

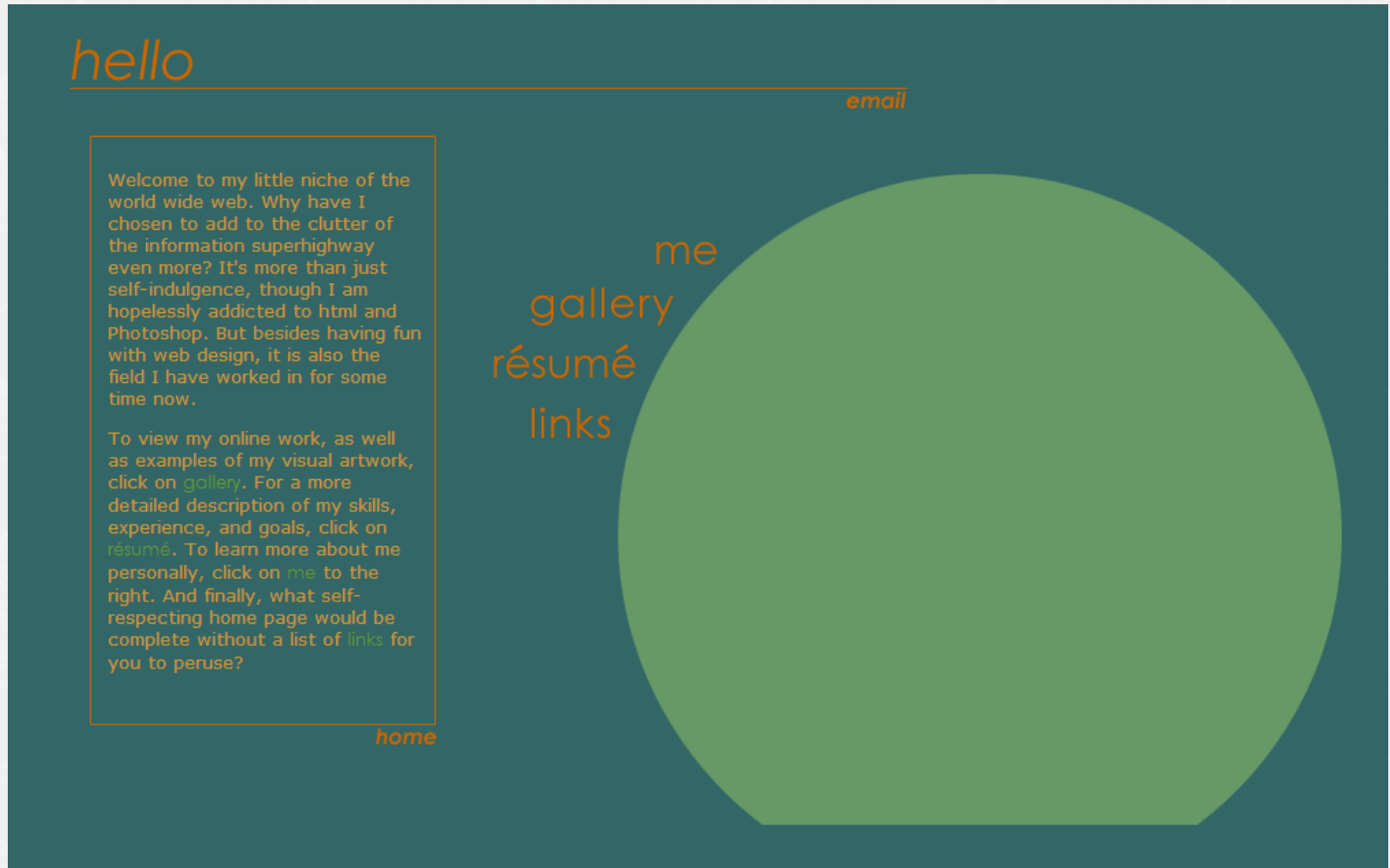
Enhancing Responsiveness WITH Flexbox

CSS Day
June 2015

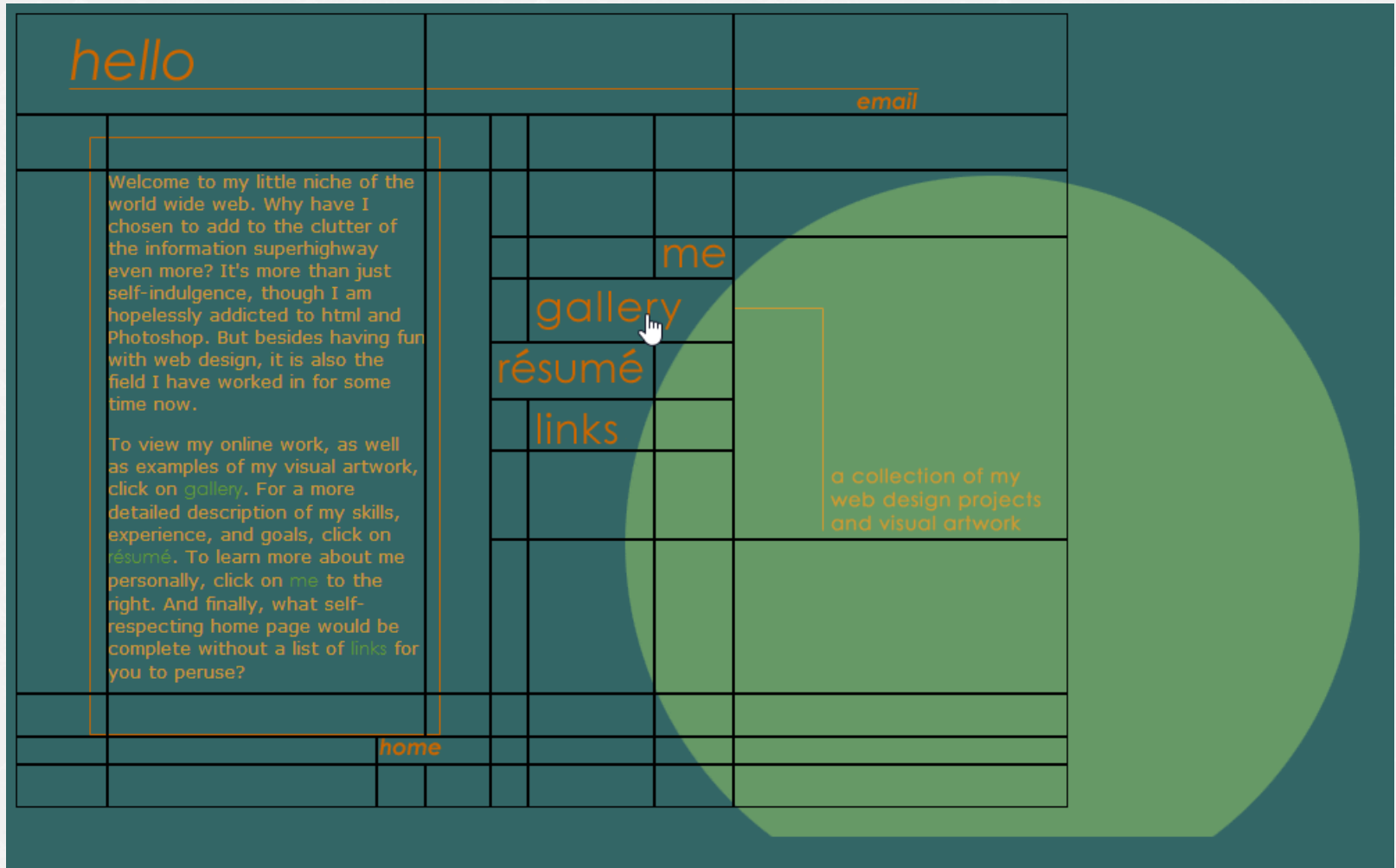
Zoe Mickley Gillenwater

@zomigi

I used to make fixed-width sites...



...with tables



Then I got into CSS “liquid” layout

I even wrote a book about it in 2008.



Problems with CSS 2 layout

- ❑ Float containment
- ❑ Wrapping hard to control
- ❑ Difficulty making boxes equal height
- ❑ Difficulty doing vertical centering
- ❑ Difficulty mixing units of measurement
- ❑ Visual location still tied to HTML order

Flexbox solves a lot of those issues

- ❑ 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

Can I use flexbox ?  Settings

1 result found

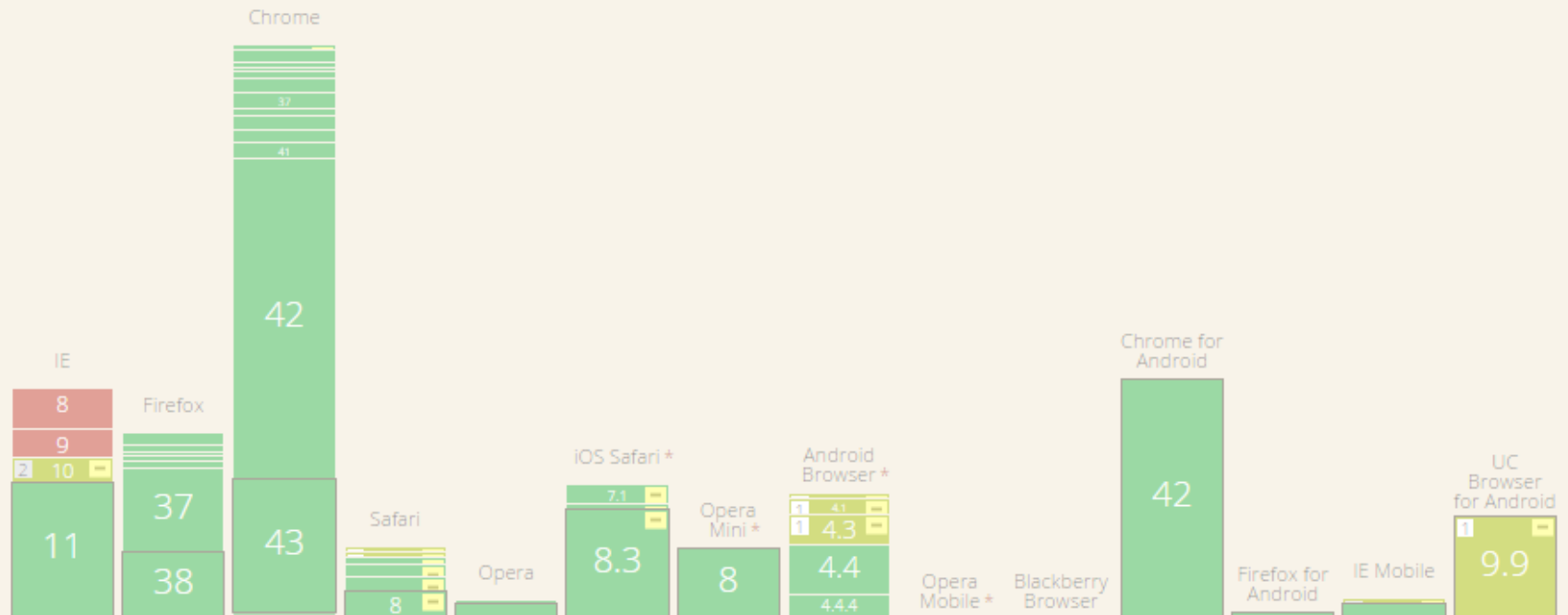
Global $81.44\% + 11.8\% = 93.24\%$

unprefixed: $70.92\% + 0.34\% = 71.26\%$

Current aligned

Usage relative

Showing all



You can use flexbox now

Use flexbox now on UI components as progressive enhancement.

“Easy for you to say.
I have to support IE 8.”

– You, maybe

“I work for Booking.com,
and we support IE 7,
and I use flexbox.”

– Me

Progressive enhancement possibilities

- Align items in new ways
- Fill up the gaps in your layout
- Reorder decorative content
- Increase responsiveness

RWD is not binary

Responsiveness is a continuum.

Flexbox can help make your site **more** responsive.

Flexbox and RWD

Space

Make better use of the space at all screen sizes

Placement

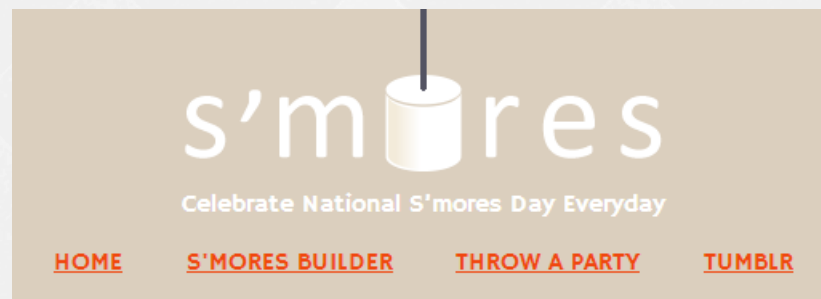
Reorder content at different screen sizes

Making better use of space

Demo: horizontal navigation

Without flexbox:

```
.list-nav {  
  margin: 0;  
  padding: 0;  
  list-style: none;  
  text-align: center;  
}  
  
.list-nav li {  
  display: inline-block;  
  padding: 0 .5em;  
  text-align: center;  
}
```



Demo: horizontal navigation

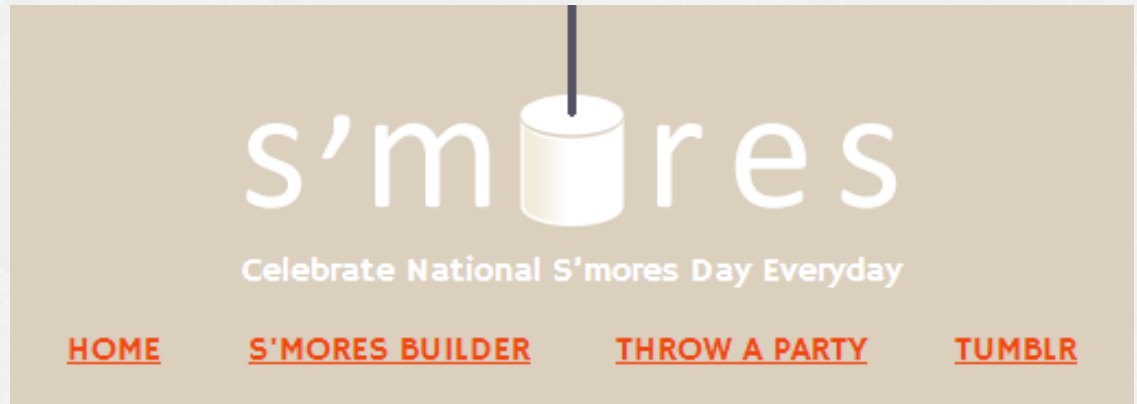
1. Turn `<ul>` into flex container:

```
.list-nav {  
  display: flex;  
  flex-direction: row; /* default */  
  ...  
}
```

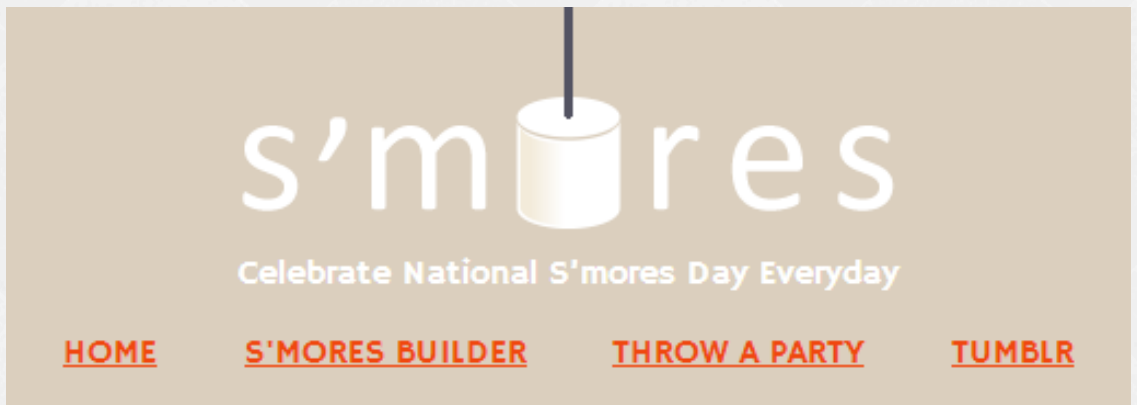
2. Children `<li>` become flex items laid out on single horizontal line

Demo: horizontal navigation

Non-flexbox
fallback version



Flexbox version



Making it full-width

- All links on same line
- First link flush left, last link flush right
- Equal spaces between all links

Trying display:table-cell

- 😊 All links on same line
- 😊 First link flush left, last link flush right
- 😞 Equal spaces between all links

Spacing with table-layout:fixed

S'MORES

ARE VERY GOOD

YOU SHOULD TRY THEM

HUNGRY

YUM

YUM

CONTENT

S'MORES

ARE VERY GOOD

YOU SHOULD TRY THEM

HUNGRY

YUM

YUM

CONTENT

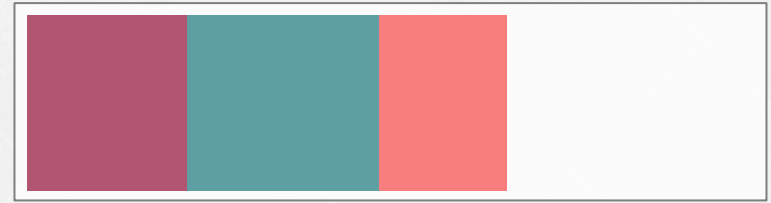
Making it full-width

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

justify-content

aligns flex items along
main axis

(flow direction set by flex-direction)



flex-start
(default)



center



flex-end



space-between



space-around

Combine with inline-block

```
.list-nav {  
  display: flex;  
  justify-content: space-between;  
  margin: 0;  
  padding: 0;  
  list-style: none;  
  text-align: center; /* fallback */  
}  
  
.list-nav li {  
  display: inline-block; /* fallback */  
  padding: 0 .5em; /* fallback */  
  text-align: center;  
}  
  
.list-nav li:first-child { padding-left: 0; }  
.list-nav li:last-child { padding-right: 0; }
```

Combine with inline-block

**Non-flexbox
fallback version**

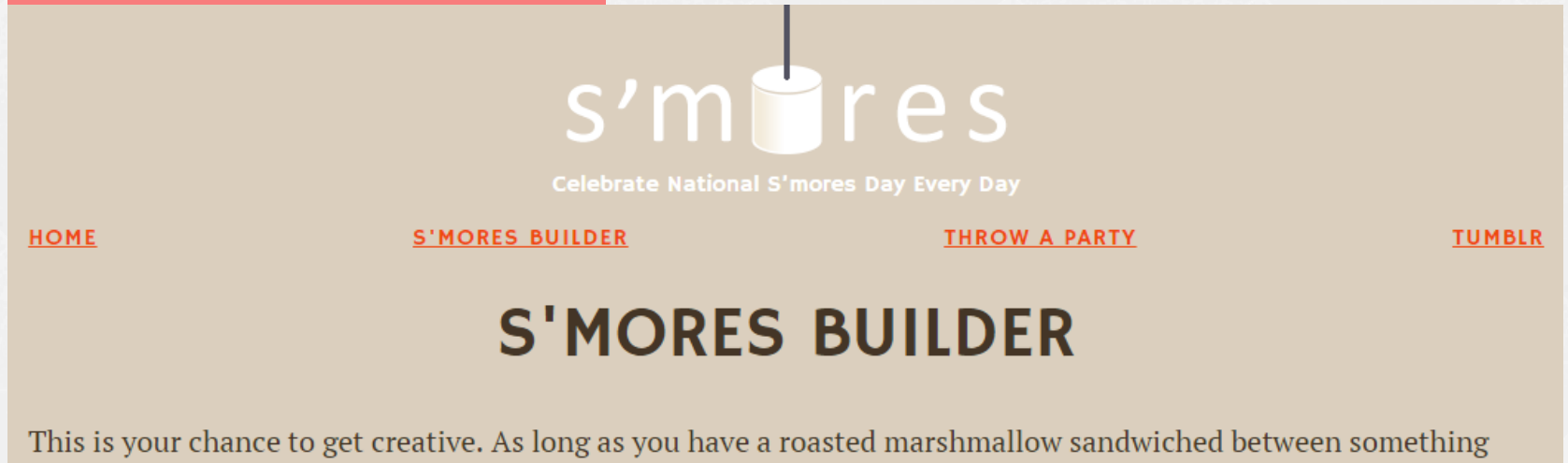


Flexbox version



Improve the wide layout

Wide: too stretched out



A more responsive enhancement



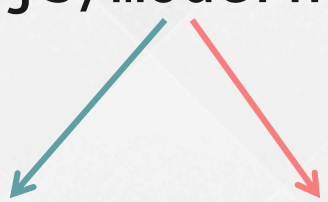
Wide variation: two-piece main nav

1. Add media query for wide width:

```
@media (min-width:860px) {  
  }
```

2. Add link to Modernizr:

```
<script src="js/modernizr.js"></script>
```



A teal arrow points from the script tag above to the 'Supporting browsers:' box. A red arrow points from the same script tag to the 'Non-supporting browsers:' box.

Supporting browsers:

```
<html class="flexbox">
```

Non-supporting browsers:

```
<html class="no-flexbox">
```

Add Modernizr as needed with flexbox

- Flexbox and fallback styles can often co-exist, but sometimes need (or want) to isolate them
- Modernizr can add flexbox, no-flexbox, and flexboxlegacy classes to do this

Wide variation: two-piece main nav



3. Move nav bar up to overlap logo's line:

```
@media (min-width:860px) {  
  .flexbox .list-nav {  
    position: relative;  
    top: -70px;  
  }  
}
```

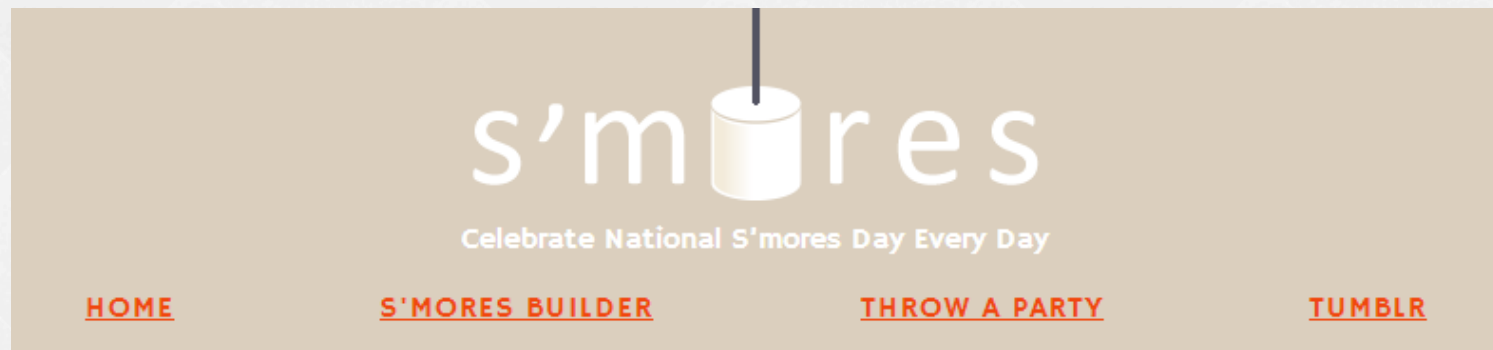
Wide variation: two-piece main nav



4. Add margins to control extra space in line:

```
.flexbox .link-party {  
    margin-left: auto;  
}  
  
.flexbox .link-home    { margin-right: 15px; }  
.flexbox .link-tumblr  { margin-left: 15px; }
```

A more responsive nav bar



This works vertically too

Content blocks' height varies in RWD, and flexbox can also help you make better use of varying vertical space

Demo: full-height stacked icons



S'MORES BROWNIES RECIPE

Etiam sed convallis tellus. Pellentesque odio magna, pharetra in ligula tincidunt, ullamcorper pharetra quam. Donec semper imperdiet quam sed sodales. Suspendisse sed mollis quam. Morbi feugiat quis justo eget elementum. Pellentesque nec faucibus tellus. Nam scelerisque, nisl eget sollicitudin pellentesque, dui justo imperdiet nisl, id cursus dolor lectus at felis. Proin a massa mollis, imperdiet augue vitae, egestas nunc. Donec ullamcorper fermentum auctor. Donec vulputate elit enim, ac eleifend odio egestas et. Nulla egestas, dui nec ullamcorper viverra, neque ipsum fringilla augue, eget condimentum ipsum lectus non orci.

.icons

.content

.wrapper

Demo: full-height stacked icons

1. Turn children `.icons` and `.content` into side-by-side, equal-height flex items

```
.wrapper {  
  display: flex;  
  align-items: stretch; /* default */  
}
```



S'MORES BROWNIES RECIPE

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align-items

aligns flex items in
cross axis

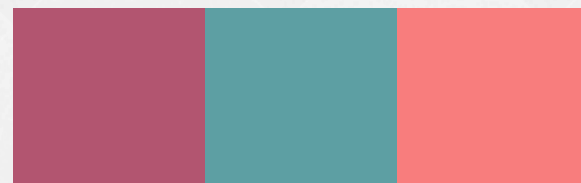
(justify-content aligned in main axis)



flex-start



center



stretch
(default)



flex-end



baseline

Only children become flex items

This is the flex container

So these 2 children are the flex items



S'MORES BROWNIES RECIPE

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These 3 grandchildren aren't flex items (yet)



S'MORES BROWNIES RECIPE

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Demo: full-height stacked icons

2. Turn `.icons` into flex container with vertically stacked children (the 3 icons):

```
.icons {  
    display: flex;  
    flex-direction: column; /* main axis */  
}
```

Demo: full-height stacked icons

3. Equally space the 3 icons along the vertical main axis:

```
.icons {  
  display: flex;  
  flex-direction: column;  
  justify-content: space-between;  
}
```

Demo: full-height stacked icons



CLASSIC S'MORES

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S'MORES COOKIE BARS

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S'MORES BROWNIES RECIPE

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Combine with table-cell

```
.wrapper {  
  display: table; /* fallback */  
  display: flex;  
}  
  
.icons {  
  display: table-cell; /* fallback */  
  vertical-align: middle; /* fallback */  
  display: flex;  
  flex-direction: column;  
  justify-content: space-between;  
}  
  
.content {  
  display: table-cell; /* fallback */  
  vertical-align: top; /* fallback */  
  flex: 1 0 0px;  
}
```

Combine with float

```
.wrapper {  
    display: flex;  
}  
  
.icons {  
    float: left; /* fallback */  
    position: relative; /* fix for old WebKit bug w/ floated flex items */  
    width: 40px;  
    display: flex;  
    flex-direction: column;  
    justify-content: space-between;  
}  
  
.content {  
    flex: 1 0 0px;  
}  
  
.no-flexbox .content {  
    margin-left: 60px; /* fallback */  
}
```


Fallback alignment options

Top-aligned (float)



CLASSIC S'MORES

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S'MORES COOKIE BARS

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S'MORES BROWNIES RECIPE

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Centered (table-cell)



CLASSIC S'MORES

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S'MORES COOKIE BARS

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S'MORES BROWNIES RECIPE

Etiam sed convallis tellus. Pellentesque odio magna, pharetra imperdiet quam sed sodales. Suspendisse sed mollis quam. Morbi faucibus tellus. Nam scelerisque, nisl eget sollicitudin pellentesque. Proin a massa mollis, imperdiet augue vitae, egestas nunc. Donec ac eleifend odio egestas et. Nulla egestas, dui nec ullamcorper ipsum lectus non orci.

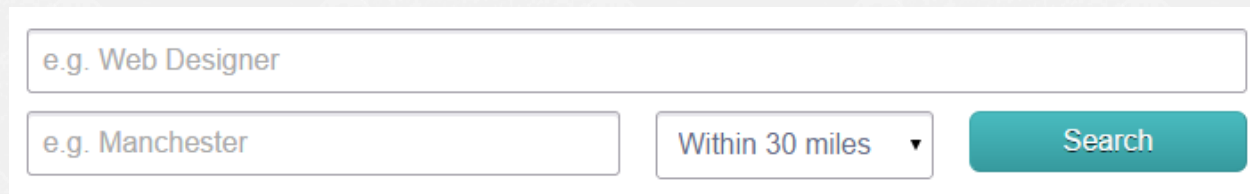
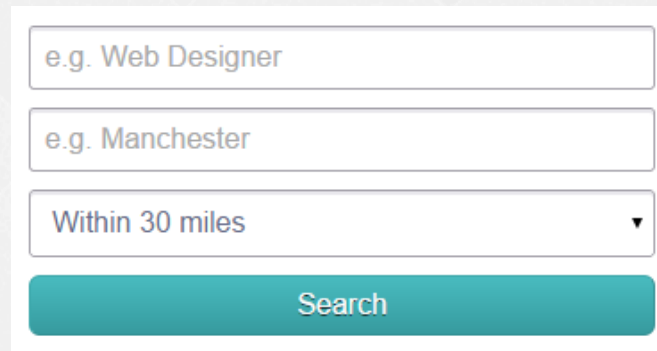


ems + % + px + [blank] = ???

Combining units of measurement across a line can make RWD tricky.

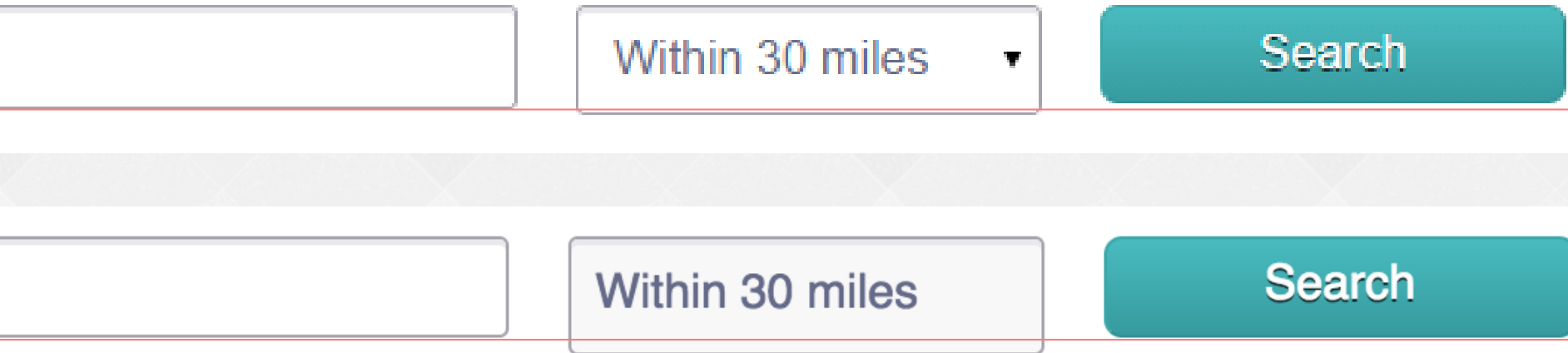
Demo: responsive form

Inspired by <http://jobs.theguardian.com/>, which uses floats and percentage widths



But it would be nicer if...

- ❑ The drop-down and button were sized automatically by their content, so this doesn't happen: 
- ❑ The fields and button all matched each other exactly in height

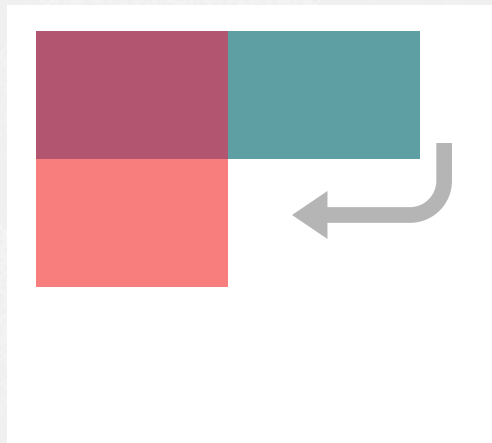
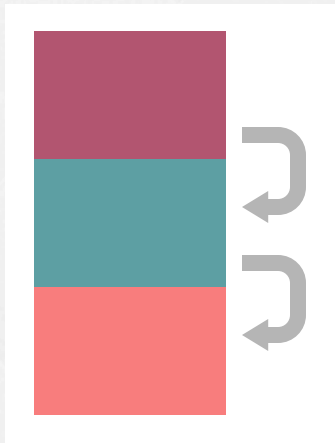


	Within 30 m ▾	Search
	Within 30 miles	Search

Enhance form with flexbox

1. Let the fields wrap when needed:

```
.jobs-form {  
  display: flex;  
  flex-wrap: wrap;  
}
```



Enhance form with flexbox

2. Override the % widths and use flex instead:

```
/* hide from non-flex browsers */  
.flexbox .jobs-form_field-wrapper {  
    width: auto;  
    flex: 1 1 100%;  
}
```

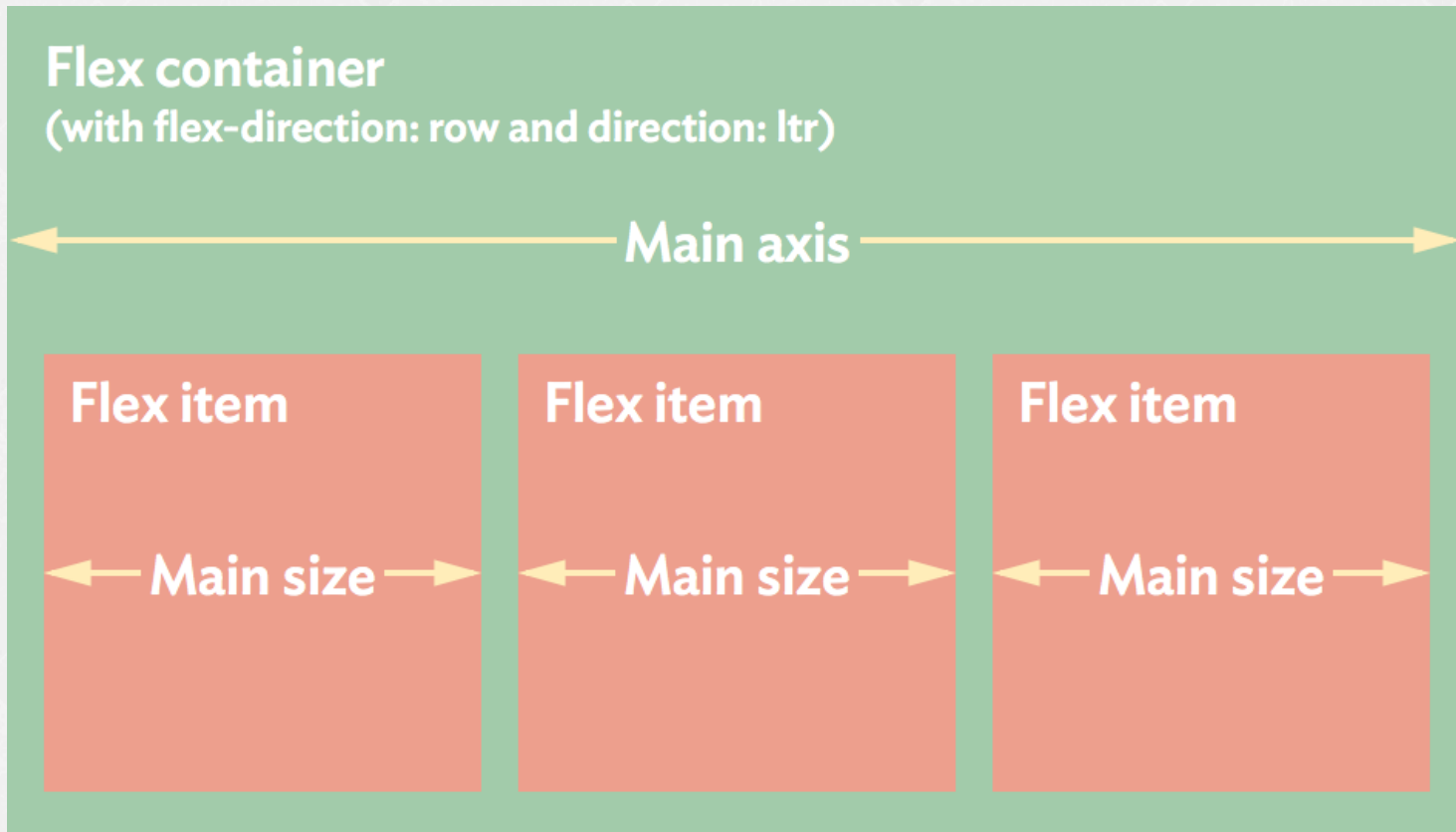
Enhance form with flexbox

3. When wider, let fields size to their content:

```
@media (min-width:40em) {  
  .jobs-form_keywords, /* the 2 text fields */  
  .jobs-form_location {  
    flex: 1 1 auto;  
  }  
  .jobs-form_distance, /* select and button */  
  .jobs-form_submit {  
    flex: 0 0 auto;  
  }  
}
```

Defining the flex property

Makes flex items change their main size (width or height) to fit available space



Defining the flex property

flex-grow

how much flex item will grow relative to other items if extra space is available (proportion of extra space that it gets)

flex-shrink

how much item will shrink relative to others if there is not enough space (proportion of overflow that gets shaved off)

flex-basis

the initial starting size before free space is distributed (any standard width/height value, including auto)

Breaking down the flex property

```
@media (min-width:40em) {
```

```
  .jobs-form_keywords,  
  .jobs-form_location {  
    flex: 1 1 auto;  
  }
```

```
  .jobs-form_distance,  
  .jobs-form_submit {  
    flex: 0 0 auto;  
  }
```

```
}
```

flex-basis = auto

start field at “main size” value (in this case, width) or natural content size if main size not set

Breaking down the flex property

```
@media (min-width:40em) {
```

```
  .jobs-form_keywords,  
  .jobs-form_location {  
    flex: 1 1 auto;  
  }
```

```
  .jobs-form_distance,  
  .jobs-form_submit {  
    flex: 0 0 auto;  
  }
```

```
}
```

flex-shrink = 1

it's ok to shrink smaller than starting width if there's not enough space

flex-shrink = 0

don't shrink smaller than starting width

Breaking down the flex property

```
@media (min-width:40em) {
```

```
  .jobs-form_keywords,  
  .jobs-form_location {  
    flex: 1 1 auto;  
  }
```

```
  .jobs-form_distance,  
  .jobs-form_submit {  
    flex: 0 0 auto;  
  }
```

```
}
```

flex-grow = 1

give it 1 share of
any extra width on
its line

flex-grow = 0

don't grow bigger
than starting width

In other words...

```
@media (min-width:40em) {
```

```
  .jobs-form_keywords,  
  .jobs-form_location {  
    flex: 1 1 auto;  
  }
```

```
  .jobs-form_distance,  
  .jobs-form_submit {  
    flex: 0 0 auto;  
  }
```

```
}
```

Text fields:

You guys adjust to the space available to fill the line.

Select and button:

You guys just stay at your content width.

The flexbox form so far

`flex-basis: 100%`

A form with three input fields and a search button, all stacked vertically. The first input field contains the placeholder text "e.g. Web Designer". The second input field contains the placeholder text "e.g. Manchester". The third input field contains the placeholder text "Within 30 miles". Below the input fields is a teal button with the text "Search".

`flex-basis: auto`

A form with three input fields and a search button, all arranged horizontally. The first input field contains the placeholder text "e.g. Web Designer". The second input field contains the placeholder text "e.g. Manchester". The third input field contains the placeholder text "Within 30 miles". Below the input fields is a teal button with the text "Search". The entire form is enclosed in a red rectangular border.

A form with three input fields and a search button, all arranged horizontally. The first input field contains the placeholder text "e.g. Web Designer". The second input field contains the placeholder text "e.g. Manchester". The third input field contains the placeholder text "Within 30 miles". Below the input fields is a teal button with the text "Search".

A form with three input fields and a search button, all arranged horizontally. The first input field contains the placeholder text "e.g. Web Designer". The second input field contains the placeholder text "e.g. Manchester". The third input field contains the placeholder text "Within 30 miles". Below the input fields is a teal button with the text "Search".

Enhance form with flexbox

4. Refine keywords field's flex-basis values to improve the layout:

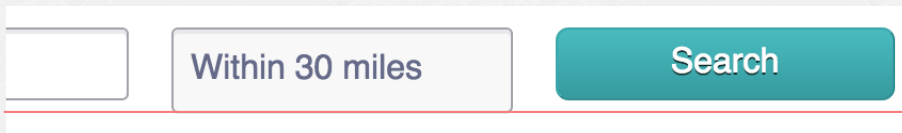
```
@media (min-width:40em) {  
  .jobs-form_keywords { flex: 1 1 100%; }  
  .jobs-form_location { flex: 1 1 auto; }  
  .jobs-form_distance,  
  .jobs-form_submit    { flex: 0 0 auto; }  
}  
  
@media (min-width:50em) {  
  .jobs-form_keywords { flex-basis: auto; }  
}
```

Enhance form with flexbox

5. Turn each field wrapper into flex container so field inside will stretch to match height of its line:

```
.flexbox .jobs-form_field-wrapper {  
  display: flex; /* sets align-items:stretch */  
  width: auto;  
  flex: 1 1 100%;  
}
```

Fields misaligned without flexbox



A form with three elements: a text input field, a button labeled "Within 30 miles", and a teal button labeled "Search". The text input field is shorter than the other two elements, causing it to be misaligned with the baseline of the buttons.

Fields match height due to align-items



A form with three elements: a text input field, a button labeled "Within 30 miles", and a teal button labeled "Search". The text input field is stretched to match the height of the buttons, resulting in a perfectly aligned row of elements.

57

Smarter sizing

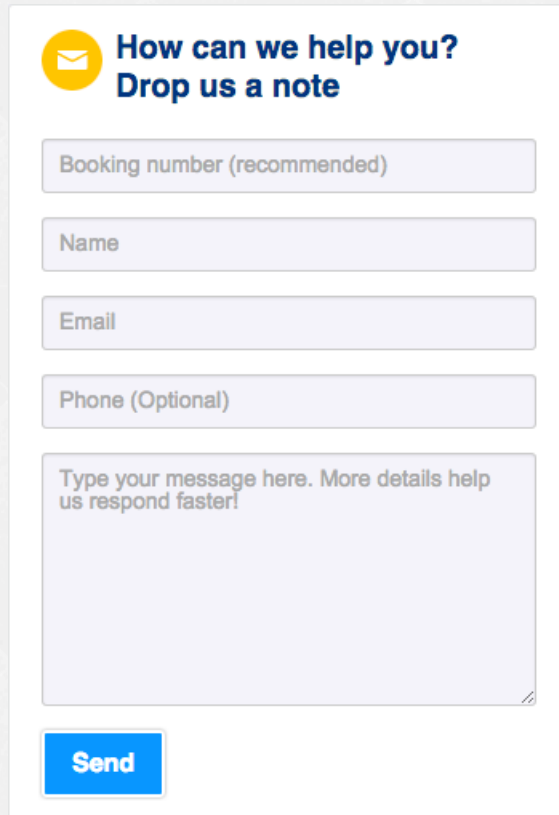
Non-flexbox

Flexbox enhanced

Content-driven breakpoints
aren't perfect.

Automatic orientation switch

Booking's responsive customer service form doesn't use any media queries



How can we help you?
Drop us a note

Booking number (recommended)

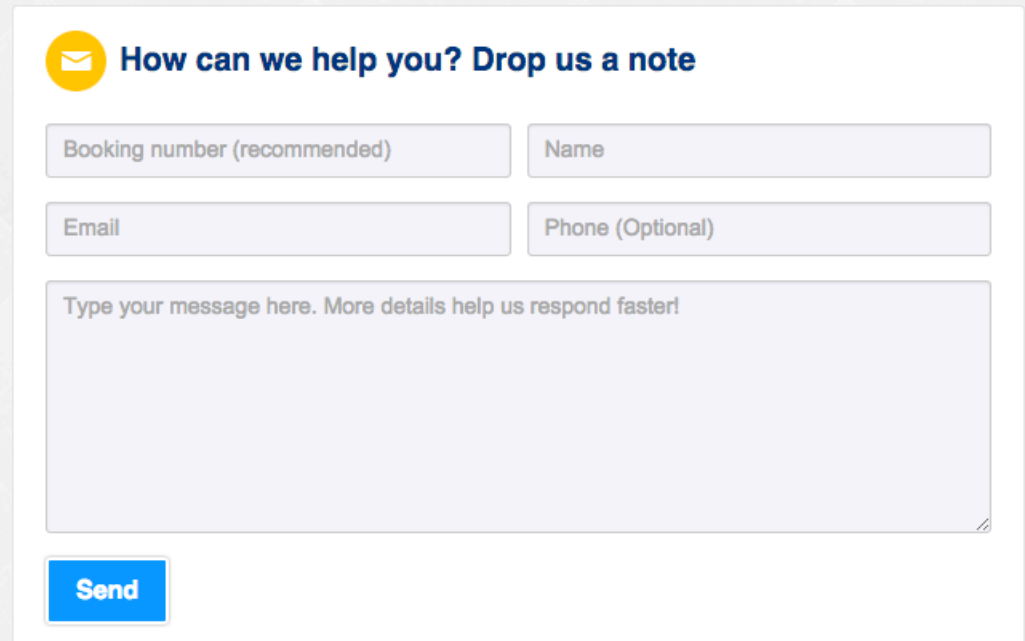
Name

Email

Phone (Optional)

Type your message here. More details help us respond faster!

Send



How can we help you? Drop us a note

Booking number (recommended) Name

Email Phone (Optional)

Type your message here. More details help us respond faster!

Send

<http://www.booking.com/content/cs.html>

Automatic orientation switch

```
form.cs-message {  
  display: flex;  
  flex-flow: row wrap;  
  margin-right: -10px;  
}  
input.cs-message__text {  
  flex: 1 0 40%;  
  width: 43%;  
  float: left;  
  margin-right: 10px;  
  padding: 8px 10px;  
}
```

→ 1 property creates
2 responsive layouts,
both always full width

Demo: responsive article header

Narrow starting styles

- ❑ No media query
- ❑ `display: block`



Another School-free Snow Day for Hillsborough Kids

Weather 28 January 2015

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Wide starting styles

- ❑ 50em media query
- ❑ `display: table-cell`



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Enhance header with flexbox



Another School-free Snow Day for Hillsborough Kids

Weather

28 January 2015

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.article-header-image

.article-header-text

.article-header

Enhance header with flexbox

1. Make photo and text block automatically sit side-by-side when they can fit (300px + 20em):

```
.article-header {  
  display: flex;  
  flex-wrap: wrap;  
  margin-left: -20px;  
}  
.article-header-image {  
  flex: 1 1 300px;  
  padding: 0 0 20px 20px;  
}  
.article-header-text {  
  flex: 1 1 20em;  
  padding: 0 0 20px 20px;  
}
```

Enhance header with flexbox

2. Enhance alignment of text within the text block:

...

```
.article-header-text {  
  display: flex;  
  flex-wrap: wrap;  
  align-items: baseline;  
  align-content: space-between;  
  flex: 1 1 20em;  
  padding: 0 0 20px 20px;  
}  
  
.article-title {  
  flex: 1 1 100%;  
}  
  
.article-category {  
  flex: 1 1 auto;  
}
```


Demo: responsive article header



Another School-free Snow Day for Hillsborough Kids

Weather

28 January 2015

Lorem ipsum dolor sit amet, consectetur adipiscing elit.

`flex: 1 1 auto`



Another School-free Snow Day for Hillsborough Kids

Weather

28 January 2015

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`align-content:
space-between`

Improved wrapping

With float or text-align

With flex or justify-content



Another School-free Snow Day for Hillsborough Kids

Hillsborough News

28 January 2015

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Another School-free Snow Day for Hillsborough Kids

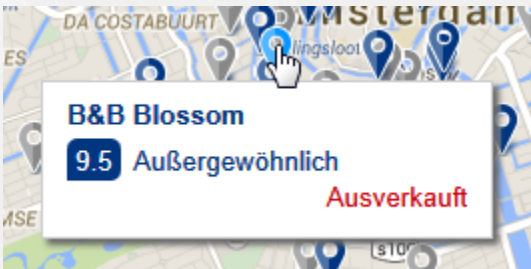
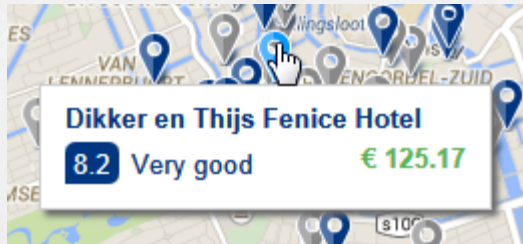
Hillsborough News

28 January 2015

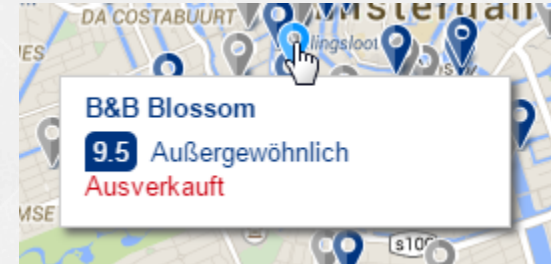
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed sed laoreet quam. Etiam vehicula vel enim non commodo. Integer quis eros sed ante semper ultricies id at justo. Integer

A real-world wrapping example

Without flexbox (IE 9)



With flexbox (Chrome)



Flexbox with float fallback

```
.iw_mini_details_wrapper {  
    display: flex;  
    flex-wrap: wrap;  
    justify-content: space-between;  
    align-items: baseline;  
}  
  
.iw_mini_review_score_wrapper {  
    float: left;  
}  
  
.iw_mini_price_wrapper {  
    float: right;  
}
```

Reordering content

Remember this?



Celebrate National S'mores Day Everyday

[HOME](#) [S'MORES BUILDER](#)

[THROW A PARTY](#) [TUMBLR](#)

```
.flexbox .list-nav {  
  position: relative;  
  top: -70px;  
}
```

```
.flexbox .link-party {  
  margin-left: auto;  
}
```

```
.flexbox .link-home { margin-right: 15px; }  
.flexbox .link-tumblr { margin-left: 15px; }
```

→ Nav overlaps logo's line,
so link text could overlap
logo if viewport too
narrow or text too big

Use order property to move logo



1. Divide nav bar into order groups:

```
.link-home, .link-builder {  
    order: 0; /* default, and first here */  
}  
.logo {  
    order: 1; /* second */  
}  
.link-party, .link-tumblr {  
    order: 2; /* last */  
}
```

Use order property to move logo



2. Split extra space on line to center logo:

```
.logo {  
    margin-left: auto;  
}  
.link-party {  
    margin-left: auto;  
}
```


Order only works on siblings

To move logo to middle of list, it needs to be part of list

```
<div class="logo"></div>
```

```
<ul class="list-nav">
```

```
  <li class="logo"></li>
```

```
  <li class="link-home"><a>home</a></li>
```

```
  <li class="link-builder"><a>s'mores builder</a></li>
```

```
  <li class="link-party"><a>throw a party</a></li>
```

```
  <li class="link-tumblr"><a>tumblr</a></li>
```

```
</ul>
```

Accessibility implications

Pro

Can keep content in logical order in HTML instead of structuring HTML just to achieve a visual layout.

Cons

If HTML order is illogical, screen reader users still hear it.

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

Use the order property sparingly

If you're using it for progressive enhancement, the content should make sense in both the HTML and visual order.

Reordering mobile content

Problem

In RWD, narrow-view (mobile) stacking order doesn't always match needed HTML order for wide-view (desktop) layout

Solution

Keep HTML order needed for desktop and use order property only on mobile, since browser support is great there

Demo: moving a photo on mobile

Mobile: reordered



S'MORES BARS

Recipe and photo by [IHeartNapTime](#)

This is a demo of using the CSS flexbox `order` property for moving a photo out of the normal HTML flow. On narrow screens, such as you would see on mobile devices, the photo moves up over the title of the recipe—scrunch down your browser and check it out! Flexbox is only used on narrow screens because it has much better support among mobile browsers than desktop browsers. Even if a mobile browser doesn't support it, the reordering here is simply a visual effect, in the spirit of progressive enhancement, so it's not a problem if some mobile users don't see the photo at the top.

INGREDIENTS

- 1/2 cup butter melted
- 1 1/2 cup graham cracker crumbs
- 2 cups brown sugar
- 2/3 cup salted butter (softened)
- 2 eggs
- 2 1/2 cup flour
- 2 1/4 tsp baking powder
- 1/2 tsp salt
- 1 tsp vanilla
- 1 cup semi-sweet chocolate chips

Desktop: HTML order (no flexbox)

S'MORES BARS

Recipe and photo by [IHeartNapTime](#)

This is a demo of using the CSS flexbox `order` property for moving a photo out of the normal HTML flow. On narrow screens, such as you would see on mobile devices, the photo moves up over the title of the recipe—scrunch down your browser and check it out! Flexbox is only used on narrow screens because it has much better support among mobile browsers than desktop browsers. Even if a mobile browser doesn't support it, the reordering here is simply a visual effect, in the spirit of progressive enhancement, so it's not a problem if some mobile users don't see the photo at the top.

INGREDIENTS

- 1/2 cup butter melted
- 1 1/2 cup graham cracker crumbs
- 2 cups brown sugar
- 2/3 cup salted butter (softened)
- 2 eggs
- 2 1/2 cup flour
- 2 1/4 tsp baking powder
- 1/2 tsp salt
- 1 tsp vanilla
- 1 cup semi-sweet chocolate chips
- 1 cup mini marshmallows
- 1 Milk Chocolate Candy Bar (broken into pieces)
- 1 Graham Cracker (broken into pieces)
- 1/2 cup marshmallows

INSTRUCTIONS

1. Pre-heat oven to 325 degrees.
2. Combine melted butter and graham cracker crumbs into a small bowl with a fork. Then line a 13x9 with foil and press down crust. Set aside.
3. Cream butter and sugar in a large bowl. Add in eggs and vanilla and stir until combined. Mix the baking powder and salt with 1 cup of flour. Pour into the butter mixture and stir in the rest of the flour. Fold in chocolate chips.
4. Press dough into pan with a spatula flour on your hands. The dough goes right on top of the crust. Bake for 30-35 minutes or until lightly browned. Oven temps will vary. Test with a tooth pick. The dough should be soft in the center.
5. Allow bars to cool and then enjoy with a scoop of ice cream or cold glass of milk!



Use flexbox order in mobile styles

```
.recipe {  
    display: flex;  
    flex-direction: column;  
}  
  
.recipe figure {  
    order: -1; /* before all items with default  
               order: 0 */  
}  
  
.recipe figure img {  
    width: 100%;  
}
```

Inspired by Jonathan Cutrell's example at <http://webdesign.tutsplus.com/tutorials/tricks-with-flexbox-for-better-css-patterns--cms-19449>

Turn off flexbox in desktop styles

```
@media screen and (min-width:800px) {  
  .recipe {  
    display: block; /* turn off flexbox */  
  }  
  .recipe figure {  
    float: right;  
    width: 55%;  
  }  
}
```

Demo: moving a photo on mobile

Flexbox version



S'MORES BARS

Recipe and photo by [I Heart Nap Time](#)

This is a demo of using the CSS flexbox `order` property for moving a photo out of the normal HTML flow. On narrow screens, such as you would see on mobile devices, the photo moves up over the title of the recipe—scrunch down your browser and check it out! Flexbox is only used on narrow screens because it has much better support among mobile browsers than desktop browsers. Even if a mobile browser doesn't support it, the reordering here is simply a visual effect, in the spirit of progressive enhancement, so it's not a problem if some mobile users don't see the photo at the top.

INGREDIENTS

- 1/2 cup butter melted
- 1 1/2 cup graham cracker crumbs

Non-flexbox version

S'MORES BARS

Recipe and photo by [I Heart Nap Time](#)

This is a demo of using the CSS flexbox `order` property for moving a photo out of the normal HTML flow. On narrow screens, such as you would see on mobile devices, the photo moves up over the title of the recipe—scrunch down your browser and check it out! Flexbox is only used on narrow screens because it has much better support among mobile browsers than desktop browsers. Even if a mobile browser doesn't support it, the reordering here is simply a visual effect, in the spirit of progressive enhancement, so it's not a problem if some mobile users don't see the photo at the top.



INGREDIENTS

- 1/2 cup butter melted
- 1 1/2 cup graham cracker crumbs
- 2 cups brown sugar

The Guardian: opposite approach

Stacking order you see when narrow is the HTML order, unchanged

1

2

3

4

5

6

highlights



[Ancient history](#) / Jaw bone found in Ethiopia is oldest known human lineage remains

272 comments



● Live Newcastle United v Manchester United: Premier League



Steve Bell on David Cameron and the economy - cartoon

7 comments



Salma Hayek 🌹 I am a feminist because a lot of amazing women have made me who I am today

174 comments

[Pardon or prison?](#) / What would happen if Snowden went home

147 comments

Help! I need a last minute easy World Book Day costume!

[Communist Manifesto](#) sales rise up as Penguin releases bargain classics

180 comments

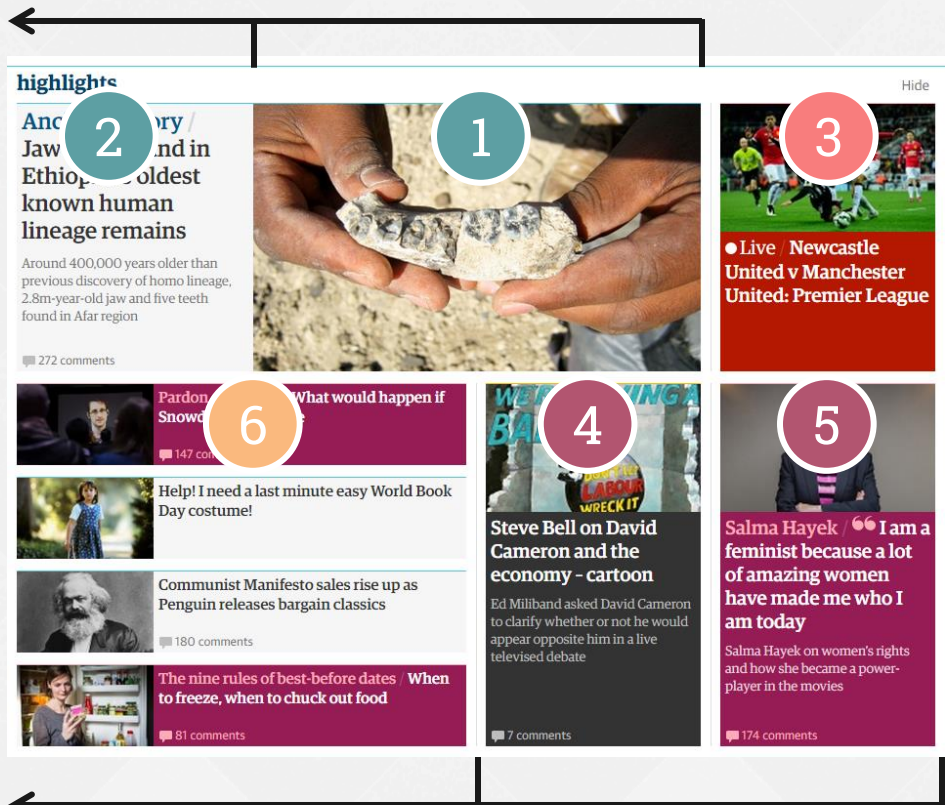
[The nine rules of best-before dates](#) / When to freeze, when to chuck out food

81 comments

The Guardian: opposite approach

Reordered when
wide, but not
using order

flex-direction: row-reverse



flex-direction: row-reverse

Using flexbox today

Pick which versions you'll use

2009 syntax
(`display:box`)



2011 syntax
(`display:flexbox`)



Current syntax
(`display:flex`)



* with -webkit- prefix

† with -ms- prefix

I recommend you skip the '09 syntax

- ❑ It's slower to render than current syntax*
- ❑ Doesn't support wrapping
- ❑ Its browsers have tiny market share
- ❑ You should be using flexbox in progressive enhancement sort of way regardless, so its browsers will just get same fallback you provide to non-supporting browsers

* <http://updates.html5rocks.com/2013/10/Flexbox-layout-isn-t-slow>

Set up your tools

- ❑ Let Autoprefixer, Sass, or LESS add the browser variants for you:
 - ❑ <https://github.com/ai/autoprefixer>
 - ❑ <https://github.com/mastastealth/sass-flex-mixin>
 - ❑ <https://gist.github.com/cimmanon/4461470>
 - ❑ https://github.com/thoughtbot/bourbon/blob/master/app/assets/stylesheets/css3/_flex-box.scss
 - ❑ <https://github.com/annebosman/FlexboxLess>
- ❑ Keep Modernizr on hand to help feed different styles to different browsers:
<http://modernizr.com/download/>

Adding Modernizr classes with Sass

```
@mixin supports-flexbox($support) {  
    @if $support == yes {  
        .flexbox & { @content }  
    }  
    @if $support == no {  
        .no-flexbox & { @content }  
    }  
}
```

Adding Modernizr classes with Sass

```
.container {  
    display: flex;  
}  
.sidebar {  
    float: left;  
    width: 300px;  
}  
.main-content {  
    margin-left: 320px;  
  
    @include supports-flexbox(yes) {  
        margin-left: 20px;  
    }  
}
```


Adding Modernizr classes with Sass

```
.container {  
  display: flex;  
}  
.sidebar {  
  float: left;  
  width: 300px;  
}  
.main-content {  
  margin-left: 320px;  
}  
.flexbox .main-content {  
  margin-left: 20px;  
}
```

Pick your starter/fallback layout CSS

No single right/best answer. Use whatever you normally would.

Flexbox will override:

- ❑ Floats
- ❑ table-cell
- ❑ inline-block

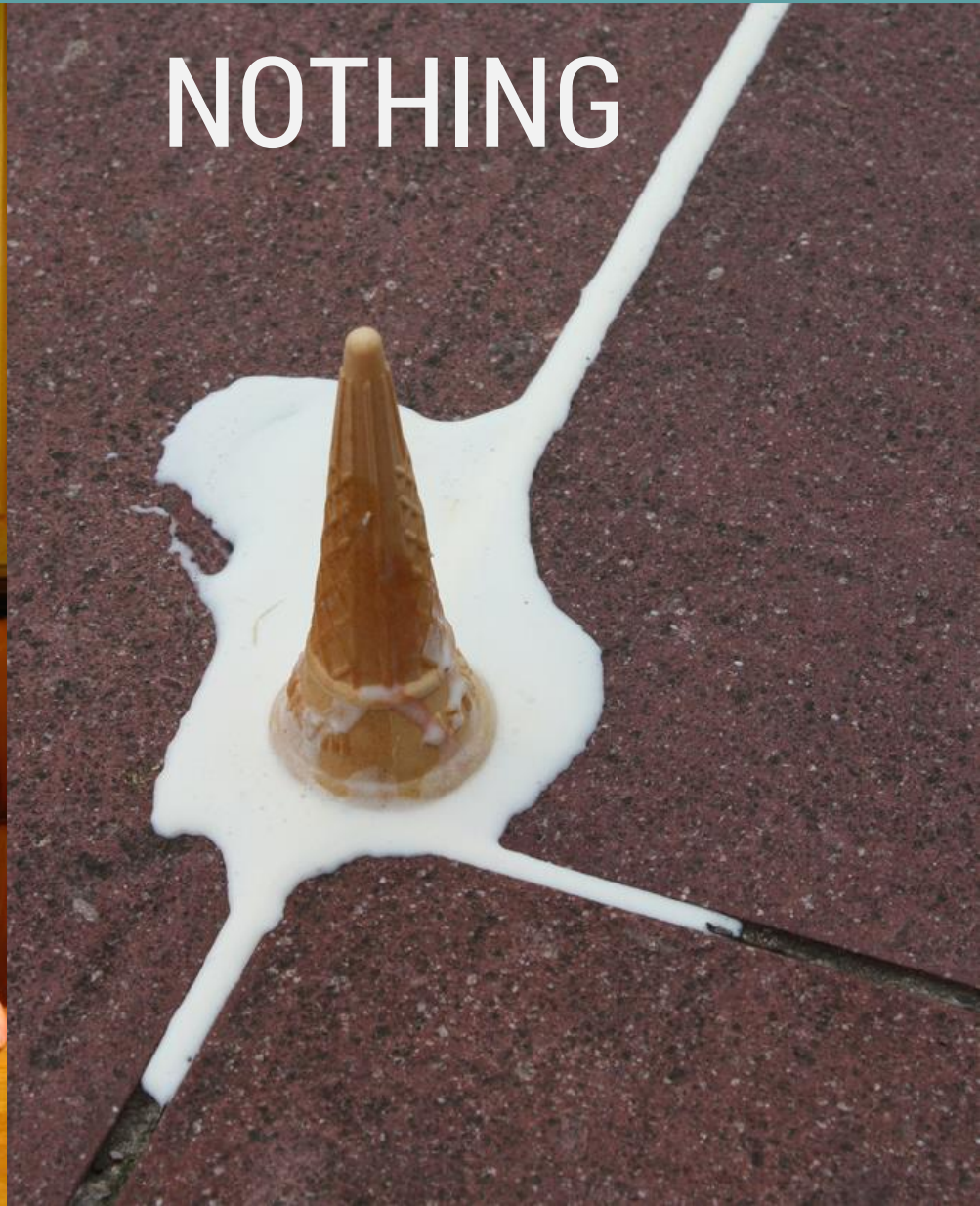
Flexbox will not override:

- ❑ Absolute positioning

Flexbox is not

ALL or

NOTHING



Learn more

Download slides and get links at
www.zomigi.com/blog/rwd-flexbox

Thanks!

Zoe Mickley Gillenwater

@zomigi

design@zomigi.com

zomigi.com | stunningcss3.com | flexiblewebbook.com