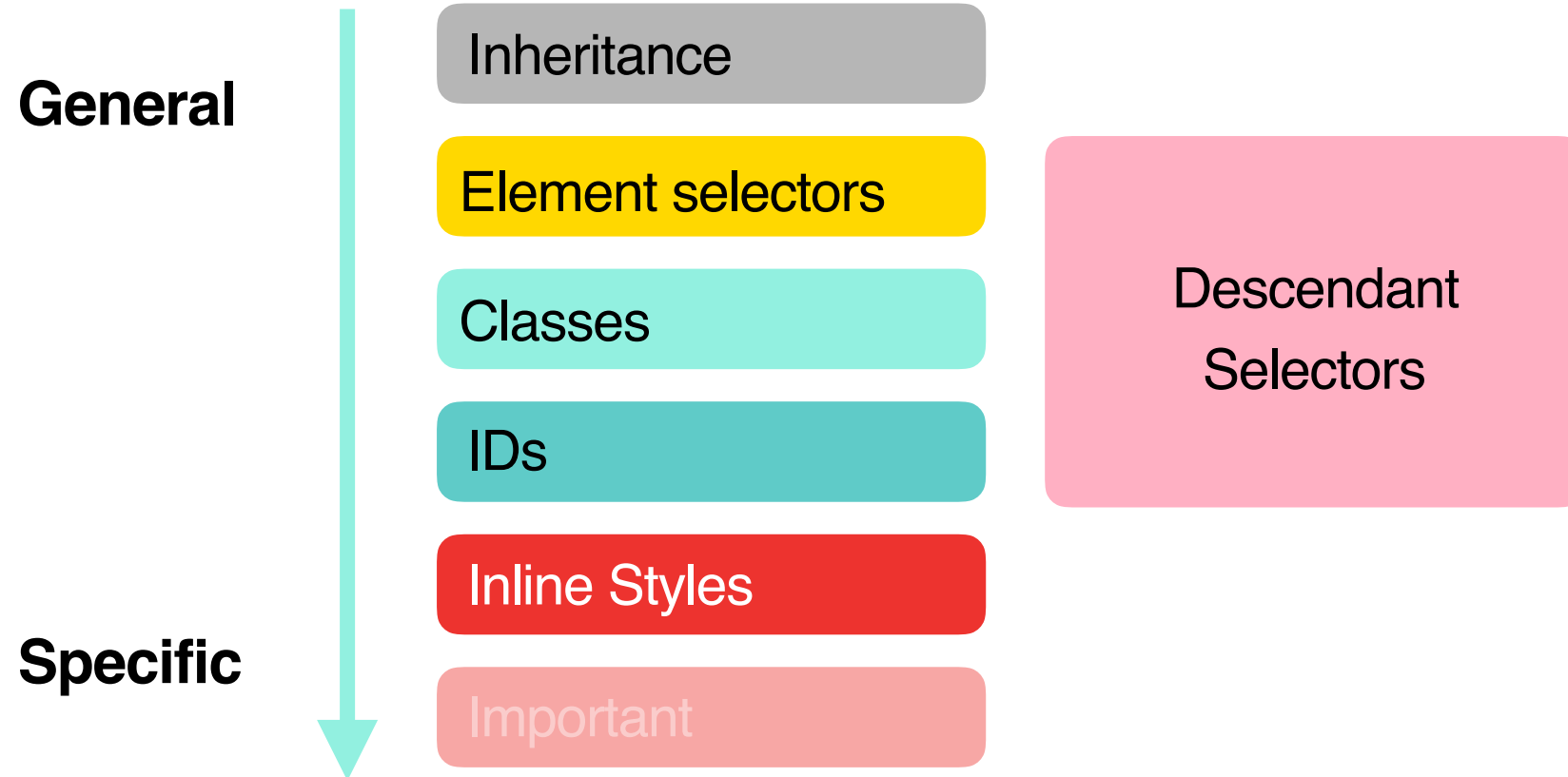
```
<li style="color: red;">Content</li>
```

**BAD!!!!**

---

## MORE ABOUT CASCADING

---



---

## CSS IMPORTANCE

---

Adding **!important** after any property value indicates that it should be considered *more important than other rules that apply to the same element*.

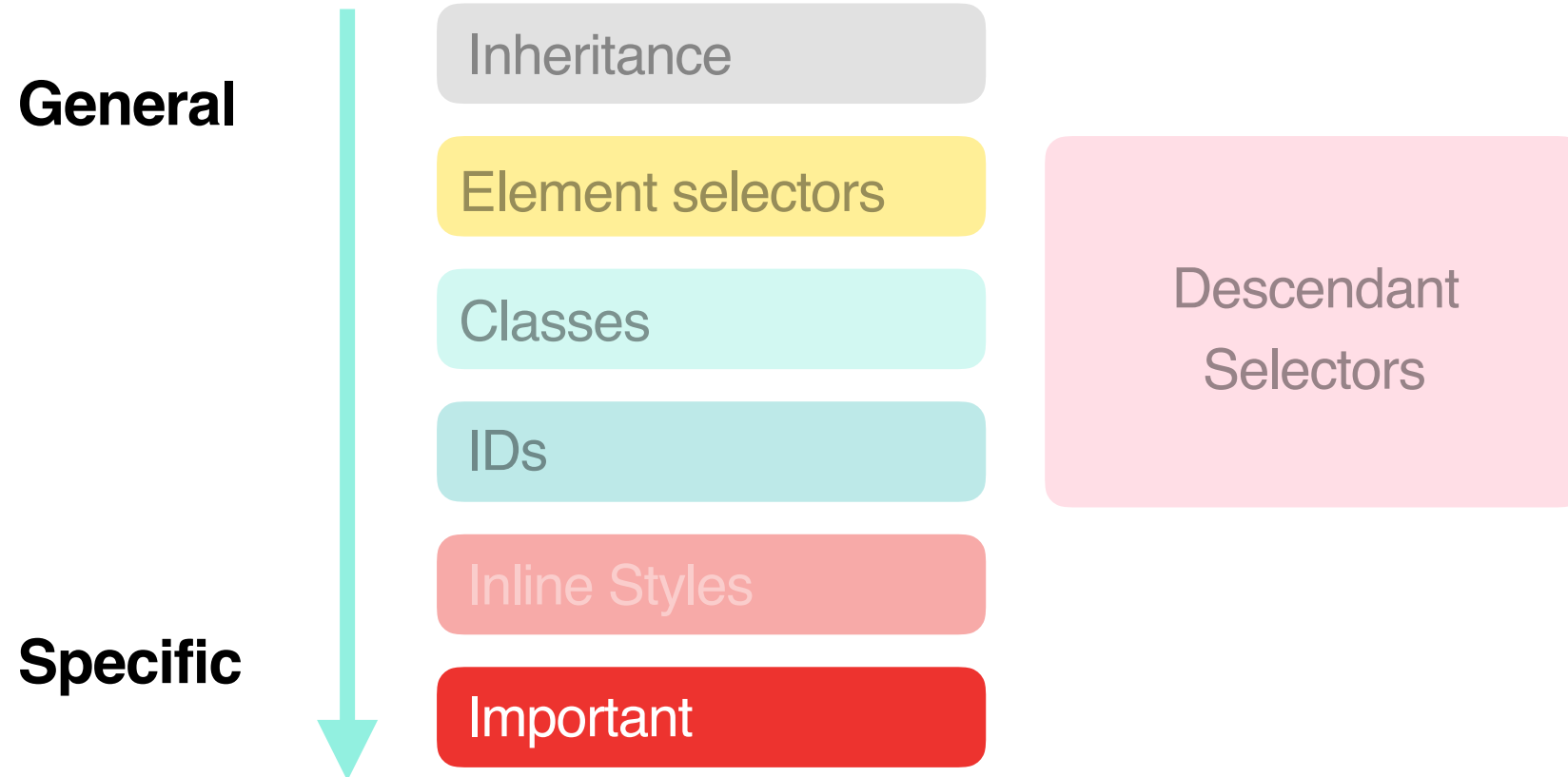
```
li {  
  font-size: 100px !important;  
}
```

**ONLY WHEN NECESSARY!!!**  
**(Which is almost never)**

---

## MORE ABOUT CASCADING

---





---

**FEWD**

---

# HTML ELEMENTS FOR STYLING: DIVS/SPANS

---

## GROUPING TEXT & ELEMENTS

---

### THE <DIV> ELEMENT

- Allows us to group a set of HTML elements together into a box
- We can then style that chunk of HTML

### THE <SPAN> ELEMENT

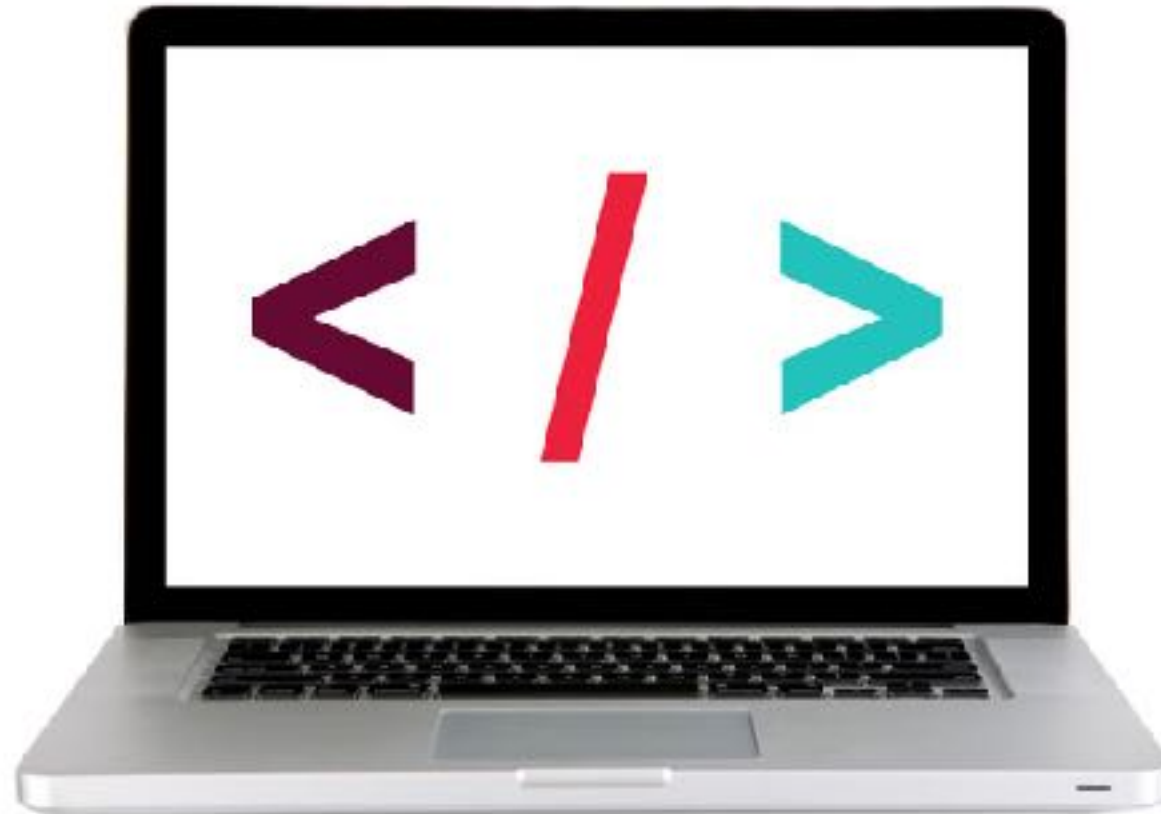
The <span> element acts like the **inline equivalent** of the <div> element. It is used to either:

1. Style one little piece of text within a larger paragraph
2. Contain several inline elements

---

## DIV & SPAN DEMO

---



---

## SEMANTIC TAGS — STRONG, EM

---

ELEMENT	DESCRIPTION	EXAMPLE
strong	Strong Importance	<code>&lt;p&gt;Do &lt;strong&gt;not&lt;/strong&gt; walk&lt;/p&gt;</code>
em	Emphasis	<code>&lt;p&gt;I &lt;em&gt;think&lt;/em&gt; Bill went.&lt;/p&gt;</code>

- Default browser styles: **strong will be bold** and *em will be italic*
- `<em>` indicates emphasis that may *subtly change* the meaning of a sentence:

I *think* John was there

I think *John* was there

---

**FEWD**

---

**DISPLAY**

---

## BLOCK ELEMENTS

---

An **block element** will always start on a new line.

Header

- Sint esse tempor
- 90's fanny pack
- raw denim whatever

Tilde tote bag XOXO, next level sint esse tempor 90's fanny pack raw denim whatever sriracha aliquip taxidermy. Banksy literally laboris, fashion axe Truffaut four loko Tumblr iPhone. Sunt Vice meditation wolf dolor. Typewriter Pitchfork.

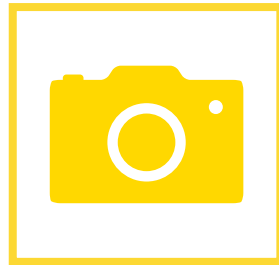
---

## INLINE ELEMENTS

---

An **inline element** does not start on a new line and only takes up as much space as needed.

Tilde tote bag XOXO, next level sint esse tempor 90's  
fanny pack raw denim whatever sriracha aliquip  
taxidermy. Banksy **literally** laboris, fashion axe Truffaut  
four loko Tumblr iPhone. Sunt Vice meditation *wolf* dolor.  
Typewriter [www.Pitchfork.com](http://www.Pitchfork.com).



Banksy literally laboris, fashion axe Truffaut  
four loko Tumblr iPhone. Sunt Vice meditation wolf dolor.  
Typewriter [www.Pitchfork.com](http://www.Pitchfork.com).

---

## DISPLAY

---

You can change whether elements are displayed as inline or block elements by using the **display** property.

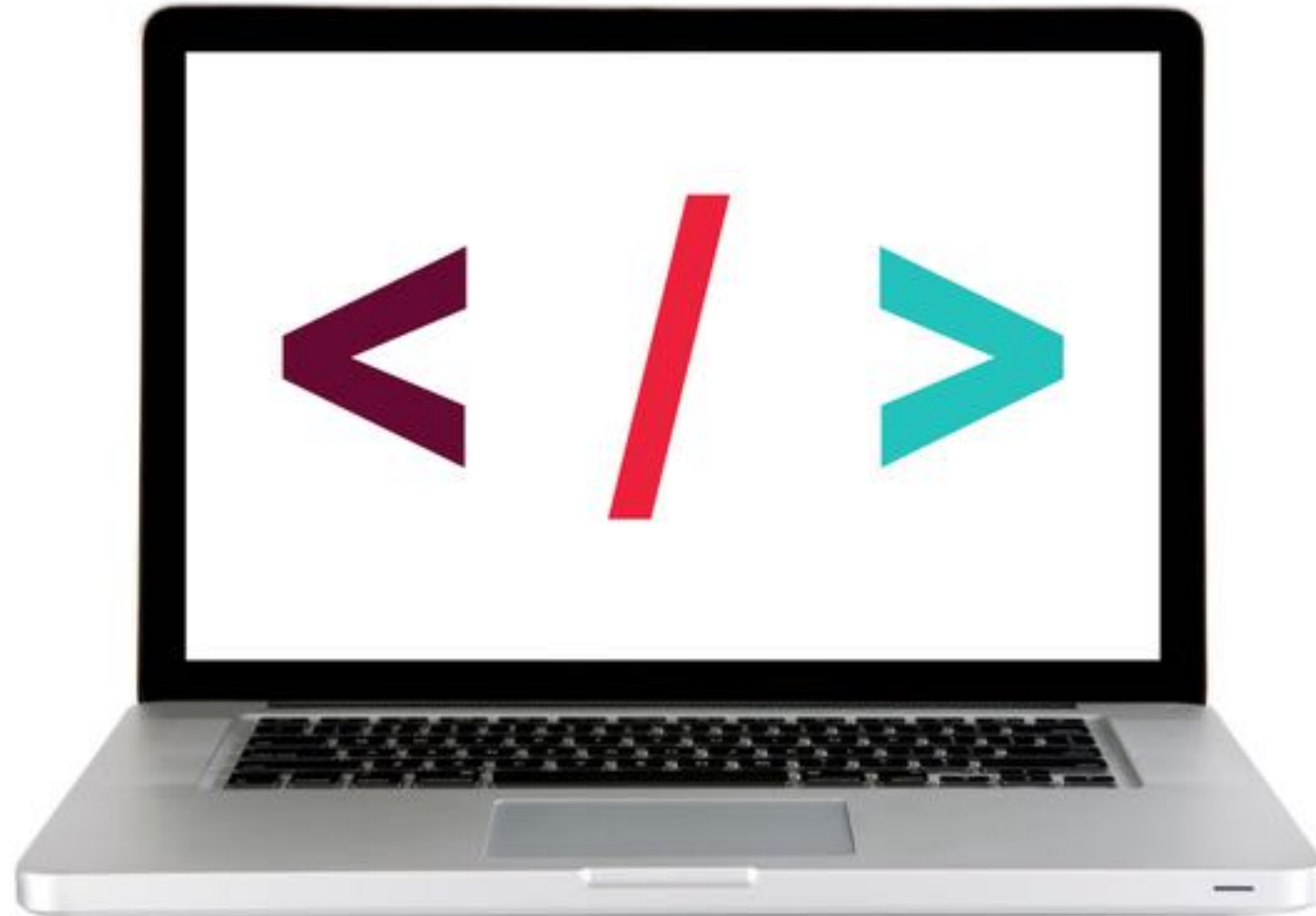
```
li {  
  display: inline-block;  
}
```



---

## DISPLAY DEMO: PART 1 - INLINE VS BLOCK

---

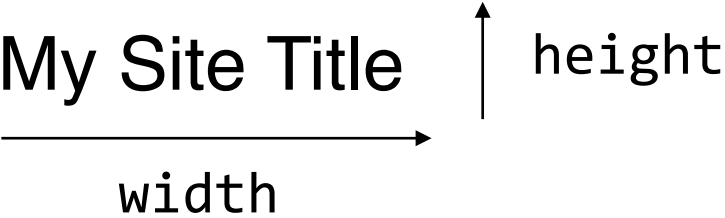


---

# CONTENT

---

My Site Title



A diagram illustrating the dimensions of the text "My Site Title". A horizontal arrow points from the left edge of the text to the right edge, with the word "width" centered below it. A vertical arrow points from the bottom edge of the text to the top edge, with the word "height" centered to its right.

---

# BOX MODEL — BLOCK ELEMENTS

---



---

## DIMENSION – A KEY DIFFERENCE BETWEEN INLINE AND BLOCK

---

If you try to add dimension to an inline element:

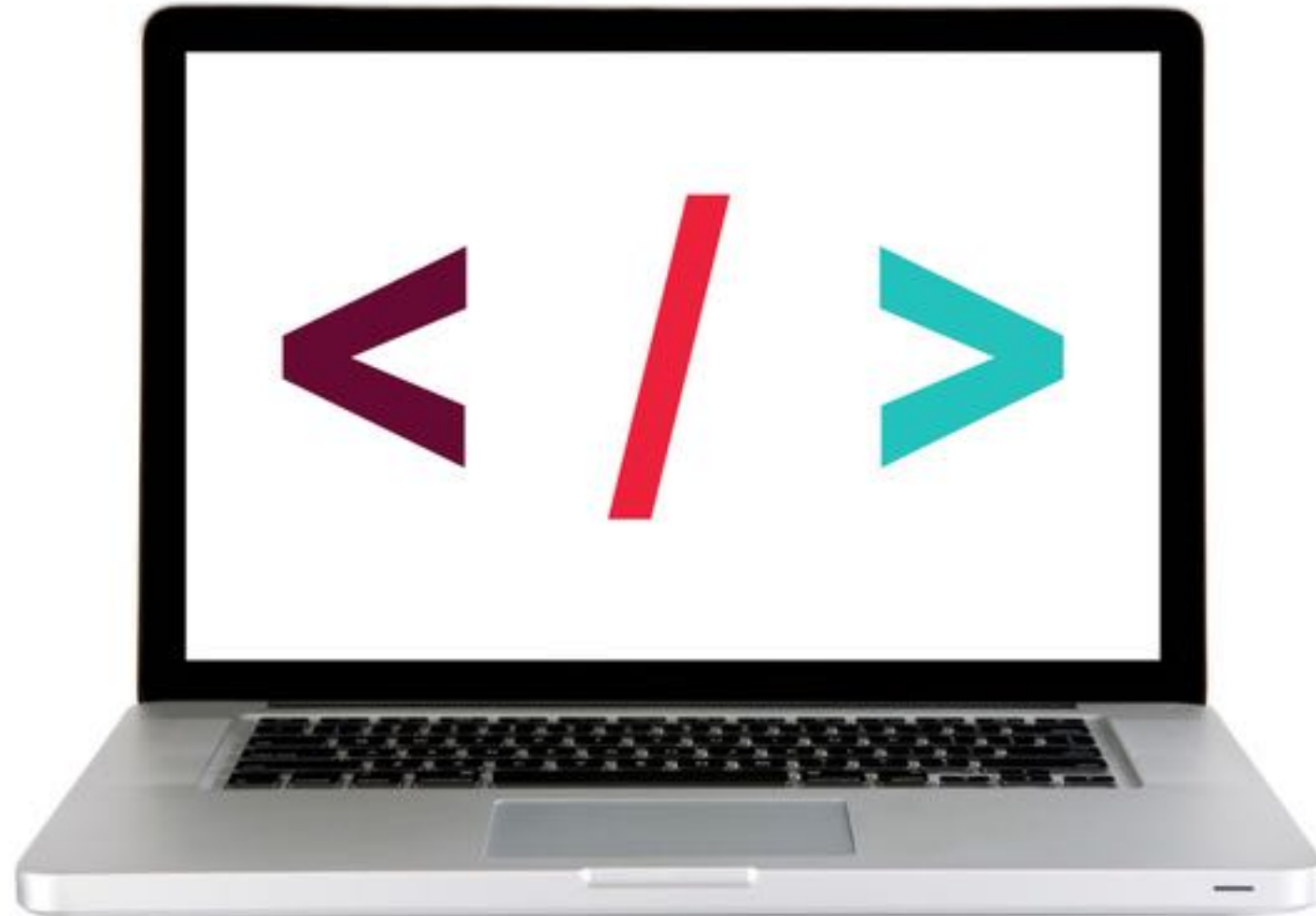
- ▶ Padding and margin will only apply to the *left and right*
- ▶ Width and height will have *no effect*



---

## DISPLAY DEMO: PART 2 – DIMENSION IN INLINE VS BLOCK

---



---

## DISPLAY — INLINE (RARE)

---

To make a block-level element act like an inline element:

### BEFORE:

Monday

Tuesday

Wednesday

```
li {  
  display: inline;  
}
```

Monday

Tuesday

Wednesday

- Elements will sit next to each other
- **Still can't set a width, height, or margin and padding on top and bottom**

---

## DISPLAY — BLOCK

---

Make an inline element act like a block-level element:

### BEFORE:

[Link](#)

[Link](#)

[Link](#)

```
a {  
  display: block;  
}
```

[Link](#)

[Link](#)

[Link](#)

- Elements will stack on top of each other
- We can add all dimensions (width, height, padding, margin)

---

## DISPLAY — INLINE-BLOCK

---

Make a **block** or **inline** element flow like an **inline** element, while allowing us to set a **width**, **height**, **padding**, and **margin**:

### BEFORE:

Monday

Tuesday

Wednesday

```
li {  
  display: inline-block;  
}
```

Monday

Tuesday

Wednesday

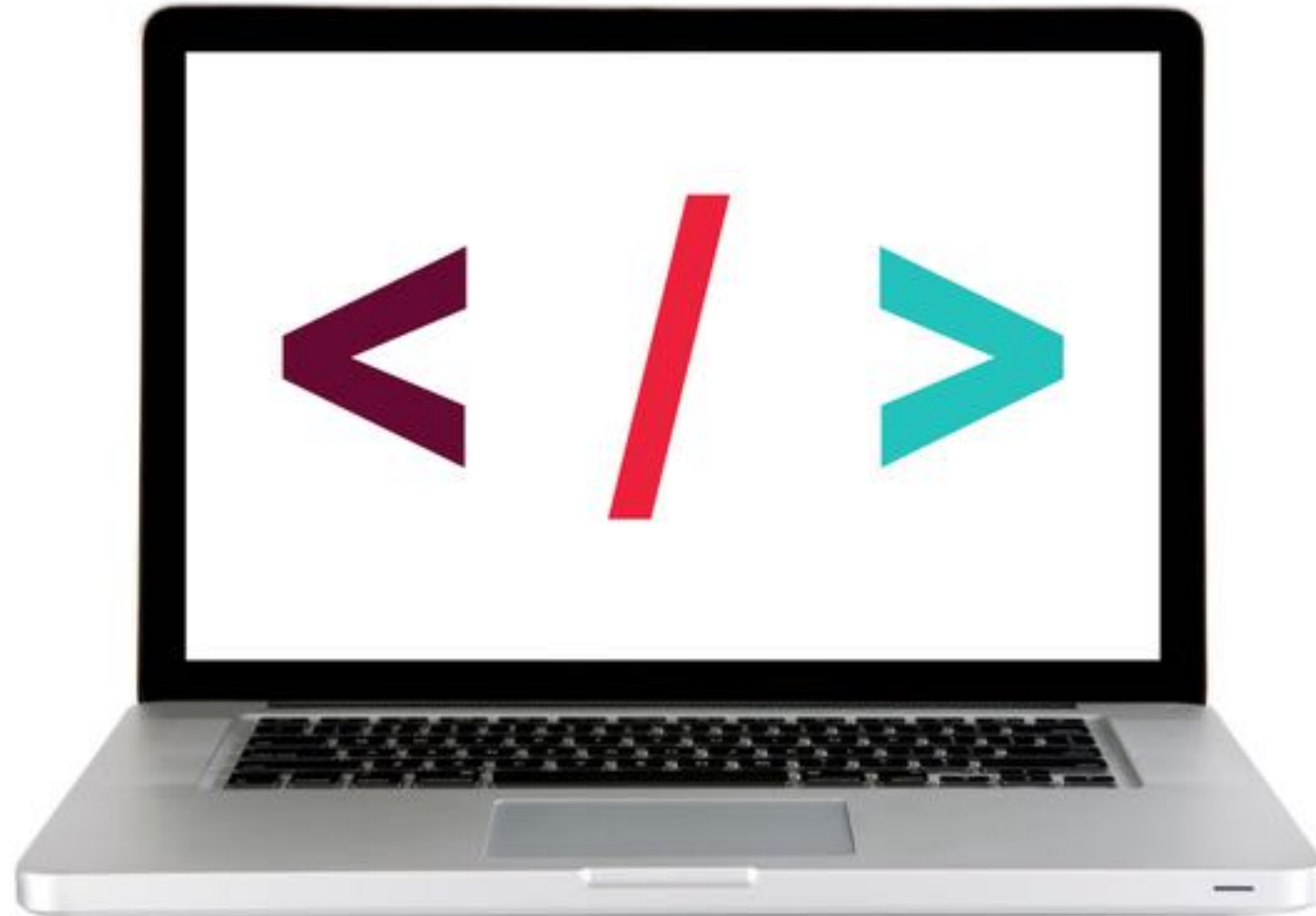
- Elements will sit on a line next to each other
- We can now set a **width**, **height**, and **margin** & **padding** on top and bottom!!



---

## DISPLAY DEMO: PART 3 – INLINE BLOCK

---



---

## DISPLAY — NONE

---

Hide an element from the page:

### BEFORE:

Monday

Tuesday

Wednesday

```
li {  
  display: none;  
}
```

► Elements will be hidden from the page

---

# TEXT-ALIGN

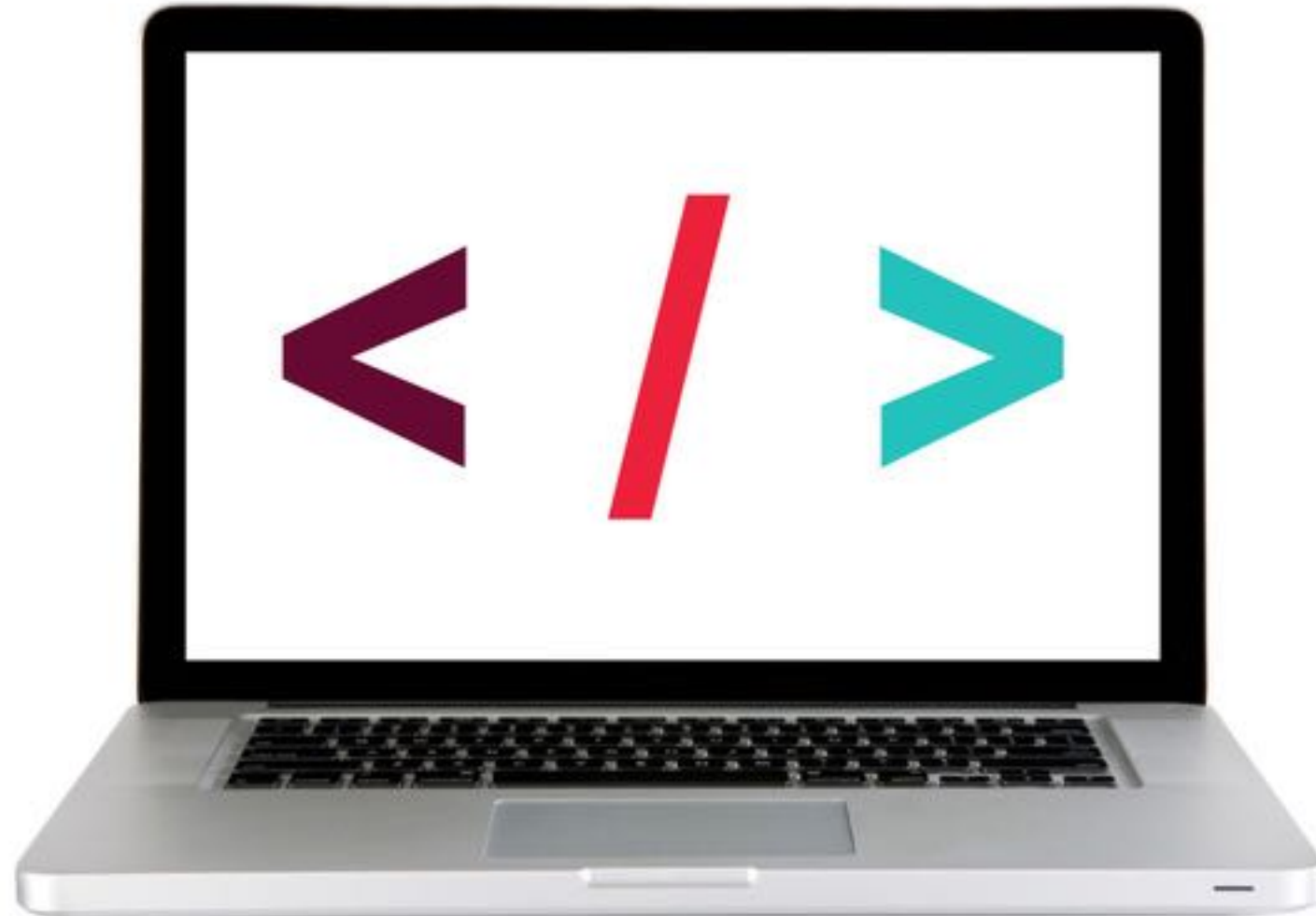
---

	TEXT-ALIGN
BLOCK	yes
INLINE / INLINE-BLOCK	no

---

## DISPLAY DEMO: PART 4 - TEXT-ALIGN

---



---

## ACTIVITY — DISPLAY LAB

---



### EXERCISE

#### **KEY OBJECTIVE**

---

- ▶ Get practice using the `display` property

#### **LOCATION OF FILES**

---

- ▶ starter code > **display\_lab** folder

#### **TIMING**

---

*5 min*

1. Follow the instructions in steps 1-4 in the CSS file

---

**FEWD**

---

**CENTER ALL THE THINGS!**

---

## CENTERING THINGS — TEXT

---

```
<p>  
  <a href="">Home</a>  
  <a href="">About</a>  
  <a href="">Contact</a>  
</p>
```

Set `text-align: center` on parent. This will be inherited by all children.

```
p {  
  text-align: center;  
}
```

---

## CENTERING THINGS — IMAGES AND CONTAINERS

---

### Centering an image:

```
img {  
  display: block;  
  margin: 0 auto;  
}
```

### Centering a block-level element:

```
p {  
  width: 400px;  
  margin: 0 auto;  
}
```



---

**FEWD**

---

# FLEXBOX

---

## WHAT IS FLEXBOX?

---

- Another display property!
- Used to build layouts on your website

---

**FEWD**

---

# **FLEXBOX — HTML STRUCTURE**

---

# WHAT IS FLEXBOX?

---

```
<section>
  <article>
    <h1>Article title</h1>
    <p>Lorem ipsum dolor sit amet.</p>
  </article>
  <article>
    <h1>Article title</h1>
    <p>Lorem ipsum dolor sit amet.</p>
  </article>
  <article>
    <h1>Article title</h1>
    <p>Lorem ipsum dolor sit amet.</p>
  </article>
</section>
```

---

# WHAT IS FLEXBOX?

---

parent wrapper:  
**flex container**

```
<section>
  <article>
    <h1>Article title</h1>
    <p>Lorem ipsum dolor sit amet.</p>
  </article>

  <article>
    <h1>Article title</h1>
    <p>Lorem ipsum dolor sit amet.</p>
  </article>

  <article>
    <h1>Article title</h1>
    <p>Lorem ipsum dolor sit amet.</p>
  </article>
</section>
```

Flex Container



---

# WHAT IS FLEXBOX?

---

direct children:  
**flex items**

```
<section>
```

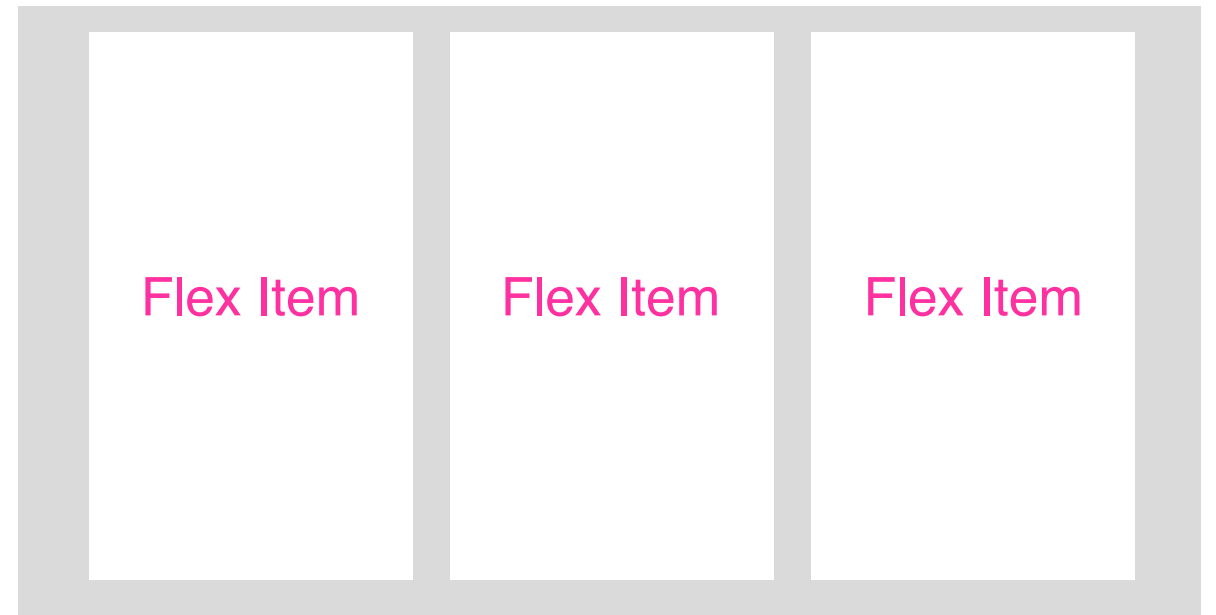
```
<article>  
  <h1>Article title</h1>  
  <p>Lorem ipsum dolor sit amet.</p>  
</article>
```

```
<article>  
  <h1>Article title</h1>  
  <p>Lorem ipsum dolor sit amet.</p>  
</article>
```

```
<article>  
  <h1>Article title</h1>  
  <p>Lorem ipsum dolor sit amet.</p>  
</article>
```

```
</section>
```

Flex Container



---

**FEWD**

---

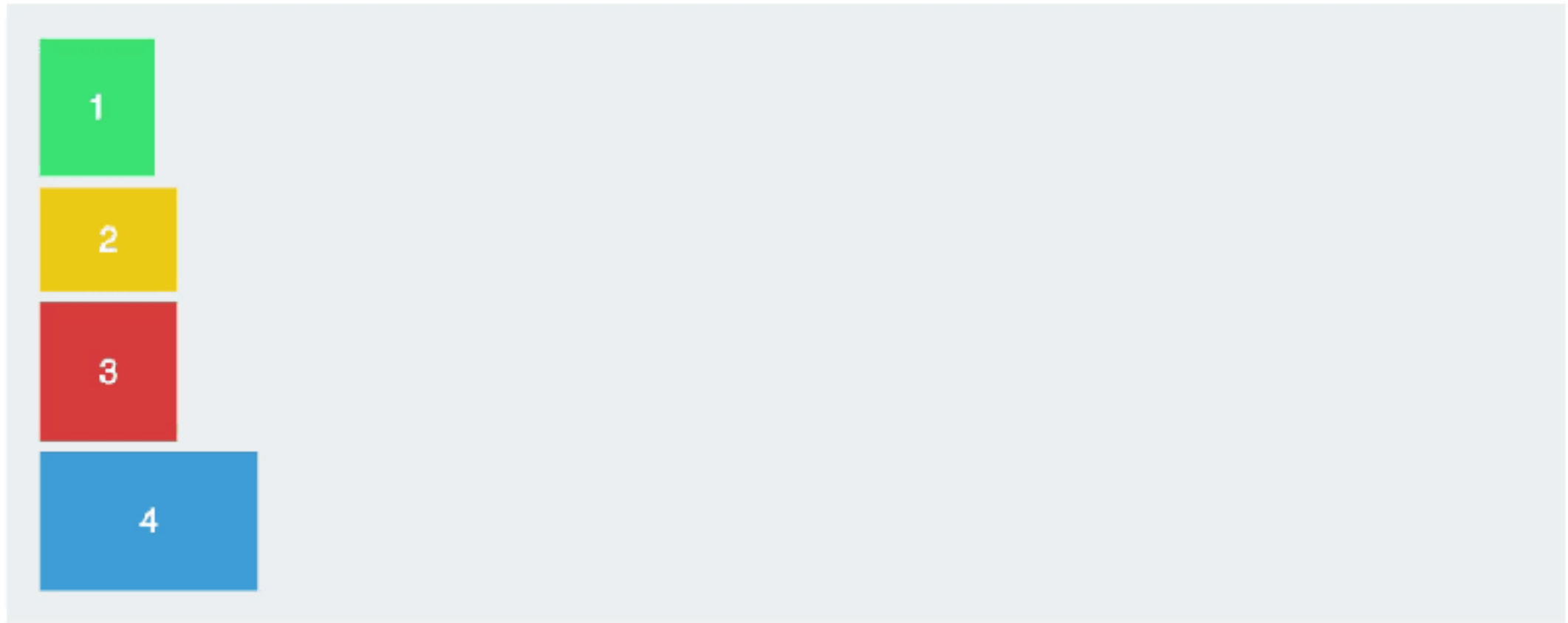
# MULTI-COLUMN LAYOUTS

---

## HOW DOES FLEXBOX WORK – ANIMATION

---

**display: block;**





---

## PARENT WRAPPER (FLEX CONTAINER)

---

In order to get started with Flexbox, you need to make your container into a flex container. This is as easy as:

parent wrapper:  
flex container

```
<section>
  <article>
    ...
  </article>
  <article>
    ...
  </article>
  <article>
    ...
  </article>
</section>
```

```
section {
  display: flex;
}
```

---

## HOW DOES FLEXBOX WORK?

---

By default, items are arranged along the main axis, from left to right. This is why your squares defaulted to a horizontal line once you applied **display: flex**.



---

# WHAT IS FLEXBOX?

---

★ `display: flex;` ★

Flex Container

Flex Item

Flex Item

Flex Item

---

## STEPS TO ACHIEVE A MULTI-COLUMN LAYOUT — CSS

---

### **FLEX CONTAINER:**

- Add `display: flex`

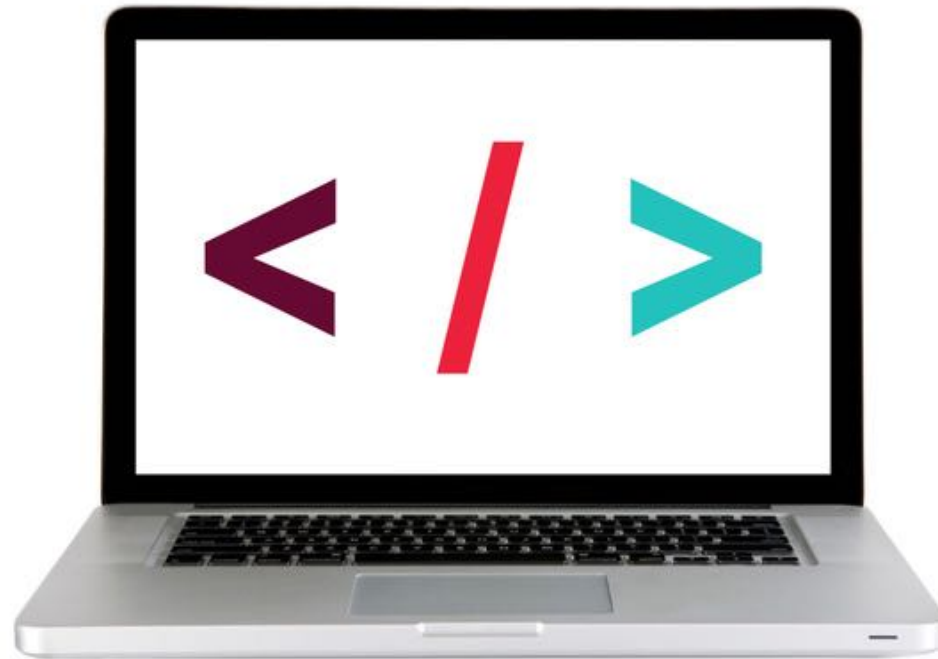
### **FLEX ITEMS:**

- Set a width in percentages

---

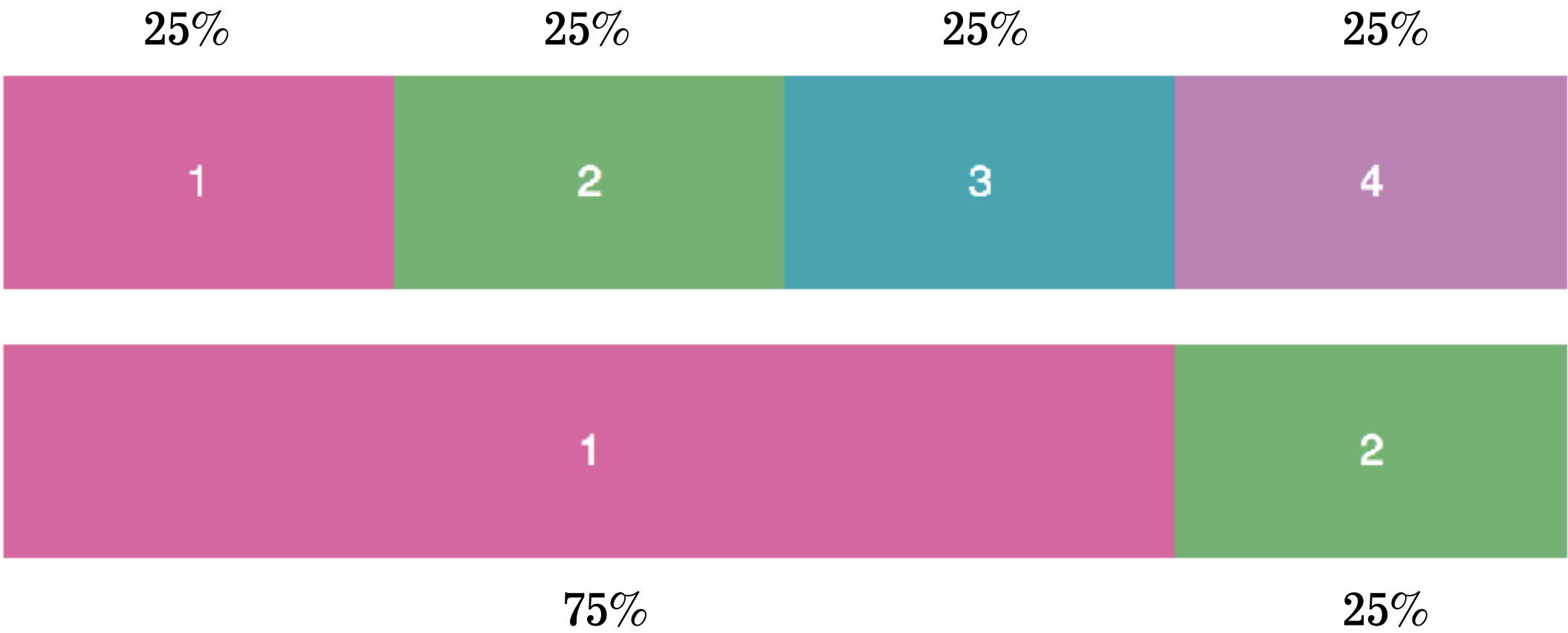
## CODEALONG – FLEXBOX LAYOUT SYSTEM

---

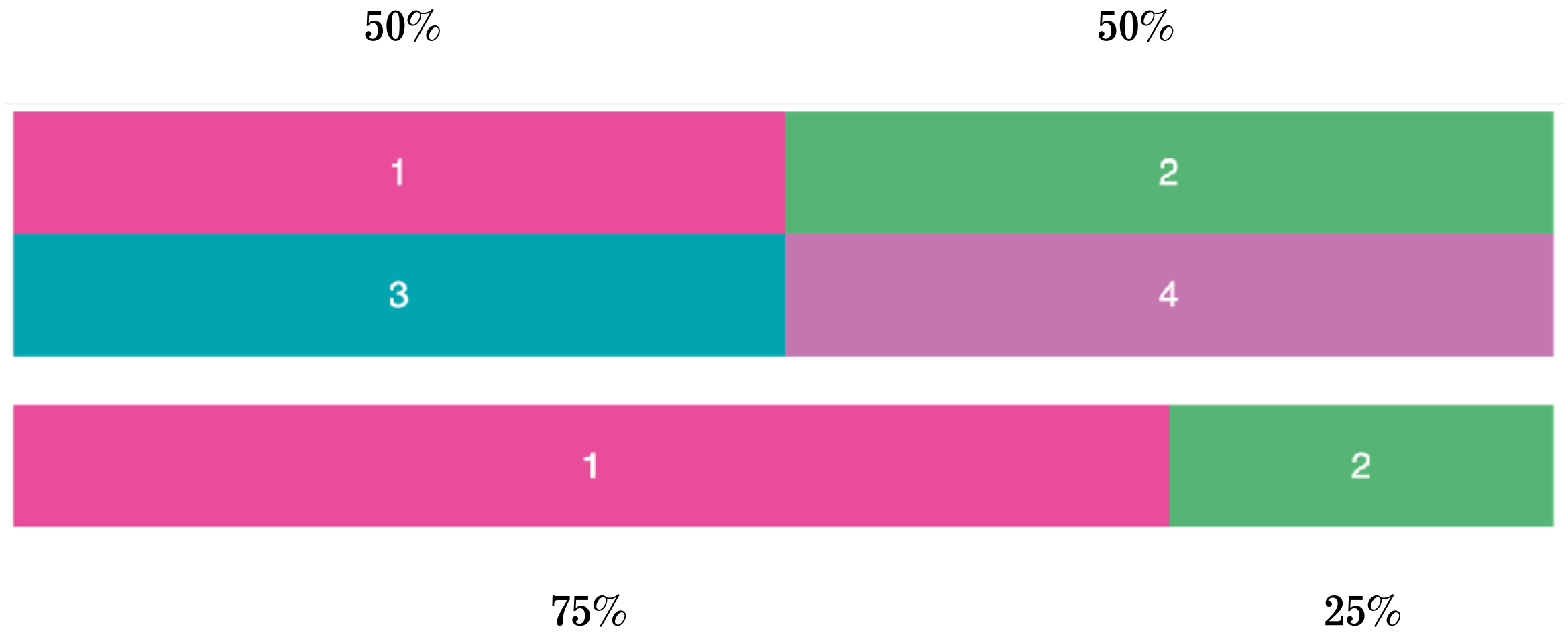


<https://codepen.io/svodnik/pen/WJWbZP?editors=1100#0>

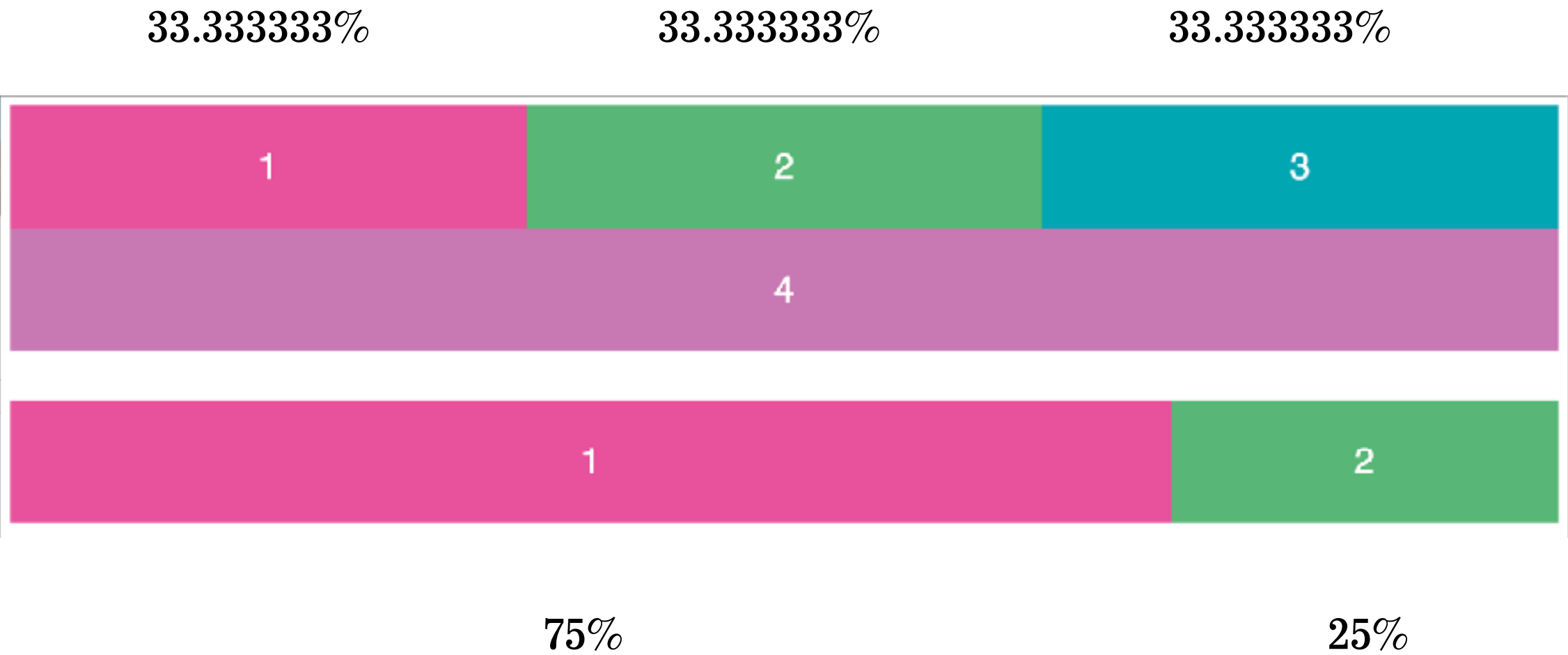
**CODEALONG: PART 1**



CODEALONG: PART 2



CODEALONG: PART 3





---

## ACTIVITY: MULTI COLUMN LAB

---



### EXERCISE

#### **KEY OBJECTIVE**

---

- ▶ Work through steps to create a multi-column layout

#### **LOCATION OF FILES**

---

- ▶ starter code > multi\_column\_lab folder

#### **TIMING**

---

*5 min*

1. Follow steps in HTML and CSS
2. Make it look like mocks.png

---

**FEWD**

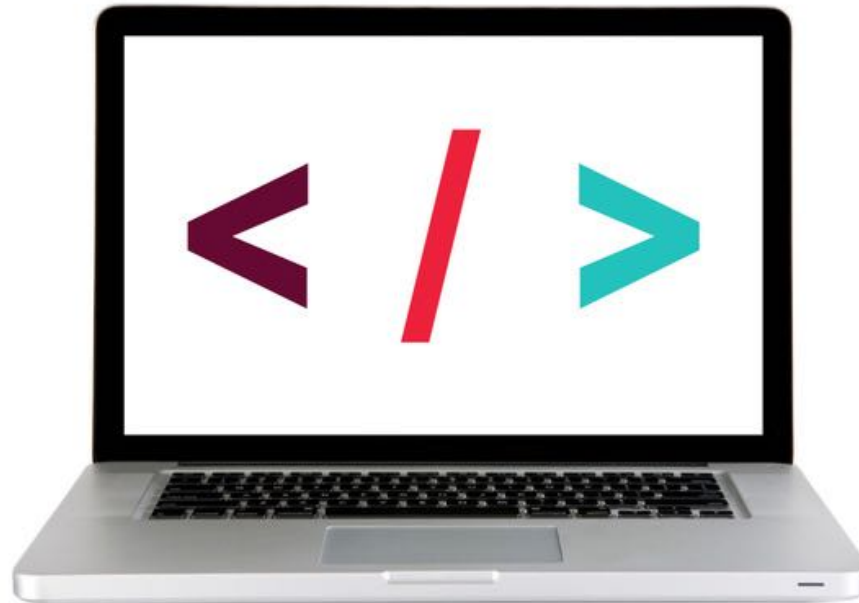
---

# OTHER FLEXBOX PROPERTIES

---

## CODEALONG — OTHER FLEXBOX PROPERTIES

---



<https://codepen.io/svodnik/pen/yjrypB?editors=1100>

---

## JUSTIFY-CONTENT

---

`justify-content` controls how you align items on the **main axis**.

- 1. `flex-start` (default)
- 2. `flex-end`
- 3. `center`
- 4. `space-between`
- 5. `space-around`

```
section {  
  display: flex;  
  justify-content: flex-start;  
}
```



---

## JUSTIFY-CONTENT

---

`justify-content` controls how you align items on the **main axis**.

**`justify-content: flex-start;`**



---

# ACTIVITY: FLEXBOX PROPERTIES: JUSTIFY CONTENT

---



## EXERCISE

### KEY OBJECTIVE

---

- ▶ Learn the justify-content property and values

### LOCATION

---

- ▶ [CodePen](#)/Whiteboard

### TIMING

---

1. Play with the different values of justify-content: flex-start, flex-end, center, space-around, space-between
2. Draw a diagram for what happens to the elements when you change the value of justify-content

---

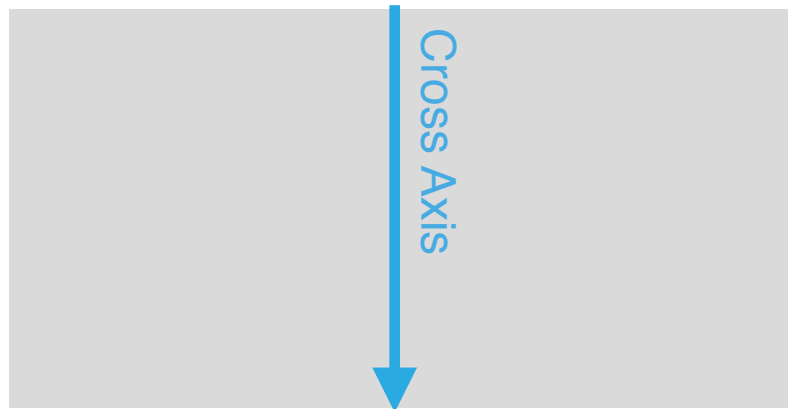
## ALIGN-ITEMS

---

`align-items` controls how you align items on the **cross axis**.

- 1. `flex-start`
- 2. `flex-end`
- 3. `center`
- 4. `stretch`

```
section {  
  display: flex;  
  align-items: center;  
}
```



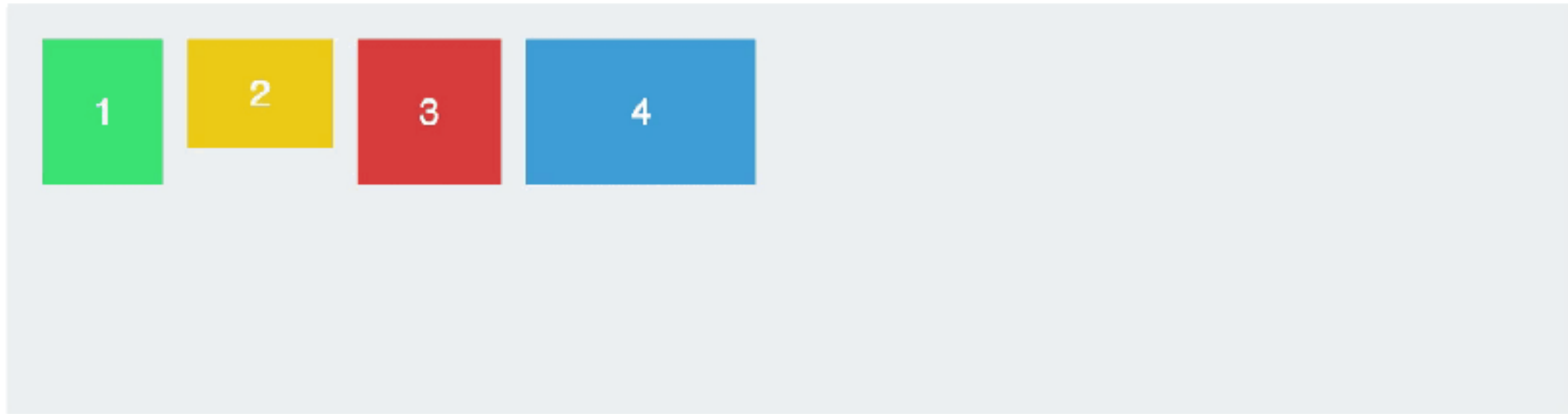
---

## ALIGN-ITEMS

---

`align-items` controls how you align items on the **cross axis**.

**`align-items: flex-start;`**



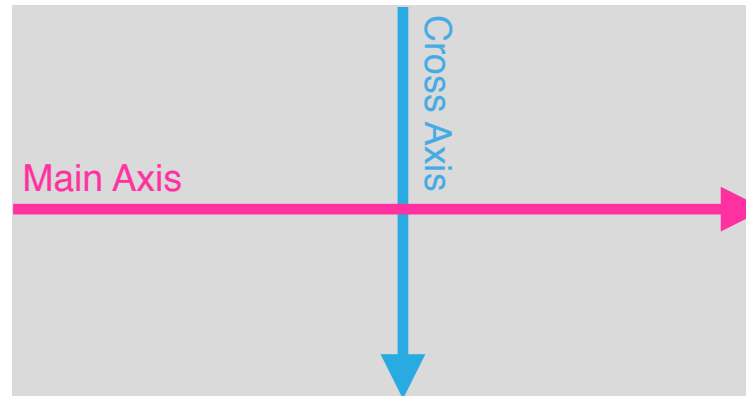


# FLEX DIRECTION

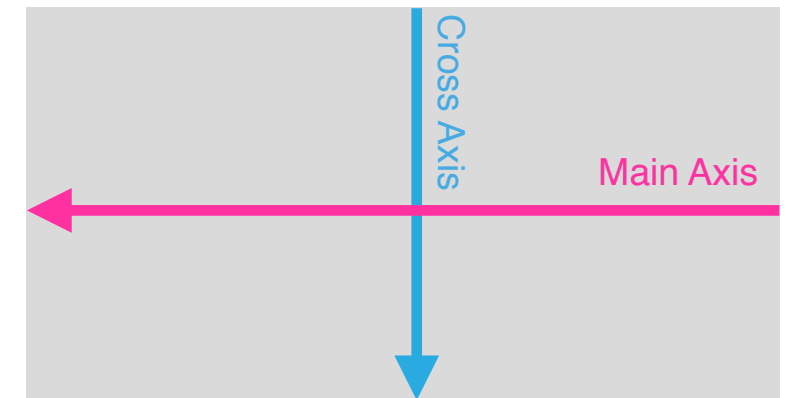
`flex-direction` lets you rotate the **main axis**.

```
section {  
  display: flex;  
  flex-direction: row;  
}
```

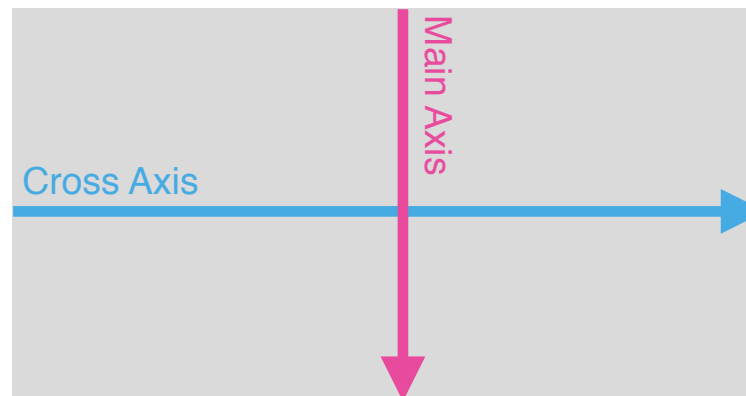
`flex-direction: row;`



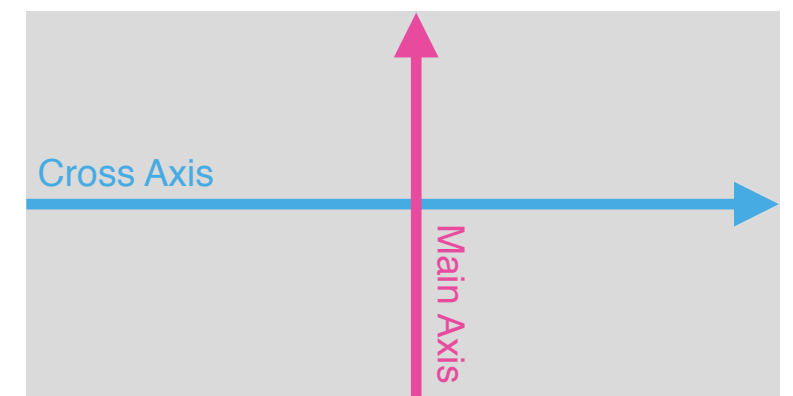
`flex-direction: row-reverse;`



`flex-direction: column;`



`flex-direction: column-reverse;`



---

## FLEX-DIRECTION

---

`flex-direction` lets you rotate the **main axis**.

`flex-direction: row;`



---

## ACTIVITY: FLEXBOX PROPERTIES: FLEX-DIRECTION

---



### EXERCISE

#### KEY OBJECTIVE

---

- ▶ Learn the flex-direction property and values

#### LOCATION

---

- ▶ [CodePen](#)/Whiteboard

#### TIMING

---

1. Play with the different values of flex-direction: row, row-reverse, column, column-reverse
2. Draw a diagram for what happens to the elements when you change the value of flex-direction

# FLEX-WRAP

Flex items are on the same row by default. flex-wrap allows them to wrap around.

The image displays two screenshots from the 'Flexbox Froggy' game, illustrating the 'flex-wrap' property. Both screenshots show a green interface with a title 'FLEXBOX FROGGY', a level indicator 'Level 18 of 24', and a 'Next' button. The game area is a dark blue pond with lily pads.

**Left Screenshot (Level 18):** The instruction text says: "Oh no! The frogs are all squeezed onto a single row of lily pads. Spread them out using the `flex-wrap` property, which accepts the following values:". The code editor shows:

```
1 #pond {  
2   display: flex;  
3   flex-wrap: wrap;  
4 }  
5  
6  
7  
8  
9  
10
```

The lily pads show a yellow frog, four green frogs, and a red frog, all squeezed onto a single row.

**Right Screenshot (Level 19):** The instruction text says: "Oh no! The frogs are all squeezed onto a single row of lily pads. Spread them out using the `flex-wrap` property, which accepts the following values:". The code editor shows:

```
1 #pond {  
2   display: flex;  
3   flex-wrap: nowrap;  
4 }  
5  
6  
7  
8  
9  
10
```

The lily pads show a yellow frog, four green frogs, and a red frog, all squeezed onto a single row.

<http://flexboxfroggy.com/>

---

**FEWD**

---

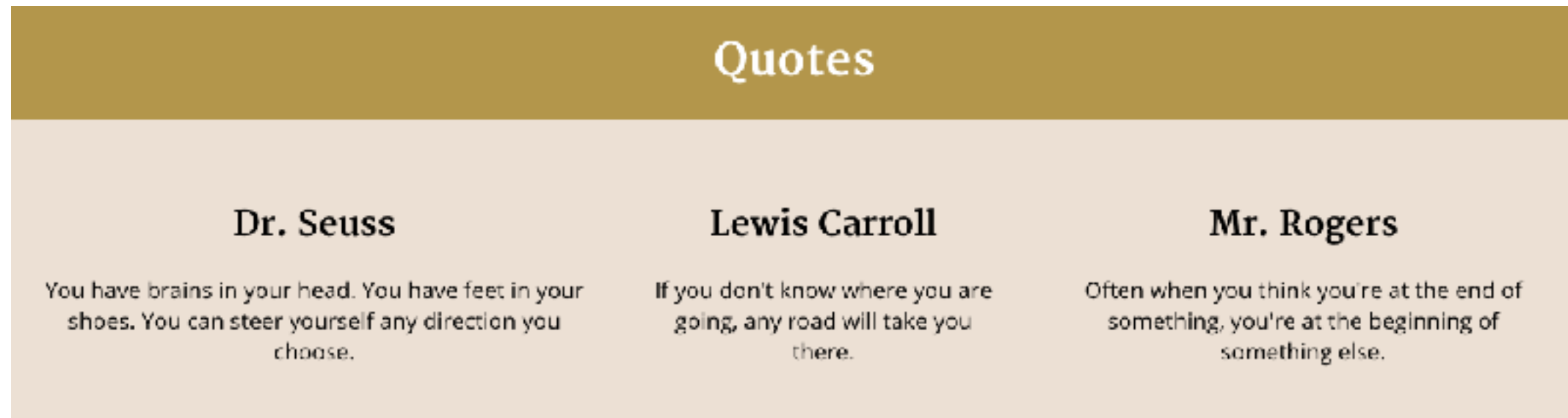
# **FLEXBOX PRACTICE**

---

## ACTIVITY: FLEXBOX PRACTICE

---

Recreate this layout in this [CodePen](#)



---

# ACTIVITY: FLEXBOX PRACTICE

---

Recreate this layout in [CodePen!](#)

[Mocks](#)

Lorem Ipsum Generators:

- \* [Lorem Ipsum](#)
- \* [Cat Ipsum](#)
- \* [Office Ipsum](#)
- \* [Hipster Ipsum](#)

## Alice's Adventures in Wonderland

### Down the Rabbit Hole

Alice was beginning to get very tired of sitting by her sister on the bank, and of having nothing to do: once or twice she had peeped into the book her sister was reading, but it had no pictures or conversations in it, "and what is the use of a book," thought Alice "without pictures or conversation?"

So she was considering in her own mind (as well as she could, for the hot day made her feel very sleepy and stupid), whether the pleasure of making a daisy-chain would be worth the trouble of getting up and picking the daisies, when suddenly a White Rabbit with pink eyes ran close by her.

### Background Information

Alice's Adventures in Wonderland was published in 1865, three years after Charles Lutwidge Dodgson and the Reverend Robinson Duckworth rowed a boat up the Isis on 4 July 1862 with the three young daughters of Henry Liddell: Lorina Charlotte Liddell, Alice Pleasance Liddell, and Edith Mary Liddell.

---

**FEWD**

---

# **LAB: MONUMENT BLOG**



---

## ACTIVITY: MONUMENT BLOG PART 2

---



### EXERCISE

#### KEY OBJECTIVE

---

- ▶ Create a multi-column layout with flexbox

#### TASKS

---

1. Update the Monument blog layout to a 2 column layout, as shown in `mocks_part2.png`
2. **Bonus 1:** Add the background-image in the header
3. **Bonus 2:** Add the FontAwesome icons in the footer
4. **Bonus 3:** Work from `bonus_hover.gif` to add a hover effect to links

---

## REVIEW QUESTIONS

---

- What should our HTML structure look like to set up a Flexbox?
- How do we initiate Flexbox? Name the property. Which element would we set this property on (the flex container or flex items)?
- Which property can we use to determine the space between flex items? Which element would we set this property on (the flex container or flex items)?
- How can we determine how much width each column should take up?

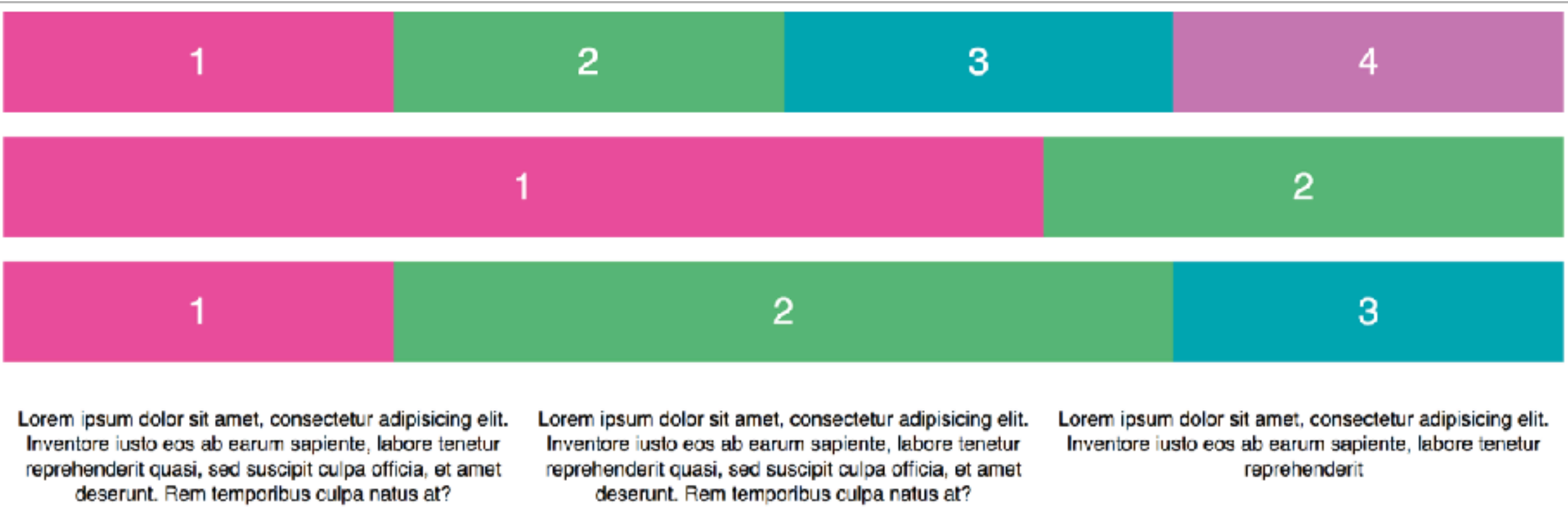
---

**FEWD**

---

# GRID SYSTEMS PRACTICE

# CODEALONG

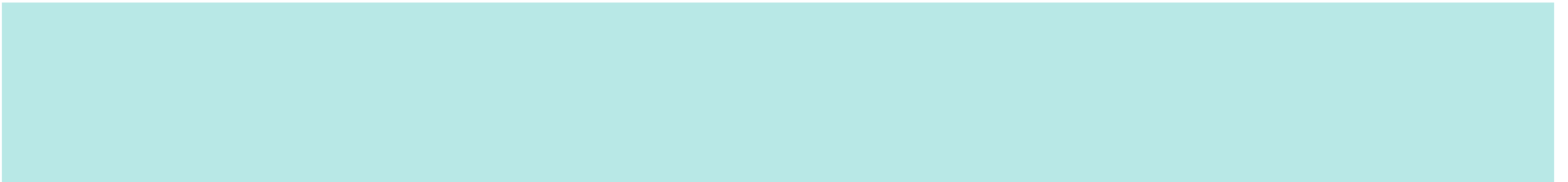


---

## ROWS

---

Each row will be a flex container!

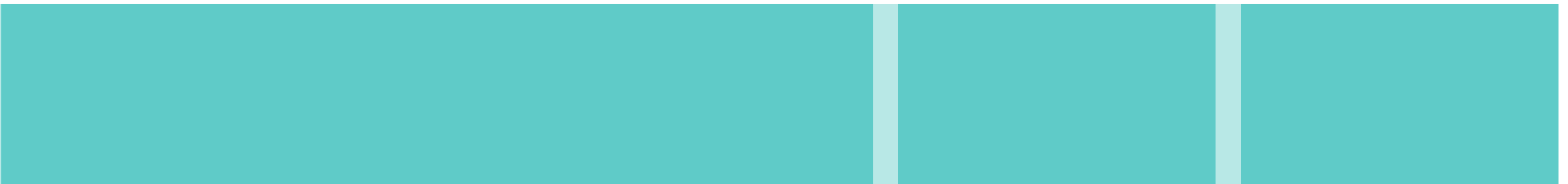


---

## COLUMNS

---

Each column will be a flex item (inside each row)!



---

## **CLASSES**

---

We can create classes to reuse styles across multiple elements!

---

## ROWS

---

Since all our rows will be set to **display: flex;** we can store this property in a class and apply it to any element to turn it into a row.

```
.row {  
  display: flex;  
  margin-bottom: 20px;  
}
```

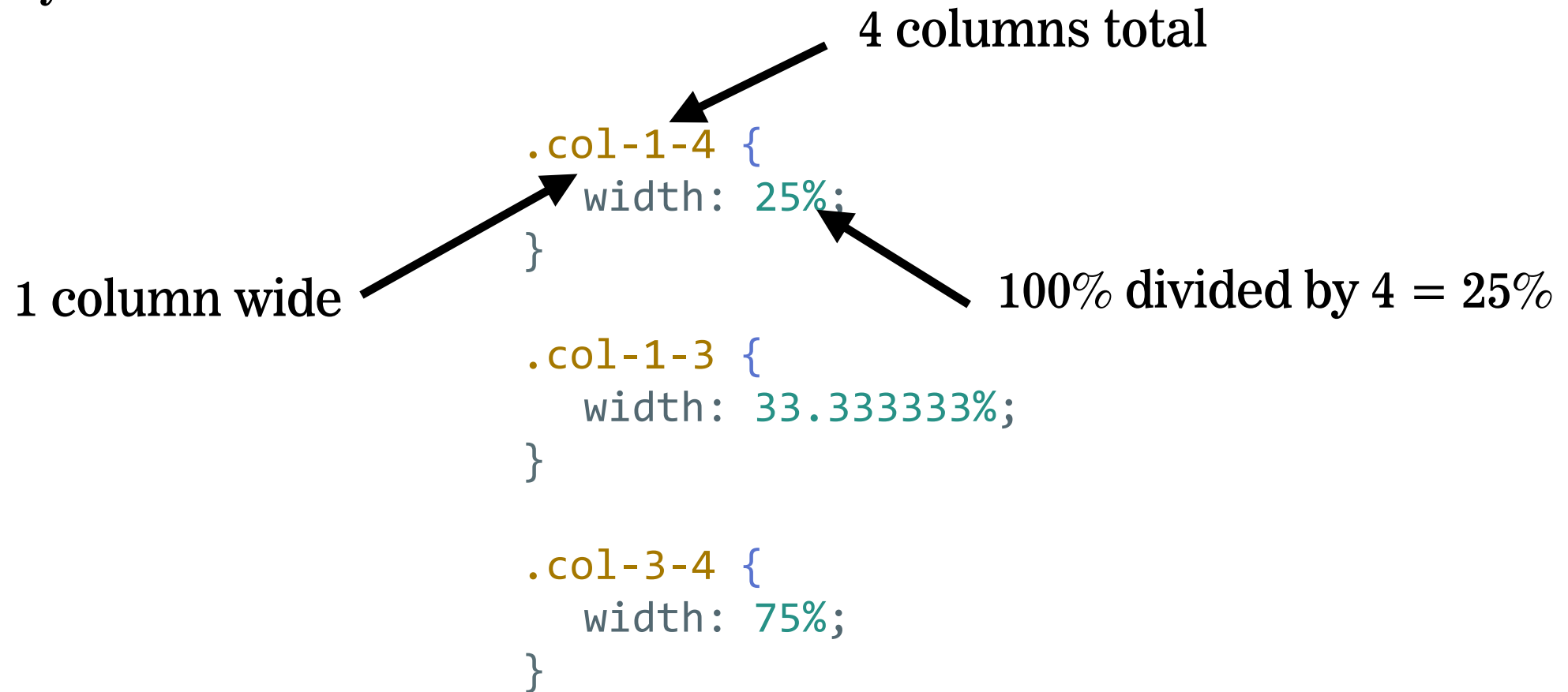


---

## COLUMNS

---

We can create classes for the different options for column widths. We can then apply these classes to any flex item to set its width.



## COLUMNS

---

We can create classes for the different options for column widths. We can then apply these classes to any flex item to set its width.

```
.col-1-4 {  
  width: 25%;  
}
```

```
.col-1-3 {  
  width: 33.333333%;  
}
```

```
.col-3-4 {  
  width: 75%;  
}
```

4 columns total

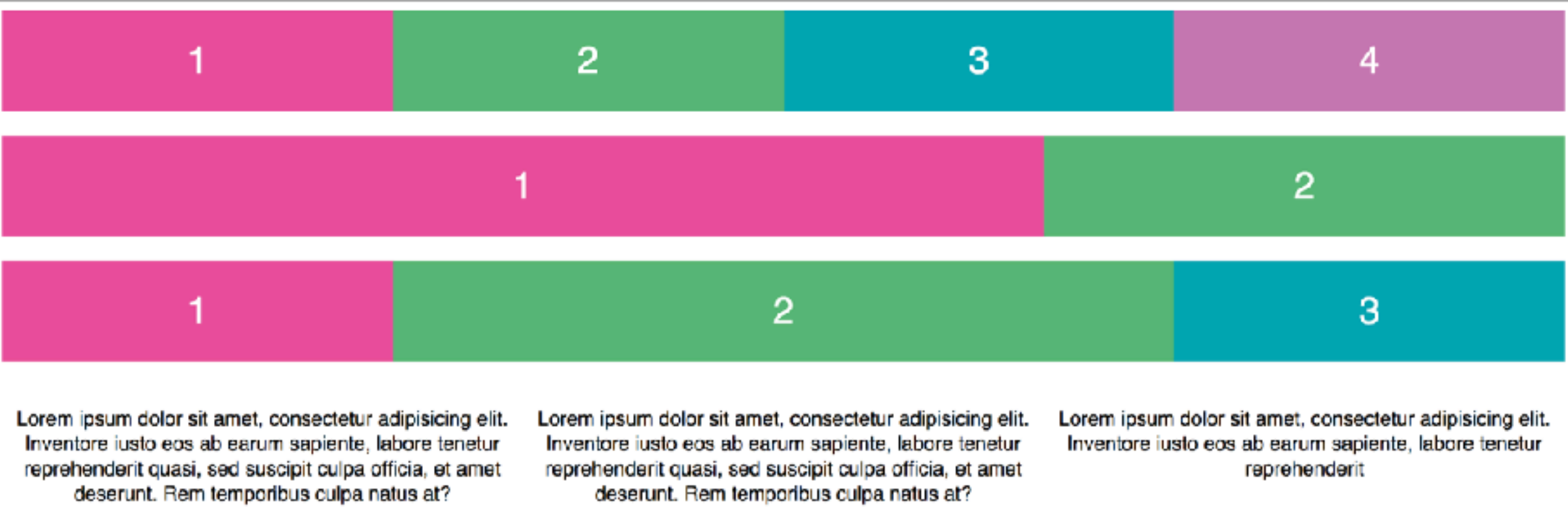


3 columns wide



$3 * (100\% \text{ divided by } 4) = 75\%$

# CODEALONG



---

**FEWD**

---

# USING CHROME DEV TOOLS

---

## LET'S USE THE INSPECTOR!

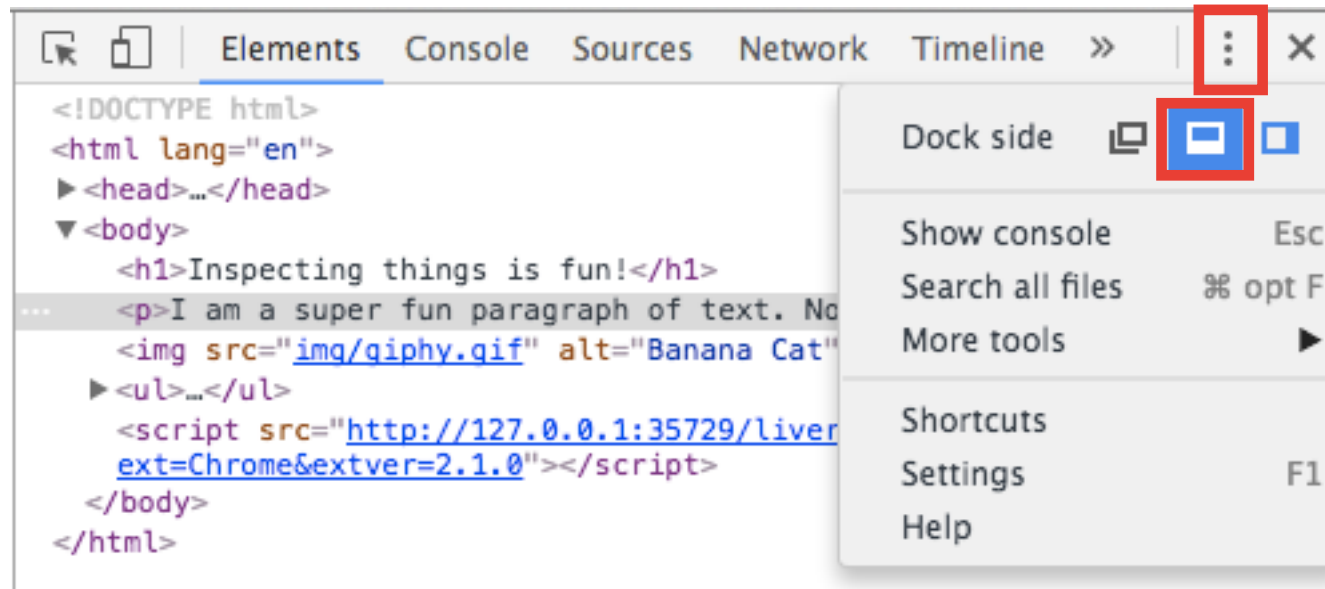
---

There are several ways to open Chrome dev tools:

- Right click on an element and click "inspect"
- In Chrome, go to view > developer > Developer Tools
- Keyboard shortcut: Mac: *Cmd + Opt + I* Windows: *F12, Ctrl + Shift + I*

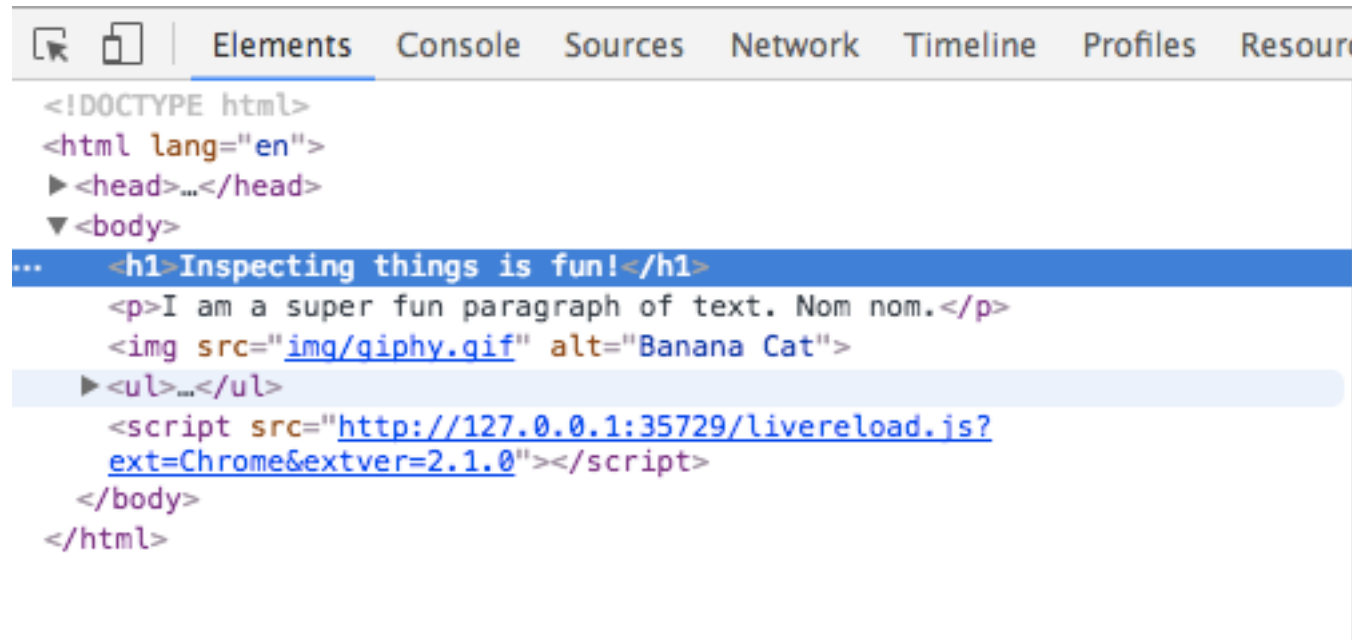
## DOCK LOCATION

I find it easiest to move the dock to the bottom of the window.



# PICKING AN ELEMENT

Choose an element to inspect by clicking on the element in the "Elements" tab

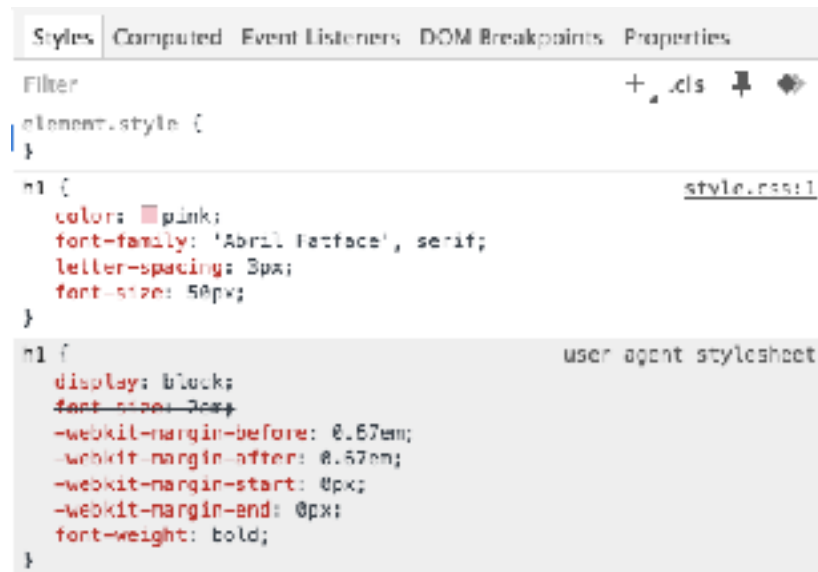


---

## SEEING STYLES AND EXPERIMENTING

---

You can see what styles you've added (and default styles added by the browser) to the element in the "styles" panel.



You can also experiment here!

```
✓ color: pink;
✓ font-family: 'Abril Fatface', serif;
✓ letter-spacing: 3px;
  font-size: 100px;
}
```



# FINAL RENDERED STYLES AND DIMENSION

In the "computed" tab you can see all the styles that are being rendered on screen for an element. You can also see dimensions for an element including width, height, padding, margin and border.

StylesComputedEvent ListenersDOM BreakpointsProperties

margin67

border-

padding-

932 × 270

Filter

Show all

▶color

rgb(255, 192, 203)

▶display

block

▶font-family

'Abril Fatface', serif

▶font-size

100px

▶font-weight

bold

height

270px

▶letter-spacing

3px

width

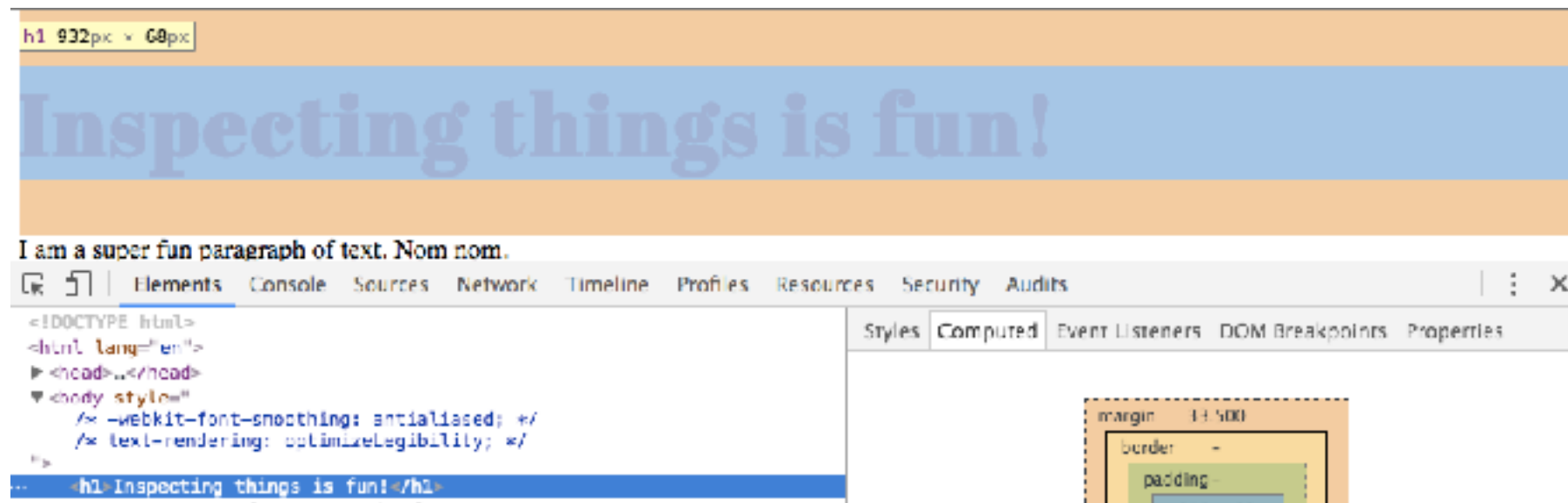
932px

Rendered Fonts

Abril Fatface — 24 glyphs

# VISUALIZING DIMENSIONS

One of the things I find most helpful when working through layout issues is to hover over different elements and see where everything is.

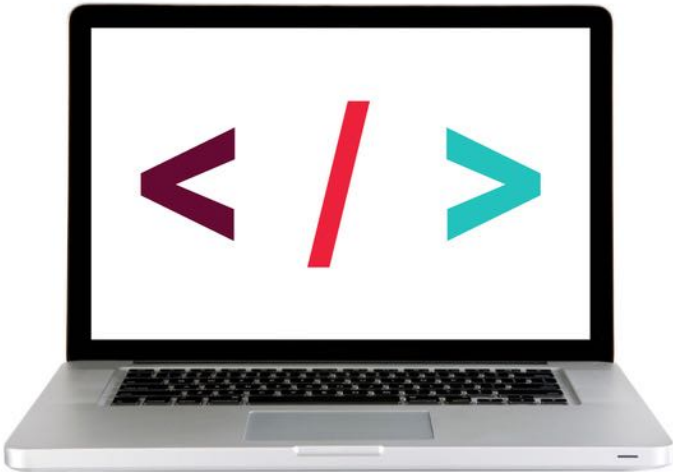


Orange: margin

Green: padding

Also notice width and height in a little yellow box by the element

# INSPECT ELEMENT LAB



Starter Code > inspect\_element

## Inspecting things is fun!

I am a super fun paragraph of text. You know.



### Why is Flexbox not working?!

#### This should be the left column

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce, tortor. Nunc quisque, fames nunciam fames illo, doloris enim inque ipsum nam impedit consequi, facilis consequatur donec nunc, deserunt quare?

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Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce, tortor. Nunc quisque, fames nunciam fames illo, doloris enim inque ipsum nam impedit consequi, facilis consequatur donec nunc, deserunt quare?

### Aside for my page

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce, tortor. Nunc quisque, fames nunciam fames illo, doloris enim inque ipsum nam impedit consequi, facilis consequatur donec nunc, deserunt quare?

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce, tortor. Nunc quisque, fames nunciam fames illo, doloris enim inque ipsum nam impedit consequi, facilis consequatur donec nunc, deserunt quare?

Five
Four
Three
Two
One

# LET'S USE THE INSPECTOR!

---



## EXERCISE

### LOCATION

---

‣ Starter Code > inspect\_element

### LAB SESSION

---

*10 min*

1. What color is the h1? Can you find the rgb value?
2. What is the margin-top of the h1 element? Margin-bottom? Are these styles added in our stylesheet or default styles given by the browser (in the user agent stylesheet).
3. Hover over the h1 to visualize these dimensions.
4. If we didn't want margin on top, what could we do? Try to update the h1 so there is no margin on top — in your inspector.
5. Our two-column layout isn't working! Using your inspector can you figure out why? Can you fix this — in your inspector.
6. What is the background-color for each li? How much padding and margin does each li have? What is the width and height?
7. Hover over an li to visualize these dimensions.
8. Bonus - can you figure out why the image isn't loading? Hint: look in the "Console" tab and compare with what you see in the folder in Finder. What should the image path be?

---

**FEWD**

---

**PACIFIC LAB**

# ACTIVITY — PLANNING

---



## EXERCISE

### KEY OBJECTIVE

---

- ▶ Get practice using a grid system

### LOCATION OF FILES

---

- ▶ starter code > **pacific** folder

### TIMING

---

1. Look at the `pacific_burger.png` file
2. Map out your grid system - how many rows will you have?  
How many types columns will you need to account for?
3. Discuss with a partner!

---

# ACTIVITY — GRID SYSTEM LAB

---



## EXERCISE

### KEY OBJECTIVE

---

- ▶ Get practice using a grid system

### LOCATION OF FILES

---

- ▶ starter code > **pacific** folder

### TIMING

---

1. Map out the rest of your styles - We've done a bit of the HTML already, but which CSS properties will I need to use?
2. Build it out!

# LEARNING OBJECTIVES

- Differentiate between block and inline elements
- Create multi-column layouts with flexbox
- Describe a grid system
- Use classes to set up modular, multi-column layouts



---

## WEEKLY OVERVIEW

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### WEEK 3

Layout & Grid Systems / Layout Lab

### WEEK 4

Responsive Design / CSS Positioning

### WEEK 5

Forms / Final Project Lab

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**HTML BASICS**

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**EXIT TICKETS**