



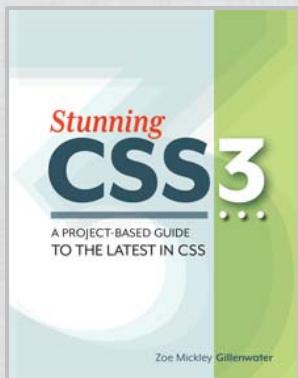
CSS3 Layout

February 18, 2013
In Control Orlando

by Zoe Mickley Gillenwater
[@zomigi](https://twitter.com/zomigi)
zomigi.com

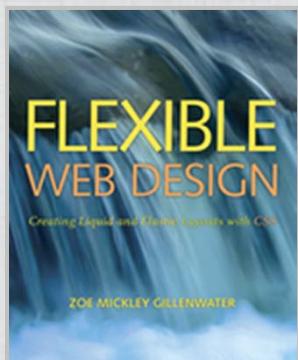
What I do

Books



**Stunning CSS3:
A Project-based Guide to
the Latest in CSS**

www.stunningcss3.com



**Flexible Web Design:
Creating Liquid and Elastic
Layouts with CSS**

www.flexiblewebbook.com

Web

**Accessibility
specialist at AT&T**

**Visual designer
CSS developer
and consultant**



the past
table layout

Problems with table layout

- Complicated/bulky markup
- Accessibility problems
- Slower browser rendering
- Rigid designs
- Spacer gifs



the present
float layout

Problems with float layout

- Difficulty with containment
- Wrapping/float drop
- Difficulty with equal-height columns
- No float:center
- Visual location somewhat tied to HTML order



the future

a whole mess o' CSS3

FLOATS OF THE FUTURE

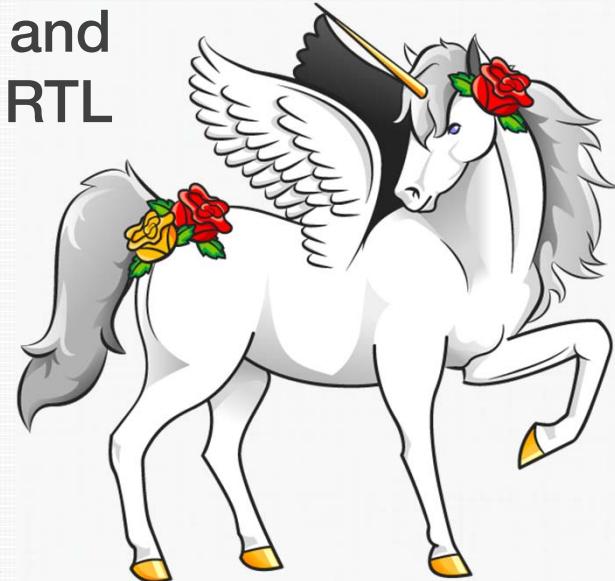
<http://dev.w3.org/csswg/css3-box/>

- New values for `float` property
- New ways to contain floats
- New `float-displace` property

New values for float property

These include values like `start` and `end` to help with languages with RTL direction, but check out how the text wraps around this graphic when using the new `contour` value.

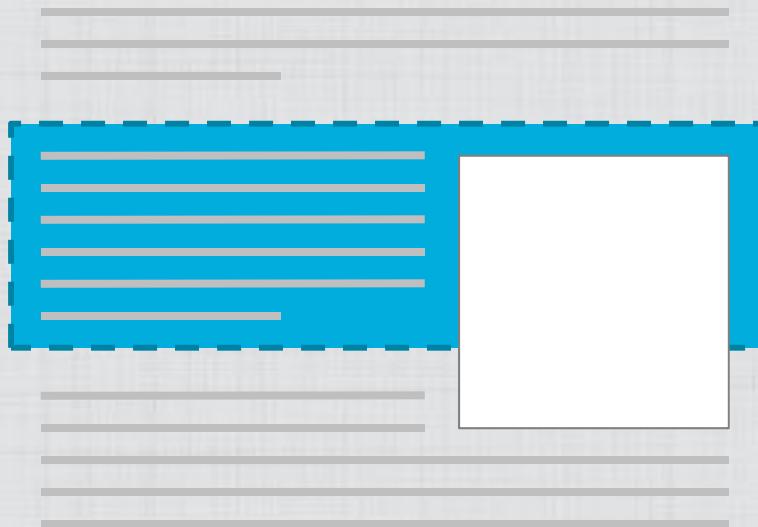
```
.unicorn {  
  float: right contour;  
}
```



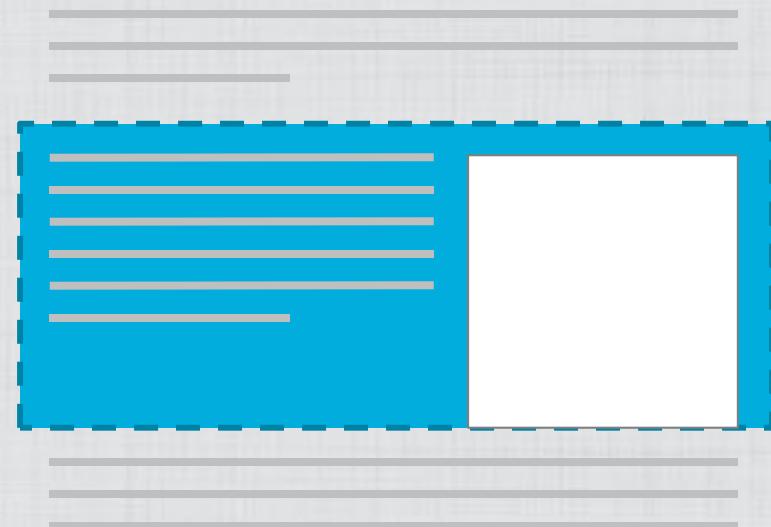
Pretty sweet, right? Almost as sweet as this rad unicorn pegasus.

New ways to contain floats

Current behavior:



New behavior:

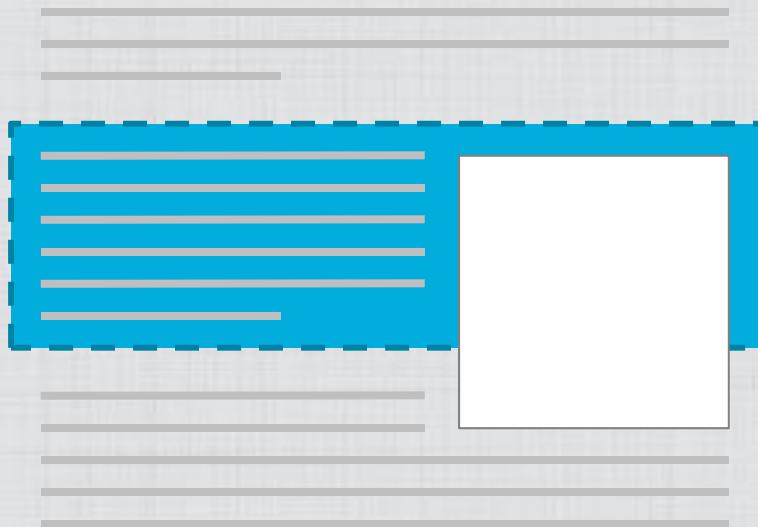


One potential
way to get this
new behavior:

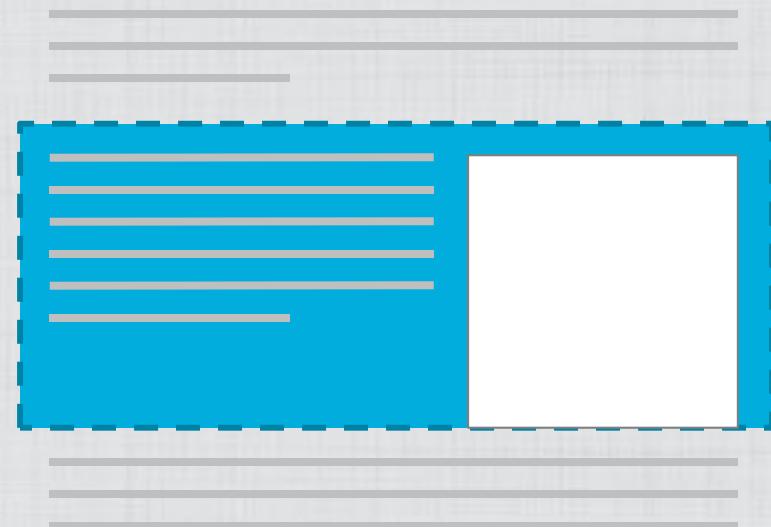
```
p {  
  min-height: contain-floats;  
}
```

New ways to contain floats

Current behavior:



New behavior:

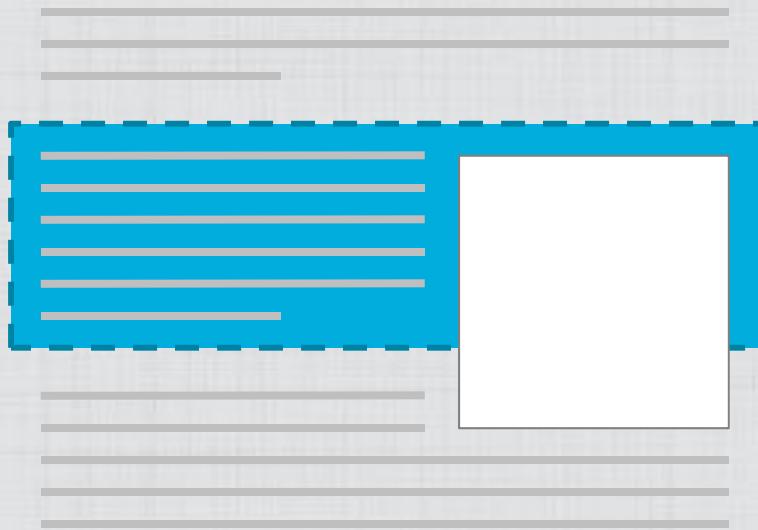


Another way
(if element has
bottom border
or padding):

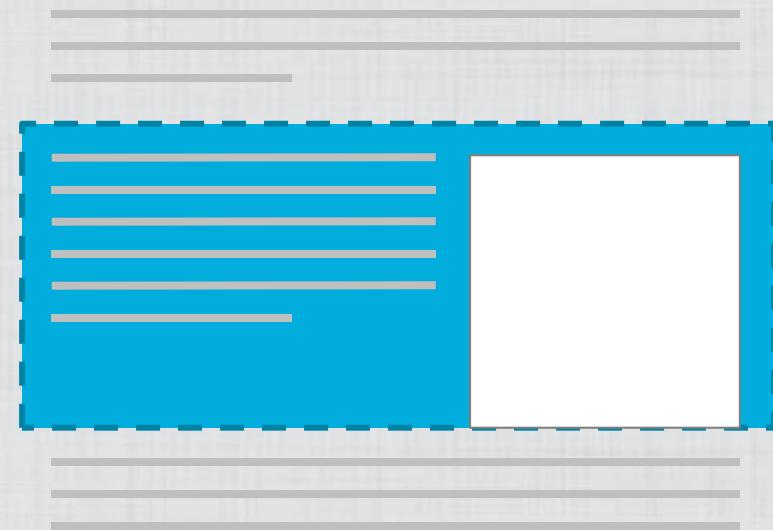
```
p {  
  clear-after: right;  
}
```

New ways to contain floats

Current behavior:



New behavior:



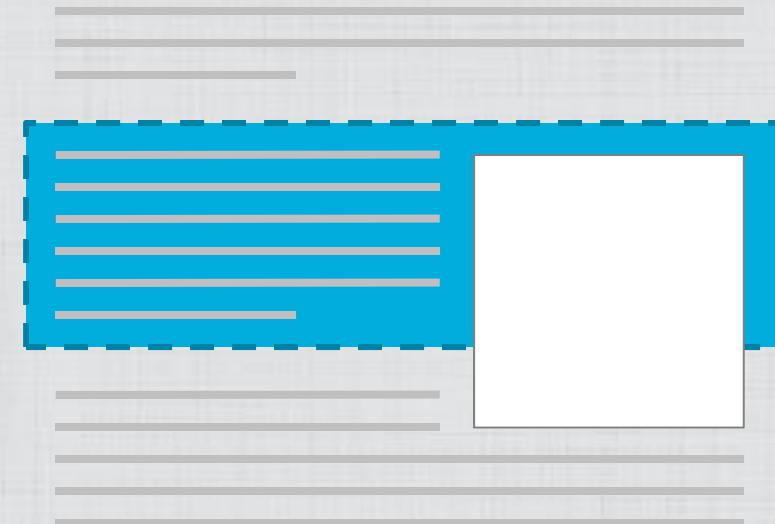
Or maybe just:

```
p {  
    clear: both after;  
}
```

Current float wrap behavior

```
p {  
  float-displace: line;  
}
```

- Floats lay over blocks
- Lines get shortened



Here's when that sucks



Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent ultrices tortor ac ligula aliquam malesuada. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.

- [Home](#)
- [About](#)
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Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.

Fix with float-displace



- [Catering](#)
- [Contact Us](#)

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.

Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.

- [Home](#)
- [About](#)
- [Menu](#)
- [Location](#)

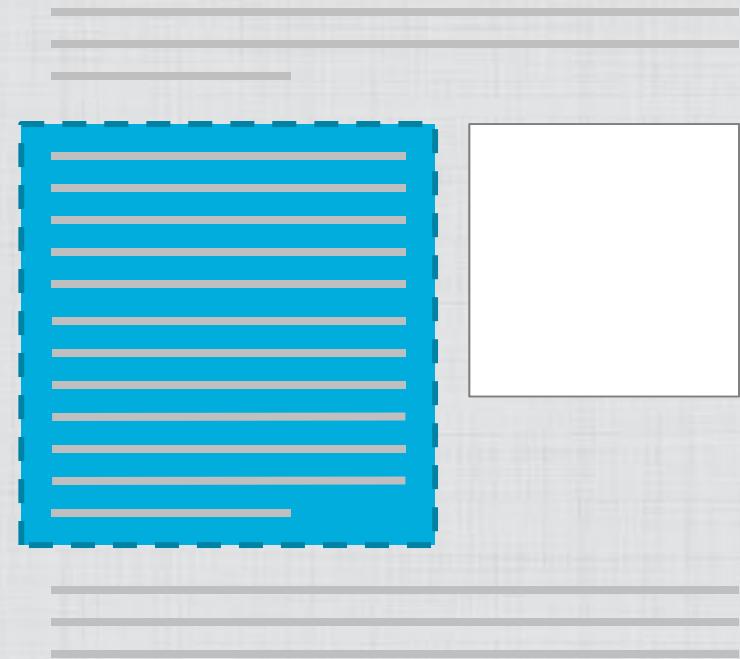
```
ul {  
    float: right;  
}
```

float-displace: indent;

Another option for float wrap

```
p {  
  float-displace: block;  
}
```

- Floats do not lay over blocks
- Block's width reduced



CSS3 “content-flow” modules

- **Multi-column Layout:** flow a box’s content into multiple columns in that box
- **Regions:** flow content into multiple, separate boxes
- **Exclusions and Shapes:** make content flow around and within areas in more intricate ways than floating

Multi-column Layout

www.w3.org/TR/css3-multicol/

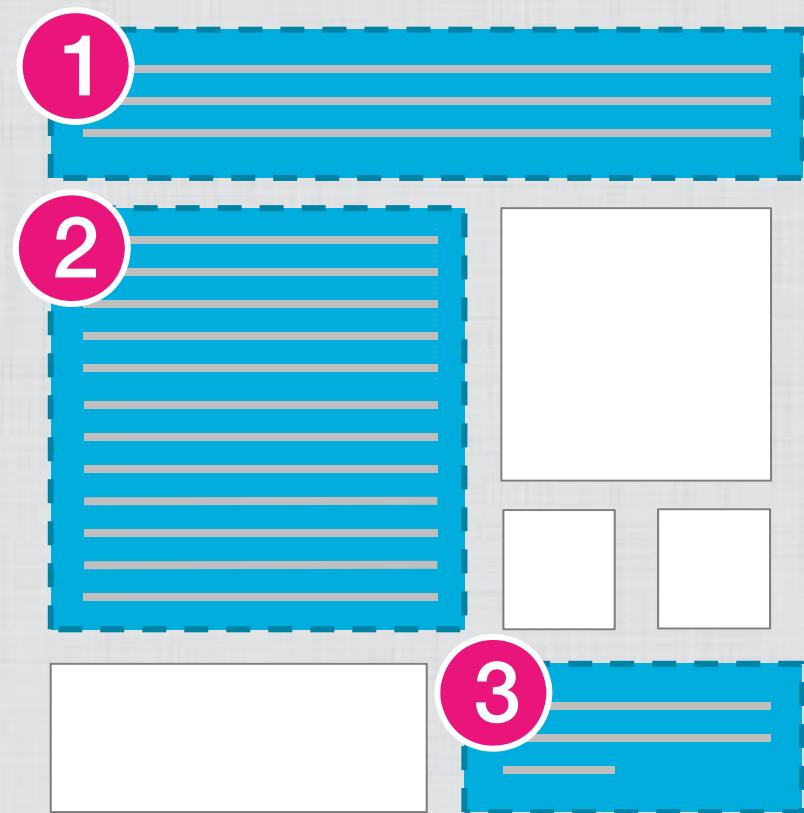


* with browser-specific prefixes

Regions

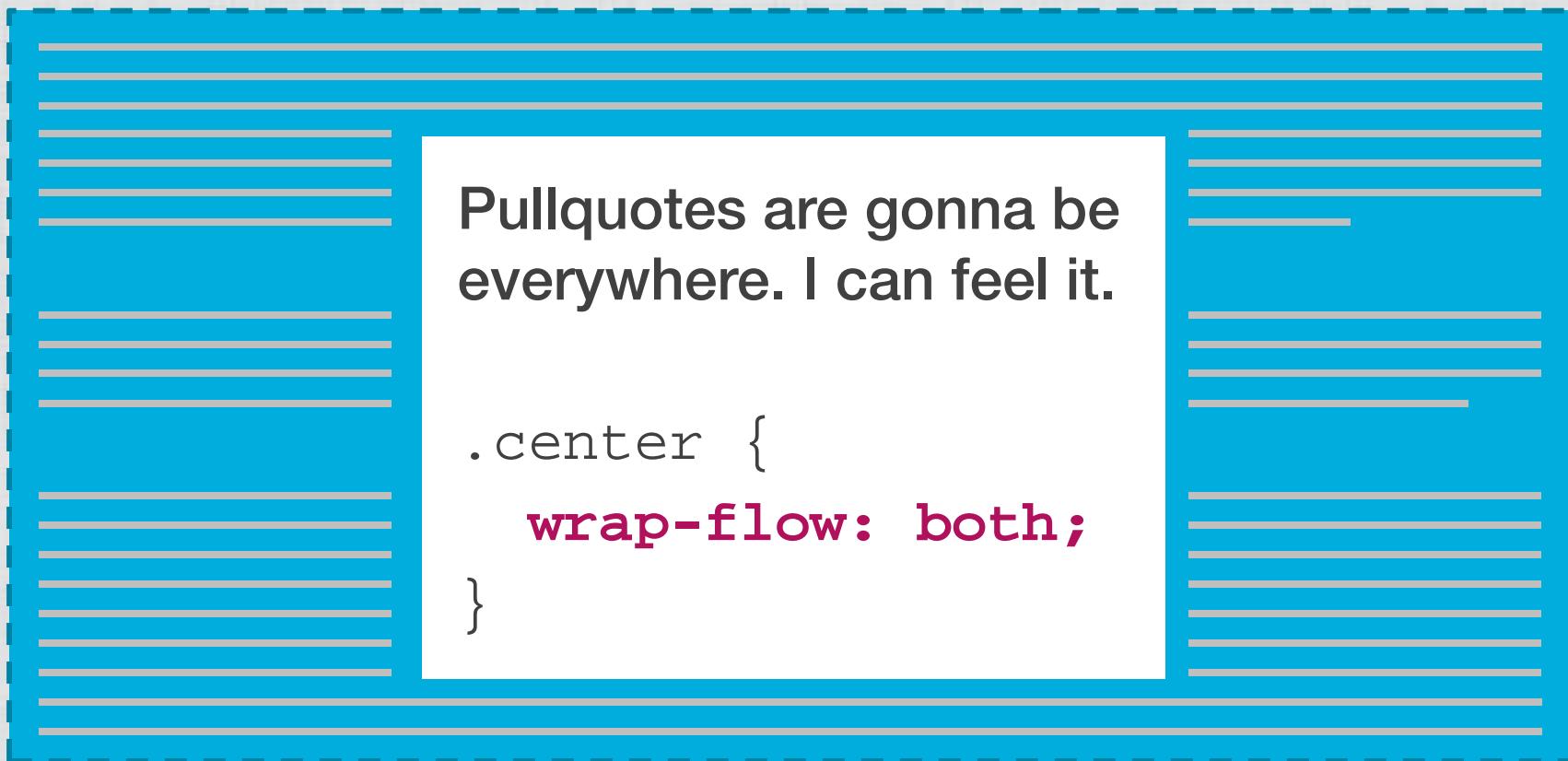
www.w3.org/TR/css3-regions/

```
article {  
  flow-into: orlando;  
}  
  
#one, #two, #three {  
  flow-from: orlando;  
}
```



Exclusions and Shapes

<http://dev.w3.org/csswg/css3-exclusions/>



Shapes

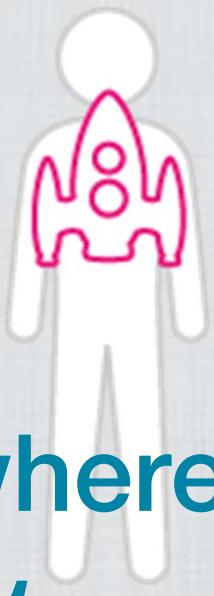
- Use SVG-like syntax or image URL to define contours
 - Inside shapes apply to all blocks
 - Outside shapes apply to floats and exclusions

The text content in this element will wrap in the shape of a circle. Any text that overflows will be hidden but using CSS Regions you can direct it to another element. Using the notation described in this document you can achieve even more complex polygon shapes. The text content in this element will wrap in the shape of a circle. Any text that overflows will be hidden but using CSS Regions you can direct it to another element. The text content in this element will wrap in the shape of a circle.

shape-inside

lum socias sed eget purus. In-
te-
uris a sapien augue, vehicula
rutm augue.
elementum blandit massa, pel-
lentesque elementum orci
ellentesque enim. Sed blandit dolor et neque tincidunt rutrum. Lorem
g elit. Nullam tincidunt dolor vel neque eleifend fringilla. Praesent et orci nec
nim. Donec suscipit placerat adipiscing. Nulla a nunc mi. Sed vehicula suscip-
t tortor, at fermentum augue malesuada in. Ut cursus, odio non porttitor vari-

Image from <http://coding.smashingmagazine.com/2011/12/15/six-css-layout-features-to-look-forward-to/>



but where's my
jetpack



CSS3 grid-related modules

- Grid Alignment?
- Template Layout?
- Grid Template Layout?
- **Grid Layout—the winner!**

Grid Layout

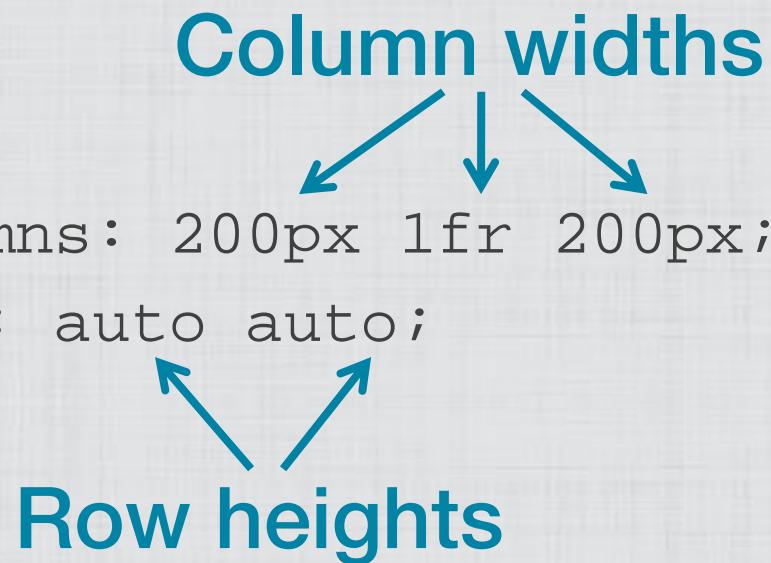
<http://dev.w3.org/csswg/css3-grid-layout/>



* partially, with -ms- prefix

Create a grid, method 1

```
.wrap {  
  display: grid;  
  grid-definition-columns: 200px 1fr 200px;  
  grid-definition-rows: auto auto;  
}
```



IE 10 also lets you use:

-ms-grid-columns: 200px 1fr 200px;
-ms-grid-rows: auto auto;

Empty invisible grid



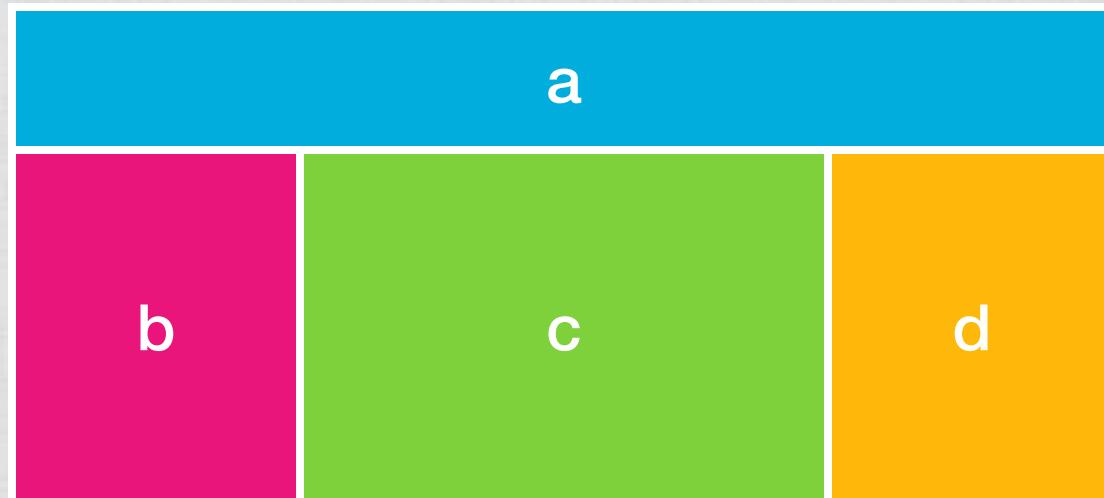
Place elements in that grid

```
nav { grid-column: 1 3; grid-row: 1; }  
#main { grid-column: 2; grid-row: 2; }  
aside { grid-column: 3; grid-row: 2; }  
#news { grid-column: 1; grid-row: 2; }
```



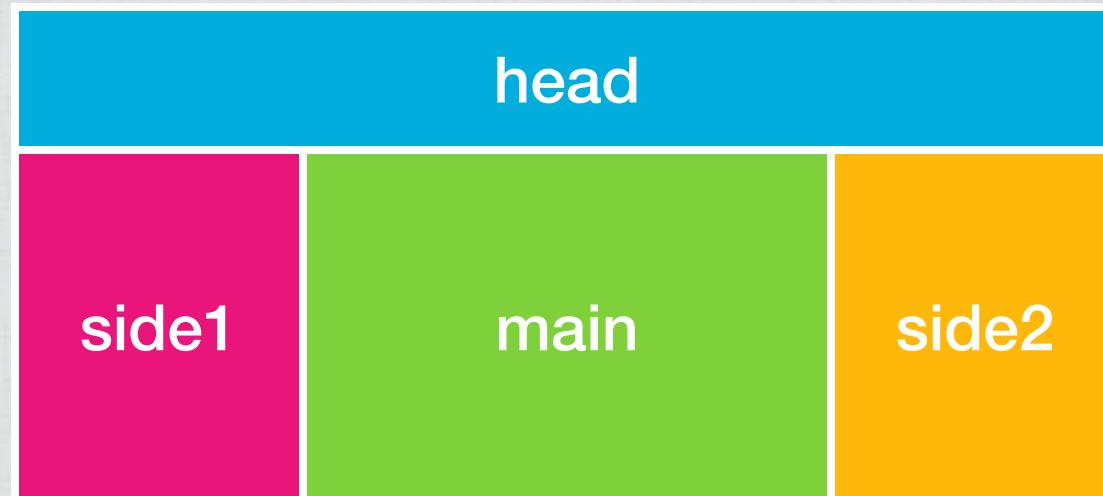
Create a grid, method 2

```
.wrap {  
  display: grid;  
  grid-template: "a a a a"  
                "b c c d"  
}
```



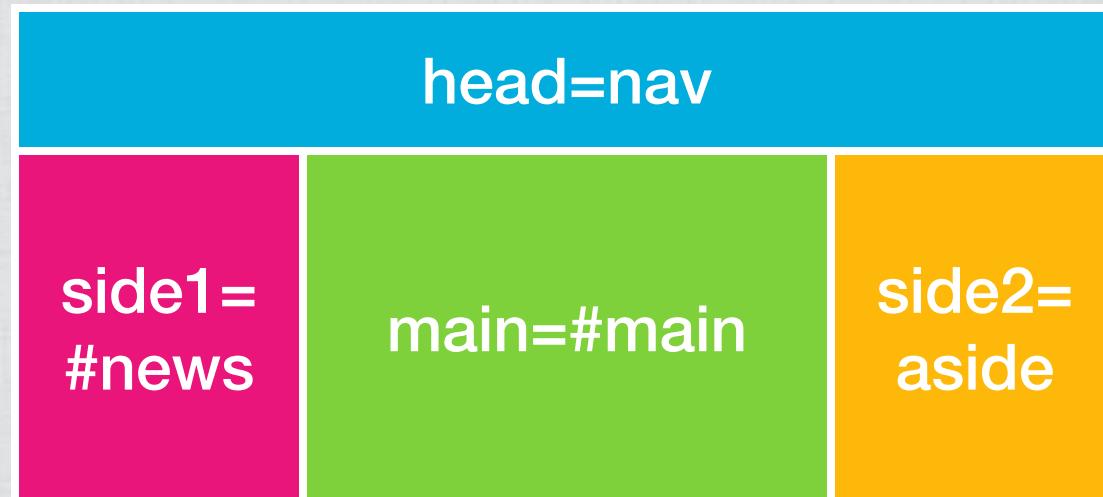
Create a grid, method 2

```
.wrap {  
  display: grid;  
  grid-template: "head head head head"  
                "side1 main main side2"  
}
```



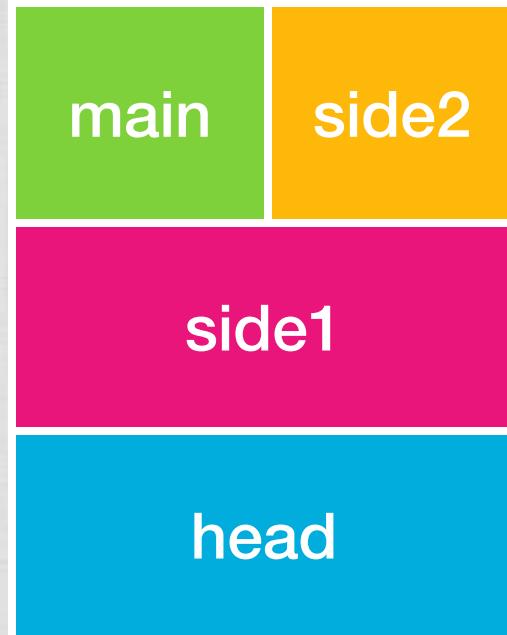
Place elements in that grid

```
nav { grid-area: "head" }  
#main { grid-area: "main" }  
aside { grid-area: "side2" }  
#news { grid-area: "side1" }
```



Rearrange the grid

```
@media screen and (max-width:500px) {  
  .wrap { grid-template: "main side2"  
          "side1 side1"  
          "head head"  
        }  
}
```





demo time

Flexible Box Layout

www.w3.org/TR/css3-flexbox/



* with -webkit- prefix

† can be switched on in version 18+

Which is which?

2009 **display:box**



2011 **display:flexbox**



Now **display:flex**



See also <http://css-tricks.com/old-flexbox-and-new-flexbox/>

How flexbox works

- Make boxes automatically grow to fill space or shrink to avoid overflow
- Give boxes proportional measurements
- Lay out boxes in any direction
- Align boxes on any side
- Place boxes out of order from HTML

Let's try flexbox out on this page

LITTLE
pea
BAKERY

HOME ABOUT MENU LOCATION CATERING CONTACT US

You deserve a sweet little treat every now and then.

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo. Quisque sit amet est et sapien

ullamcorper pharetra. Vestibulum erat wisi, condimentum sed, commodo vitae, ornare sit amet, wisi. Aenean fermentum, elit eget tincidunt condimentum, eros ipsum rutrum orci, sagittis tempus lacus enim ac dui. Donec non enim in turpis pulvinar facilisis. Ut felis.

Candies TRUFFLES, BARS, CARAMELS, AND MORE

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.

Pastries CROISSANTS, DANISHES, CREAM PUFFS, AND MORE

Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.

Desserts CAKES, PIES, TARTS, COOKIES, AND MORE

Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.

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SWEET DEALS

MOTHER'S DAY SPECIAL

Pellen tesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.

NEWS

[Lorem ipsum dolor sit amet, consectetur adipiscing elit](#)

[Aliquam tincidunt mauris eu risus](#)

[Vestibulum auctor dapibus neque](#)

Read more at our [blog](#) and follow us on [Twitter](#).

About this Page
This page is for a fictional site. It was created by [Zoe Mickley Gillenwater](#) as an exercise in the book [Stunning CSS3: A Project-based Guide to the Latest in CSS](#). It uses CSS3 media queries to change the design at different screen sizes; resize your browser window or load it up in a mobile device to check it out.

Credits

WEB FONTS:
Nadia Serif from [Kernest](#)

ILLUSTRATIONS:
Yummy by [Icon Eden](#)

Original CSS



Candies

TRUFFLES, BARS,
CARAMELS, AND MORE

Pellentesque habitant
morbi tristique senectus et
netus et malesuada fames
ac turpis egestas.
Vestibulum tortor quam,



Pastries

CROISSANTS, DANISHES,
CREAM PUFFS, AND MORE

Vestibulum tortor quam,
feugiat vitae, ultricies eget,
tempor sit amet, ante.
Donec eu libero sit amet
quam egestas semper.



Desserts

CAKES, PIES, TARTS,
COOKIES, AND MORE

Donec eu libero sit amet
quam egestas semper.
Aenean ultricies mi vitae
est. Mauris placerat
eleifend leo. Vestibulum
tortor quam, feugiat vitae,
ultricies eget, tempor sit
amet, ante.

```
.feature {  
    float: left;  
    width: 30%;  
    margin: 0 4.5% 0 0;  
    padding: 130px 0 0 0;  
}
```

Create a flex container

```
<div class="feature-wrap">  
  <div class="feature" id="feature-candy">  
    ...</div>  
  <div class="feature" id="feature-pastry">  
    ...</div>  
  <div class="feature" id="feature-dessert">  
    ...</div>  
</div>
```

```
.feature-wrap {  
  display: flex; ←————  
}
```

Make sure to also add
the prefixed values and
properties for now.

How the CSS might really look

```
.feature-wrap {  
    display: -ms-flexbox;           ← Optional for IE 10  
    display: -moz-flex;            ← Optional for testing in  
    display: -webkit-flex;         ← FF 18 and 19  
    display: flex;                ← Needed for Chrome and  
                                (someday) Safari  
}
```

Specify direction of flex items

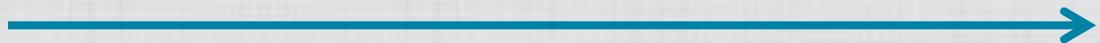
```
.feature-wrap {  
    display: flex;  
    flex-direction: row; ←———— Default value  
}
```

Switch to vertical stacking:

```
@media screen and (max-width: 500px) {  
    .feature-wrap {  
        display: flex;  
        flex-direction: column;  
    }  
}
```

Setting a point of reference

Main axis



Cross axis →



for flex-direction: row

Make flex items flexible

```
.feature {  
  flex: 1 0px; ————— flex grow factor  
  margin-right: 40px;  
  padding: 130px 0 0 0; }
```

Make flex items flexible

```
.feature {  
  flex: 1 1<0px; ————— flex shrink factor  
  margin-right: 40px;  
  padding: 130px 0 0 0; }
```

Make flex items flexible

```
.feature {  
  flex: 1 1 0px; ← flex basis  
  margin-right: 40px;  
  padding: 130px 0 0 0; }
```

Make flex items flexible

```
.feature {  
  flex: 1 1 0px;  
  margin-right: 40px;  
  padding: 130px 0 0 0; }
```

Same as:

```
.feature {  
  flex: 1;  
  margin-right: 40px;  
  padding: 130px 0 0 0; }
```

Add a fourth feature box

```
<div class="feature-wrap">  
  <div class="feature" id="feature-candy">  
    ...</div>  
  <div class="feature" id="feature-pastry">  
    ...</div>  
  <div class="feature" id="feature-dessert">  
    ...</div>  
  <div class="feature" id="feature-bread">  
    ...</div>  
</div>
```

All boxes adjust in width



Candies

TRUFFLES, BARS,
CARAMELS, AND
MORE

Pellentesque habitant
morbi tristique
senectus et netus et
malesuada fames ac
turpis egestas.
Vestibulum tortor
quam, feugiat vitae,
ultricies eget, tempor
sit amet, ante.



Pastries

CROISSANTS,
DANISHES, CREAM
PUFFS, AND MORE

Vestibulum tortor
quam, feugiat vitae,
ultricies eget, tempor
sit amet, ante. Donec
eu libero sit amet
quam egestas
semper. Aenean
ultricies mi vitae est.



Desserts

CAKES, PIES, TARTS,
COOKIES, AND MORE

Donec eu libero sit
amet quam egestas
semper. Aenean
ultricies mi vitae est.
Mauris placerat
eleifend leo.
Vestibulum tortor
quam, feugiat vitae,
ultricies eget, tempor
sit amet, ante.



Breads

YEAST BREADS,
FLATBREADS, ROLLS,
AND MORE

Donec eu libero sit
amet quam egestas
semper. Aenean
ultricies mi vitae est.
Mauris placerat
eleifend leo.
Vestibulum tortor
quam, feugiat vitae,
ultricies eget, tempor
sit amet, ante.

Don't need to do this anymore

```
.2up .feature { width: 45% }  
.3up .feature { width: 30% }  
.4up .feature { width: 22% }
```

Highlight a sale category

```
.sale {  
  padding: 130px 20px 20px 20px;  
  border-radius: 3px;  
  background-color: hsla(0,0%,100%,.4);  
}
```

What percentage width would I set to make this twice as wide as other boxes, if I weren't using flex?

Make sale box twice as wide



Candies

TRUFFLES,
BARS,
CARAMELS,
AND MORE

Pellentesque
habitant morbi
tristique
senectus et
netus et



Pastries

CROISSANTS, DANISHES,
CREAM PUFFS, AND MORE

Vestibulum tortor quam, feugiat
vitae, ultricies eget, tempor sit
amet, ante. Donec eu libero sit
amet quam egestas semper.
Aenean ultricies mi vitae est.



Desserts

CAKES, PIES,
TARTS,
COOKIES, AND
MORE

Donec eu libero
sit amet quam
egestas semper.
Aenean ultricies
mi vitae est.



Breads

YEAST BREADS,
FLATBREADS,
ROLLS, AND
MORE

Lorem ipsum
dolor sit amet,
consectetuer
adipiscing elit.
Aenean ultricies

```
.sale {  
flex: 2;  
padding: 130px 20px 20px 20px;  
border-radius: 3px;  
background-color: hsla(0,0%,100%,.4);  
}
```

Default equal-height columns!

```
.feature-wrap {  
  display: flex;  
  align-items: stretch;  
}
```

This is the default value, so we don't need to actually set this property, but this shows you what it looks like.

Vertical centering with ease!



Candies

TRUFFLES,
BARS,
CARAMELS,
AND MORE

Pellentesque
habitant morbi
tristique
senectus et
netus et
malesuada
fames ac turpis
egestas.



Pastries

CROISSANTS, DANISHES,
CREAM PUFFS, AND MORE

Vestibulum tortor quam, feugiat
vitae, ultricies eget, tempor sit
amet, ante. Donec eu libero sit
amet quam egestas semper.
Aenean ultricies mi vitae est.



Desserts

CAKES, PIES,
TARTS,
COOKIES, AND
MORE

Donec eu libero
sit amet quam
egestas semper.
Aenean ultricies
mi vitae est.
Mauris placerat
eleifend leo.
Vestibulum
tortor quam,
feugiat vitae,
ultricies eget,
tempor sit amet,
ante.



Breads

YEAST BREADS,
FLATBREADS,
ROLLS, AND
MORE

Lorem ipsum
dolor sit amet,
consectetuer
adipiscing elit.
Aenean ultricies
mi vitae est.
Mauris placerat
eleifend leo.

```
.feature-wrap {  
  display: flex;  
  align-items: center;  
}  
.feature-wrap .content {  
  flex-grow: 1;  
  padding: 0 20px;  
}
```

align-items

(2011: flex-align)



flex-start
(*start*)



center
(*center*)



stretch
(*stretch*)



flex-end
(*end*)



baseline
(*baseline*)

Visual order = HTML order



Candies

TRUFFLES,
BARS,
CARAMELS,
AND MORE

Pellentesque
habitant morbi
tristique
senectus et
netus et
malesuada
fames ac turpis
egestas.
Vestibulum
tortor quam,
feugiat vitae,
ultricies eget,
tempor sit amet,
ante.



Pastries

CROISSANTS, DANISHES,
CREAM PUFFS, AND MORE

Vestibulum tortor quam, feugiat
vitae, ultricies eget, tempor sit
amet, ante. Donec eu libero sit
amet quam egestas semper.
Aenean ultricies mi vitae est.



Desserts

CAKES, PIES,
TARTS,
COOKIES, AND
MORE

Donec eu libero
sit amet quam
egestas semper.
Aenean ultricies
mi vitae est.
Mauris placerat
eleifend leo.
Vestibulum
tortor quam,
feugiat vitae,
ultricies eget,
tempor sit amet,
ante.



Breads

YEAST BREADS,
FLATBREADS,
ROLLS, AND
MORE

Lorem ipsum
dolor sit amet,
consectetuer
adipiscing elit.
Aenean ultricies
mi vitae est.
Mauris placerat
eleifend leo.
Vestibulum
tortor quam,
feugiat vitae,
ultricies eget,
tempor sit amet,
ante.

Move sale box to front of line

```
.sale {  
  order: -1;  
  flex: 2;  
  padding: 130px 20px 20px 20px;  
  border-radius: 3px;  
  background-color: hsla(0,0%,100%,.4);  
}
```

Default **order** value is 0 for all flex items,
so -1 moves this one before others

New visual order, same HTML

	<h3>Pastries</h3> <p>CROISSANTS, DANISHES, CREAM PUFFS, AND MORE</p> <p>Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.</p>		<h3>Candies</h3> <p>TRUFFLES, BARS, CARAMELS, AND MORE</p> <p>Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.</p>		<h3>Desserts</h3> <p>CAKES, PIES, TARTS, COOKIES, AND MORE</p> <p>Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.</p>		<h3>Breads</h3> <p>YEAST BREADS, FLATBREADS, ROLLS, AND MORE</p> <p>Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Aenean ultricies mi vitae est. Mauris placerat eleifend leo. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.</p>
---	--	--	---	---	--	---	--

Accessibility implications

Pro

Keep content in logical order in HTML instead of structuring HTML to achieve visual layout

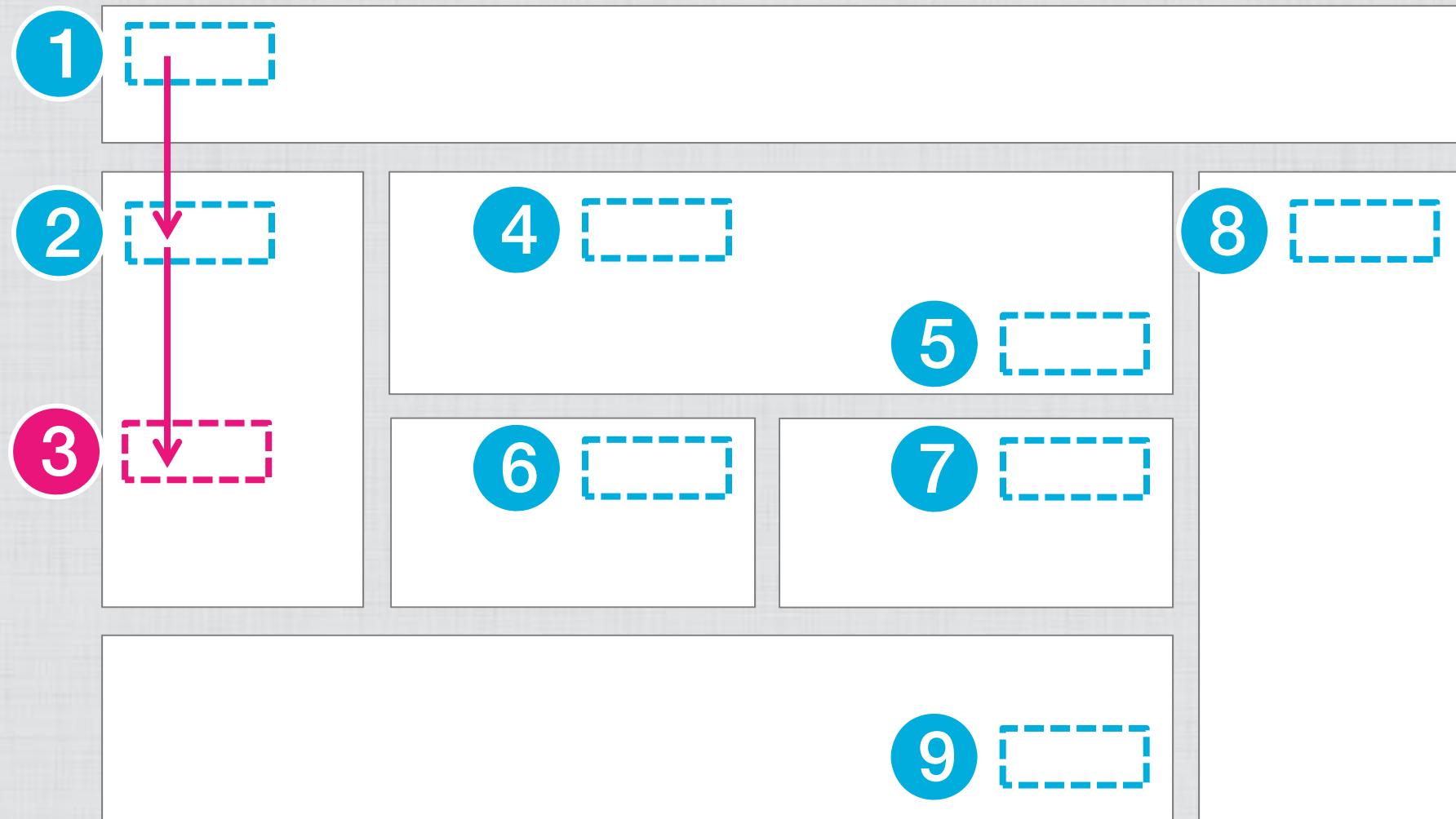
Con

Focus/tab order won't always match expected order, may jump around seemingly randomly

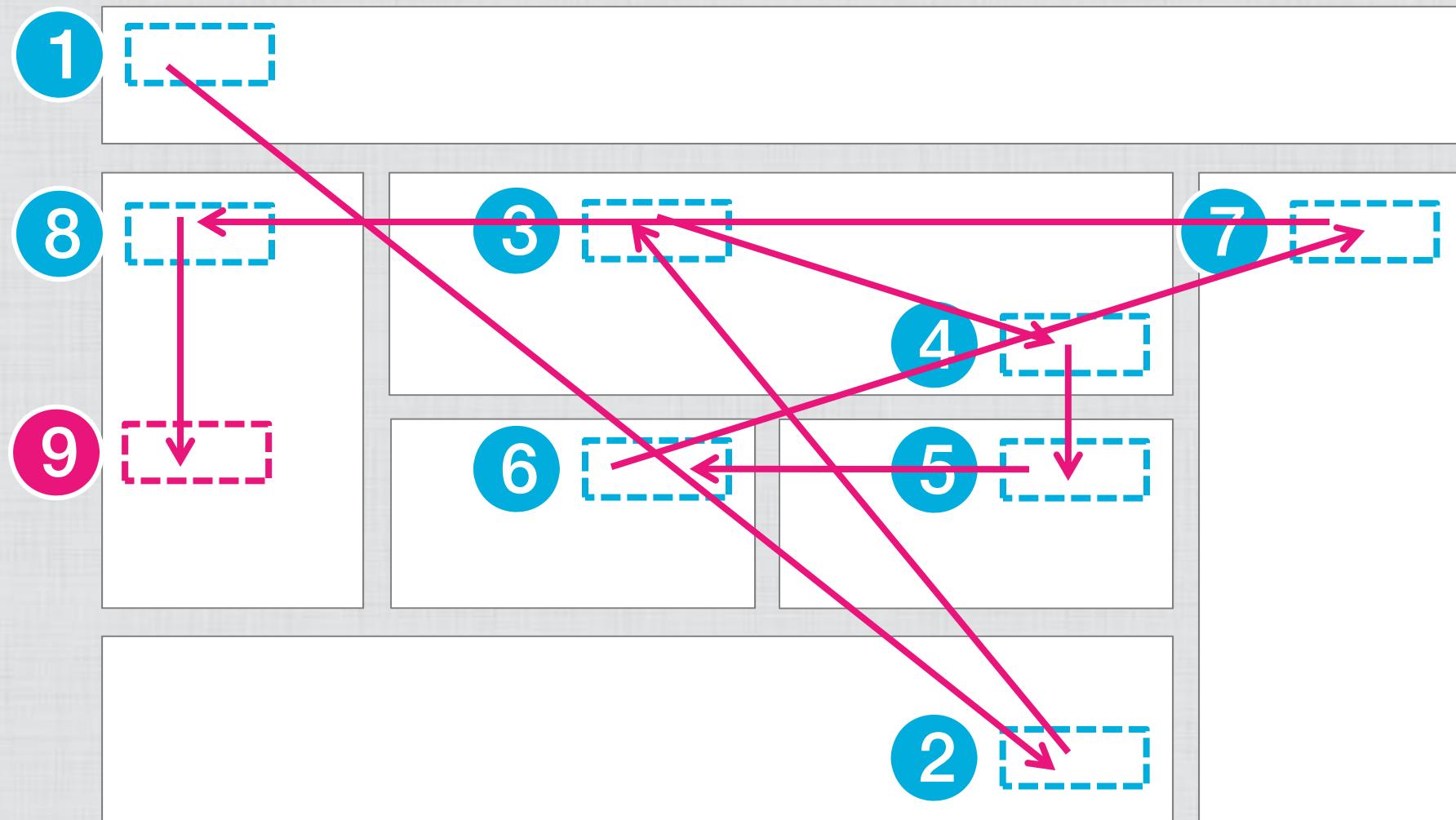
Tab order = HTML order

 <p>Pastries CROISSANTS, DANISHES, PIE PUFFS, AND MORE</p> <p>2</p> <p>Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.</p>	 <p>Candies TRUFFLES, CHOCOLATE ELS, AND MORE</p> <p>1</p> <p>Phaenomenaque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.</p>	 <p>Desserts CAKES, PIES, ICE CREAM, AND MORE</p> <p>3</p> <p>Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.</p>	 <p>Breads YEAST BREADS, SWEET BREADS, AND MORE</p> <p>4</p> <p>Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.</p>
--	--	---	---

Expected tab order



Frustrating mystery tab order



use the order property for
good
not evil



Columns are too narrow

	<h3>Pastries</h3> <p>CROISSANTS, DANISHES, CREAM PUFFS, AND MORE</p> <p>Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.</p>		<h3>Candies</h3> <p>TRUFFLES, BARS, CARAMELS, AND MORE</p> <p>Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.</p>		<h3>Desserts</h3> <p>CAKES, PIES, TARTS, COOKIES, AND MORE</p> <p>Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.</p>		<h3>Breads</h3> <p>YEAST BREADS, FLATBREADS, ROLLS, AND MORE</p> <p>Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.</p>
---	--	--	---	---	--	---	--

Create multi-line flex container

```
.feature-wrapper {  
  display: flex;  
  flex-wrap: wrap;  
}  
  
.sale {  
  order: -1;  
  flex: 1 1 100%;  
  margin: 0 0 20px 0;  
  padding: 130px 20px 20px 20px;  
  border-radius: 3px;  
  background-color: hsla(0, 0%, 100%, .4);  
}
```

Flex items can now wrap



Pastries

CROISSANTS, DANISHES, CREAM PUFFS, AND MORE

Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.



Candies

TRUFFLES, BARS, CARAMELS,
AND MORE

Pellentesque habitant morbi
tristique senectus et netus et
malesuada fames ac turpis
egestas. Vestibulum tortor
quam, feugiat vitae, ultricies
eget, tempor sit amet, ante.



Desserts

CAKES, PIES, TARTS, COOKIES,
AND MORE

Donec eu libero sit amet quam
egestas semper. Aenean
ultricies mi vitae est. Mauris
placerat eleifend leo.
Vestibulum tortor quam,
feugiat vitae, ultricies eget,
tempor sit amet, ante.



Breads

YEAST BREADS, FLATBREADS,
ROLLS, AND MORE

Lorem ipsum dolor sit amet,
consectetuer adipiscing elit.
Aenean ultricies mi vitae est.
Mauris placerat eleifend leo.
Vestibulum tortor quam,
feugiat vitae, ultricies eget,
tempor sit amet, ante.

Change icon position

```
.sale {  
    order: -1;  
    flex: 1 1 100%;  
    margin: 0 0 20px 0;  
    padding: 20px 20px 1px 170px;  
    border-radius: 3px;  
    background-color: hsla(0, 0%, 100%, .4);  
background-position: 20px 0;  
}
```

Final layout



Pastries

CROISSANTS, DANISHES, CREAM PUFFS, AND MORE

Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.

Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.



Candies

TRUFFLES, BARS, CARAMELS,
AND MORE

Pellentesque habitant morbi
tristique senectus et netus et
malesuada fames ac turpis
egestas. Vestibulum tortor
quam, feugiat vitae, ultricies
eget, tempor sit amet, ante.



Desserts

CAKES, PIES, TARTS, COOKIES,
AND MORE

Donec eu libero sit amet quam
egestas semper. Aenean
ultricies mi vitae est. Mauris
placerat eleifend leo.
Vestibulum tortor quam,
feugiat vitae, ultricies eget,
tempor sit amet, ante.



Breads

YEAST BREADS, FLATBREADS,
ROLLS, AND MORE

Lorem ipsum dolor sit amet,
consectetuer adipiscing elit.
Aenean ultricies mi vitae est.
Mauris placerat eleifend leo.
Vestibulum tortor quam,
feugiat vitae, ultricies eget,
tempor sit amet, ante.

use flexbox now for
progressive enhancement



How can I make this form:

- Display on a single line with image
- Vertically centered with image
- Span full-width of container

Order Form

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.



Message for top of cake:

[add to cart](#)

Let's try inline-block

```
#order img, #order form {  
    display: inline-block;  
    vertical-align: middle; }  
  
<div id="order">  
      
    <form>  
        <label for="message"> . . . </label>  
        <input type="text" id="message" . . .>  
        <input type="submit" value="add to cart">  
    </form>  
</div>
```

Inline-block achieves:

- ✓ Display on a single line with image
- ✓ Vertically centered with image
- ✗ Span full-width of container

Order Form

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.



Message for top of cake:

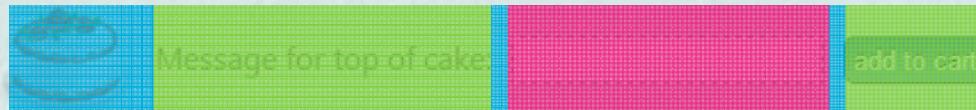
[add to cart](#)

Different units make life hard

- Pixels
- Ems
- Some mystery percentage

Order Form

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.



Make the text input flex

```
#order, #order form {  
    display: flex; ← Make outer div and form  
into flex containers  
    align-items: center; ← Vertically center kiddos  
}  
  
#order form {  
    flex: 1; ← Make form take up all  
space next to image  
}  
  
#order #message {  
    flex: 1; ← Make text input take up  
all space in form left  
after label and button  
    min-width: 7em; ← But don't let it get  
crazy-small  
    margin: 0 5px; }  
}
```

Use inline-block with flexbox

Order Form

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.



Message for top of cake:

[add to cart](#)



Order Form

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.



Message for top of cake:

[add to cart](#)

Use inline-block with flexbox

```
#order img, #order form {  
    display: inline-block;  
    vertical-align: middle; }  
  
#order, #order form {  
    display: flex;  
    align-items: center; }  
  
#order form {  
    flex: 1; }  
  
#order #message {  
    flex: 1;  
    min-width: 7em;  
    margin: 0 5px; }
```

Full-width nav bar



```
nav ul {  
    display: table;  
    width: 100%;  
    margin: 0;  
    padding: 0;  
    list-style: none; }
```

```
nav li {  
    display: table-cell;  
    text-align: center; }
```

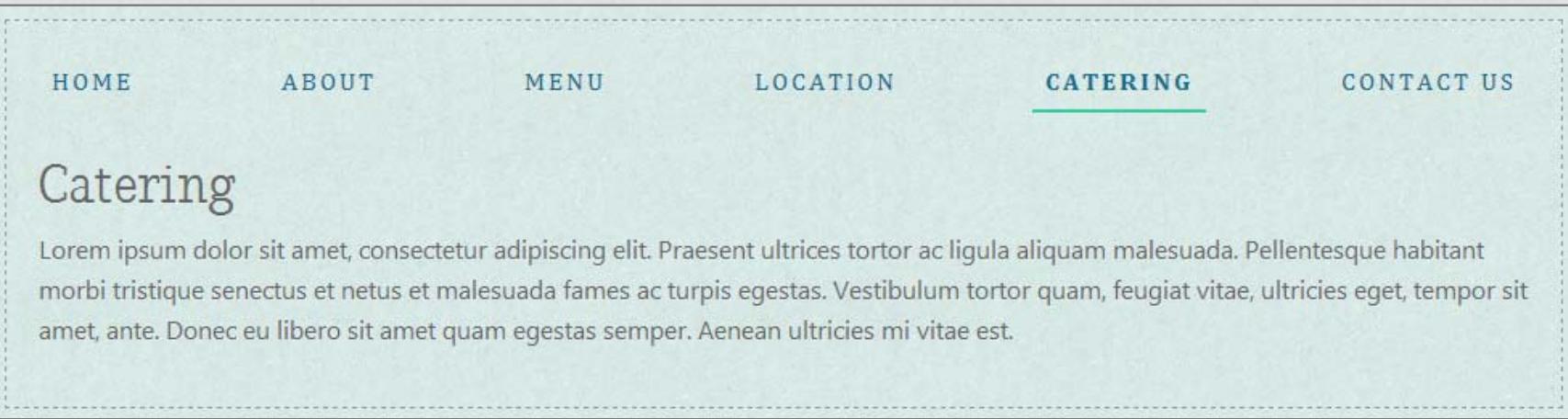
Not so hot with no backgrounds

Uneven spacing



Don't like these gaps

Even spacing with flexbox



The screenshot shows a website header with a light blue background. It features a horizontal navigation bar with six items: HOME, ABOUT, MENU, LOCATION, CATERING, and CONTACT US. The 'CATERING' item is underlined, indicating it is the active page. Below the navigation, the word 'Catering' is displayed in a large, dark font. A paragraph of placeholder text follows.

HOME ABOUT MENU LOCATION **CATERING** CONTACT US

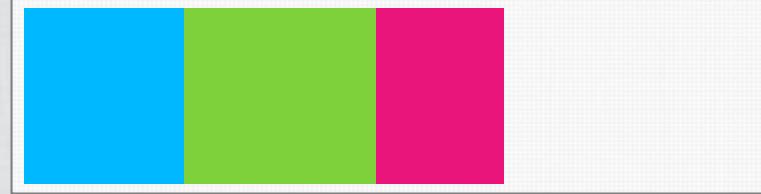
Catering

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent ultrices tortor ac ligula aliquam malesuada. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.

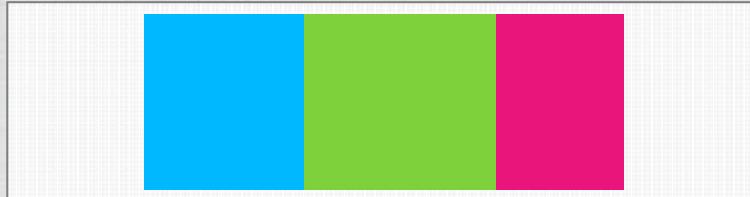
```
nav ul {  
  display: flex;  
  justify-content: space-between;  
  margin: 0;  
  padding: 0;  
  list-style: none; }
```

justify-content

(2011: flex-pack)



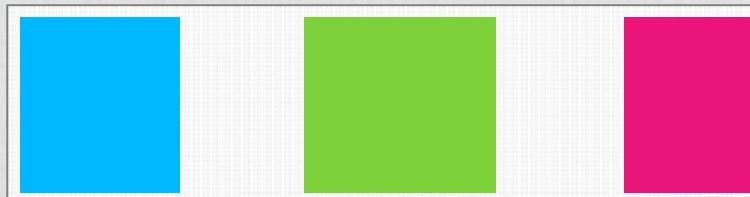
flex-start
(start)



center
(center)



flex-end
(end)



space-between
(justify)



space-around
(distribute)

Use inline-block with flexbox

HOME ABOUT MENU LOCATION **CATERING** CONTACT US

Catering

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent ultrices tortor ac ligula aliquam malesuada. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.

The screenshot shows a website layout with a navigation bar at the top. The 'CATERING' menu item is highlighted with a blue underline. To the right of the page content, there is a vertical dashed-line box containing three browser icons: Firefox (orange and blue), Chrome (red, green, and yellow), and Internet Explorer (blue and yellow).

HOME ABOUT MENU LOCATION **CATERING** CONTACT US

Catering

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent ultrices tortor ac ligula aliquam malesuada. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.

This screenshot shows the same website layout as the first one, but with a different set of browser icons to its right. The 'CATERING' menu item is again underlined. The icons shown are Firefox, Chrome, and Opera (red and white).

Use inline-block with flexbox

```
nav ul {  
    display: flex;  
    justify-content: space-between;  
    margin: 0;  
    padding: 0;  
    list-style: none;  
    text-align: center;  
}  
  
nav li {  
    display: inline-block;  
}
```

Or use Modernizr script

<http://modernizr.com>

```
nav ul {  
    display: table;  
    width: 100%;  
    margin: 0;  
    padding: 0;  
    list-style: none;  
}  
.flexbox nav ul {  
    display: flex;  
}
```

```
nav li {  
    display: table-cell;  
}  
.flexbox nav li {  
    display: list-item;  
}
```



prepare for the
future

Learn more

Download slides and get links at
<http://zomigi.com/blog/css3-layout>

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Rocket icon by Jason Peters, fire icon by James Bond Icons, both from The Noun Project