

FEWD WEEK 4 • CLASS 8:

Key Concepts

<https://slides.com/jennifermeade/fewd-4-8/live>



OBJECTIVES

- Review key concepts in HTML & CSS
- Solve common UI challenges
- Understand where to go to find answers and get help

CHALLENGES

- Align elements horizontally
- Align elements vertically
- Make images responsive
- Understanding flexbox

HORIZONTAL ALIGNMENT

TEXT-ALIGN

Align inline elements inside of a
block element

USING TEXT-ALIGN

*PARAGRAPHS
ARE BLOCK*

*TEXT NODES
ARE INLINE*

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

Lorem ipsum dolor sit amet,
consectetur adipisicing elit.

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

Lorem ipsum dolor sit amet,
consectetur adipisicing elit.

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

Lorem ipsum dolor sit amet,
consectetur adipisicing elit.

ANY INLINE ELEMENT WORKS

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

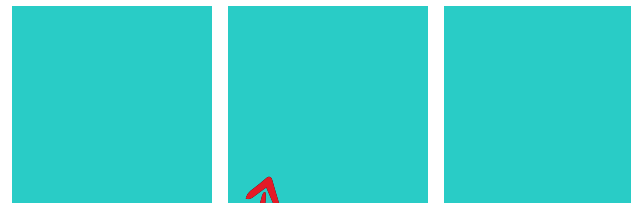
**DIVS ARE
BLOCK**



**IMAGES ARE
INLINE**

INLINE-BLOCK WORKS TOO

```
div.outside {  
  text-align: center;  
}  
  
div.inner {  
  height: 100px;  
  width: 100px;  
  background: #29ccc6;  
  display: inline-block;  
}
```



*DIVS SET AS
INLINE-BLOCK*

MARGIN: AUTO

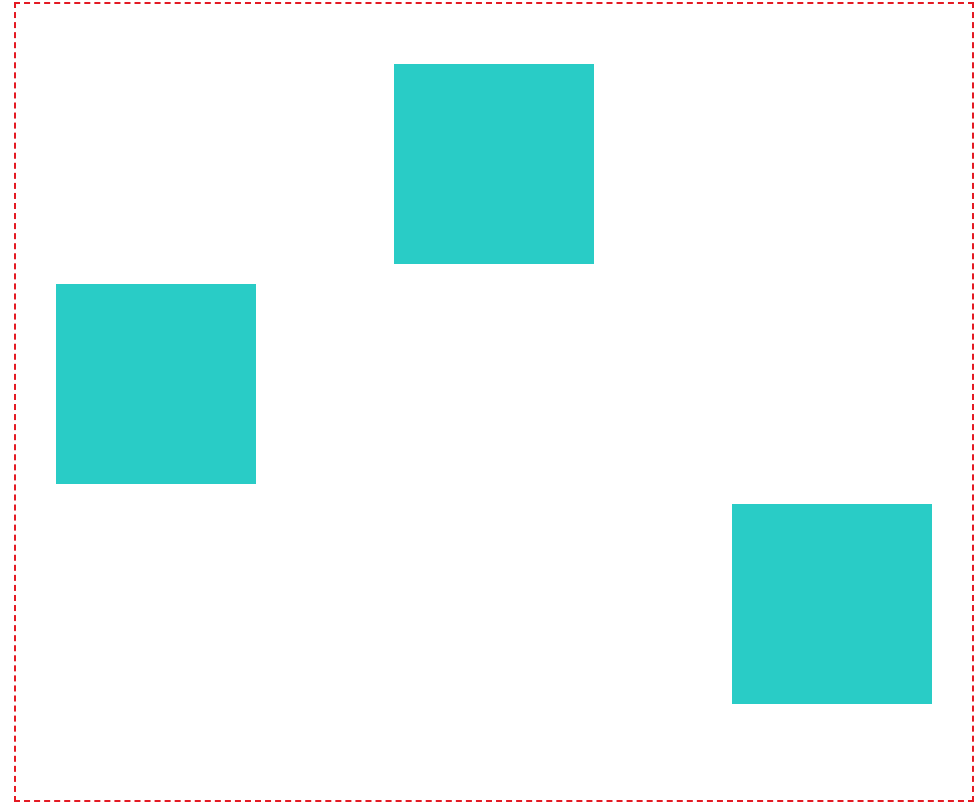
Align a block element inside of another block element



This technique requires the outer block element to be larger than the inner block element.

USING MARGIN: AUTO

```
div.inner {  
  height: 100px;  
  width: 100px;  
  margin-top: 10px;  
}  
  
div.inner:nth-child(1) {  
  margin-right: auto;  
  margin-left: auto;  
}  
  
div.inner:nth-child(3) {  
  margin-right: auto;  
}
```



FLOAT

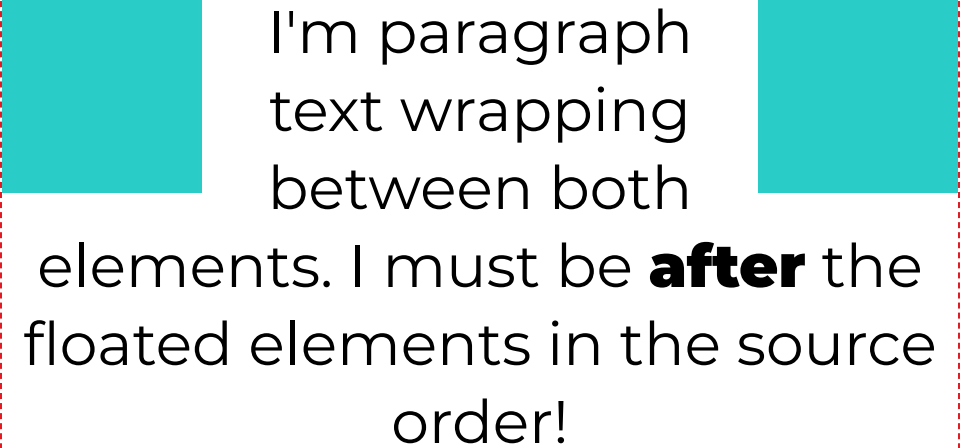
Align elements inside of a block element side-by-side



Float can only align elements to the left or right. There is no center option.

USING FLOAT

```
div.inner {  
  height: 100px;  
  width: 100px;  
  background: #29ccc6;  
}  
  
div.inner:nth-child(1) {  
  float: left;  
}  
  
div.inner:nth-child(2) {  
  float: right;  
}
```



I'm paragraph
text wrapping
between both
elements. I must be **after** the
floated elements in the source
order!

FLEX

Align elements inside of
another element



Not supported in Internet Explorer.

93.03% support in the US

USING FLEX

```
div.inner {  
  height: 100px;  
  width: 100px;  
  background: #29ccc6;  
  margin: 10px;  
}  
  
div.outside {  
  display: flex;  
  justify-content: center;  
}
```

**CENTER ALONG THE
MAIN AXIS WITH
JUSTIFY-CONTENT**



**FLEX DIRECTION IS
ROW BY DEFAULT**

VERTICAL ALIGNMENT

LINE-HEIGHT

Center a single line of text
vertically in its container.

USING LINE-HEIGHT

```
p {  
  height: 500px;  
  line-height: 500px;  
  text-align: center;  
}
```

This is a line of text.

FLEX

Align child elements vertically
inside a flex container.



Not supported in Internet Explorer.

93.03% support in the US

USING FLEX

```
div.outside {  
  display: flex;  
  justify-content: center;  
  align-items: center;  
}  
  
div.inner:nth-child(1) {  
  align-self: flex-start;  
}  
  
div.inner:nth-child(3) {  
  align-self: flex-end;  
}
```



POSITION

Align child elements within a positioned ancestor.

POSITION ONLY

```
section {  
  position: relative;  
  height: 400px;  
}  
  
div {  
  position: absolute;  
  bottom: 0;  
  right: 0;  
  background: #29ccc6;  
}
```



I'm aligned
bottom-right

POSITION + TRANSFORM

Align an element in the center of its positioned ancestor.

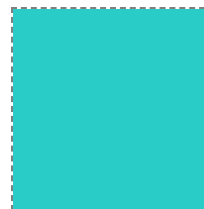


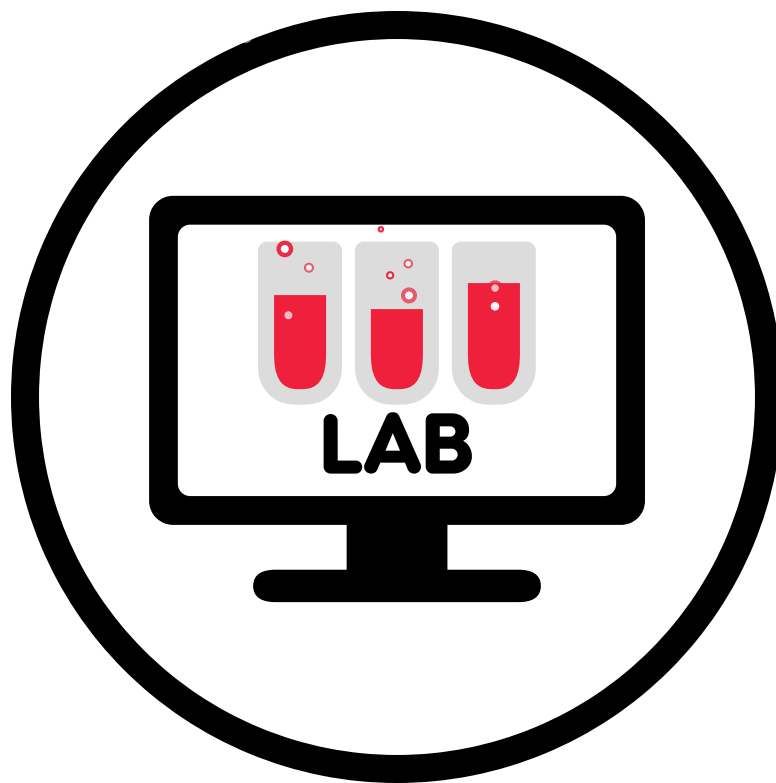
Transform is supported in Internet Explorer 9+.

94.14% support in the US

TRANSFORM HACK

```
section {  
  position: relative;  
  height: 400px;  
}  
  
div {  
  position: absolute;  
  top: 50%;  
  left: 50%;  
  background: #29ccc6;  
  transform: translate(-50%,-50%);  
}
```





CENTER STUFF

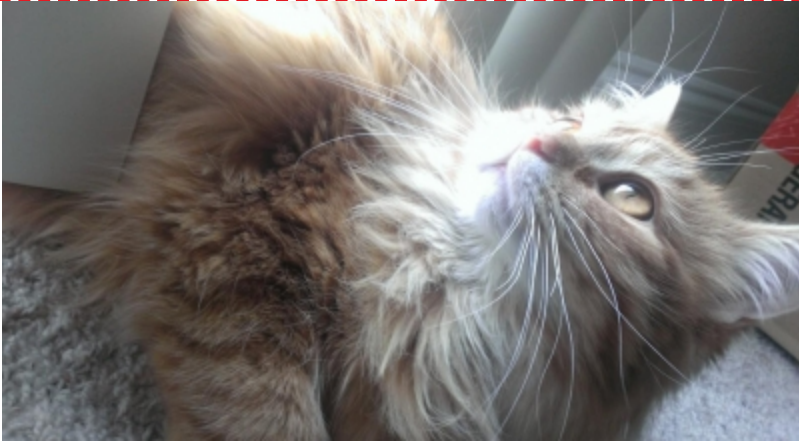
<https://codepen.io/jme11/pen/pxXqGE>

RESPONSIVE IMAGES

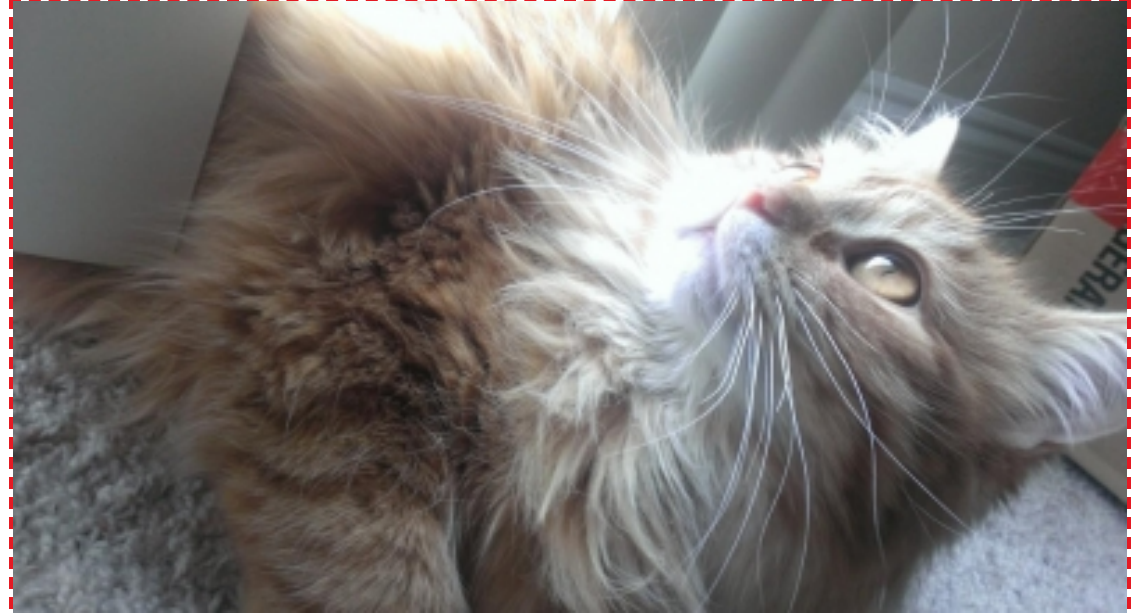
IMAGES IN RESPONSIVE PAGES

- Remember that your images have an intrinsic height and width (the size of the image)
- By default, if you set either the height **or** width of an image, it will resize the other value proportionally
- Large images can slow your download. Optimize them and use srcset or picture, if needed.

SETTING THE IMAGE WIDTH



Now the image will fill its parent and scale to fit the viewport.



Now the image will fill its parent and scale to fit the viewport.

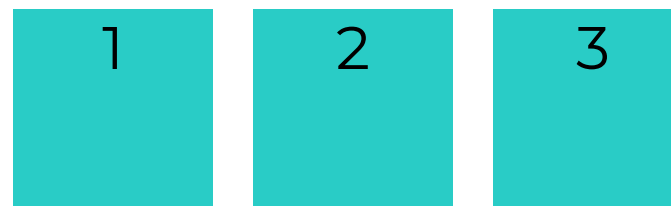
FLEX REVISITED

LEARN FLEXBOX

- Flexbox should be your goto unless you really need to support very old browsers (validate with analytics)
- Dig into all of its features and properties — it's more powerful than you know

FLEX

```
div.outside {  
  display: flex;  
}  
  
div.inner {  
  height: 100px;  
  width: 100px;  
  background: #29ccc6;  
}
```



FLEX-GROW

```
div.outside {  
  display: flex;  
}  
  
div.inner {  
  height: 100px;  
  background: #29ccc6;  
  flex-grow: 1;  
}
```



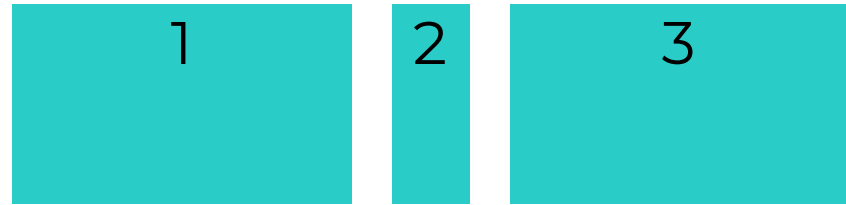
FLEX-GROW

```
div.outside {  
  display: flex;  
}  
  
div.inner {  
  height: 100px;  
  background: #29ccc6;  
  flex-grow: 1;  
}  
  
div.inner:nth-child(2) {  
  flex-grow: 2;  
}
```



FLEX-SHRINK

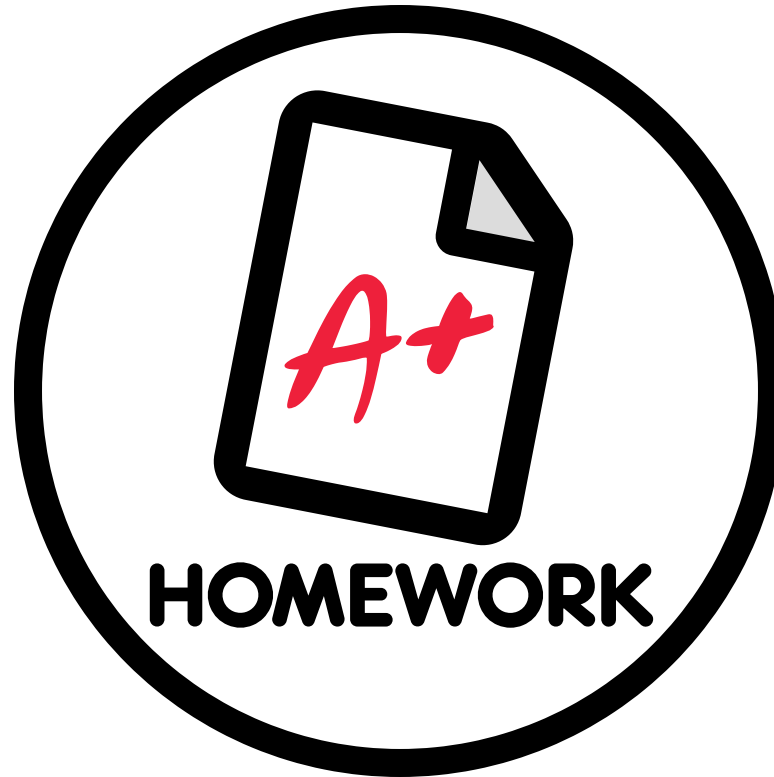
```
div.outside {  
  display: flex;  
}  
  
div.inner {  
  height: 100px;  
  background: #29ccc6;  
  width: 300px;  
}  
  
div.inner:nth-child(2) {  
  flex-shrink: 2;  
}
```



FLEX-BASIS

```
div.inner {  
  height: 100px;  
  background: #29ccc6;  
  flex-basis: 100px;  
}  
  
div.outside {  
  display: flex;  
}
```





CLASS 8 HOMEWORK

<https://github.com/jmeade11/FEWD/tree/master/Final%20Project>

HOMEWORK FOR NEXT CLASS

- Let's make sure you have a final project proposal ready for Monday.
- Make sure you have a proposal and wireframes submitted. You can send them as a zip file to me over Slack.



Here's your chance to get creative. Your final project proposal is due on Monday. You'll need to have a clear concept and a set of wireframes (pencil drawing are fine).

EXIT SURVEY

<https://goo.gl/EB4XFw>

**GO BUILD
AWESOME THINGS!**