

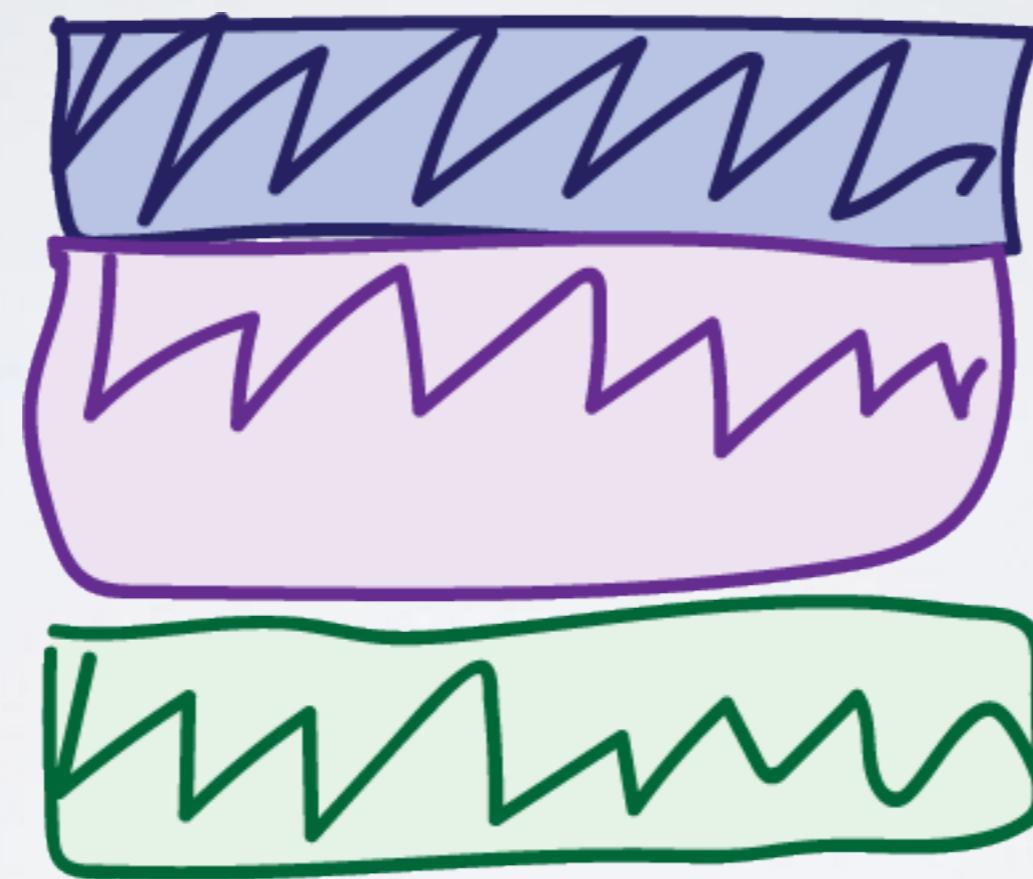
ПРОГРЕССИВНЫЕ И ДЕГРАДИРУЮЩИЕ

Света Шарипова
 @hellodeadline

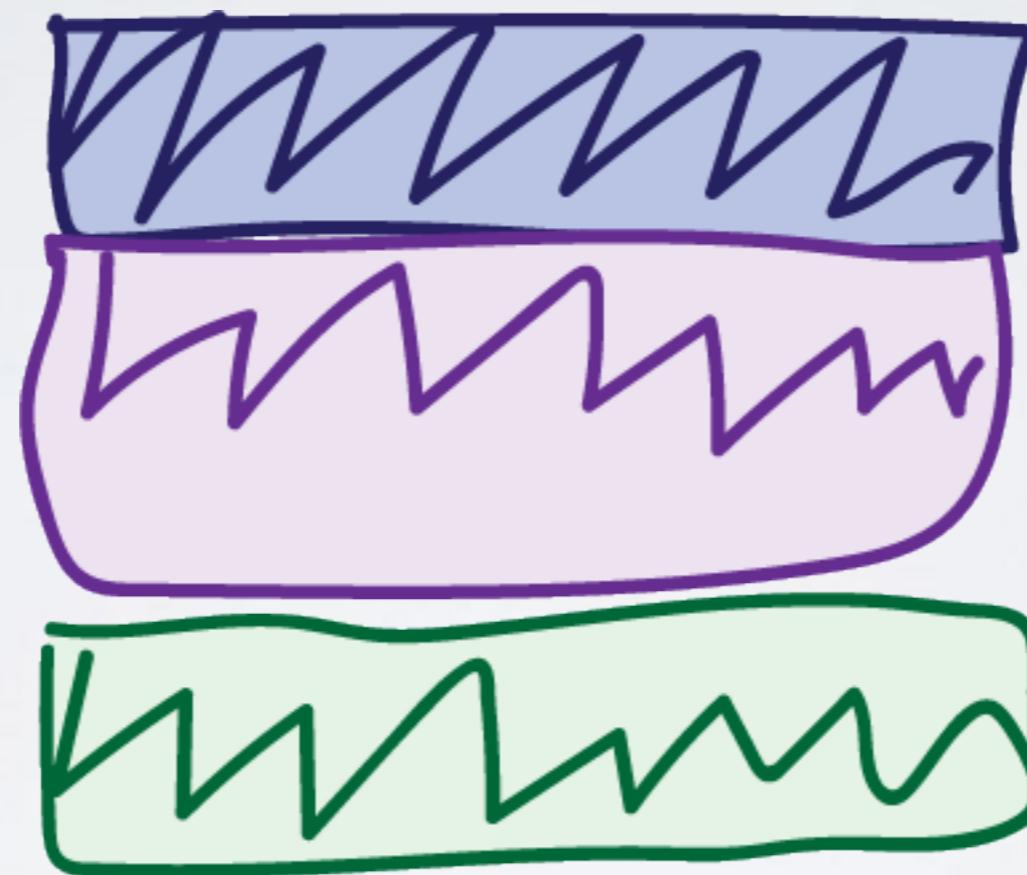
4 года во фронтеnde
3 – в аутсорсе

Сейчас: DevFest Siberia team

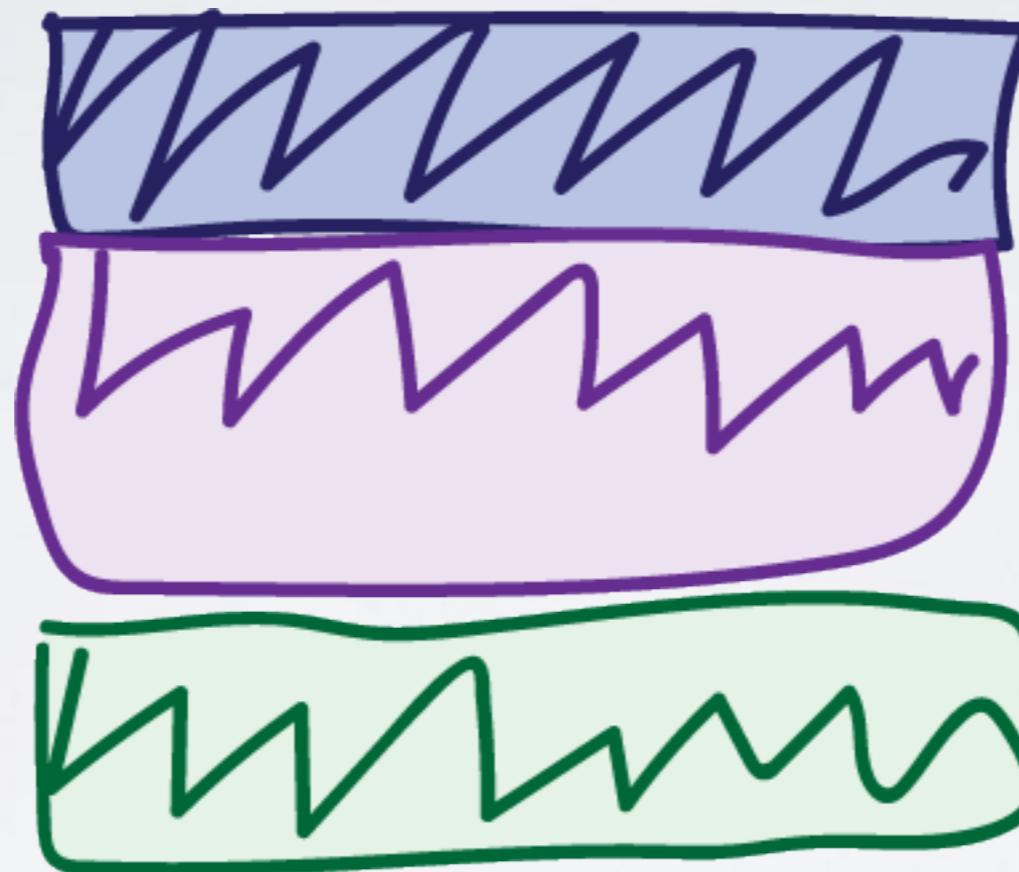




DOCUMENT FLOW

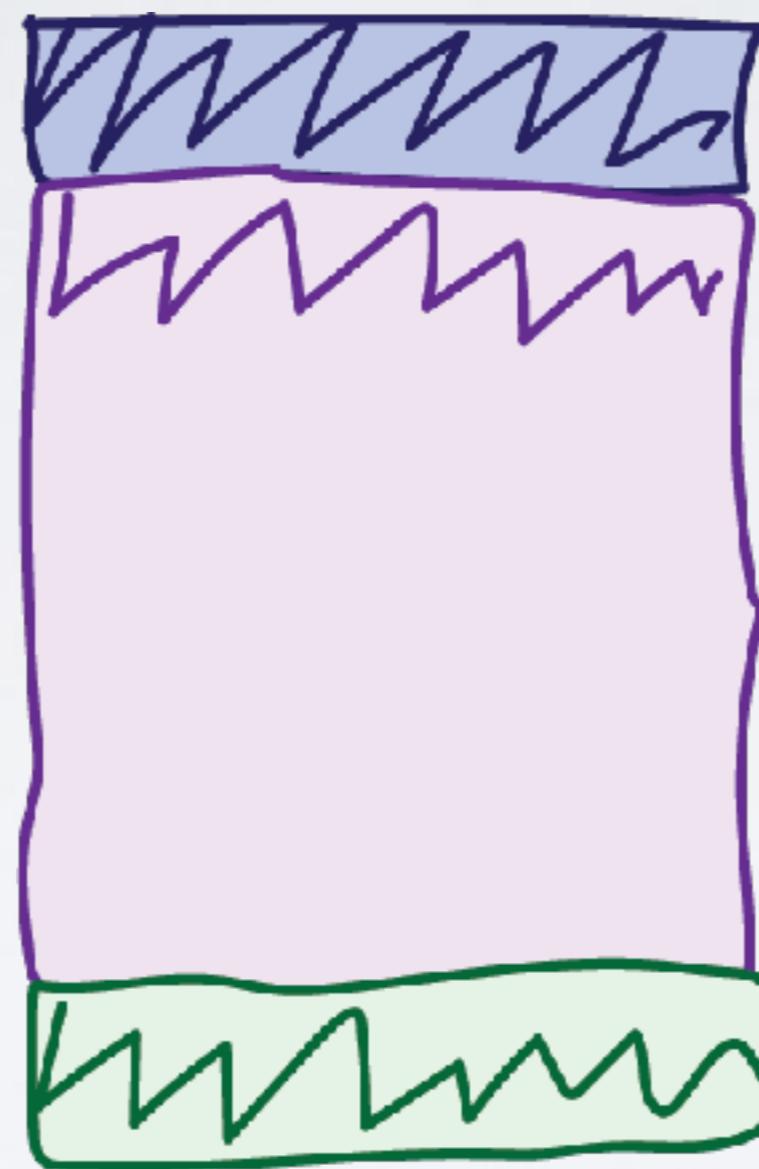


DOCUMENT FLOW

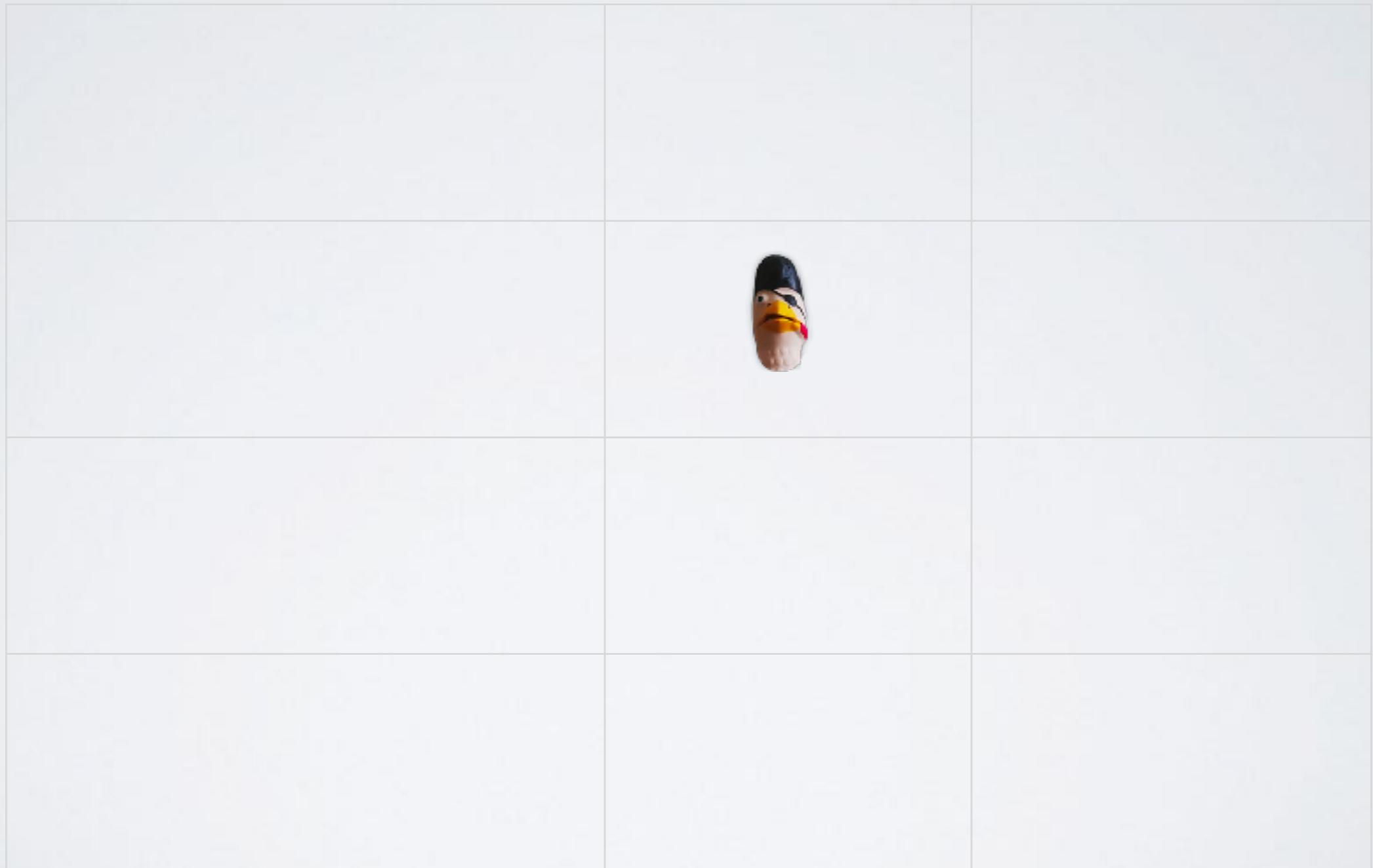
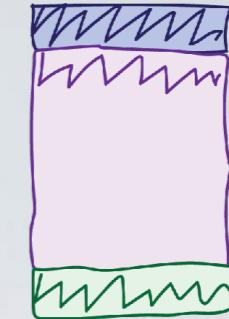


Challenge: sticky footer

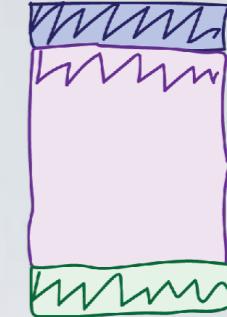
STICKY FOOTER



STICKY FOOTER

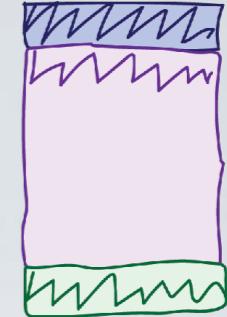


STICKY FOOTER



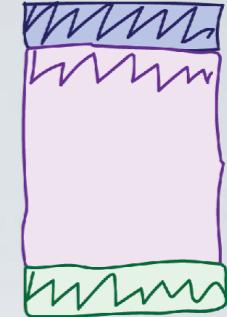
display: table	A small image of a person's head, representing the content of the table cell.	

STICKY FOOTER



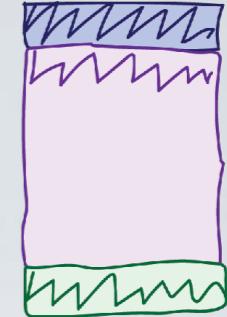
		all-tracked (caniuse)
display: table	A small emoji of a person wearing a blue and yellow hat, representing a user agent or browser.	99.98 %

STICKY FOOTER



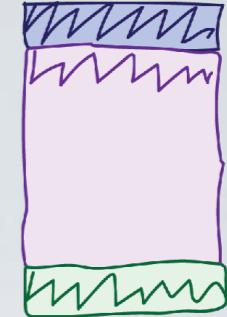
		all-tracked (caniuse)
display: table		99.98 %
display: flex		99.64 %

STICKY FOOTER



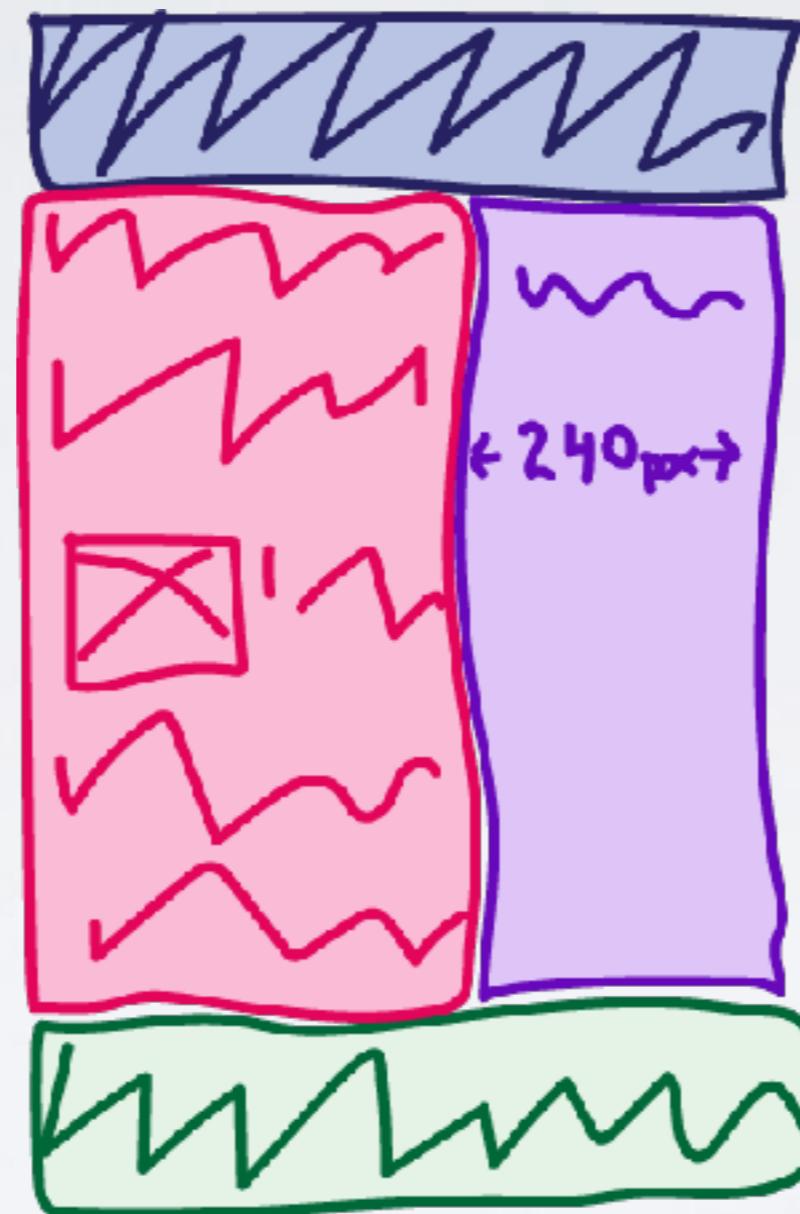
		all-tracked (caniuse)
display: table		99.98 %
display: flex		99.64 %
display: grid		87.35 %

STICKY FOOTER

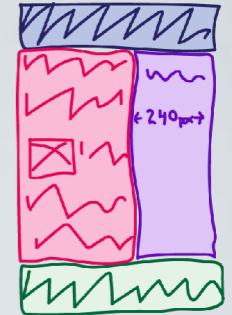


		all-tracked (caniuse)
display: table	A small black and yellow emoji of a character wearing a mask, representing a table-based sticky footer.	99.98 %
display: flex	A yellow rubber duck emoji, representing a flex-based sticky footer.	99.64 %
display: grid	A yellow rubber duck emoji, representing a grid-based sticky footer.	87.35 %

HOLY GRAIL LAYOUT

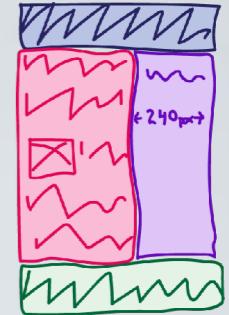


HOLY GRAIL LAYOUT



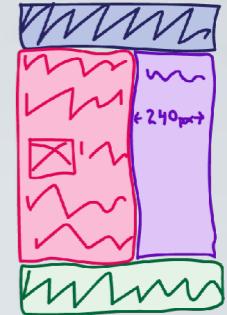
		all-tracked (caniuse)
Float + padding hack + calc()		92.78 %

HOLY GRAIL LAYOUT



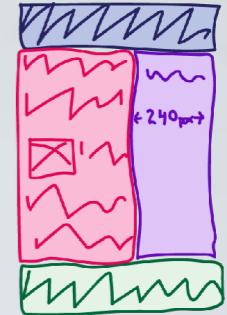
		all-tracked (caniuse)
Float + padding hack + calc()		92.78 %
display: flex		99.64 %

HOLY GRAIL LAYOUT



		all-tracked (caniuse)
Float + padding hack + calc()		92.78 %
display: flex		99.64 %
display: grid		87.35 %

HOLY GRAIL LAYOUT



		all-tracked (caniuse)
Float + padding hack + calc()		92.78 %
display: flex		99.64 %
display: grid		87.35 %

CARD LAYOUT



CARD LAYOUT



Float + hardcoded height



99.98 %

CARD LAYOUT



Float + hardcoded height



99.98 %

Inline-block + hardcoded
min-height



99.98 %

CARD LAYOUT



Float + hardcoded height		99.98 %
Inline-block + hardcoded min-height		99.98 %
display: flex		98.95 %

CARD LAYOUT



Float + hardcoded height		99.98 %
Inline-block + hardcoded min-height		99.98 %
display: flex		98.95 %
display: grid		87.35 %

CARD LAYOUT



Float + hardcoded height		99.98 %
Inline-block + hardcoded min-height		99.98 %
display: flex		98.95 %
display: grid		87.35 %



UI ДОСТАВЛЯЕТ КОНТЕНТ

У меня в Chrome все ок

У меня в Chrome все ок
(works on my machine)

У меня в Chrome все ок
(works on my machine)



Еще в 2012-м работало же

Еще в 2012-м работало же
(старые добрые костыли)



Еще в 2012-м работало же
(старые добрые костыли)



А мы полифил подключим

А мы полифил подключим
(Graceful Degradation)

А мы полифил подключим

(Graceful Degradation)



ПОЛИФИЛЫ

- JS-based

ПОЛИФИЛЫ

- JS-based
- Autoprefixer

AUTOPREFIXER

Все префиксы флексов по умолчанию
(включая синтаксис 2009 года)

AUTOPREFIXER

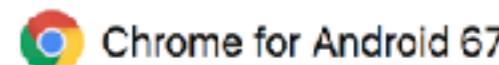
browserlist

A page to display compatible browsers from a browserslist string.

> 0.1%

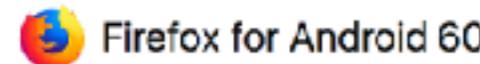
Show Browsers

Mobile Browsers



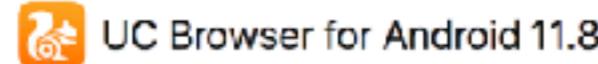
Chrome for Android 67

31.69%



Firefox for Android 60

0.17%



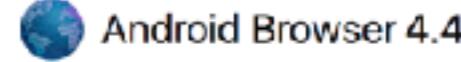
UC Browser for Android 11.8

7.54%



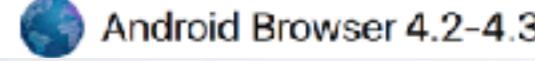
Android Browser 4.4.3-4.4.4

0.36%



Android Browser 4.4

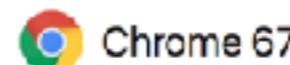
0.58%



Android Browser 4.2-4.3

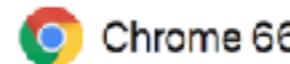
0.16%

Desktop Browsers



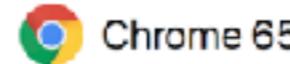
Chrome 67

15.49%



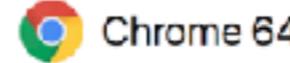
Chrome 66

9%



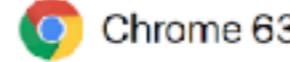
Chrome 65

0.44%



Chrome 64

0.23%



Chrome 63

0.43%



Chrome 62

0.14%

AUTOPREFIXER

Mobile Browsers

	Chrome for Android 67	31.69%
	Firefox for Android 60	0.17%
	UC Browser for Android 11.8	7.54%
	Android Browser 4.4.3-4.4.4	0.36%
	Android Browser 4.4	0.58%
	Android Browser 4.2-4.3	0.16%

AUTOPREFIXER

Mobile Browsers

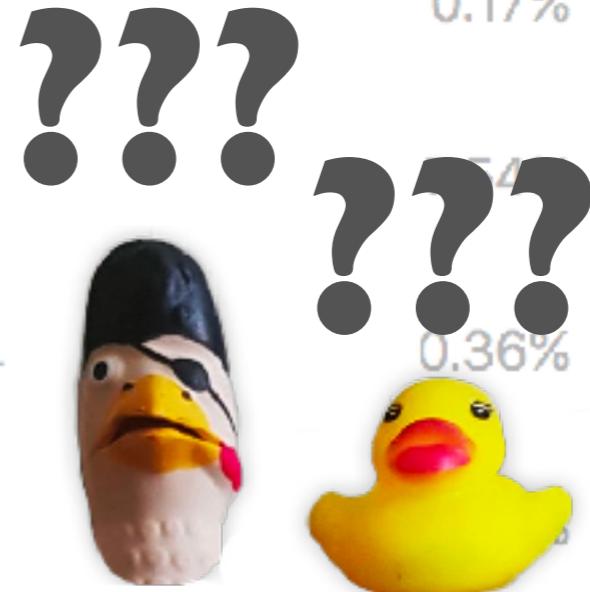
	Chrome for Android 67	31.69%
	Firefox for Android 60	0.17%
	UC Browser for Android 11.8	7.54%
	Android Browser 4.4.3-4.4.4	0.36%
	Android Browser 4.4	0.58%
	Android Browser 4.2-4.3	0.16%



AUTOPREFIXER

Mobile Browsers

	Chrome for Android 67	31.69%
	Firefox for Android 60	0.17%
	UC Browser for Android 11.8	0.54%
	Android Browser 4.4.3-4.4.4	0.36%
	Android Browser 4.4	0.16%
	Android Browser 4.2-4.3	0.16%



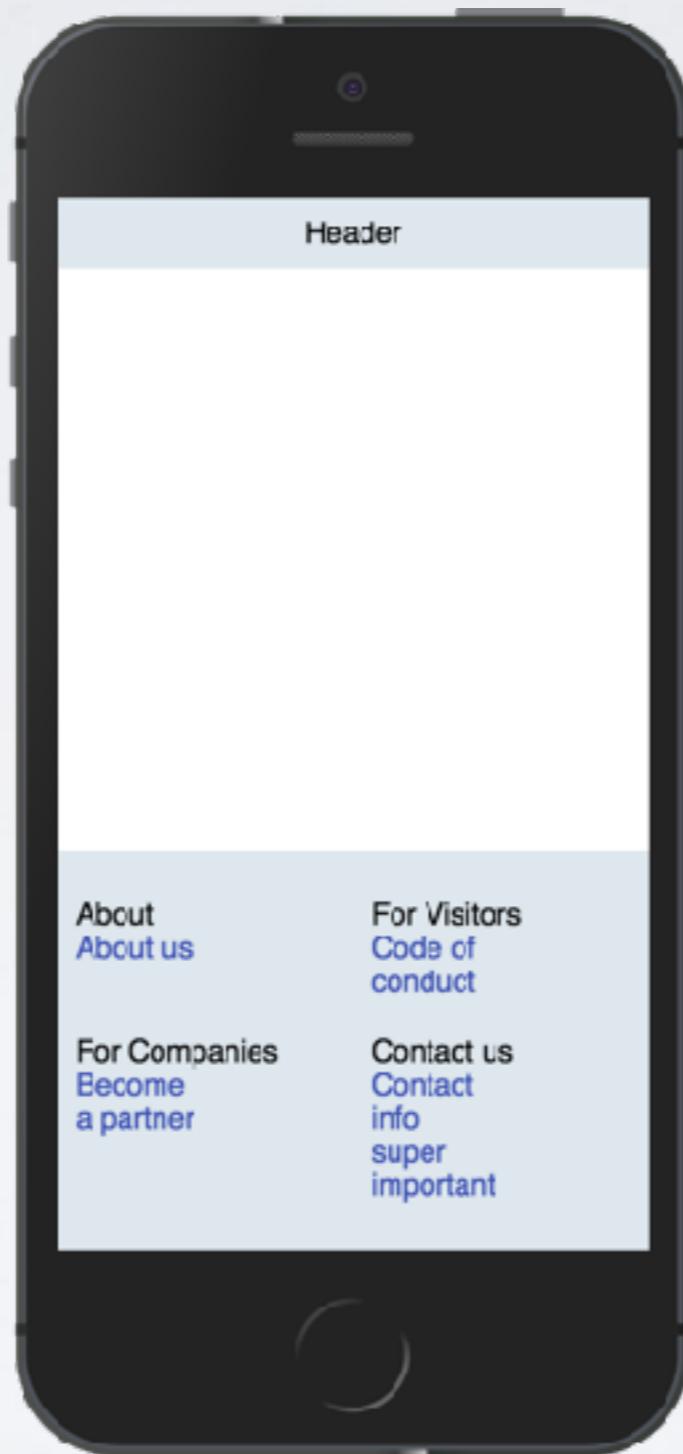
ANDROID BROWSER < 4.4

ANDROID BROWSER < 4.4

Notes

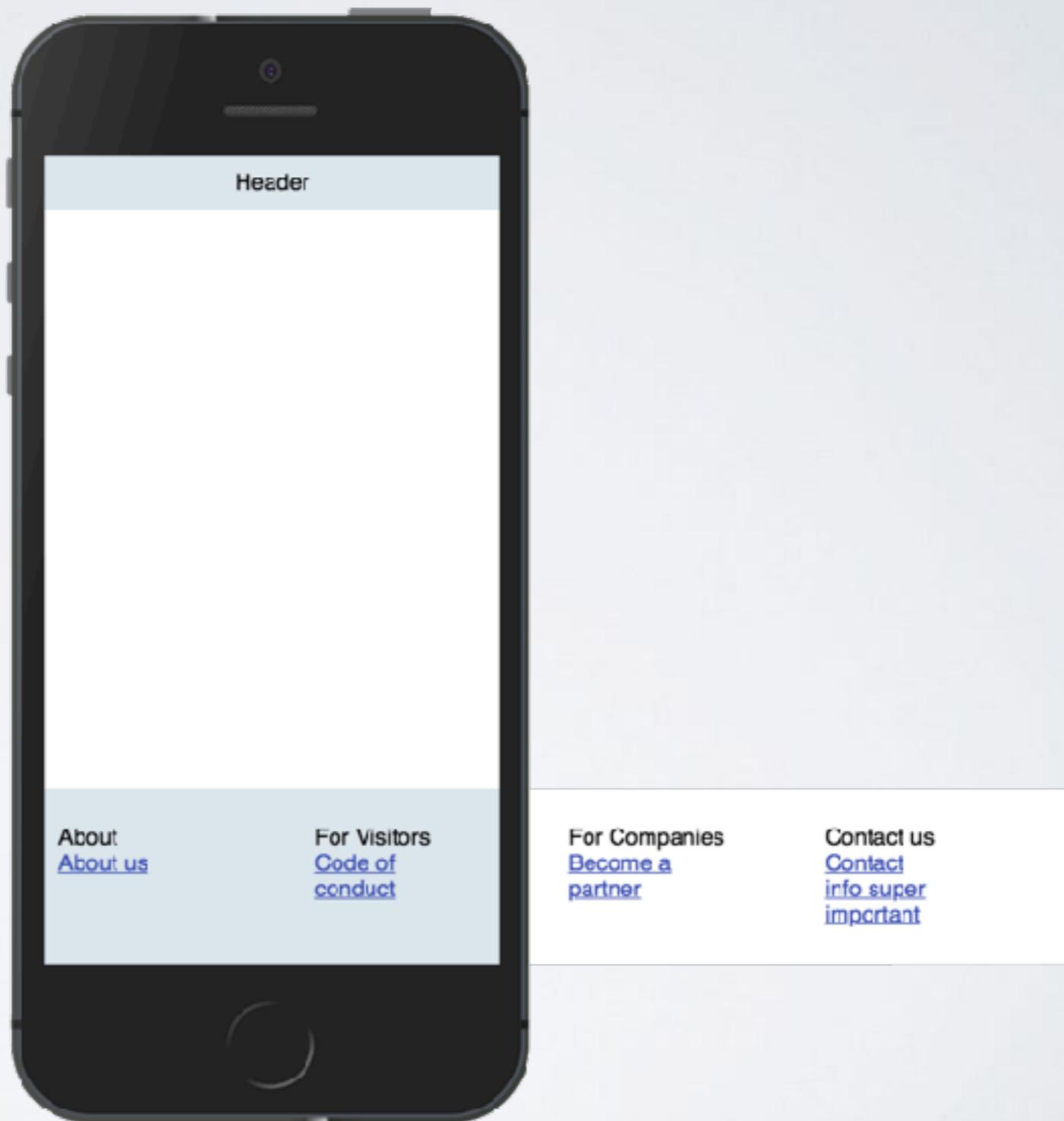
- 1 Only supports the old flexbox specification and does not support wrapping.

FLEX-WRAP: WRAP



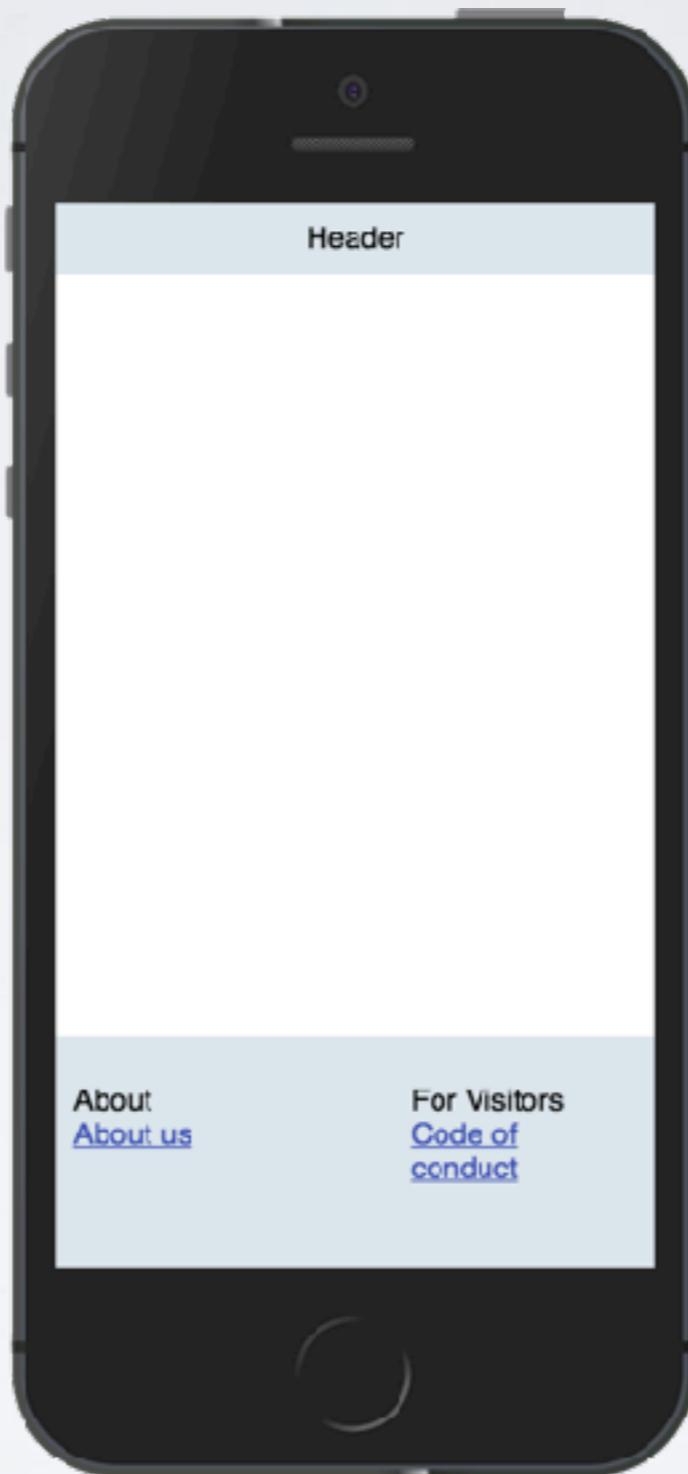


~~FLEX WRAP: WRAP~~





~~FLEX WRAP: WRAP~~



`overflow-x: hidden;`



Автопрефиксер CSS онлайн

Автопрефиксер — плагин для PostCSS для добавления вендорных префиксов в CSS

Postcss: v6.0.23, autoprefixer: v8.6.4

```
div {  
  display: flex;  
}
```

```
div {  
  display: -webkit-box;  
  display: flex;  
}
```

CSS

Фильтр

> 0.1%

Применить



Автопрефиксер CSS онлайн

Автопрефиксер — плагин для PostCSS для добавления вендорных префиксов в CSS

Postcss: v6.0.23, autoprefixer: v8.6.4

```
div {  
  display: flex;  
}
```

```
div {  
  display: -webkit-box;  
  display: flex;  
}
```

CSS



Фильтр

> 0.1%

Применить

FIX: ОТКЛЮЧИТЬ ВСЕ ПРЕФИКСЫ

- ДЛЯ СТРОКИ:



```
/* autoprefixer: ignore next */
```

FIX: ОТКЛЮЧИТЬ ВСЕ ПРЕФИКСЫ

- ДЛЯ СТРОКИ:



```
/* autoprefixer: ignore next */
```

- ДЛЯ БЛОКА:



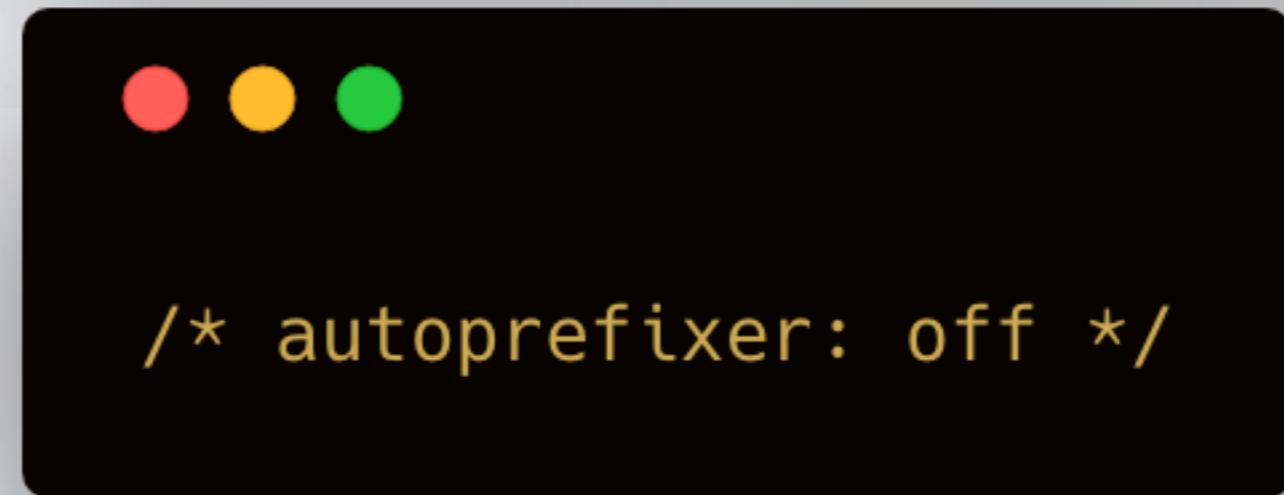
```
/* autoprefixer: off */
```

FIX: ОТКЛЮЧИТЬ ВСЕ ПРЕФИКСЫ

- ДЛЯ СТРОКИ:



- ДЛЯ БЛОКА:



FIX: ОТКЛЮЧИТЬ ВСЕ ПРЕФИКСЫ

- ДЛЯ СТРОКИ:



- ДЛЯ БЛОКА:



FIX: ОТКЛЮЧИТЬ ДЛЯ ANDROID < 4.4

```
div {  
  display: flex;  
}
```

```
div {  
  display: flex;  
}
```

CSS

Фильтр

Применить

FIX: ОТКЛЮЧИТЬ ДЛЯ ANDROID < 4.4

```
div {  
  display: flex;  
}
```

```
div {  
  display: flex;  
}
```

CSS



Фильтр

Применить



FIX: ОТКЛЮЧИТЬ ДЛЯ ANDROID < 4.4

```
div {  
  display: flex;  
}
```

```
div {  
  display: -webkit-box;  
  display: -ms-flexbox;  
  display: flex;  
}
```



Фильтр

Применить



FIX

- Написать свой post-css плагин



FIX

- Написать свой post-css плагин



<https://github.com/postcss/autoprefixer/issues/408>

AUTOPREFIXER + GRID

AUTOPREFIXER + GRID

Префиксы нужны только для IE, IE Mobile и старых версий Edge:

AUTOPREFIXER + GRID + IE

Префиксы для гридов выключены по умолчанию.

Включить:

```
require('autoprefixer')({  
  grid: true,  
  browsers: [/* browserList */]  
})
```

стоп.

стоп.
А почему выключены?

AUTOPREFIXER + GRID + IE

CSS Grid Property	IE9 Implementation	Autoprefixer?	Notes
grid-template-columns	-ms-grid-columns	Yes	
grid-template-rows	-ms-grid-rows	Yes	
grid-template-areas	NA	Yes	Autoprefixer uses this to understand what the grid looks like but does not add any extra properties.
grid-template	NA	Yes	Shorthand for grid-template-columns, grid-template-rows, and grid-template-areas.
grid-auto-columns	NA	No	IE doesn't support auto-placement
grid-auto-rows	NA	No	IE doesn't support auto-placement
grid-auto-flow	NA	No	IE doesn't support auto-placement
grid	NA	No	See this GitHub issue as to why this isn't supported
grid-row-start	-ms-grid-row	Yes ¹	Span syntax requires grid-row-end to be defined
grid-column-start	-ms-grid-column	Yes ¹	Span syntax requires grid-column-end to be defined
grid-row-end	NA	Yes ¹	grid-row-start must be defined
grid-column-end	NA	Yes ¹	grid-column-start must be defined
grid-row	NA	Yes ¹	
grid-column	NA	Yes ¹	
grid-area	NA	Yes ²	Autoprefixer translates the grid area into column/row coordinates
grid-row-gap	NA	Yes ³	Generates extra rows/columns in IE.
grid-column-gap	NA	Yes ³	Generates extra rows/columns in IE.
grid-gap	NA	Yes ³	Generates extra rows/columns in IE.
NA	-ms-grid-column-span	Yes	Translated from grid-column-end and grid-area.
NA	-ms-grid-row-span	Yes	Translated from grid-row-end and grid-area.
align-self	-ms-grid-row-align	Yes	
justify-self	-ms-grid-column-align	Yes	

<https://css-tricks.com/css-grid-in-ie-css-grid-and-the-new-autoprefixer/>

AUTOPREFIXER + GRID + IE

CSS Grid Property	IE9 Implementation	Autoprefixer?	Notes
grid-template-columns	-ms-grid-columns	Yes	
grid-template-rows	-ms-grid-rows	Yes	
grid-template-areas	NA	Yes	Autoprefixer uses this to understand rows and any extra property
grid-template	NA	Yes	Shorthand for grid-template-rows/cols/areas
grid-auto-columns	NA	No	IE doesn't support auto- grid
grid-auto-rows	NA	No	IE doesn't support auto- grid
grid-auto-flow	NA	No	IE doesn't support auto- placement
grid	NA	No	See this GitHub issue as to why this isn't supported
grid-row-start	-ms-grid-row	Yes ¹	Span syntax requires grid-row-end to be defined
grid-column-start	-ms-grid-column	Yes ¹	Span syntax requires grid-column-end to be defined
grid-row-end	NA	Yes ¹	grid-row-start must be defined
grid-column-end	NA	Yes ¹	grid-column-start must be defined
grid-row	NA	Yes ¹	
grid-column	NA	Yes ¹	
grid-area	NA	Yes ²	Autoprefixer translates the grid area into column/row coordinates
grid-row-gap	NA	Yes ³	Generates extra rows/columns in IE.
grid-column-gap	NA	Yes ³	Generates extra rows/columns in IE.
grid-gap	NA	Yes ³	Generates extra rows/columns in IE.
NA	-ms-grid-column-span	Yes	Translated from grid-column-end and grid-area.
NA	-ms-grid-row-span	Yes	Translated from grid-row-end and grid-area.
align-self	-ms-grid-row-align	Yes	
justify-self	-ms-grid-column-align	Yes	

Autoprefixer still can't save you from everything

AUTOPREFIXER + GRID + IE

CSS Grid Property	IE9 Implementation	Autoprefixer?	Notes
grid-template-columns	-ms-grid-columns	Yes	
grid-template-rows	-ms-grid-rows	Yes	
grid-template-areas	NA	Yes	Autoprefixer uses this to understand nested grid areas in a grid group.
grid-template	NA	Yes	Shorthand for grid-template-rows/cols/areas.
grid-auto-columns	NA	No	IE doesn't support auto-pleo
grid-auto-rows	NA	No	IE doesn't support auto-pleo
grid-auto-flow	NA	No	IE doesn't support auto-flow
grid	NA	No	See this GitHub issue as to why
grid-row-start	ms-grid-row	Yes ¹	Span syntax requires grid-row
grid-column-start	-ms-grid-column	Yes ¹	Span syntax requires grid-column-end to be defined
grid-row-end	NA	Yes ¹	grid-row-start must be defined
grid-column-end	NA	Yes ¹	grid-column-start must be defined
grid-row	NA	Yes ¹	
grid-column	NA	Yes ¹	
grid-area	NA	Yes ²	Autoprefixer translates the grid area into column/row coordinates
grid-row-gap	NA	Yes ³	Generates extra rows/columns in IE.
grid-column-gap	NA	Yes ³	Generates extra rows/columns in IE.
grid-gap	NA	Yes ³	Generates extra rows/columns in IE.
NA	-ms-grid-column-span	Yes	Translated from grid-column-end and grid-area.
NA	-ms-grid-row-span	Yes	Translated from grid-row-end and grid-area.
align-self	-ms-grid-row-align	Yes	
justify-self	-ms-grid-column-align	Yes	

Autoprefixer still can't save you from everything

Grid Gap has limited support

AUTOPREFIXER + GRID + IE

CSS Grid Property	IE9 Implementation	Autoprefixer?	Notes
grid-template-columns	-ms-grid-columns	Yes	
grid-template-rows	-ms-grid-rows	Yes	
grid-template-areas	NA	Yes	Autoprefixer uses this to understand rows and any extra property
grid-template	NA	Yes	Shorthand for grid-template-rows/cols/areas
grid-auto-columns	NA	No	IE doesn't support auto-props
grid-auto-rows	NA	No	IE doesn't support auto-props
grid-auto-flow	NA	No	IE doesn't support auto-flow
grid	NA	No	See this GitHub issue as to why
grid-row-start	ms-grid-row	Yes ¹	Span syntax requires grid-area
grid-column-start	-ms-grid-column	Yes ¹	Span syntax requires grid-area
grid-row-end	NA	Yes ¹	grid-row-start must be defined
grid-column-end	NA	Yes ¹	grid-column-start must be defined
grid-row	NA	Yes ¹	
grid-column	NA	Yes ¹	
grid-area	NA	Yes ²	Autoprefixer translates the grid area into column/row coordinates
grid-row-gap	NA	Yes ³	Generates extra rows/columns in IE.
grid-column-gap	NA	Yes ³	Generates extra rows/columns in IE.
grid-gap	NA	Yes ³	Generates extra rows/columns in IE.
NA	-ms-grid-column-span	Yes	Translated from grid-column-end and grid-area.
NA	-ms-grid-row-span	Yes	Translated from grid-row-end and grid-area.
align-self	-ms-grid-row-align	Yes	
justify-self	-ms-grid-column-align	Yes	

Autoprefixer still can't save you from everything

Grid Gap has limited support

No auto-placement! No auto-placement! No auto-placement!

AUTOPREFIXER + GRID + IE

CSS Grid Property	IE9 Implementation	Autoprefixer?	Notes
grid-template-columns	-ms-grid-columns	Yes	
grid-template-rows	-ms-grid-rows	Yes	
grid-template-areas	NA	Yes	Autoprefixer uses this to understand rows and any extra property
grid-template	NA	Yes	Shorthand for grid-template-rows/cols/areas
grid-auto-columns	NA	No	IE doesn't support auto-props
grid-auto-rows	NA	No	IE doesn't support auto-props
grid-auto-flow	NA	No	IE doesn't support auto-flow
grid	NA	No	See this GitHub issue as to why
grid-row-start	-ms-grid-row	Yes ¹	Span syntax requires grid-row
grid-column-start	-ms-grid-column	Yes ¹	Span syntax requires grid-column
grid-row-end	NA	Yes ¹	grid-row-start must be defined
grid-column-end	NA	Yes ¹	grid-column-start must be defined
grid-row	NA	Yes ¹	
grid-column	NA	Yes ¹	
grid-area	NA	Yes ²	Autoprefixer translates the grid-area property
grid-row-gap	NA	Yes ³	Generates extra rows/columns
grid-column-gap	NA	Yes ³	Generates extra rows/columns
grid-gap	NA	Yes ³	Generates extra rows/columns in IE
NA	-ms-grid-column-span	Yes	Translated from grid-column-end and grid-area.
NA	-ms-grid-row-span	Yes	Translated from grid-row-end and grid-area.
align-self	-ms-grid-row-align	Yes	
justify-self	-ms-grid-column-align	Yes	

Autoprefixer still can't save you from everything

Grid Gap has limited support

No auto-placement! No auto-placement! No auto-placement!

Area names must be unique

AUTOPREFIXER + GRID + IE

CSS Grid Property	IE9 Implementation	Autoprefixer?	Notes
grid-template-columns	-ms-grid-columns	Yes	
grid-template-rows	-ms-grid-rows	Yes	
grid-template-areas	NA	Yes	Autoprefixer uses this to understand rows and any extra property
grid-template	NA	Yes	Shorthand for grid-template-rows/cols/areas
grid-auto-columns	NA	No	IE doesn't support auto-props
grid-auto-rows	NA	No	IE doesn't support auto-props
grid-auto-flow	NA	No	IE doesn't support auto-flow
grid	NA	No	See this GitHub issue as to why
grid-row-start	-ms-grid-row	Yes ¹	Span syntax requires grid-row
grid-column-start	-ms-grid-column	Yes ¹	Span syntax requires grid-column
grid-row-end	NA	Yes ¹	grid-row-start must be defined
grid-column-end	NA	Yes ¹	grid-column-start must be defined
grid-row	NA	Yes ¹	
grid-column	NA	Yes ¹	
grid-area	NA	Yes ²	Autoprefixer translates the grid-area property
grid-row-gap	NA	Yes ³	Generates extra rows/columns
grid-column-gap	NA	Yes ³	Generates extra rows/columns
grid-gap	NA	Yes ³	Generates extra rows/columns
NA	-ms-grid-column-span	Yes	Translated from grid-column-span
NA	-ms-grid-row-span	Yes	Translated from grid-row-span
align-self	-ms-grid-row-align	Yes	
justify-self	-ms-grid-column-align	Yes	

Autoprefixer still can't save you from everything

Grid Gap has limited support

No auto-placement! No auto-placement! No auto-placement!

Area names must be unique

Autoprefixer has limited column and row spanning support

AUTOPREFIXER + GRID + IE

CSS Grid Property	IE9 Implementation	Autoprefixer?	Notes
grid-template-columns	-ms-grid-columns	Yes	
grid-template-rows	-ms-grid-rows	Yes	
grid-template-areas	NA	Yes	Autoprefixer uses this to understand rules and any extra property
grid-template	NA	Yes	Shorthand for grid-template-rows/cols/areas
grid-auto-columns	NA	No	IE doesn't support auto-props
grid-auto-rows	NA	No	IE doesn't support auto-props
grid-auto-flow	NA	No	IE doesn't support auto-flow
grid	NA	No	See this GitHub issue as to why
grid-row-start	ms-grid-row	Yes ¹	Span syntax requires grid-row-end
grid-column-start	-ms-grid-column	Yes ¹	Span syntax requires grid-column-end
grid-row-end	NA	Yes ¹	grid-row-start must be defined
grid-column-end	NA	Yes ¹	grid-column-start must be defined
grid-row	NA	Yes ¹	
grid-column	NA	Yes ¹	
grid-area	NA	Yes ²	Autoprefixer translates the grid-area property to grid-row/coluns
grid-row-gap	NA	Yes ³	Generates extra rows/columns
grid-column-gap	NA	Yes ³	Generates extra rows/columns
grid-gap	NA	Yes ³	Generates extra rows/columns
NA	-ms-grid-column-span	Yes	Translated from grid-column-span
NA	-ms-grid-row-span	Yes	Translated from grid-row-span
align-self	-ms-grid-row-align	Yes	
justify-self	-ms-grid-column-align	Yes	

Autoprefixer still can't save you from everything

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Avoid using line names for now

AUTOPREFIXER + GRID + IE

CSS Grid Property	IE9 Implementation	Autoprefixer?	Notes
grid-template-columns	-ms-grid-columns	Yes	
grid-template-rows	-ms-grid-rows	Yes	
grid-template-areas	NA	Yes	Autoprefixer uses this to understand row and any extra property
grid-template	NA	Yes	Shorthand for grid-template-rows/cols/areas
grid-auto-columns	NA	No	IE doesn't support auto-props
grid-auto-rows	NA	No	IE doesn't support auto-props
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grid-row-start	ms-grid-row	Yes ¹	Span syntax requires grid-row
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NA	-ms-grid-column-span	Yes	Translated from grid-column-span
NA	-ms-grid-row-span	Yes	Translated from grid-row-span
align-self	-ms-grid-row-align	Yes	
justify-self	-ms-grid-column-align	Yes	

Autoprefixer still can't save you from everything

Grid Gap has limited support

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Area names must be unique

Autoprefixer has limited column and row spanning support

Avoid using line names for now

You still need to test!



У меня в Chrome все ок



Еще в 2012-м работало же



А мы полифил подключим



|Е получит одну колонку

IE получит одну колонку
(Progressive Enhancement)

IE получит одну колонку

(Progressive Enhancement)



FEATURE DETECTION

FEATURE DETECTION

- JavaScript

FEATURE DETECTION

- JavaScript:



```
const d = document.documentElement.style

if (('flexWrap' in d) || ('WebkitFlexWrap' in d) || ('msFlexWrap' in d)){
  // Add some class to top-level element
}
```

FEATURE DETECTION

- @supports

FEATURE DETECTION

- @supports:



```
@supports (display: grid) {  
  // code that will only run if CSS Grid is supported by the browser  
}
```

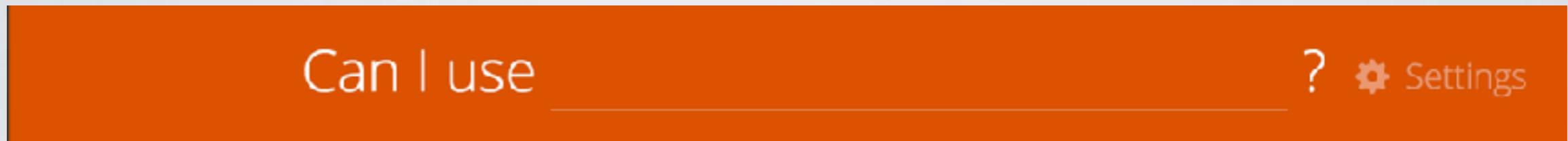
@SUPPORTS SUPPORT

@SUPPORTS SUPPORT

IE	Edge *	Firefox	Chrome	Safari	Opera	iOS Safari *	Opera Mini *	Android Browser	* Chrome for Android	Firefox for Android	IE Mobile
8	14	56	65	10		10.2		4.3			
9	15	59	66	10.1		10.3		4.4			
10	16	60	67	11		11.2		4.4.4			
11	17	61	68	11.1	53	11.4	all	67	67	60	11
	18	62	69	12		12					
		63	70	TP							
			71								



CANIUSE SETTINGS



CANIUSE SETTINGS

Can I use

?

Settings

Usage data

Source: Russian Federation

Min. browser usage: 0.01%

Total users not shown: 0.44%

Add usage source

From geography: Enter country/region Import

From Google Analytics: Import...

Browser set

Always show current & upcoming

Set 1

createlImageBitmap [- LS](#)

Create image bitmap with support for resizing and adjusting quality

Usage: Russian Federation 72% Global

Current aligned

IE Edge Firefox Chrome Safari Opera iOS Safari Opera Mini Android Chrome Android Firefox Android IE Mac

Browser	Version
IE	29
IE	41
IE	43
IE	49
Edge	54
Edge	55
Edge	56
Edge	57
Edge	58
Firefox	38
Firefox	60
Firefox	47
Firefox	61
Firefox	48
Firefox	62
Firefox	51
Firefox	63
Chrome	7.1
Chrome	8.4
Safari	
Opera	
iOS Safari	
Opera Mini	
Android	
Chrome Android	
Firefox Android	
IE Mac	

CANIUSE SETTINGS

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?

Settings

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Source: Russian Federation

Min. browser usage: 0.01%

Total users not shown: 0.44%

Add usage source

From geography: Enter country/regi Import

From Google Analytics: Import...

Browser set

Always show current & upcoming

Set 1 Delete Edit

createlImageBitmap [- LS]

Create image bitmap with support for resizing and adjusting quality

Usage

Region	Usage
Russian Federation	60.72
Global	71.04

Current aligned

IE Edge Firefox Chrome Safari Opera iOS Safari Opera Mini Android Chrome Android Firefox Android IE Mac

Browser	Version
IE	29
IE	41
IE	43
IE	49
Edge	54
Edge	55
Edge	56
Edge	57
Edge	58
Firefox	38
Firefox	60
Firefox	47
Firefox	61
Firefox	48
Firefox	62
Firefox	51
Firefox	63
Chrome	7.1
Chrome	8.4
Safari	
Opera	
iOS Safari	
Opera Mini	
Android	
Chrome Android	
Firefox Android	
IE Mac	

ЧТО ЕЩЕ?

БАГИ!

БАГИ!

The screenshot shows the MDN Web Docs page for the CSS Flexbox specification. At the top, there are two horizontal browser compatibility tables. The left table covers versions 11 to 12, and the right table covers versions 67 to 11.8. Below the tables, there are four tabs: 'Notes' (selected), 'Known issues (9)', 'Resources (13)', and 'Feedback'. The 'Known issues (9)' tab is active, displaying a list of browser-specific bugs and quirks. The list includes:

- Safari 10 and below uses min/max width/height declarations for actually rendering the size of flex items, but it ignores those values when calculating how many items should be on a single line of a multi-line flex container. Instead, it simply uses the item's flex-basis value, or its width if the flex basis is set to auto. [see bug](#). Fixed in all versions > 10.
- IE 11 requires a unit to be added to the third argument, the flex-basis property [see MSFT documentation](#)
- In IE10 and IE11, containers with `display: flex` and `flex-direction: column` will not properly calculate their flexed children's sizes if the container has `min-height` but no explicit `height` property. [See bug](#).
- IE 11 does not vertically align items correctly when `min-height` is used [see bug](#)
- Firefox 51 and below does not support [Flexbox in button elements](#). Fixed in version 52.
- In Safari 10.1 and below, the height of (non flex) children are not recognized in percentages. However other browsers recognize and scale the children based on percentage heights. Fixed in all versions > 10.1 ([See bug](#)) The bug also appeared in Chrome but was fixed in [Chrome 51](#)
- [Flexbugs](#): community-curated list of flexbox issues and cross browser workarounds for them
- In IE10 the default value for `flex` is `0 0 auto` rather than `0 1 auto` as defined in the latest spec.
- The space-evenly value of the `justify-content` property, as described in the [CSS Box Alignment Module Level 3](#) is only supported by some browsers.

Flexbugs: <https://github.com/philipwalton/flexbugs>

GridBugs: <https://github.com/rachelandrew/gridbugs>

OK, CANIUSE КРУТОЙ!



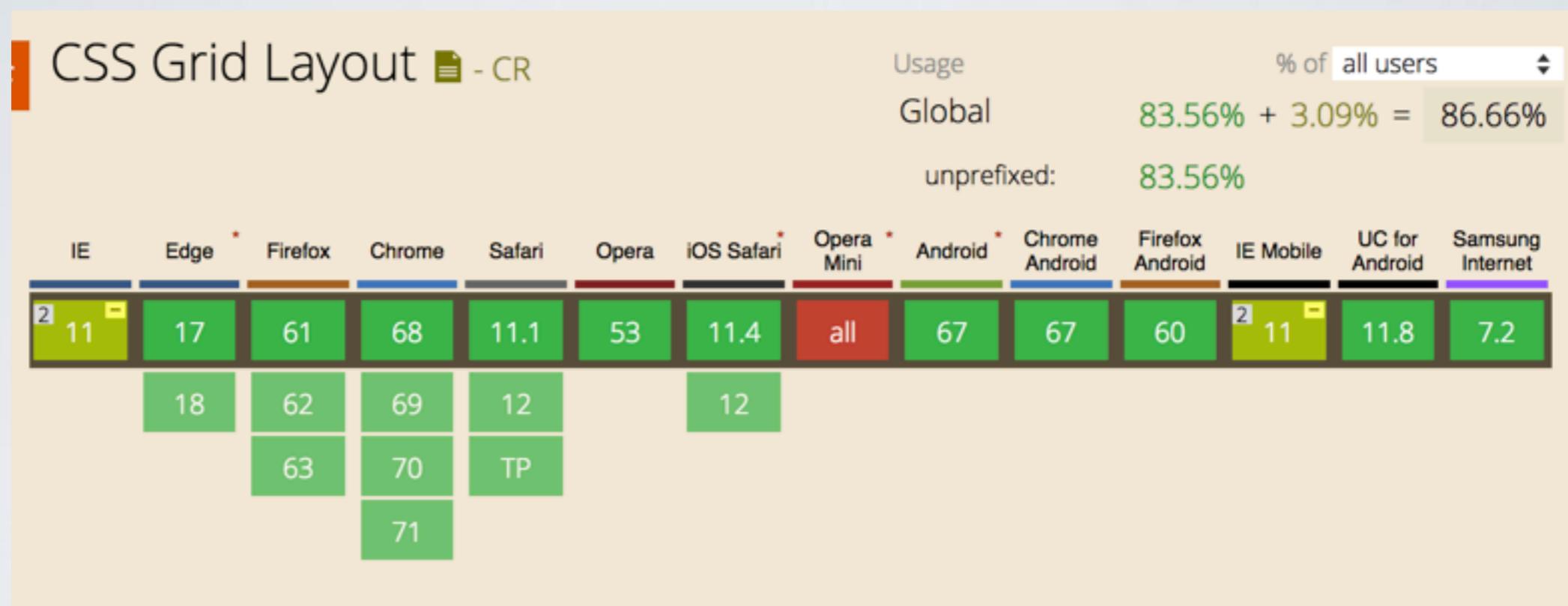
OK, CANIUSE КРУТОЙ!



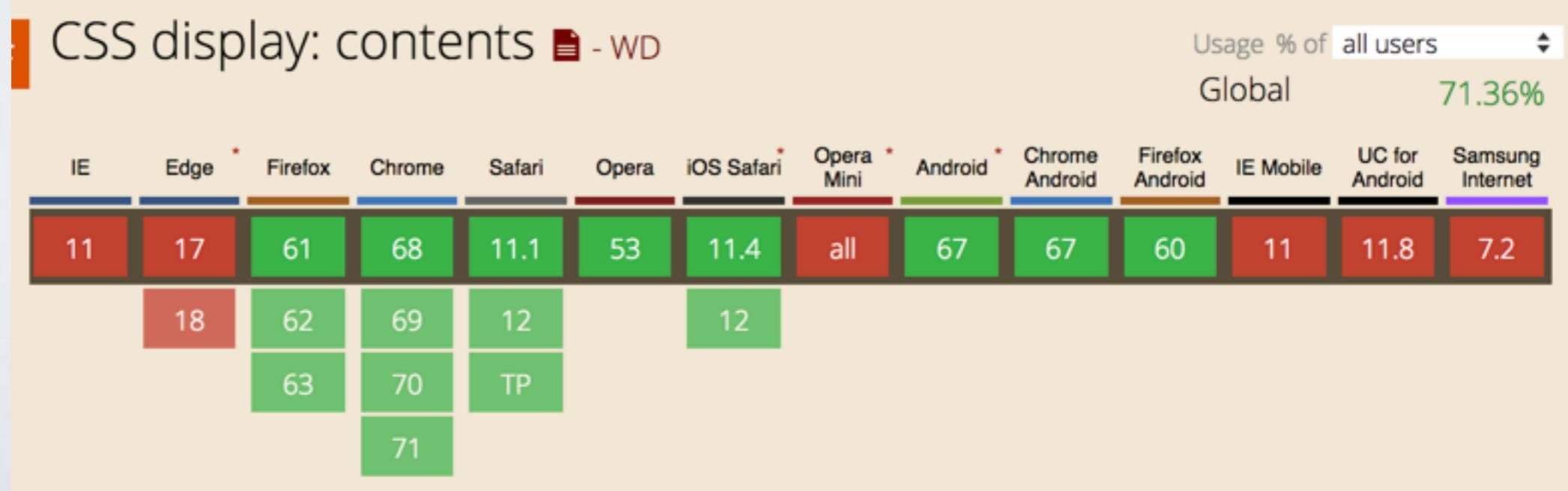
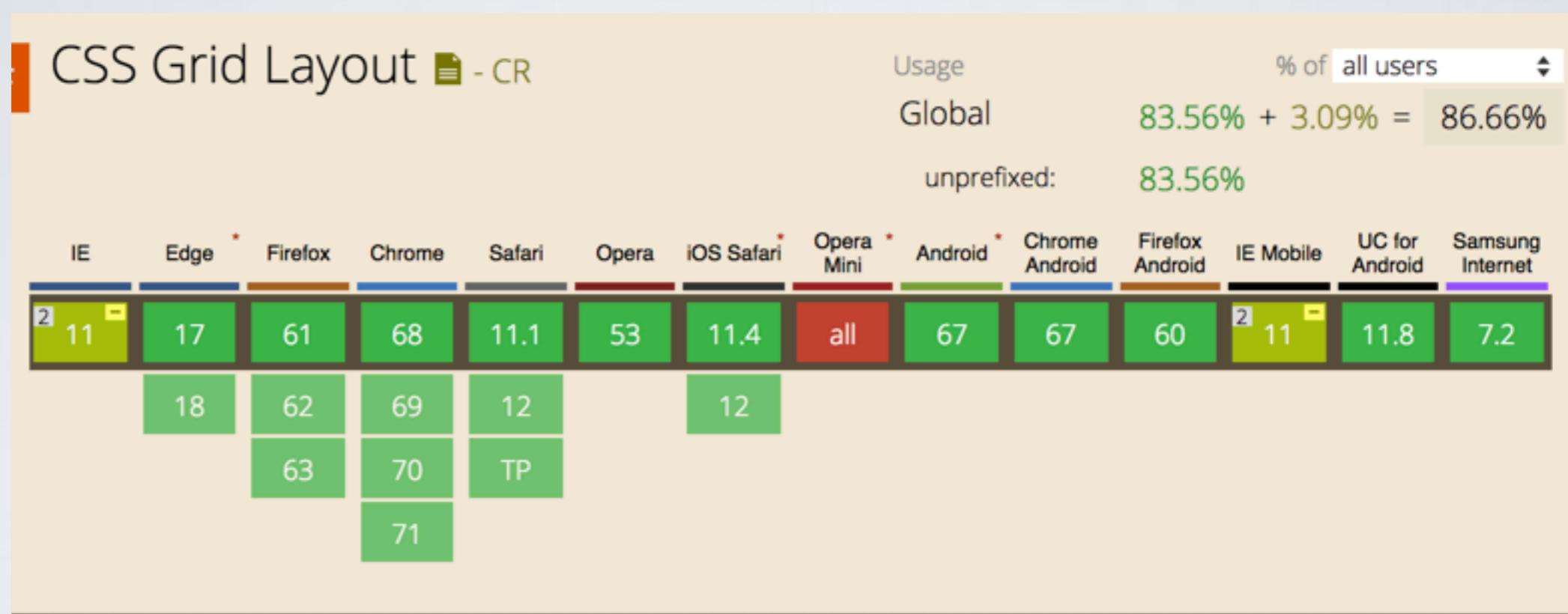
OK, CANIUSE КРУТОЙ!



ГРУППИРОВКА СВОЙСТВ



ГРУППИРОВКА СВОЙСТВ



ГДЕ ЕЩЕ СМОТРЕТЬ
ПОДДЕРЖКУ?

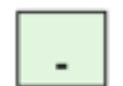
ГДЕ ЕЩЕ СМОТРЕТЬ ПОДДЕРЖКУ?

🔗 Browser compatibility



MDN web docs
moz://a

	Desktop						Mobile								
	Firefox	Edge	Chrome	IE	Opera	IE	Android	Firefox	Android	Edge	Chrome	Android	Opera	IE	Android
Basic support	57	16	52	No	44	10.1	57	57	16	52	44	10.3	6.0		



Full support



No support



See implementation notes.



User must explicitly enable this feature.

<https://developer.mozilla.org/>

ИТОГО

I.

ЗНАЙ СВОИХ
ПОЛЬЗОВАТЕЛЕЙ

2.

ЗНАЙ СВОИ ИНСТРУМЕНТЫ
И ИХ ПОДДЕРЖКУ

3.

ЗНАЙ СВОИ РАСКЛАДКИ
И КАКИМИ СРЕДСТВАМИ ИХ МОЖНО РЕАЛИЗОВАТЬ

4.

ВЫБИРАЙ МУДРО ПОДХОД
И СОГЛАСУЙ С ЗАИНТЕРЕСОВАННЫМИ ЛИЦАМИ



У меня в Chrome все ок



Еще в 2012-м работало же



А мы полифил подключим



IE получит одну колонку

5.
ТЕСТИРУЙ



Света Шарипова
Twitter: @hellodeadline