

FLEXBOX IS BOSS

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PHP Dorset Feb 2017
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About this talk

This talk assumes a knowledge of how CSS is written and the basics of how to use it.

If you don't know how to write CSS... don't feel bad, *I'm* the one who's turned up to a PHP meetup talking about CSS.

I hope this talk inspires you to check out Flexbox and learn more.

What we'll be looking at

What Flexbox fixes about CSS layouts

What supports it

How to use it

Learning more

Real world examples

Dealing with older browsers

What's next for CSS?

How to lay out things in CSS

How to lay out things in CSS

block layout for laying out documents

inline layout for laying out text

table layout for laying 2D tabular data

positioned layout for explicit positioning

How to lay out things in CSS

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FLOATS



How to lay out things in CSS

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FLOATS

How to lay out things in CSS

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table layout for laying 2D tabular data

positioned layout for explicit positioning

flex layout for distributed layouts

#

Flexible Box Layout Module - CR

Method of positioning elements in horizontal or vertical stacks.
Support includes the support for the all properties prefixed with **flex** as well as **display: flex**, **display: inline-flex**, **align-content**, **align-items**, **align-self**, **justify-content** and **order**.

Global 82.83% + 14.55% = 97.38%

unprefixed: 82.05% + 3.66% = 85.71%

U.K. 88.96% + 8.24% = 97.2%

unprefixed: 87.58% + 6.02% = 93.6%

[show more...](#)

Current aligned

Usage relative

Date relative

Show all

IE	Edge *	Firefox	Chrome	Safari	Opera	iOS Safari *	Opera Mini *	Android Browser *	Chrome for Android
			43						
			45						
			49						
			51						
8		47	52					4.3	
9		48	53			8.4		4.4	
10		49	54	9.1	41	9.3		4.4.4	
11	14	50	55	10	42	10.1	all	53	55
	15	51	56	TP	43				
		52	57		44				
		53	58						

Getting started

Set up the flex container

Direction, wrapping, justifying content, centering, etc

Set up the flex children

Sizing, growing, ordering, position

Getting started

Set up the flex container

Direction, wrapping, justifying content, **centering**, etc

Set up the flex children

Sizing, growing, ordering, position

Flexbox allows you to vertically align things

HALLELUJAH



FLEXY BOXES

flexbox playground and code generator

1

2

3

Fixed height container (not min-height) ☒
RTL writing mode ☐

```
.flex-container {  
  display: -ms-flexbox;  
  display: -webkit-flex;  
  display: flex;  
  -webkit-flex-direction: row;  
  -ms-flex-direction: row;  
  flex-direction: row;  
  -webkit-flex-wrap: nowrap;  
  -ms-flex-wrap: nowrap;  
  flex-wrap: nowrap;  
  -webkit-justify-content: flex-start;  
  -ms-flex-pack: start;  
  justify-content: flex-start;  
  -webkit-align-content: stretch;  
  -ms-flex-line-pack: stretch;  
  align-content: stretch;  
}
```

Generate legacy flexbox styles ☐
Show vanilla CSS ☐

flex container

display: flex

flex-direction: row

flex-wrap: nowrap

justify-content: flex-start

align-items: flex-start

align-content: stretch

flex items

1

order: 0

flex: 0 1 auto

align-self: auto

2

order: 0

flex: 0 1 auto

align-self: auto

3

order: 0

flex: 0 1 auto

align-self: auto

+ -

the-echoplex.net/flexyboxes

Learning



flexboxfroggy.com

Real world examples

Fings wot Jon has used Flexbox for



Results

My Location

to


Dolphin Shopping Centre

Depart now

13:51 → 14:27

Direct


36 mins

 11 mins

14:08 → 14:44

Direct


36 mins

 11 mins

13:59 → 14:36

Direct

37 mins

 11 mins



Results

My Location

to


Dolphin Shopping Centre

Depart now

13:51 → 14:27

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Results

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 11 mins

13:59 → 14:36

Direct

37 mins

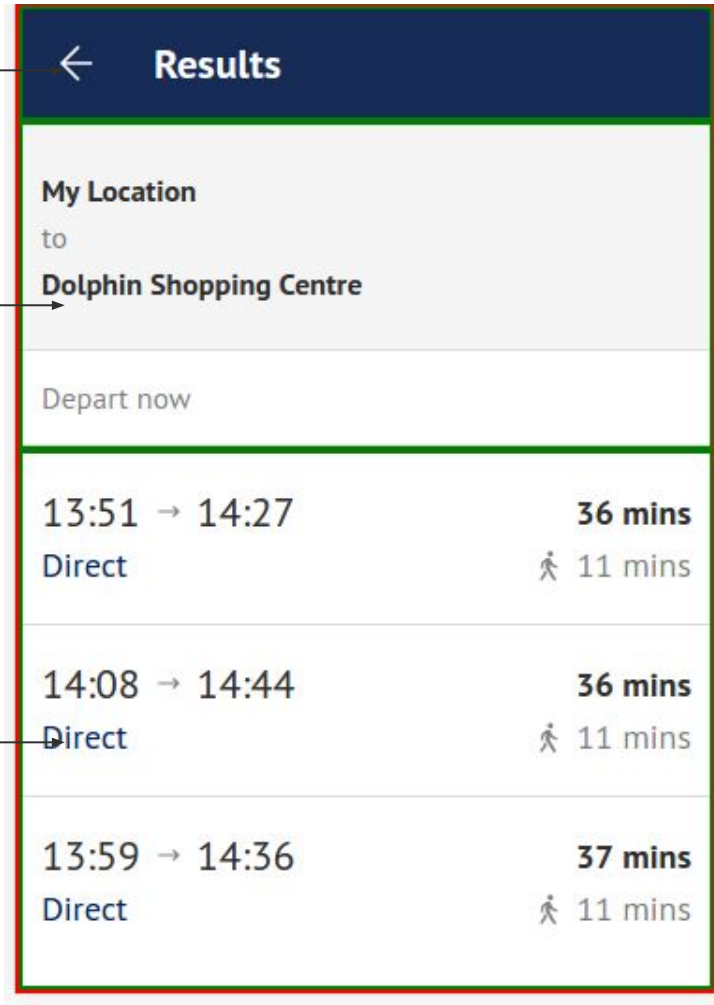
 11 mins

display: flex;
flex-direction: column;
height: 100%;

flex: 0 1 auto;

flex: 0 1 auto;

flex: 1 1 auto;
overflow: auto;



A meme featuring Leonardo DiCaprio in a dark suit, looking slightly to his right with a serious expression. The background is dark and out of focus.

THAT'S NOT ENOUGH

WE HAVE TO GO DEEPER

quickmeme.com

← Results

My Location

to

Dolphin Shopping Centre

Depart now

13:51 → 14:27 **36 mins**

Direct  11 mins

14:08 → 14:44 **36 mins**

Direct  11 mins

13:59 → 14:36 **37 mins**

Direct  11 mins

13:51 → 14:27 **36 mins**

Direct  11 mins

14:08 → 14:44 **36 mins**

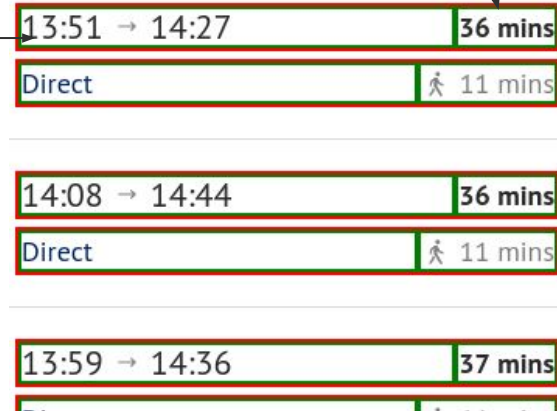
Direct  11 mins

13:59 → 14:36 **37 mins**

display: flex;

flex: 1 1 auto;

flex: 0 0 auto;



Things that would have been a horrible fight with floats in the past are now incredibly easy.

County Gates House



parkstone



Departing now

SEARCH

My Location

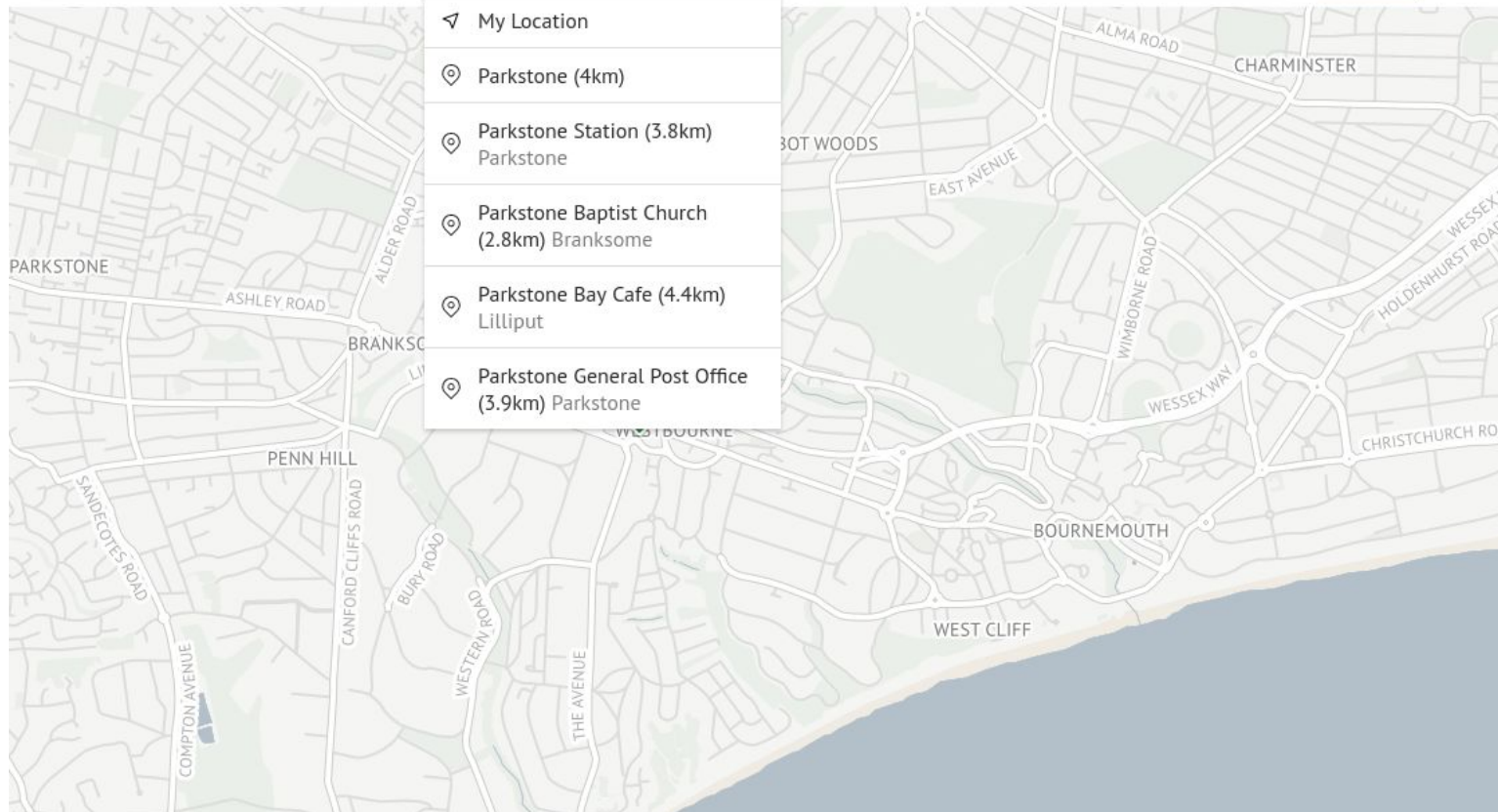
Parkstone (4km)

Parkstone Station (3.8km)
Parkstone

Parkstone Baptist Church
(2.8km) Branksome

Parkstone Bay Cafe (4.4km)
Lilliput

Parkstone General Post Office
(3.9km) Parkstone



R1

Poole - Bournemouth - Bournemouth Hospital



Outbound

02/02/2017

UPDATE

	1	R2	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2	R1	R
Bus Station	:31	12:40	12:48	12:57	13:05	13:14	13:22	13:30	13:39	13:47	13:56	14:04	14:13	14
The George	:31	12:41	12:48	12:58	13:05	13:15	13:22	13:31	13:39	13:48	13:56	14:05	14:13	14
Longfleet Road Garage	:32	12:42	12:49	12:59	13:06	13:16	13:23	13:32	13:40	13:49	13:57	14:06	14:14	14
Poole Hospital	:33	12:43	12:50	13:00	13:07	13:17	13:24	13:33	13:41	13:50	13:58	14:07	14:15	14
Garland Road	:34	12:43	12:51	13:00	13:08	13:17	13:25	13:33	13:42	13:50	13:59	14:07	14:16	14
Shah of Persia	:35	-	12:52	-	13:09	-	13:26	-	13:43	-	14:00	-	14:17	
Fourways	:35	-	12:52	-	13:09	-	13:26	-	13:43	-	14:00	-	14:17	
Poole College Annex	:36	-	12:53	-	13:10	-	13:27	-	13:44	-	14:01	-	14:18	
Felton Road	:37	-	12:54	-	13:11	-	13:28	-	13:45	-	14:02	-	14:19	
Sea View	:38	-	12:55	-	13:12	-	13:29	-	13:46	-	14:03	-	14:20	
Cranbrook Road	:39	-	12:56	-	13:13	-	13:30	-	13:47	-	14:04	-	14:21	
Uppleby Road	:41	-	12:58	-	13:15	-	13:32	-	13:49	-	14:06	-	14:23	
St Johns Church	:43	-	13:00	-	13:17	-	13:34	-	13:51	-	14:08	-	14:25	
Shah of Persia	-	12:44	-	13:01	-	13:18	-	13:34	-	13:51	-	14:08	-	14
The College	-	12:46	-	13:03	-	13:20	-	13:36	-	13:53	-	14:10	-	14
Willow Park	-	12:46	-	13:03	-	13:20	-	13:36	-	13:53	-	14:10	-	14
Ashley Cross	-	12:48	-	13:05	-	13:22	-	13:38	-	13:55	-	14:12	-	14

R1

Poole - Bournemouth - Bournemouth Hospital



Outbound

02/02/2017

UPDATE

	1	R2	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2	R1	
Bus Station	31	12:40	12:48	12:57	13:05	13:14	13:22	13:30	13:39	13:47	13:56	14:04	14:13	1
The George	31	12:41	12:48	12:58	13:05	13:15	13:22	13:31	13:39	13:48	13:56	14:05	14:13	1
Longfleet Road Garage	32	12:42	12:49	12:59	13:06	13:16	13:23	13:32	13:40	13:49	13:57	14:06	14:14	1
Poole Hospital	33	12:43	12:50	13:00	13:07	13:17	13:24	13:33	13:41	13:50	13:58	14:07	14:15	1
Garland Road	34	12:43	12:51	13:00	13:08	13:17	13:25	13:33	13:42	13:50	13:59	14:07	14:16	1
Shah of Persia	35	-	12:52	-	13:09	-	13:26	-	13:43	-	14:00	-	14:17	
Fourways	35	-	12:52	-	13:09	-	13:26	-	13:43	-	14:00	-	14:17	
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Shah of Persia	-	12:44	-	13:01	-	13:18	-	13:34	-	13:51	-	14:08	-	1
The College	-	12:46	-	13:03	-	13:20	-	13:36	-	13:53	-	14:10	-	1
Willow Park	-	12:46	-	13:03	-	13:20	-	13:36	-	13:53	-	14:10	-	1
Ashley Cross	-	12:48	-	13:05	-	13:22	-	13:38	-	13:55	-	14:12	-	1



Dealing with older browsers

Browser prefixes

```
.flex-container {  
  display: flex;  
  flex-direction: row;  
  flex-wrap: nowrap;  
  justify-content: flex-start;  
  align-content: stretch;  
}  
  
.flex-item {  
  order: 0;  
  flex: 0 1 auto;  
  align-self: auto;  
}
```



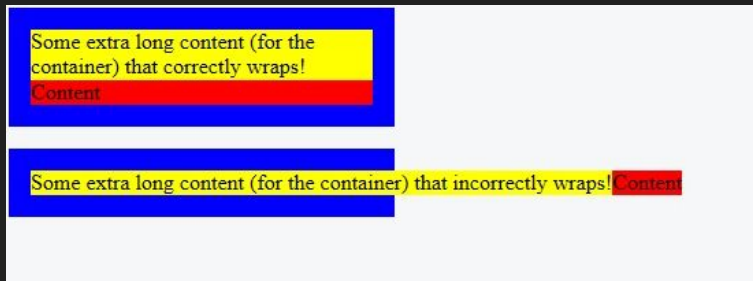
```
.flex-container {  
  display: -ms-flexbox;  
  display: -webkit-flex;  
  display: flex;  
  -webkit-flex-direction: row;  
  -ms-flex-direction: row;  
  flex-direction: row;  
  -webkit-flex-wrap: nowrap;  
  -ms-flex-wrap: nowrap;  
  flex-wrap: nowrap;  
  -webkit-justify-content: flex-start;  
  -ms-flex-pack: start;  
  justify-content: flex-start;  
  -webkit-align-content: stretch;  
  -ms-flex-line-pack: stretch;  
  align-content: stretch;  
}  
  
.flex-item {  
  -webkit-order: 0;  
  -ms-flex-order: 0;  
  order: 0;  
  -webkit-flex: 0 1 auto;  
  -ms-flex: 0 1 auto;
```

Browser prefixes

- 1) ~~Write it all yourself~~
- 2) Use an autoprefixer
- 3) CSS Preprocessors can generate it

IE10

Text does not always wrap correctly



(max-width: 100% will help)

<http://jsfiddle.net/pvJRK/2/>

IE9 and under

No Flexbox support at all.

Things will stack on top of each other.

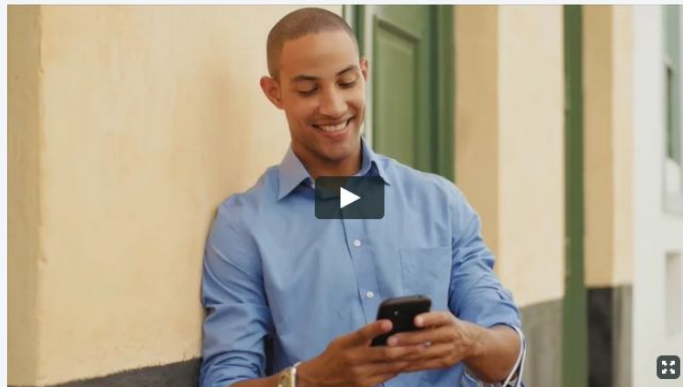
In the blog this week

USSD's Mark Twain Moment

With mobile playing an increasingly important role in how the world consumes, converses and transacts, dominated by talk of converged omni-channel communications loosely defined...

→ More from the blog

Bridging the digital divide



IE9 and under

No Flexbox support at all.

Things will stack on top of each other.

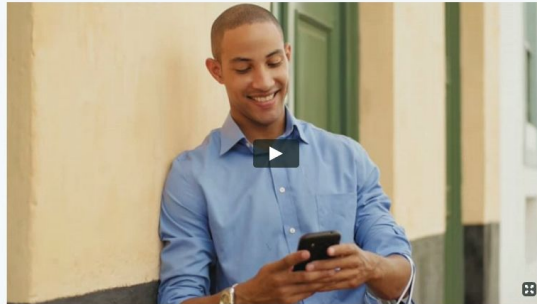
In the blog this week

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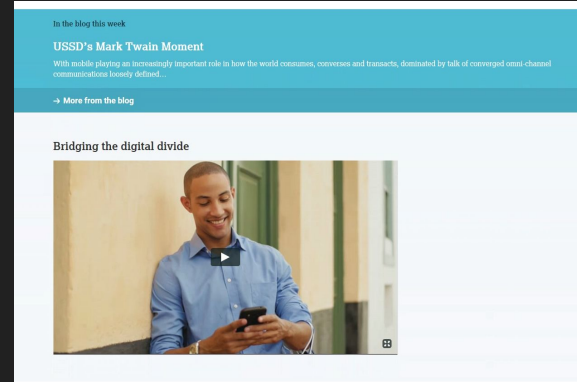
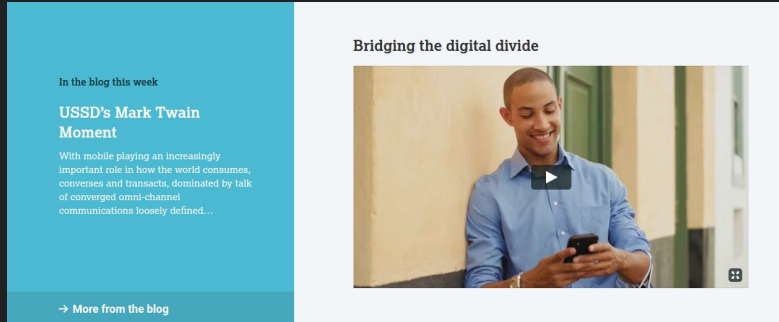
With mobile playing an increasingly important role in how the world consumes, converses and transacts, dominated by talk of converged omni channel communications loosely defined...

→ [More from the blog](#)

Bridging the digital divide



IE9 and under



Fine for certain Flexbox uses, if you're prepared for a different layout on IE8/9.

Fine if you don't support those browsers.

Not so fine if you build the entirety of a site using Flexbox without testing it.

Progressively enhance with @supports

```
.something {  
    // Stuff here  
}  
  
@supports (display: -webkit-flex) or  
          (display: -moz-flex) or  
          (display: flex) {  
  
    .something {  
        // Progressively enhance  
        display: flex;  
    }  
  
}
```

CSS.supports() API - CR

The CSS.supports() static methods returns a Boolean value indicating if the browser supports a given CSS feature, or not.

Global 77.28% + 4.47% = 81.74%
Nottingham City Transport 58.33% + 0.24% = 58.57%
U.K. 86.12% + 0.8% = 86.92%

Current aligned Usage relative Date relative Show all

IE	Edge *	Firefox	Chrome	Safari	Opera	iOS Safari *	Opera Mini *	Android Browser *	Chrome for Android
			43						
			45						
			49						
			51						
		47	52						
8		48	53					4.3	
9		49	54					4.4	
10		50	55	9.1	41	8.4		4.4.4	
11	14	51	56	10	42	10.2	all	53	55
	15	52	57	10.1	43				
		53	58	TP	44				
		54	59						

Not ideal for page layouts...



Flexbox

Grid

Not ideal for page layouts...

But really there's nothing stopping you

How to lay out things in CSS

block layout for laying out documents

inline layout for laying out text

table layout for laying 2D tabular data

positioned layout for explicit positioning

flex layout for distributed layouts

grid layout for dividing pages into rows and columns

THANK YOU!

Questions?

Further Reading:

[How Flexbox Works](#)

[Solved by Flexbox](#)

[A Complete Guide to Flexbox](#)

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