



**1) HAVE SLACK OPEN**

**2) IN CHROME, OPEN UP:**

**<https://github.com/CHIFEWD7/your.name>**

**FRONT-END WEB DEVELOPMENT**

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**SNACKS & DESIGN**

**TODAY!**

**TOM BUNTING & MICHAEL FISCHER**

**(GOOGLE SHEET IS PINNED IN SLACK)**

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**FEWD**

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**Q & A**

*“How to name divs for use with nesting?”*

*“What are the most popular CSS frameworks?”*

*“How do I make multi-box layouts?”*

*“Can you recommend resources to help practice?”*

*“When creating a navigation, must you use <nav>?”*

[http://www.w3schools.com/html/html5\\_semantic\\_elements.asp](http://www.w3schools.com/html/html5_semantic_elements.asp)



*“How do you do borders in one line?”*

[https://developer.mozilla.org/en-US/docs/Web/CSS/  
Shorthand\\_properties](https://developer.mozilla.org/en-US/docs/Web/CSS/Shorthand_properties)

*“When nesting selectors, can we add declarations that apply both to the parent and child, or do those only apply to the child?”*

*“Is the ‘DOM’ (Document Object Model) something you create for each site you make?”*

*“Why use terminal? Are there alternatives?”*

*“When do I use margin vs. padding?”*

*“It seems like you can put certain properties under different selectors. Is there a best practice on where you place the property if it has the same outcome?”*

*“What is the difference between border and padding?”*

*“How do you know whether to apply CSS rules to the highest level of organization or other?”*

*“e.g. when to apply to ‘nav ul’ and when to apply to ‘nav ul li’?”*



# COMING UP...

~~FEBRUARY 25: BOX MODEL~~

**MARCH 1: LAYOUT (CSS)**

**MARCH 3: LAYOUT LAB (W/ ADVANCED CSS ~ RESETS)**

**MARCH 8: LAYOUT LAB CONT. (W/ ADVANCED CSS ~ POSITIONING)**

# LAYOUT

*Eric Boyer*

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**FEWD**

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# REVIEW

---

## HTML SYNTAX — TAGS

---

Opening tag

Closing tag

<tag name>content</tag name>

Element

---

## HTML SYNTAX — ATTRIBUTES

---

Attribute  
Name

<tagName **name**=**"value"**></tagName>

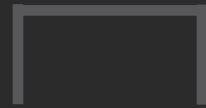
Attribute  
Value

---

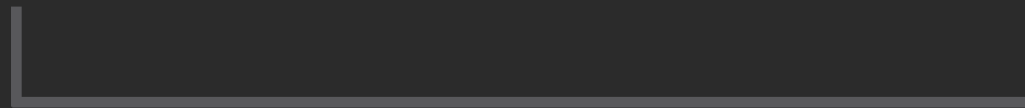
## CSS SYNTAX

---

Selector



```
h1 { color: yellow; }
```



Declaration

## CSS SYNTAX

---

h1, h2 {

color: yellow;

font-size: 16px;

}

Property

Value

**NESTED  
SELECTORS**

**SELECTOR:**

	MEANING:	EXAMPLE:
UNIVERSAL	Applies to all elements in the document	* {}
TYPE	Matches element names	h1, h2, h3 {}
CHILD	Matches an element that is a direct child of another element	p>a {}
DESCENDANT	Matches an element that is a descendent (not just a child) of another element	p a {}
ADJACENT SIBLING	Matches the element that is directly after another element	p+a {}
GENERAL SIBLING	Matches the element that is a sibling of another	p~a {}



---

# WHAT IS CSS?

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## Muir Woods

Keffiyeh next level retro, brunch *sriracha* dreamcatcher  
mixtape jean shorts XOXO master cleanse keytar  
**Kickstarter**. Neutra kale chips Vice health goth ethical,  
flannel single-origin coffee stumptown meditation  
Kickstarter mumblecore yr cronut master cleanse keytar.

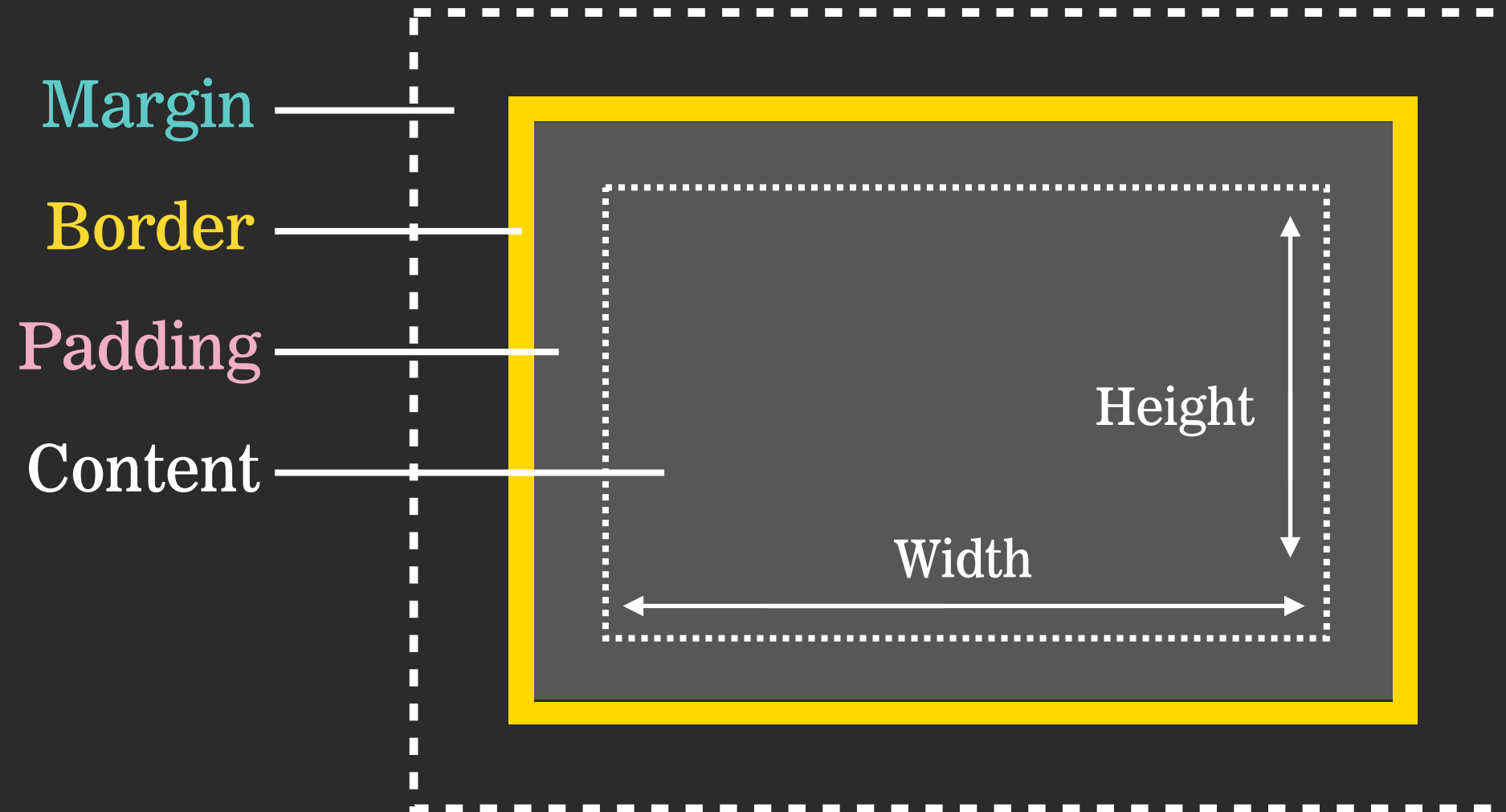
Bushwick sartorial pickled, quinoa church-key before they  
sold out drinking vinegar put a bird on it readymade organic  
lumbersexual. Four dollar toast chia *Intelligentsia* YOLO  
Marfa. Migas raw denim photo booth authentic, roof party  
shabby chic pop-up flexitarian *skateboard* blog.

## Muir Woods

Keffiyeh next level retro, brunch *sriracha* dreamcatcher  
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Marfa. Migas raw denim photo booth authentic, roof party  
shabby chic pop-up flexitarian *skateboard* blog.

## REFRESHER — BOX MODEL



---

## CLASSES AND IDS

---

- Classes and ids allow us to assign 'labels' to elements so that we can target them in our stylesheets

### IDS

- Ids are used to target *one specific element*
- **Important:** two elements on the same page cannot have the same id

```
<h3 id="about">Content</h3>
```

```
#about {  
  color: #ff0000;  
}
```

### CLASSES

- Classes are used to group elements together

```
<li class="emphasis">Content</li>
```

```
.emphasis {  
  color: #ff0000;  
}
```

# LEARNING OBJECTIVES

- Differentiate between block and inline elements
- Identify when HTML5 structural elements should be used
- Apply header, footer, sidebar, and multi-column layouts to build a web page.
- Experiment and predict effects of floats and clearing CSS positioning.

# AGENDA

---

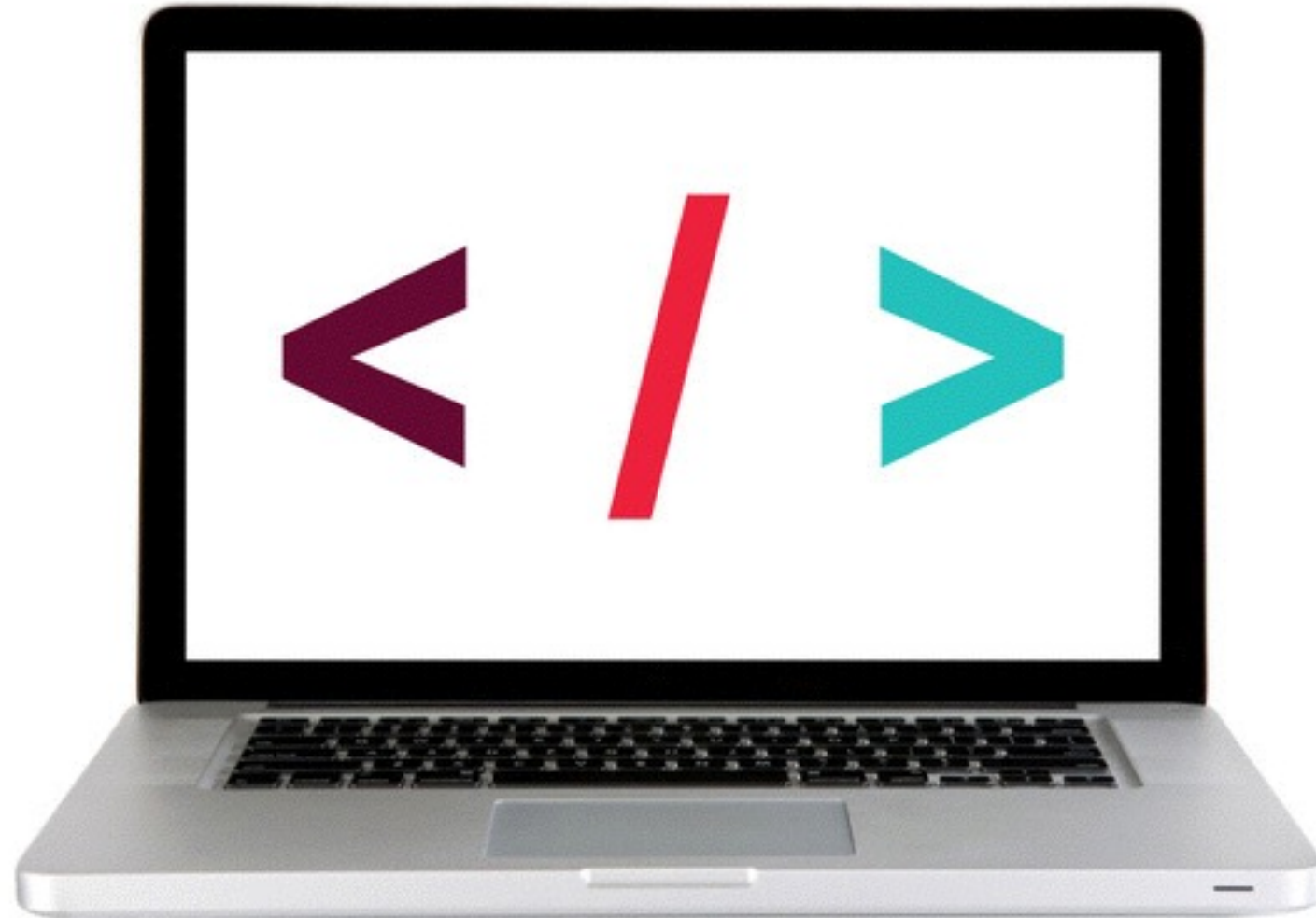


- Push homework to Github
- Display
- Classes & IDs
- Specificity
- Divs
- HTML5 Structural Elements
- Box-Sizing Part 2
- Floats
- Multi-column layouts
- Lab — Travel Blog pt. 2

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**LET'S TAKE A CLOSER LOOK**

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**FEWD**

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# CLASSES AND IDS

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## TARGETING SPECIFIC ELEMENTS

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- Classes and ids allow us to assign ‘labels’ to elements so that we can target them in our stylesheets



## TARGETING SPECIFIC ELEMENTS



---

## CLASSES AND IDS

---

### IDS

- Ids are used to target *one specific element*
- Each element can only have one id
- **Important:** two elements on the same page cannot have the same id

```
<h3 id="about">Content</h3>
```

```
#about {  
  color: #ff0000;  
}
```



---

## CLASSES AND IDS

---

### CLASSES

- Classes are used to group elements together
- Elements can have multiple classes

```
<li class="emphasis">Content</li>
```

```
.emphasis {  
  color: #ff0000;  
}
```



---

**FEWD**

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**LET'S CHAT MORE ABOUT  
SPECIFICITY &  
IMPORTANCE &  
INHERITANCE**

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## INHERITANCE — SETTING BASE STYLES

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- Certain properties are passed on from a parent element down to its children
- If you specify the font-family or color properties on the <body> element, they will apply to most child elements unless there is a more specific rule that applies. This is because the font-family property is **inherited** by child elements.

### **Inherited properties you'll use in this course:**

- |               |                  |                  |
|---------------|------------------|------------------|
| ‣ color       | ‣ font-weight    | ‣ text-align     |
| ‣ font-family | ‣ letter-spacing | ‣ text-indent    |
| ‣ font-size   | ‣ line-height    | ‣ text-transform |
| ‣ font-style  | ‣ list-style     | ‣ word-spacing   |

---

## **MORE ABOUT CASCADING**

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- CSS rules are able to override one another and cancel each other out, depending on their order.
- CSS rules cascade downward until they are canceled out by another rule.

---

## CONFLICT!! — WHEN TWO RULES APPLY TO THE SAME ELEMENT

---



### IMPORTANCE

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



### SPECIFICITY

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



### LAST RULE

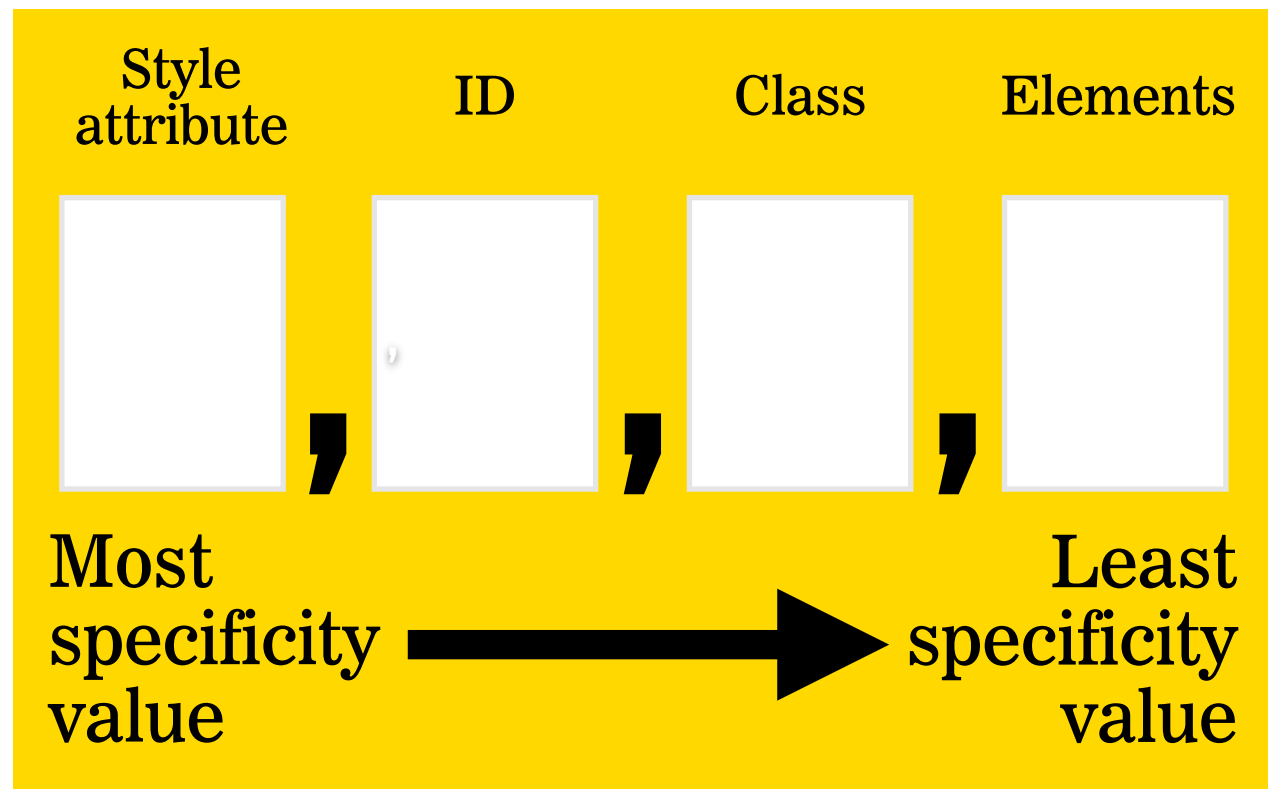
If the two selectors have the same importance and specificity, the latter will take precedence

---

## CSS CASCADING

---

### THE SPECIFICITY GAME!

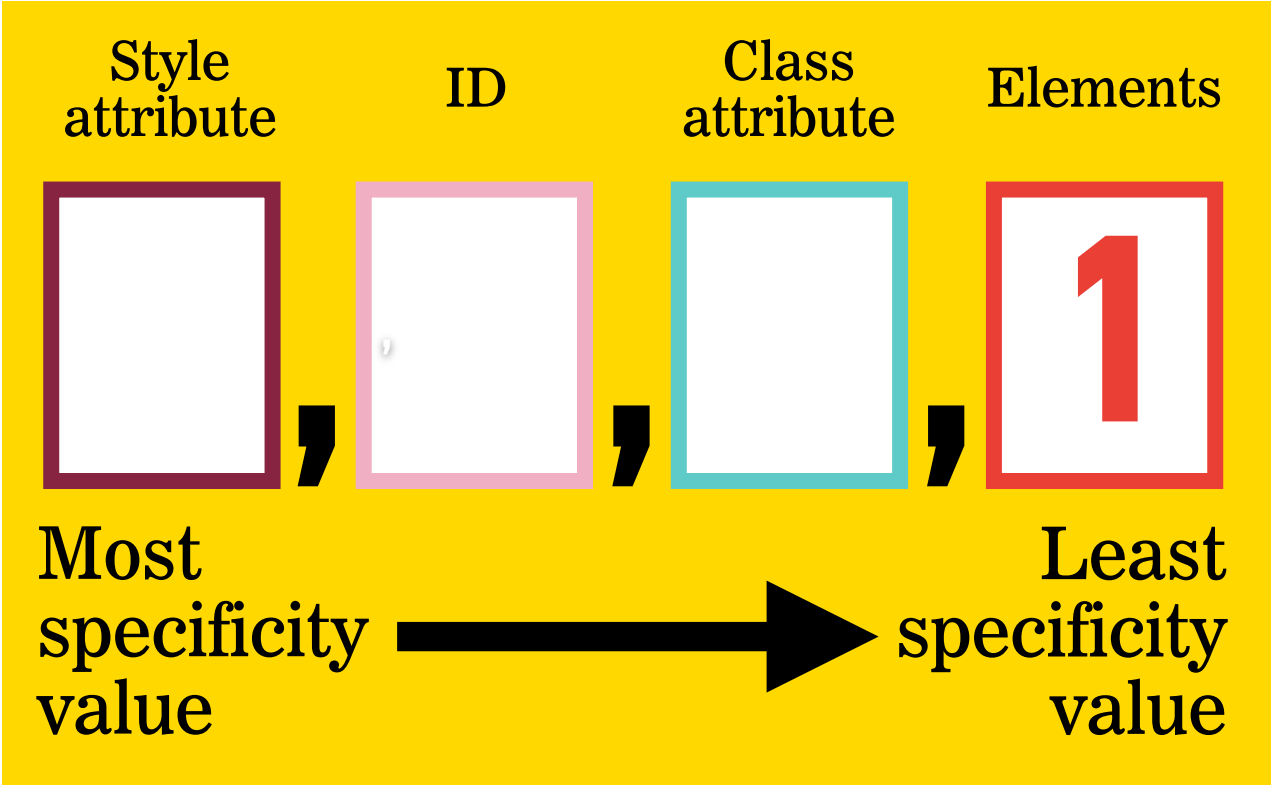




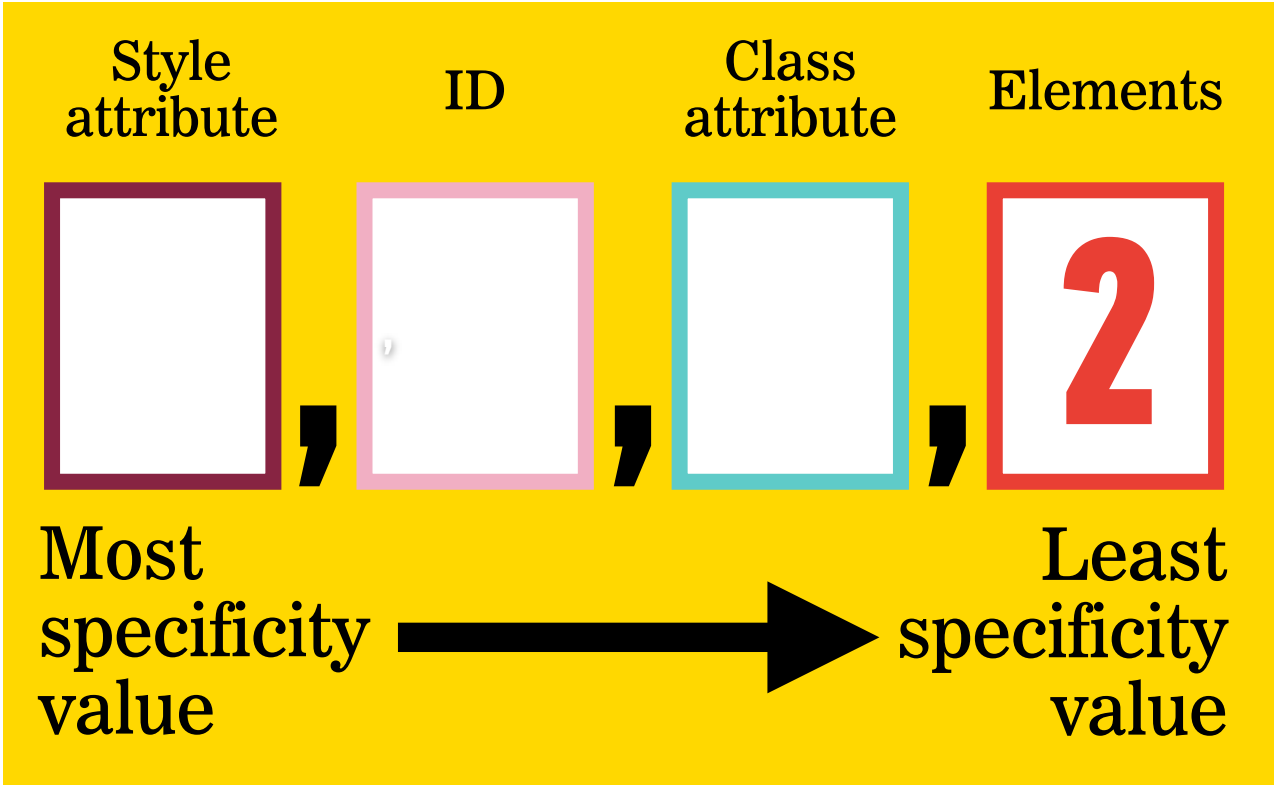
# MORE ABOUT CASCADING

## SPECIFICITY

a



p a



## CSS CASCADING

**WINNER!**

**#nav li.active p**

**.home li h2 + p**

Style  
attribute

ID

Class  
attribute

Elements



Most  
specificity  
value



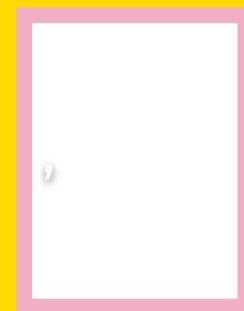
Least  
specificity  
value

Style  
attribute

ID

Class  
attribute

Elements



Most  
specificity  
value



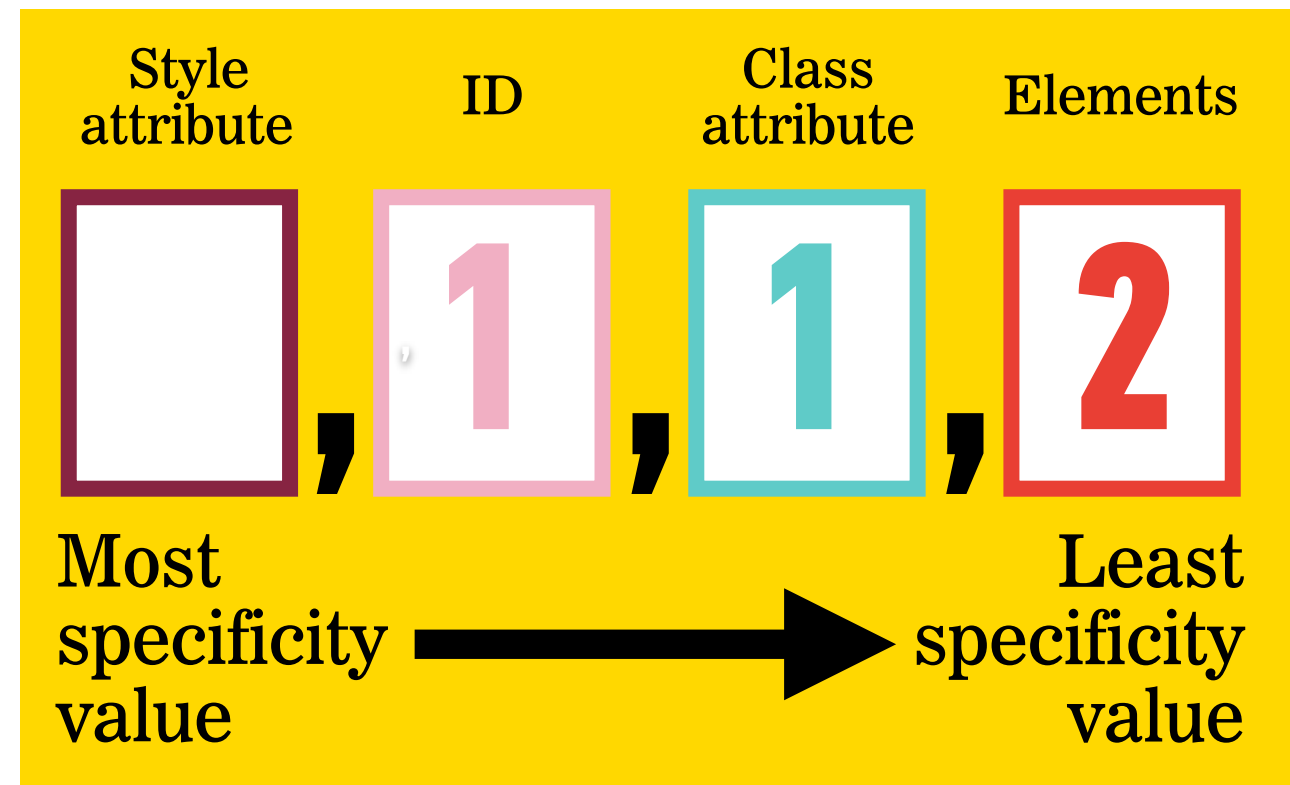
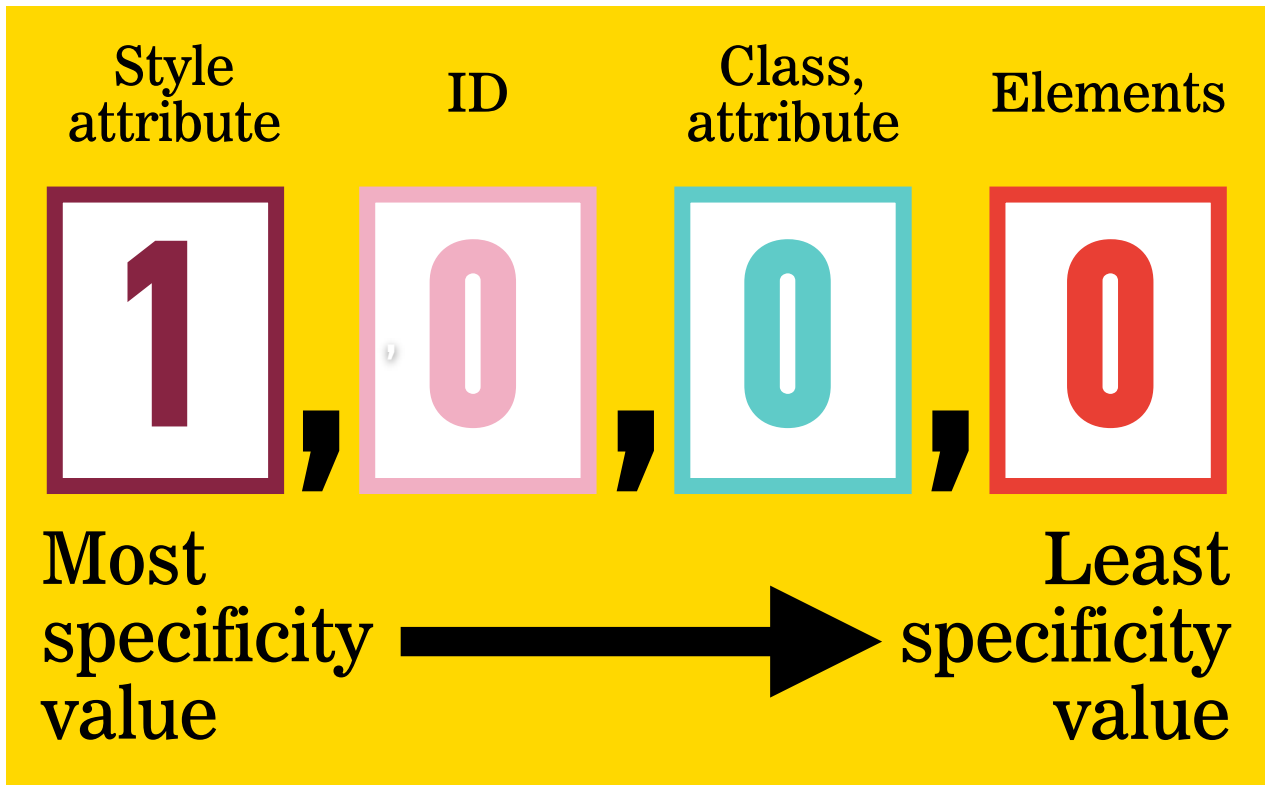
Least  
specificity  
value

## CSS CASCADING

**WINNER!**

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

`#about .first h2 + li`



## CSS CASCADING

### !IMPORTANT

**li {color: green *!important*;}**

**WINNER!**

!important	Style attribute	ID	Class attribute	Elements
1	0	0	0	0
Trumps all!!				

*!important can only be overridden by another !important*

# ACTIVITY

---



## EXERCISE

### KEY OBJECTIVE

---

- ▶ Summarize CSS “cascade” including: importance, specificity and inheritance.

### TYPE OF ACTIVITY

---

- ▶ Turn and Talk

### TASKS

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*2 min*

1. Turn and talk to a partner

*2 min*

2. A few pairs will share with the class

---

**FEWD**

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**DISPLAY**

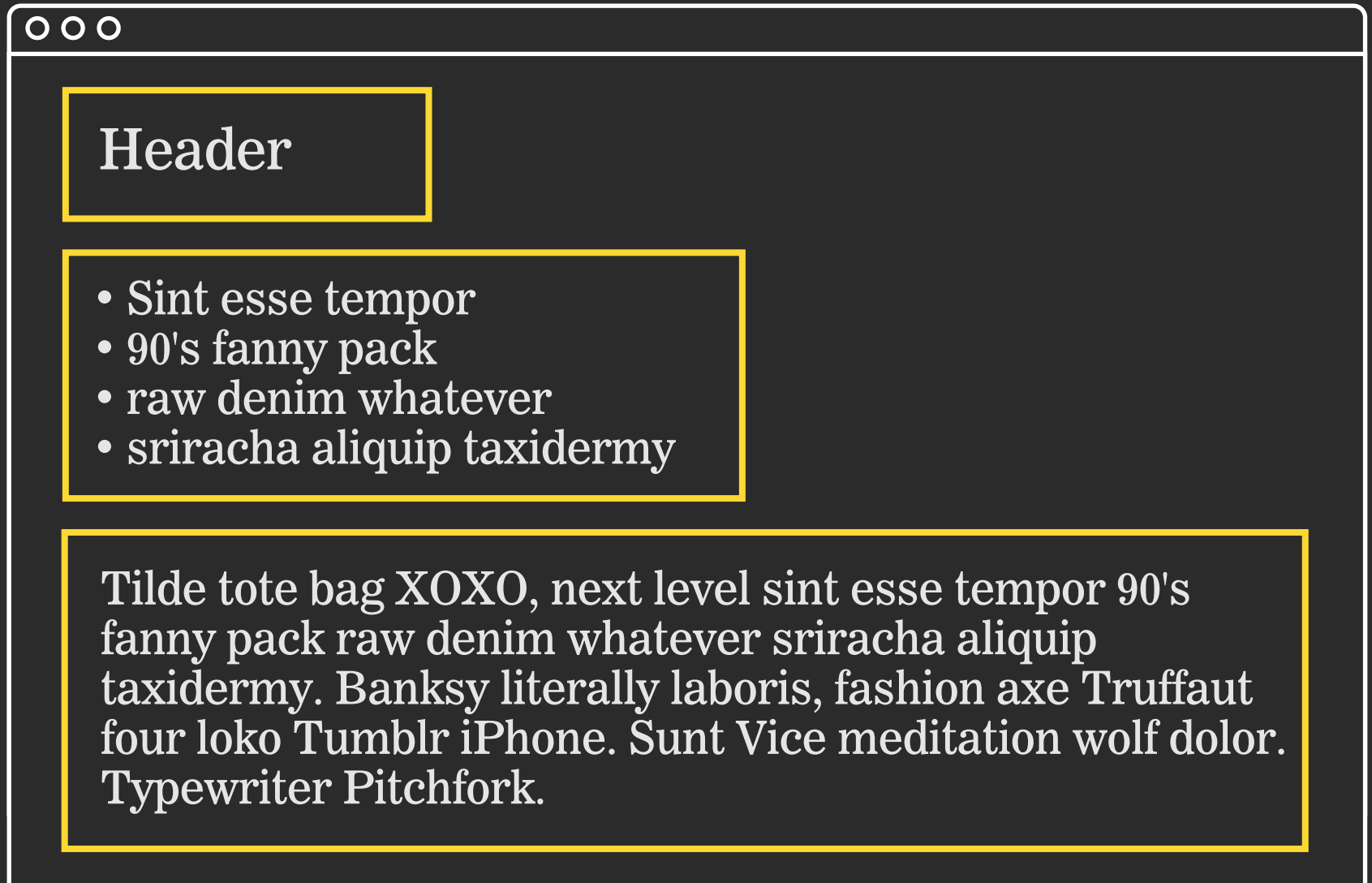
# BUILDING BLOCKS

## BLOCK-LEVEL ELEMENTS

- ▶ Will always start on a new line

Examples:

- ▶ `<h1>-<h6>`
- ▶ `<ul>`
- ▶ `<li>`
- ▶ `<p>`
- ▶ `<ol>`
- ▶ `<div>`



## BUILDING BLOCKS

### INLINE ELEMENTS

Will always appear to continue on the same line as their neighboring elements

Examples:

- ▶ `<a>`
- ▶ `<img>`
- ▶ `<em>`
- ▶ `<strong>`
- ▶ `<q>`
- ▶ `<span>`





*[Placeholder Images]*

*<https://placekitten.com/>*

*<https://www.placecage.com/>*

*<http://placeholder.it/>*

*[Lorem Ipsum]*

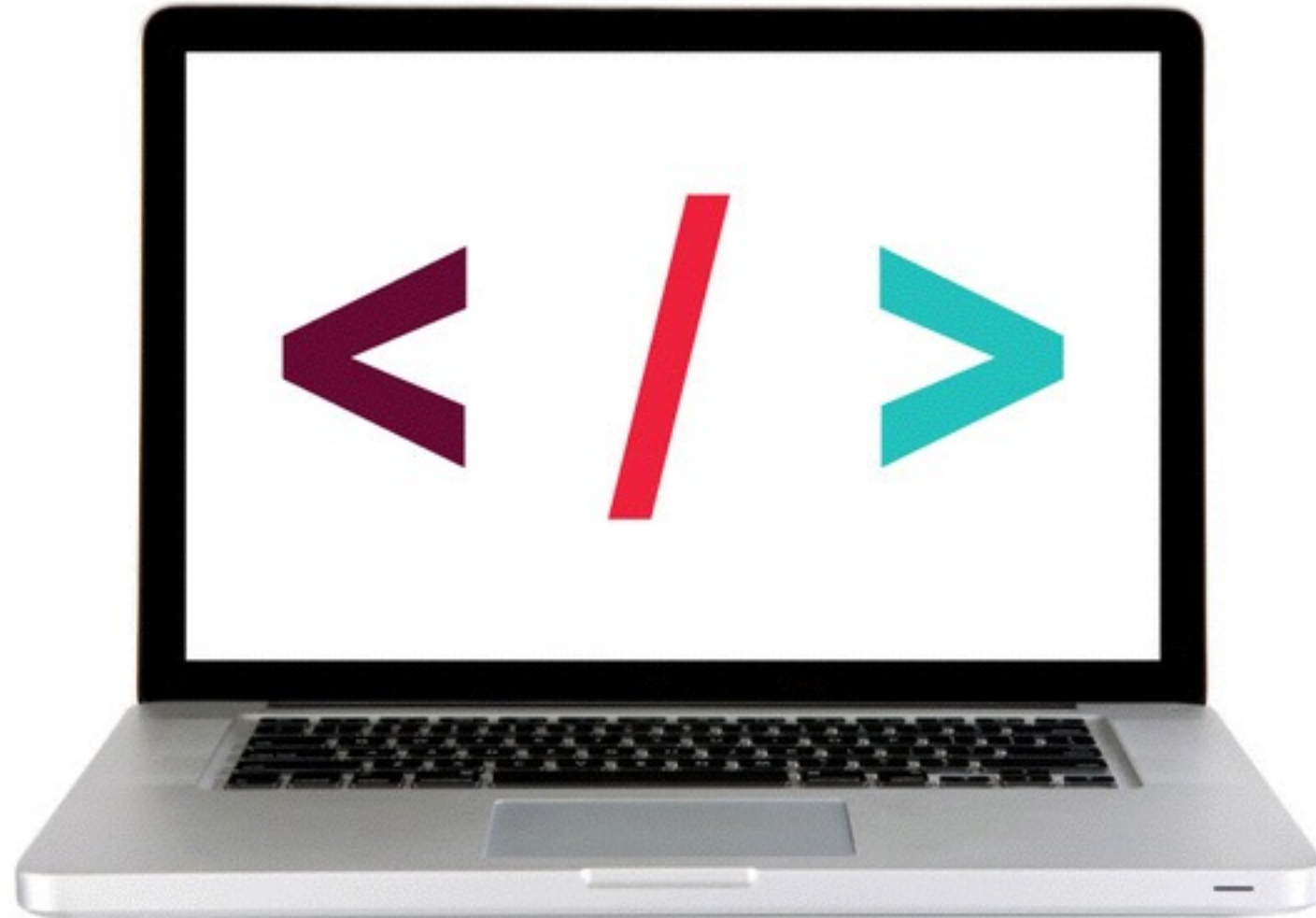
*<http://html-ipsum.com/>*

*<http://hipsum.co/>*

---

## LET'S TAKE A CLOSER LOOK – PART 1

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---

## **DIMENSION – A KEY DIFFERENCE BETWEEN INLINE AND BLOCK ELEMENTS**

---

**If you try to add dimension to an inline element:**

- Some properties will be applied
- Some properties will be *partially* applied
- Others will *not* be applied at all

The most noticeable properties are width, height, margin and padding.

---

# DIMENSION – A KEY DIFFERENCE BETWEEN INLINE AND BLOCK ELEMENTS

---

## SUMMARY — WHICH DIMENSIONS CAN BE CHANGED?

	WIDTH & HEIGHT	PADDING & MARGIN
BLOCK	yes	can apply to all sides
INLINE	no	will only affect left and right sides

---

# DISPLAY

---

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

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

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

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

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

3. Make a block-level element flow like an inline element, while retaining width, height, padding, and margin:

```
h2 {  
  display: inline-block;  
}
```

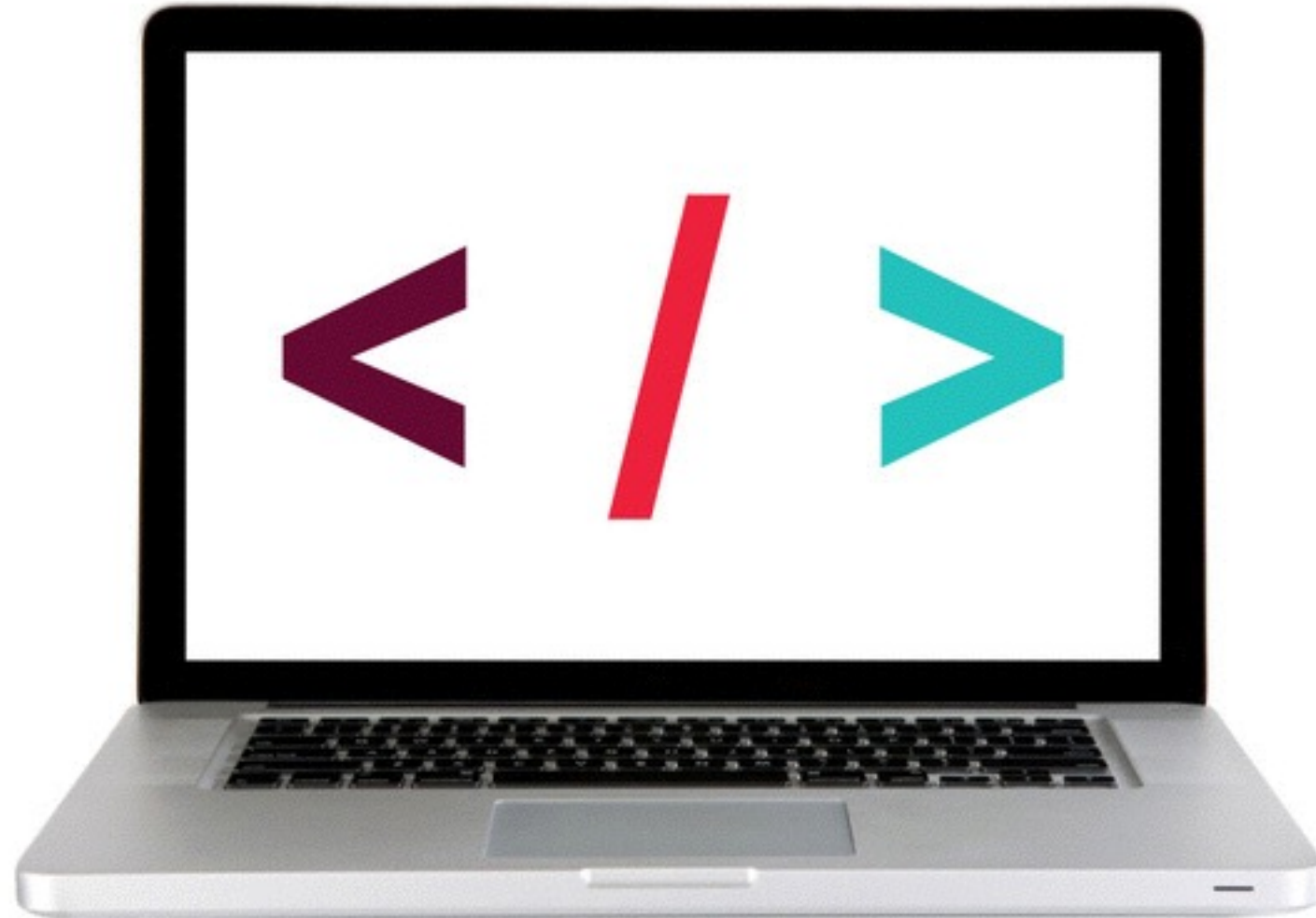
4. Hide an element from a page:

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

---

**LET'S TAKE A CLOSER LOOK**

---



# ACTIVITY — DISPLAY LAB

---



## EXERCISE

### KEY OBJECTIVE

---

- ▶ Get practice using the 'display' property

### LOCATION OF FILES

---

- ▶ `starter_code_lesson_4` > **display\_lab** folder

### TIMING

---

*5 min*

1. Follow the instructions in steps 1-3



---

**FEWD**

---

**DIVS**

---

## GROUPING TEXT & ELEMENTS

---

### THE <DIV> ELEMENT

- Defines a section or division in an HTML document
- Allows us to group a set of elements together into a block-level box

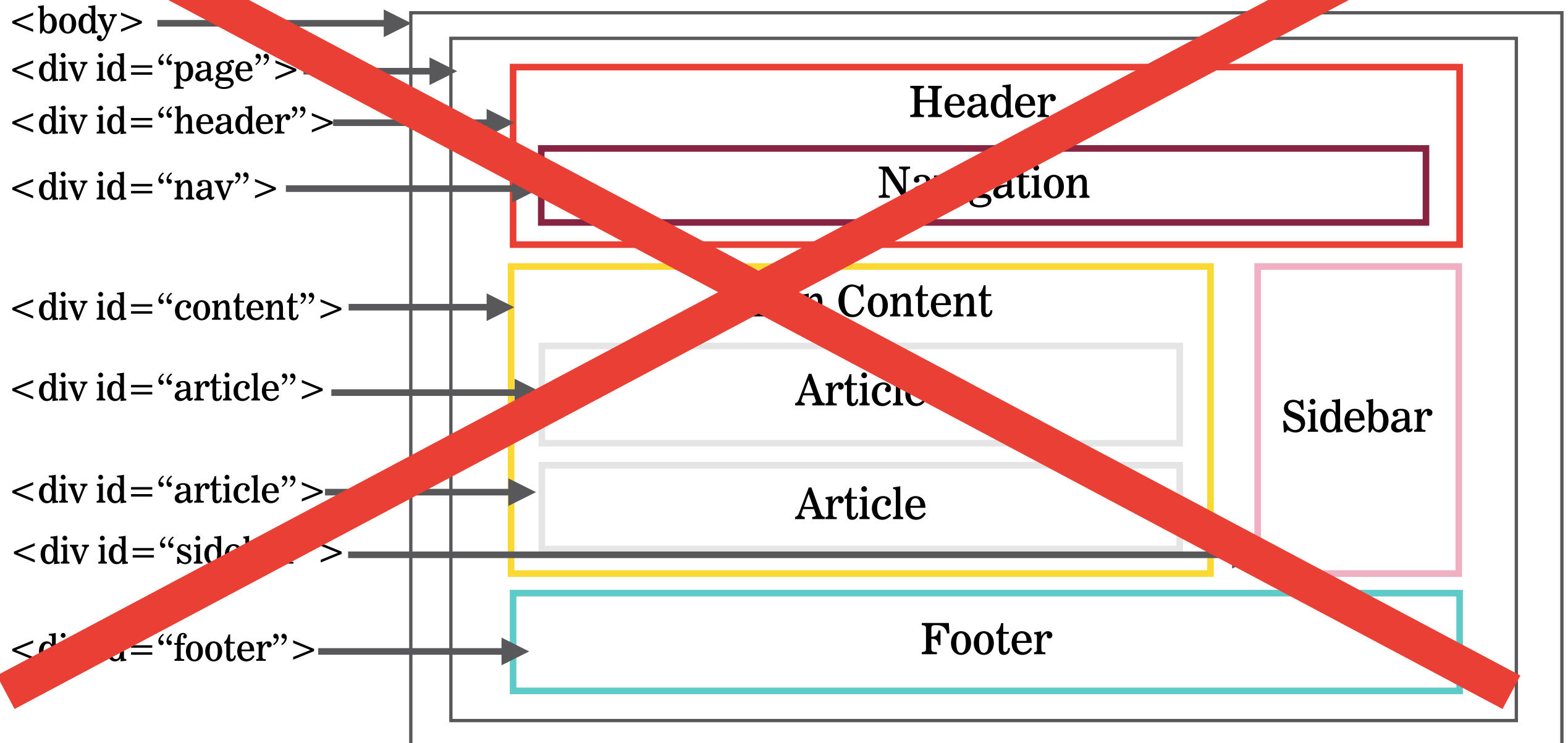
**\*\*** Divs allow developers to section off parts of a page.

### 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 = SECTIONING OFF PARTS OF A WEBPAGE (OLD WAY OF DOING THINGS)~~



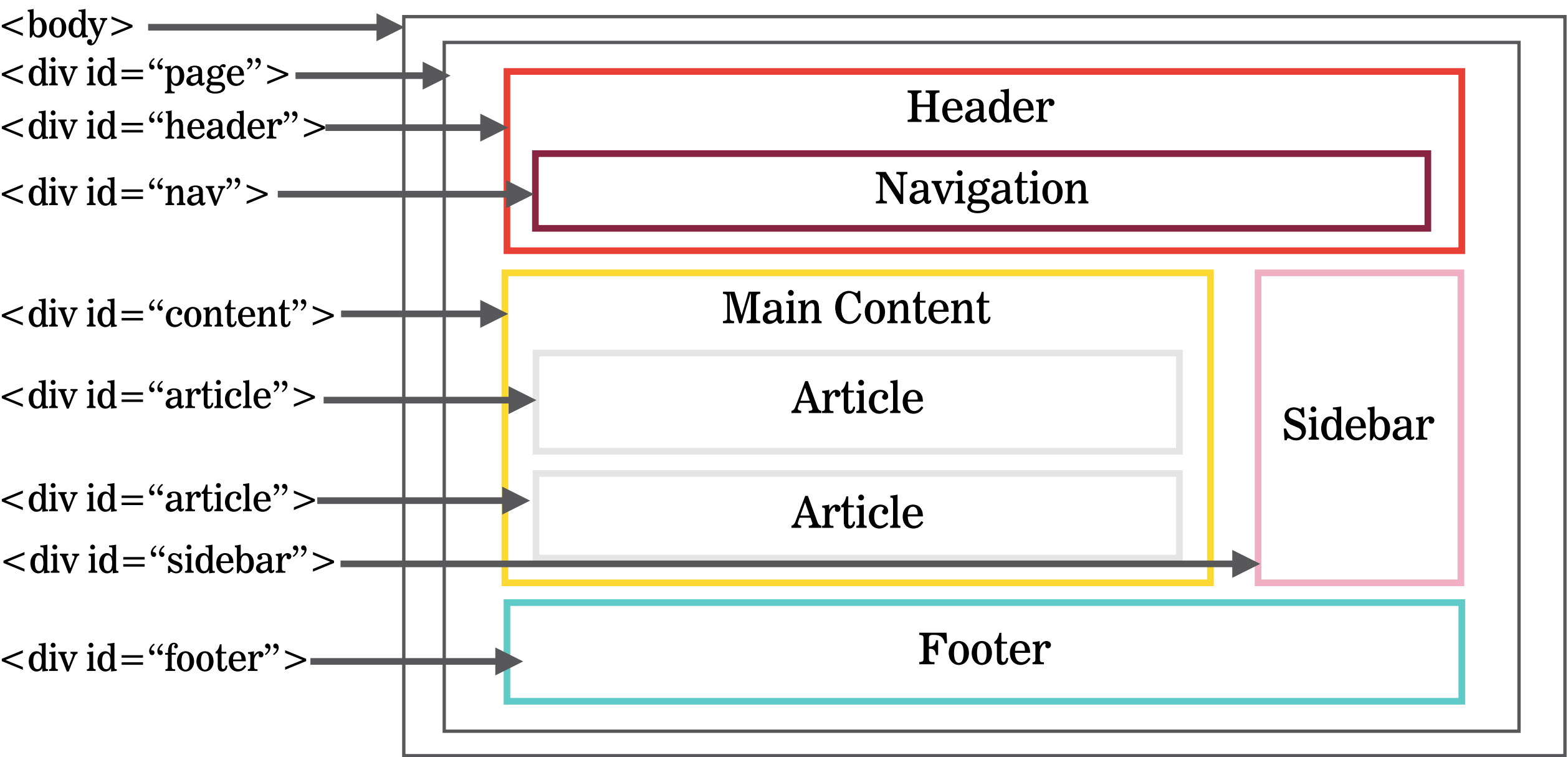
---

**FEWD**

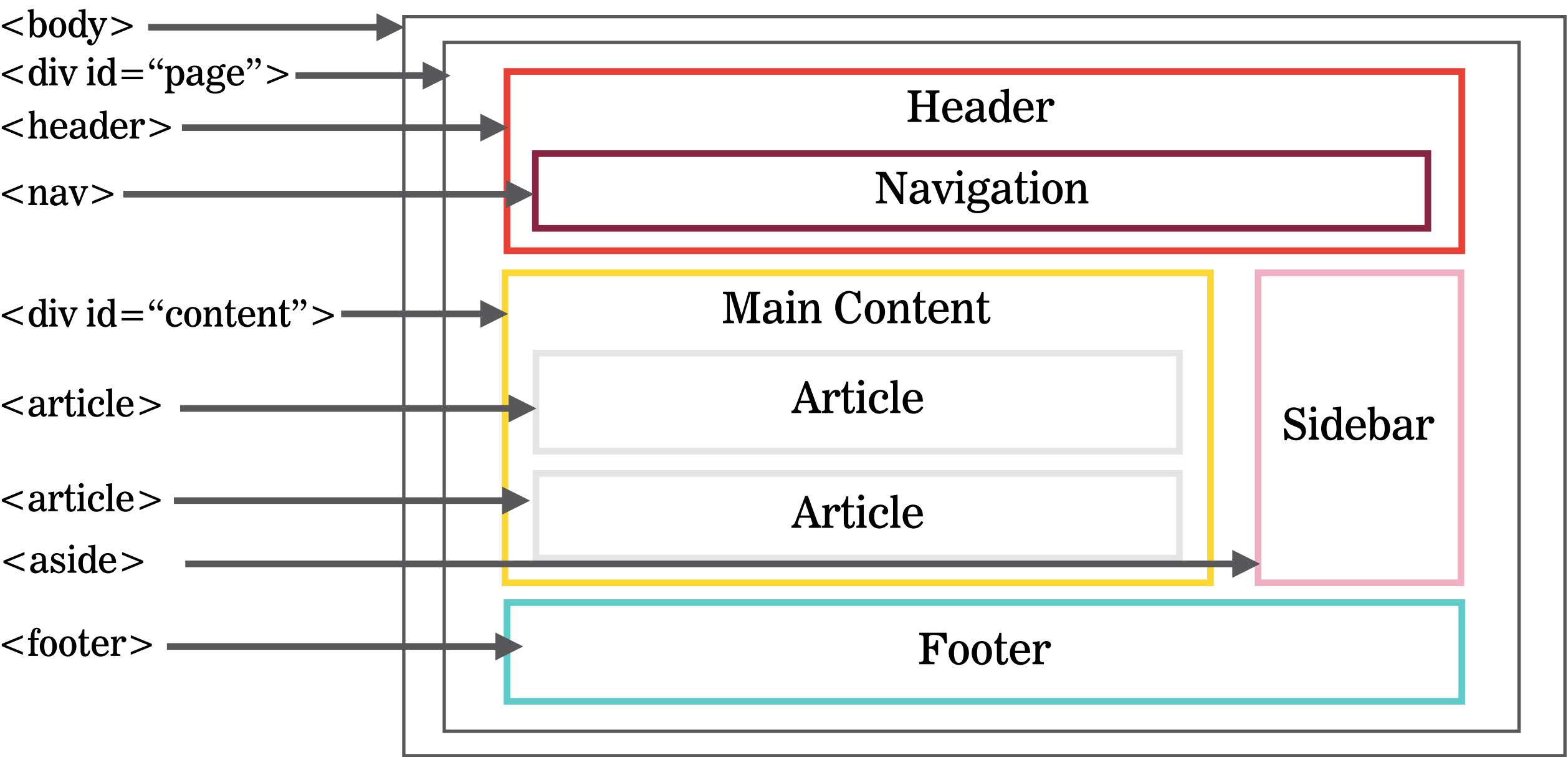
---

# HTML5 STRUCTURAL ELEMENTS

# TRADITIONAL HTML LAYOUTS



# STRUCTURAL ELEMENTS



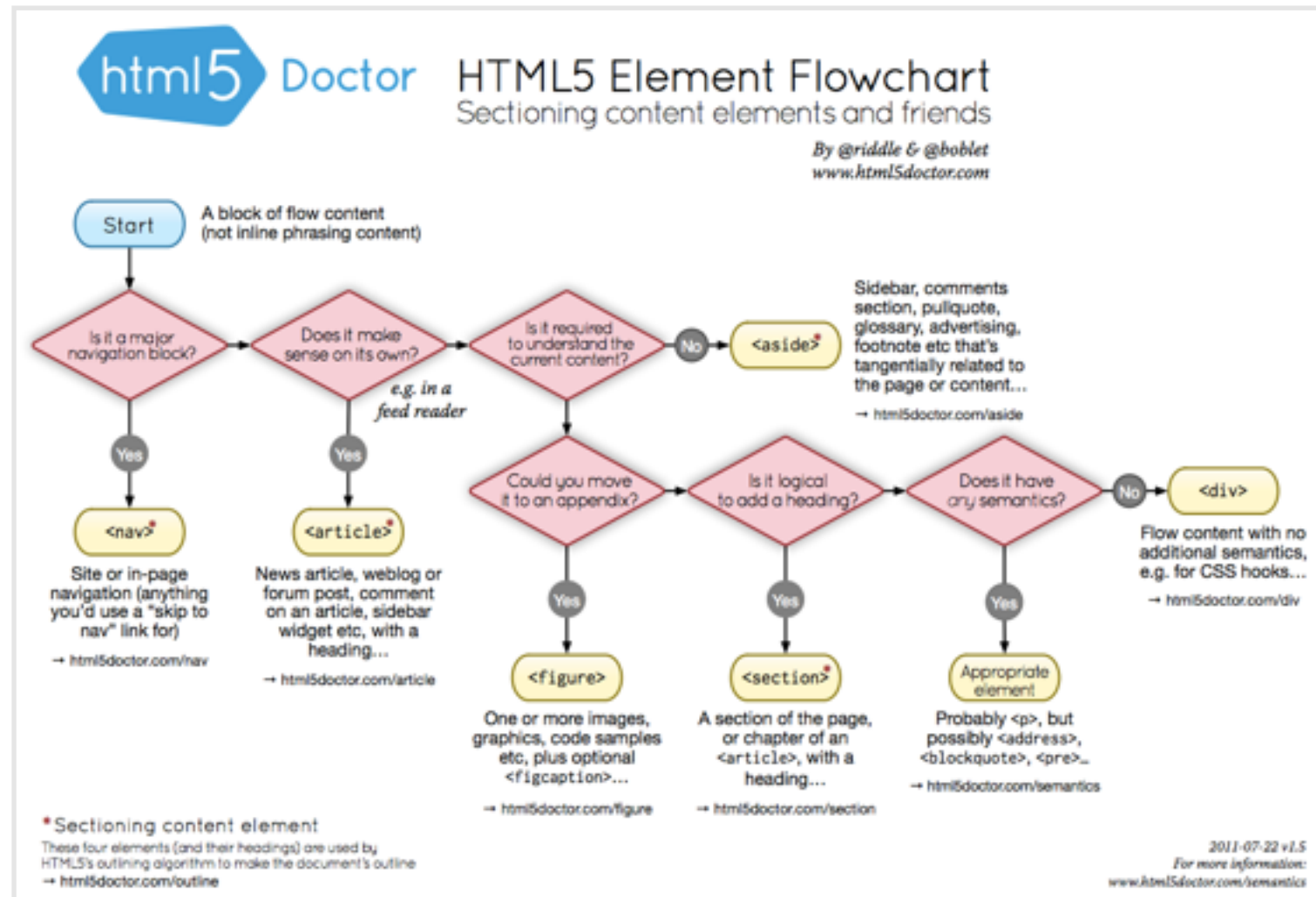
---

## SO...IS THERE STILL A PLACE FOR DIVS IN AN HTML5 WORLD?

---

- Yes! The `<div>` still has a place in the HTML5 world
- You should use `<div>` when there is **no other more semantically appropriate element that suits your purpose**
- Its most common use will likely be for stylistic purposes — i.e., wrapping some semantically marked-up content in a CSS-styled container.

# HTML5 ELEMENT FLOWCHART





---

## ACTIVITY — 'DIV' UP THE CONTENT

---



### EXERCISE

#### KEY OBJECTIVE

---

- ▶ Identify content sections

#### TYPE OF EXERCISE

---

- ▶ Partner

#### TIMING

---

*8 min*

1. First draw boxes around the content you think should live inside a sectioning element — a div, header, footer, etc.
2. Then determine which boxes/divs should have a class or id. Look for similarities to determine what should be a class.

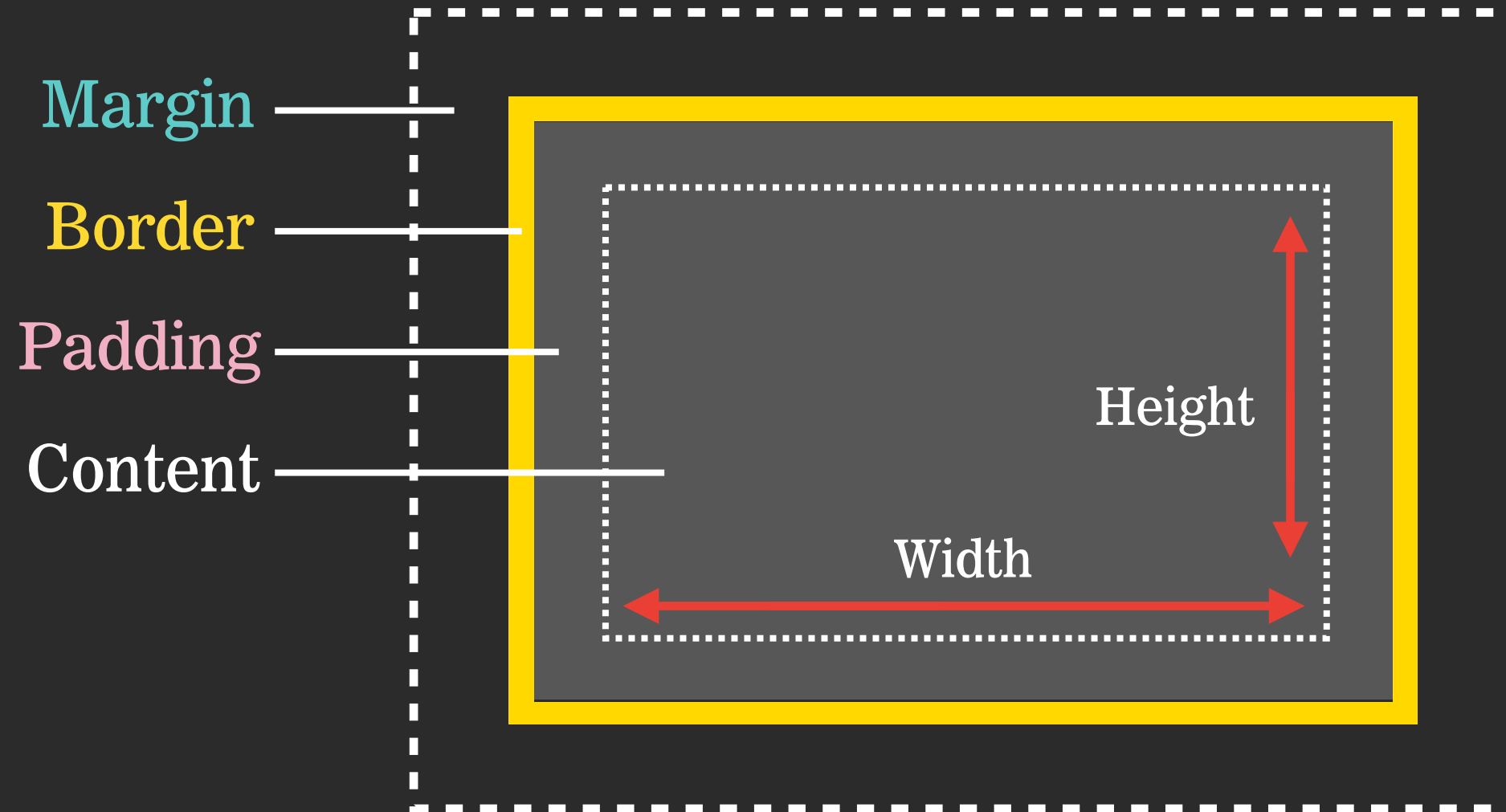
---

**FEWD**

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**BOX-SIZING FTW!**

## REFRESHER — BOX MODEL



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## THE DEFAULT WAY — ANNOYING!!

---

- ▶ **Default box-sizing** (box-sizing: content-box): As soon as an element has either padding or border applied, the actual rendered width is wider than the width you set in your CSS.

Actual width = width + border-left + border-right + padding-left + padding-right

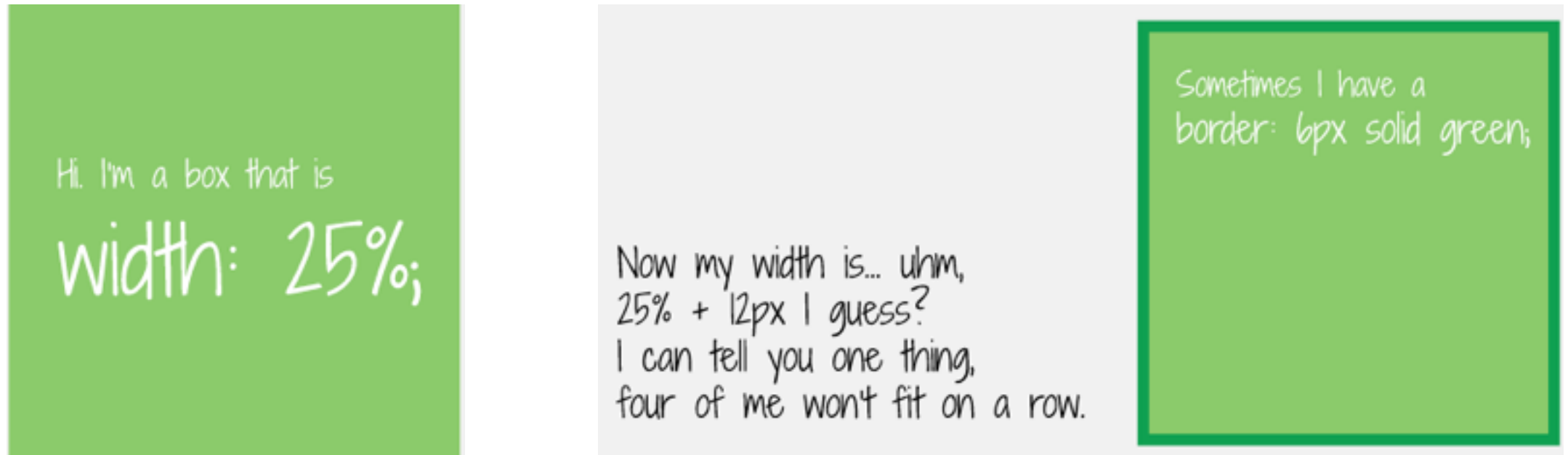
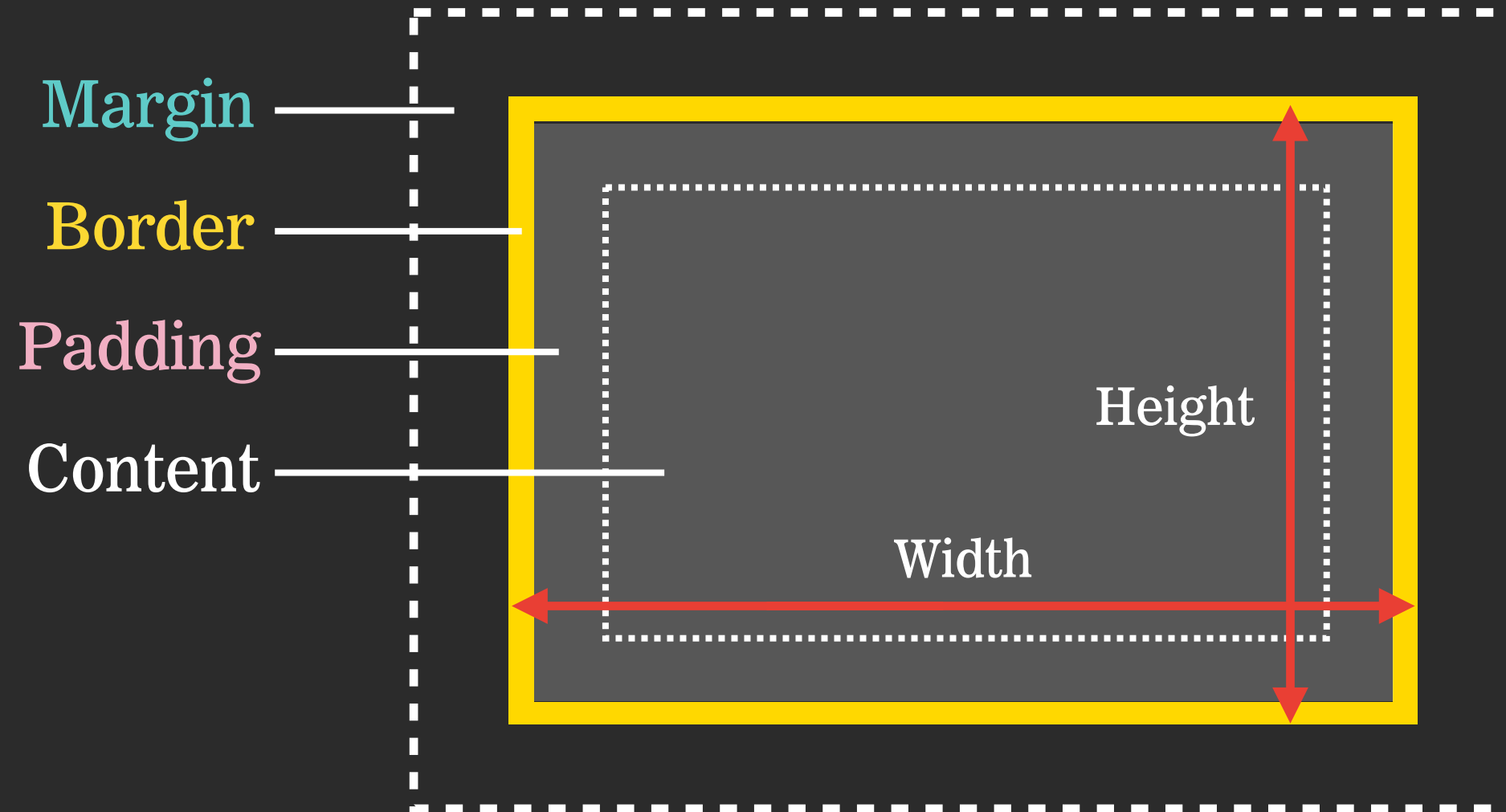


Image credit: Chris Coyier's [International Box Sizing Awareness Day](#)

## BOX-SIZING: BORDER-BOX



---

## HERE'S THE SYNTAX

---

```
* {  
  box-sizing: border-box;  
}
```

---

## WHY IS THIS SO AWESOME?

---

- ▶ With **box-sizing: border-box** — the padding and border press their way inside the box instead of expanding the box.

Actual width = Width set in CSS

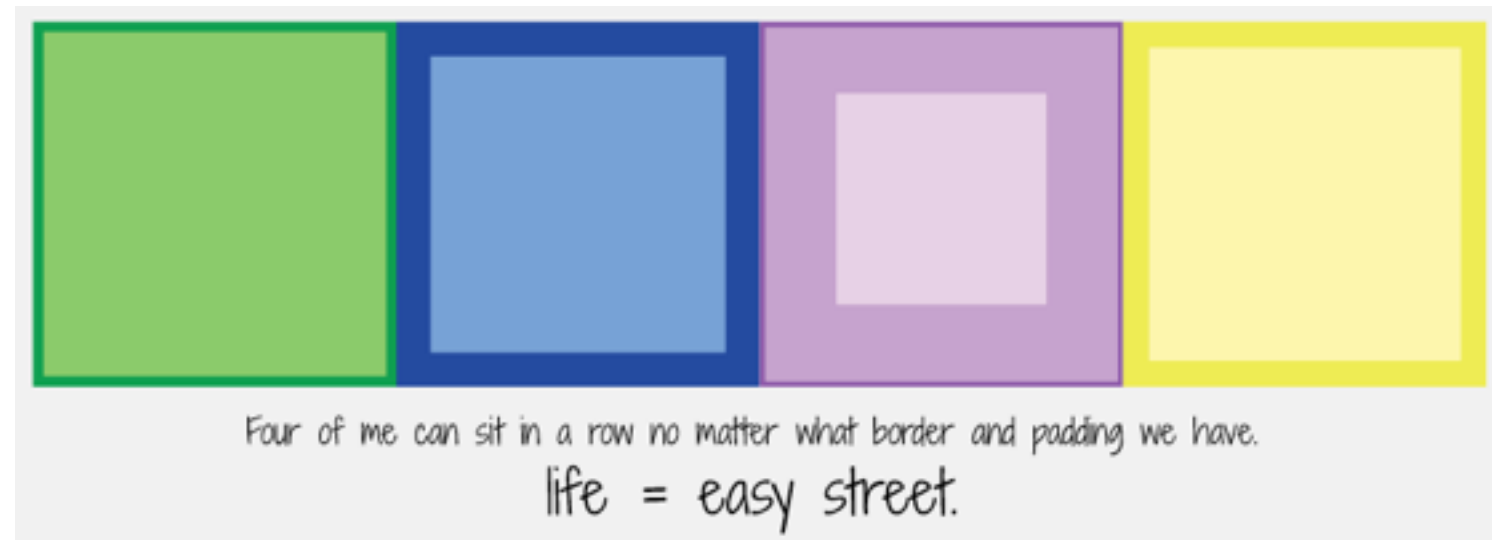
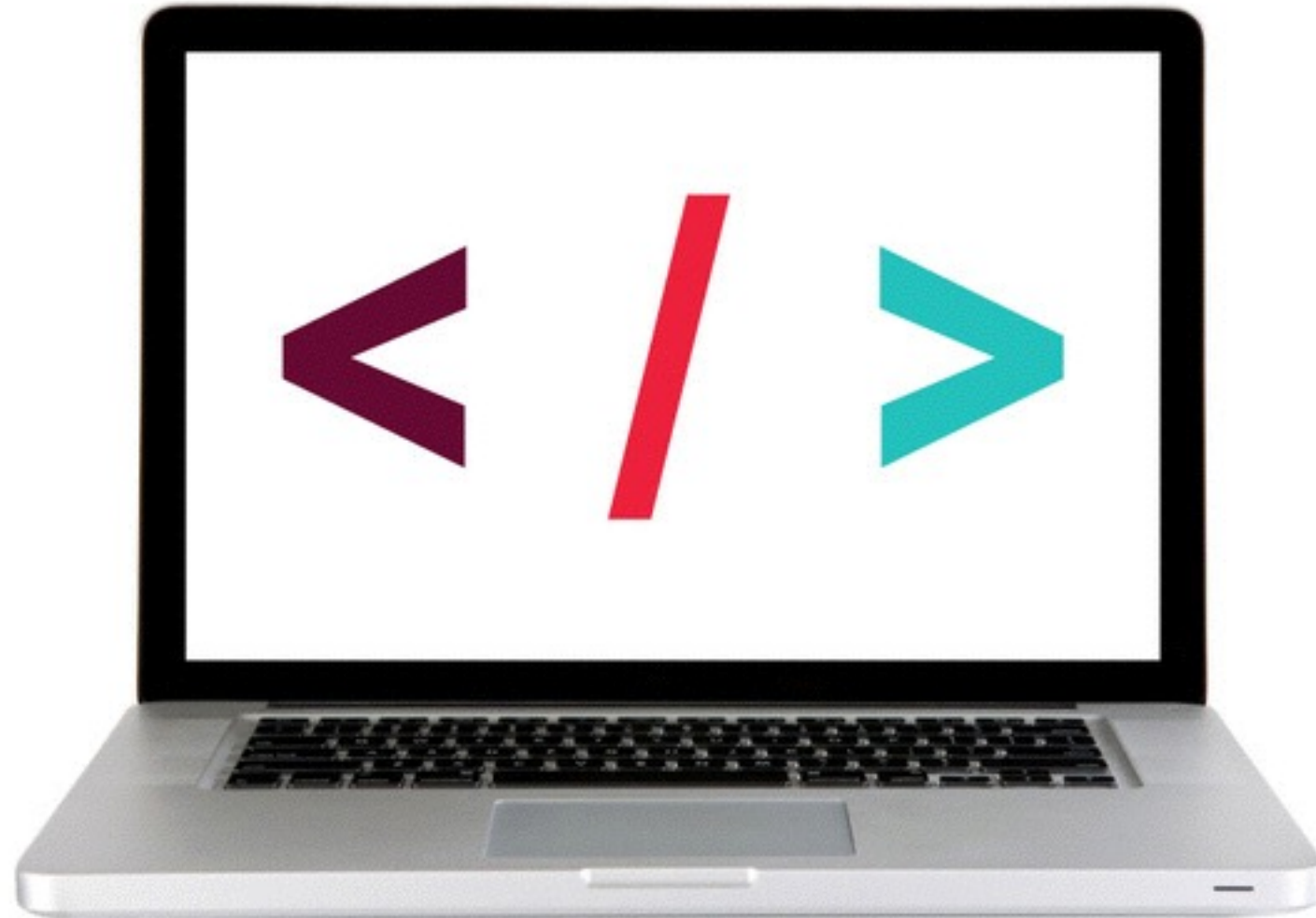


Image credit: Chris Coyier's [International Box Sizing Awareness Day](#)

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## LET'S TAKE A CLOSER LOOK

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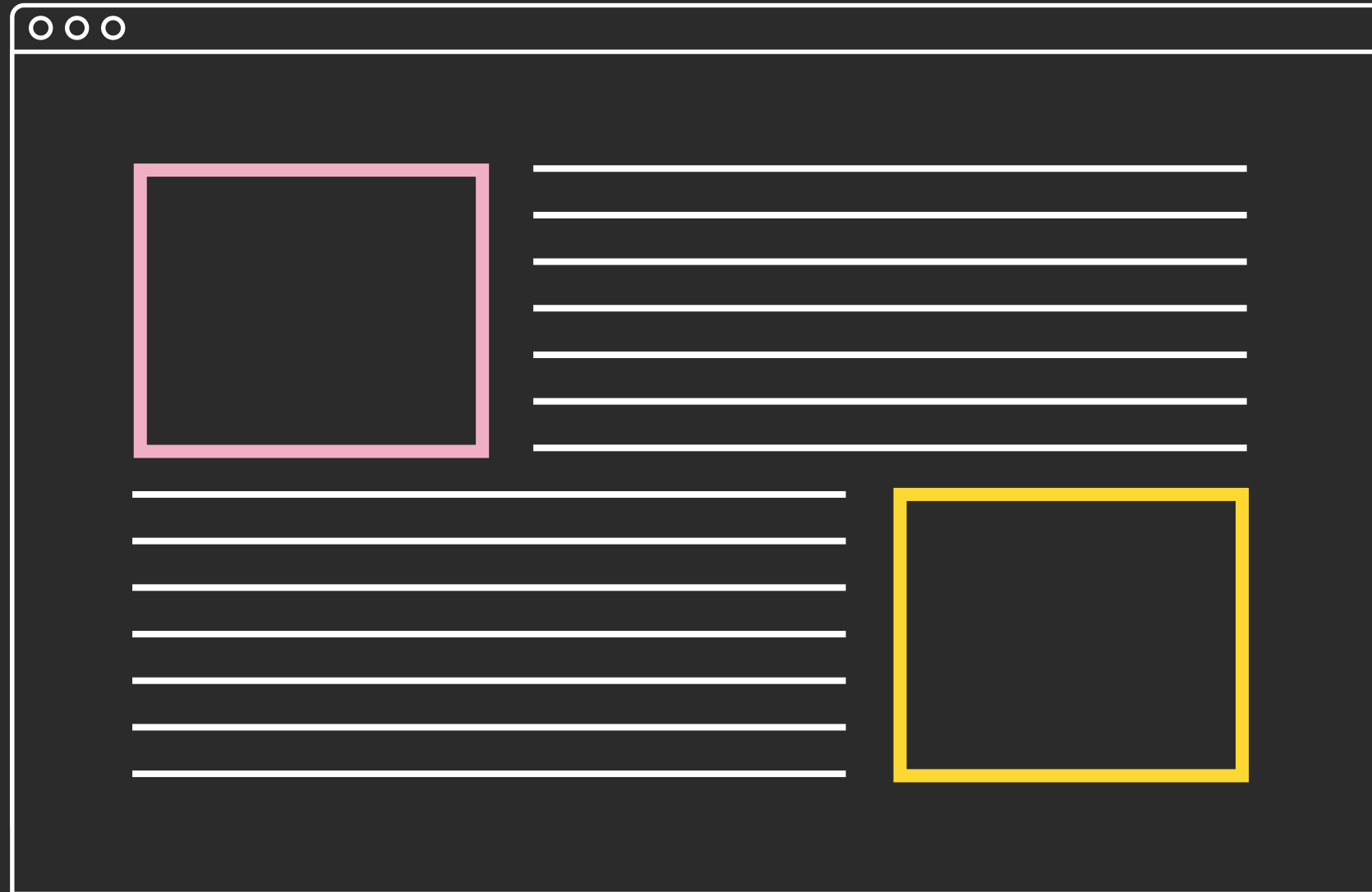
---

**FEWD**

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**FLOATS**

# CSS — FLOATS



---

## FLOATS

---

There are four valid values for the float property:

- **Left** and **Right** float elements those directions respectively
- **None** (the default) ensures the element will not float
- **Inherit** will assume the float value from that elements parent element

---

## CLEARING FLOATS

---

- The **clear** property specifies which side(s) of an element other floating elements are not allowed

### LEFT

- No floating elements allowed on the left side

### RIGHT

- No floating elements allowed on the right side

```
.clear {  
  clear: both;  
}
```

### BOTH

- No floating elements allowed on either the left or right side

### NONE

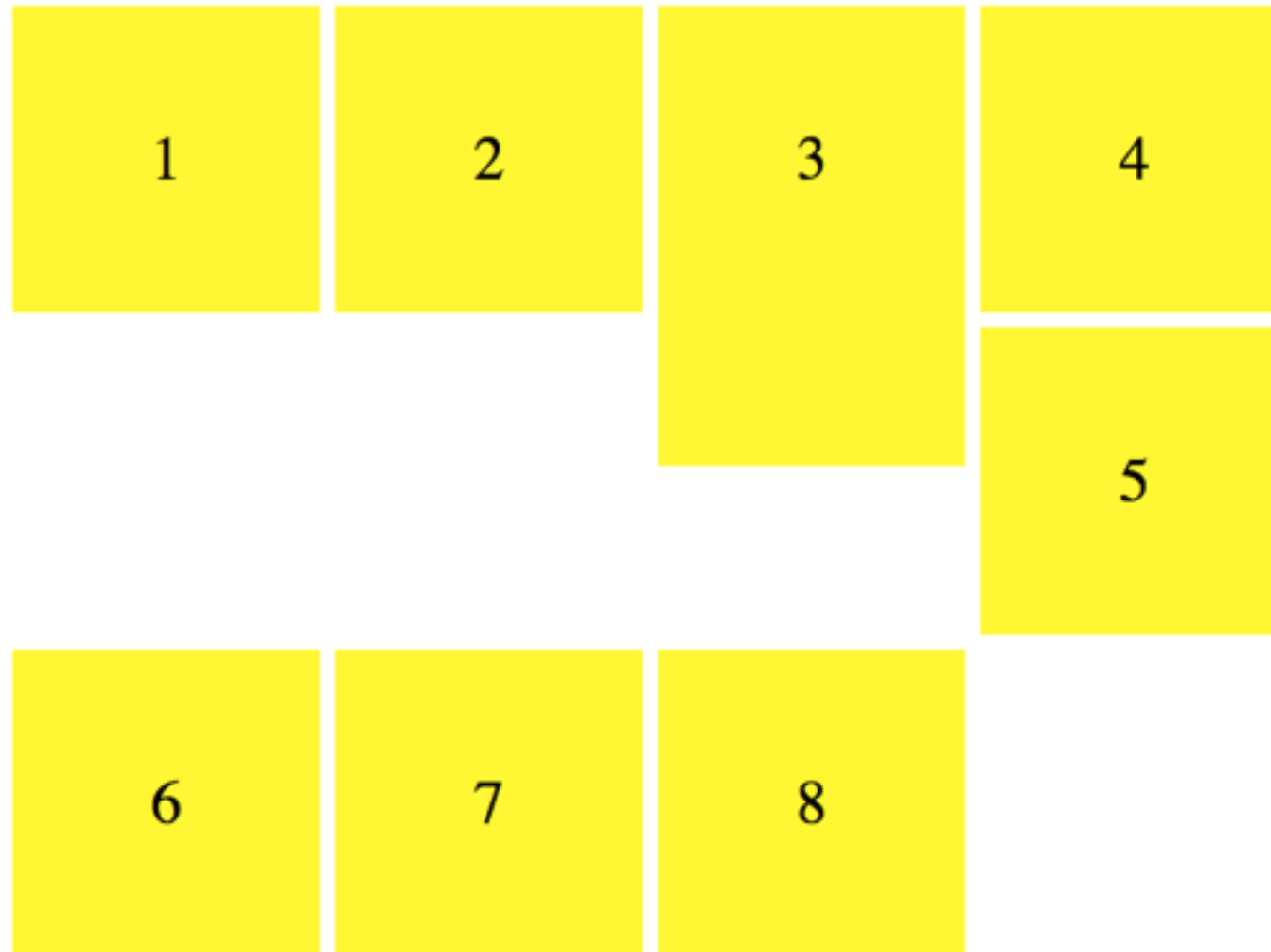
- Allows floating elements on both sides

---

## LET'S TAKE A LOOK

---

- I've added the example to Codepen so you can refer to it later if needed



## PARENTS OF FLOATED ELEMENTS

- ▶ If a containing element **only contains floated elements**, some browsers will treat it as if it is zero pixels tall.

### PROBLEM:

1	2	3	4
5	6	7	8

*Collapsed parent!*

### SOLUTION:

1	2	3	4	
5	6	7	8	

#### PT. 1 — ADD CSS CLASS:

```
.clearfix:after {  
  content: "";  
  display: table;  
  clear: both;  
}
```

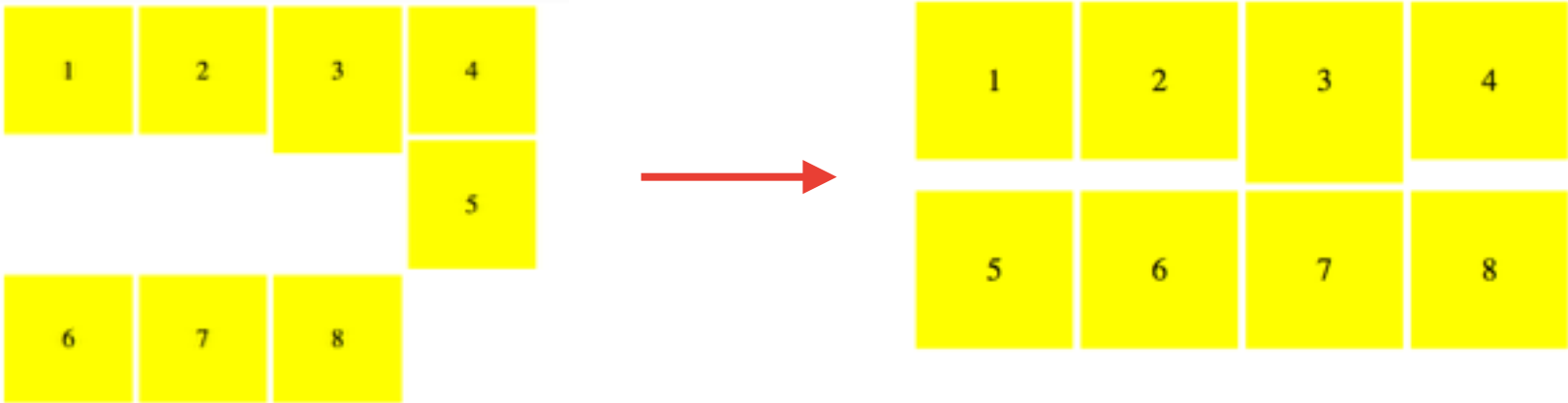
#### PT. 2 — ADD CLASS TO HTML:

```
<div class="clearfix">  
  <p>1</p> <!-- float: left -->  
  <p>2</p> <!-- float: left -->  
  <p>3</p> <!-- float: left -->  
</div>
```

# CONFUSING NAMES — KEEPING THINGS STRAIGHT

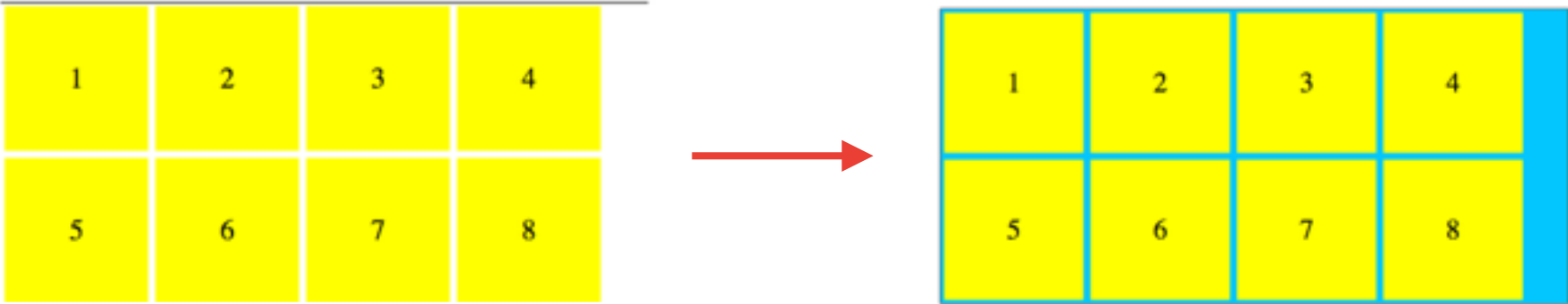
## CLEAR: BOTH;

*Make sure an element starts on a new line*



## CLEARFIX:

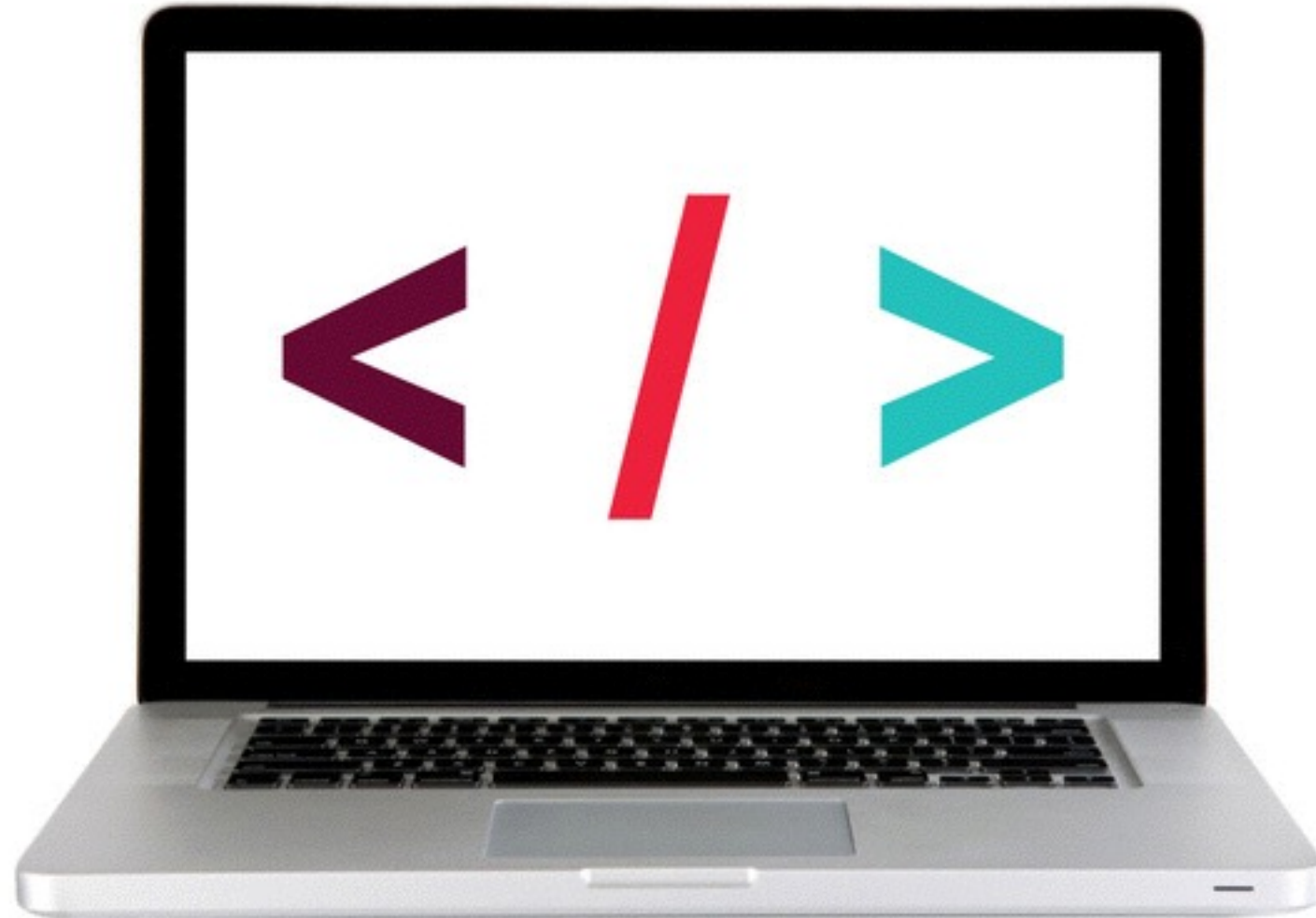
*Fixes collapsed parent*



---

**LET'S TAKE A CLOSER LOOK**

---





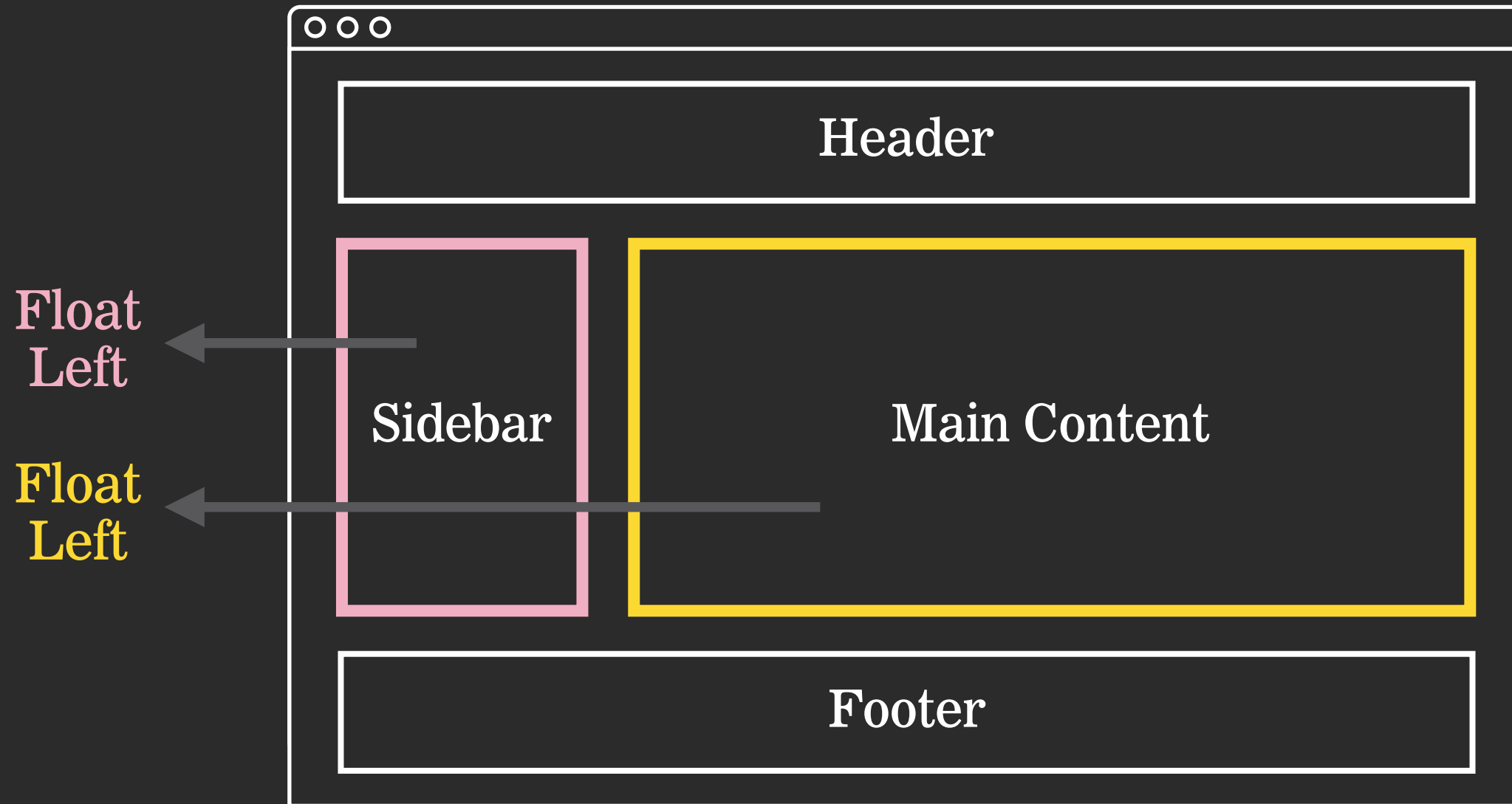
---

**FEWD**

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# MULTI-COLUMN LAYOUT

## CSS — MULTI-COLUMN LAYOUT



---

## STEPS TO ACHIEVE A MULTI-COLUMN LAYOUT

---

1. Make sure each column has a wrapper around it in your HTML
2. Give a width to each column (preferably in %)
3. Float each column to left
4. Use padding to add space between columns
5. Add box-sizing: border-box; to everything (use the \* CSS selector)
6. Clear anything underneath your columns i.e. a footer using the CSS clear property (clear: both;)

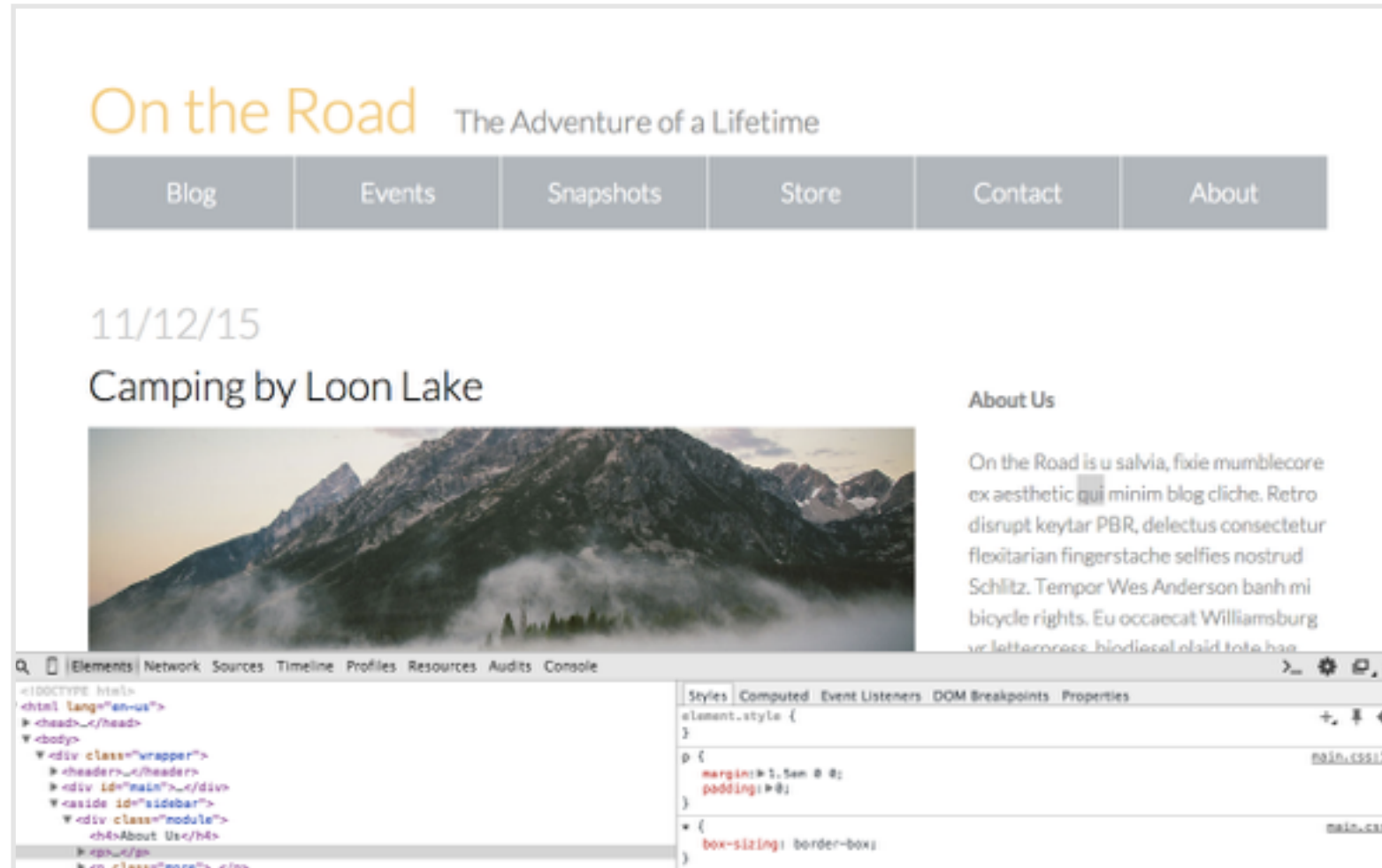
---

**FEWD**

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# TRAVEL BLOG

## LAB — WORKFLOW



Right click > Inspect Element

---

## LAB — WORKFLOW

---

Temporarily add a border to everything on the page using the `*` selector so that you can easily see how all the elements on the page line up.

```
* {  
  box-sizing: border-box;  
  border: 1px solid black;  
}
```

---

## LAB — TRAVEL BLOG PT. 2

---



---

# ACTIVITY — TRAVEL BLOG

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## EXERCISE

### KEY OBJECTIVE

---

- Demonstrate the ability to plan and build a website

### TYPE OF EXERCISE

---

- Partner | | on your own

### TIMING

---

*40 min*

1. Recreate the Travel Blog site, using Travel\_Blog.png as a reference (in starter\_code folder)
2. Use HTML structural tags such as <header>, <aside>, <article> and <footer>



# LEARNING OBJECTIVES

- Differentiate between block and inline elements
- Identify when HTML5 structural elements should be used
- Apply header, footer, sidebar, and multi-column layouts to build a web page.
- Experiment and predict effects of floats and clearing CSS positioning.

**FRONT-END WEB DEVELOPMENT**

---

**SNACKS & DESIGN**

**THURSDAY MAR 3RD**

**JIM HOWES & JON ILER**

**(GOOGLE SHEET IS PINNED IN SLACK)**

---

**LAYOUT**

---

# EXIT TICKETS