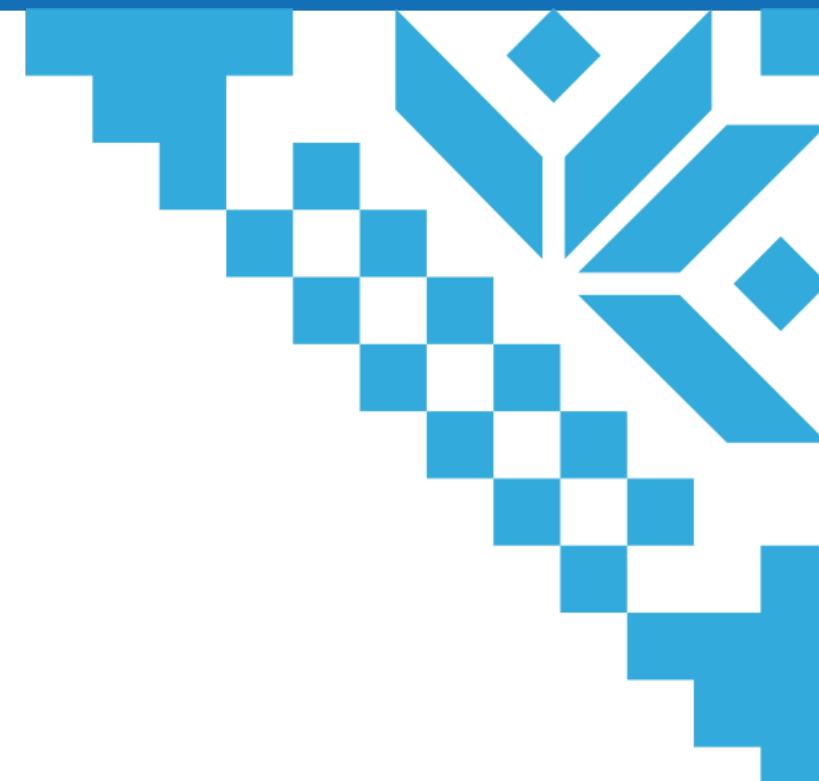


Хватит врать про Grid Layout

Серёжа Попов

Меня зовут Серёжа



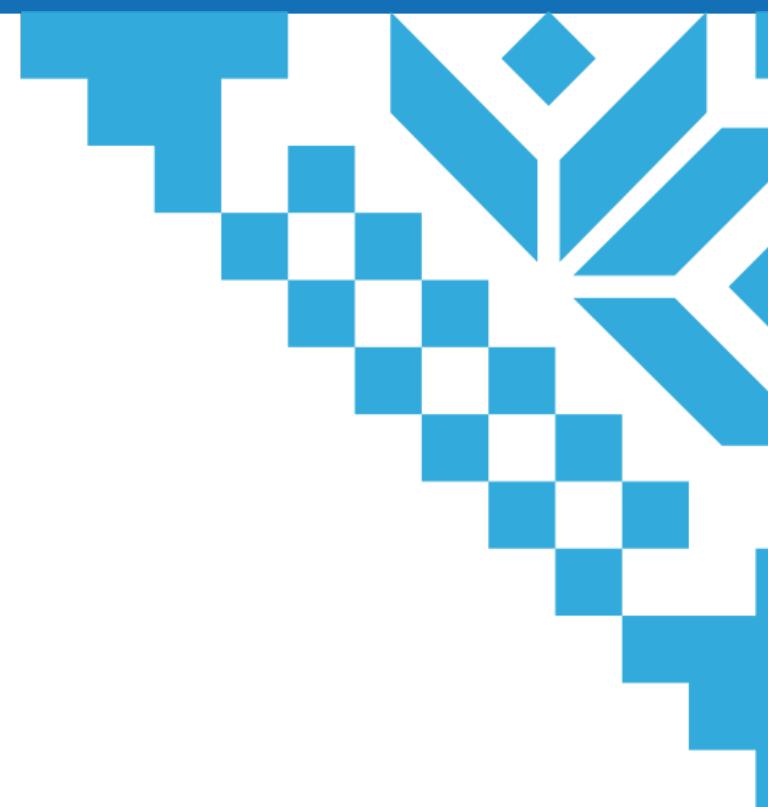
- Начальник аутсорса по фронтенду
в HTML Academy
- Верстальщик
- Участник сообщества

A photograph of a group of people outdoors, likely tourists, taking photographs with their smartphones. They are positioned in front of a large, ornate building with multiple windows and a balcony. The sky is clear and blue. In the foreground, a woman on the left is holding up her phone to take a picture. In the center, a man is looking up at something off-camera while holding his phone. On the right, another man is also looking up and holding a phone. The overall atmosphere is casual and suggests a vacation or sightseeing trip.

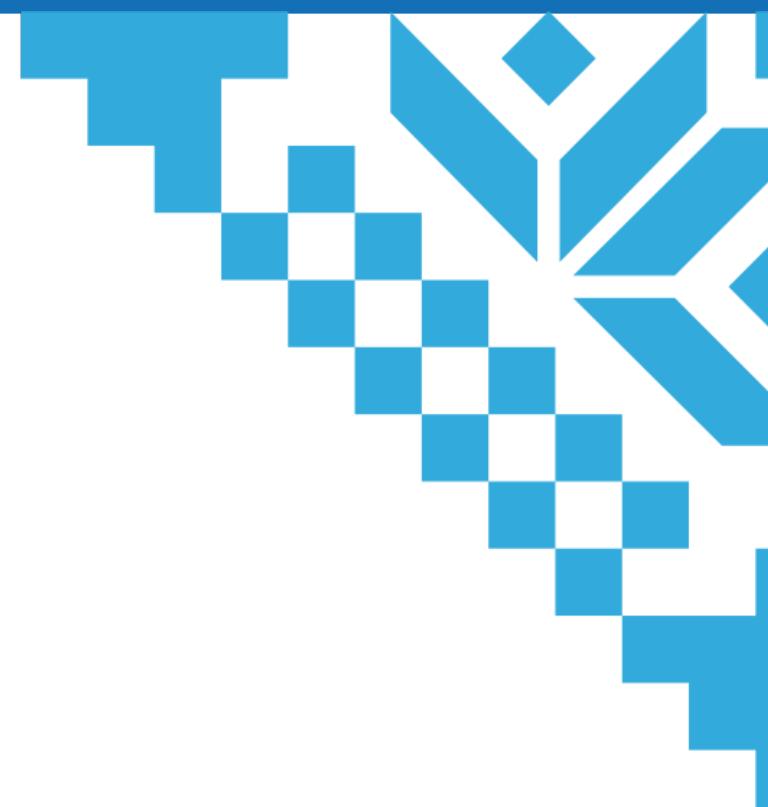
* pitercss conference

June 8-9th, 2018
St. Petersburg, Russia

*



Сообщество

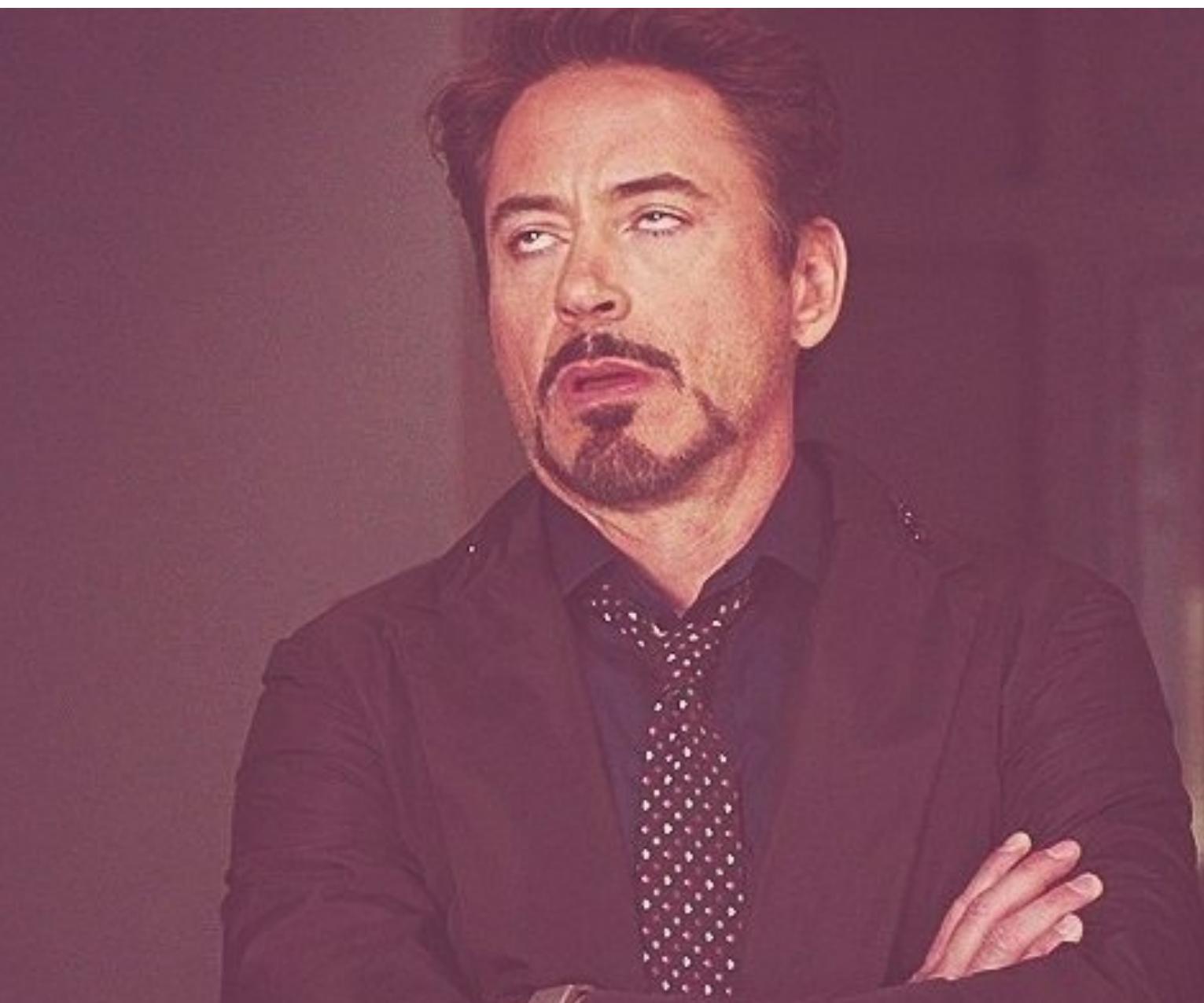


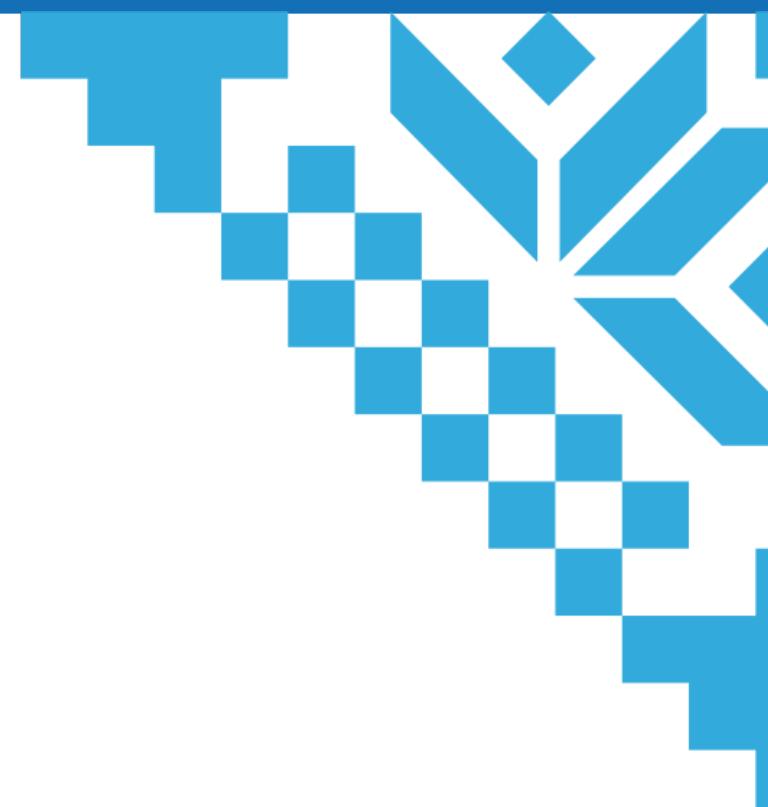
**Кто считает себя частью
сообщества?**



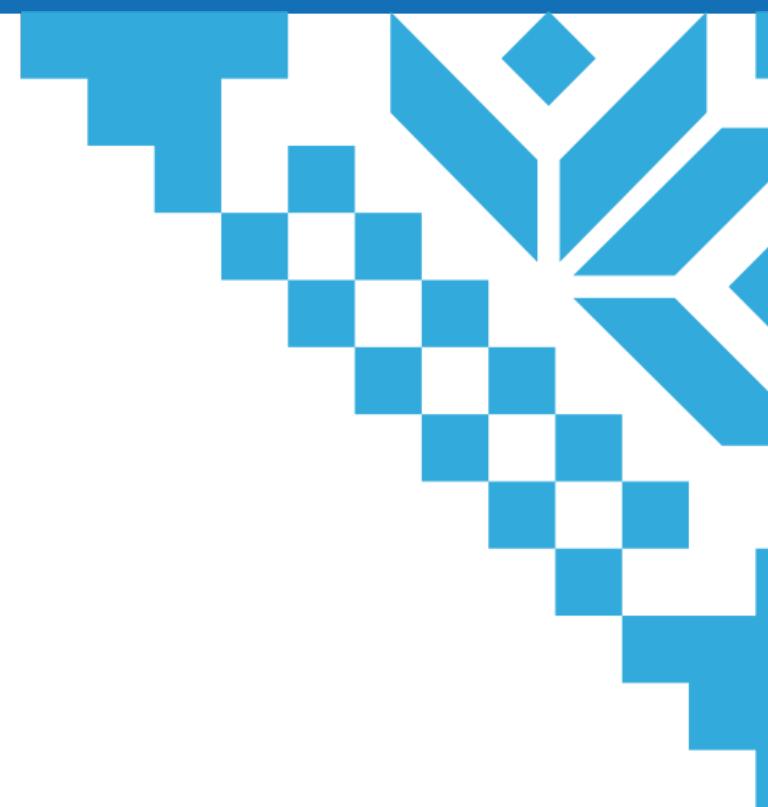


Сообщество раздражает





**Не разбираетесь –
не советуйте**

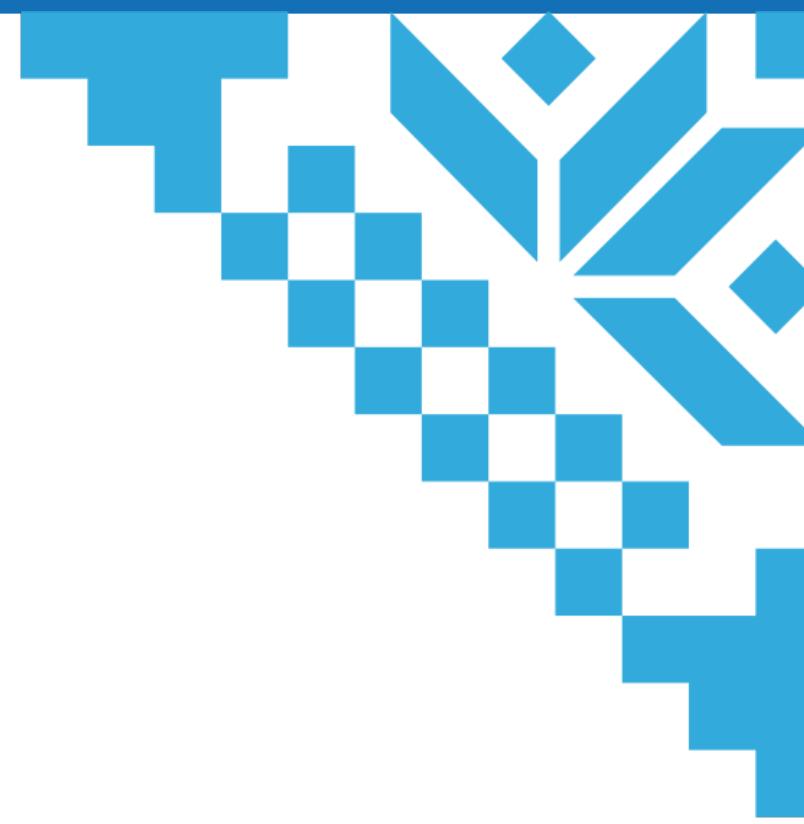


**При чём тут
Grid Layout?**

Grid Layout ❤



- Начал изучать в **2016 году**
- К моменту релиза умел использовать
- Рассказывал **обзорный доклад** весной 2017 года
- Планирую **доклад о практической стороне** осенью 2018 года
- Использую **Grid Layout** в проектах

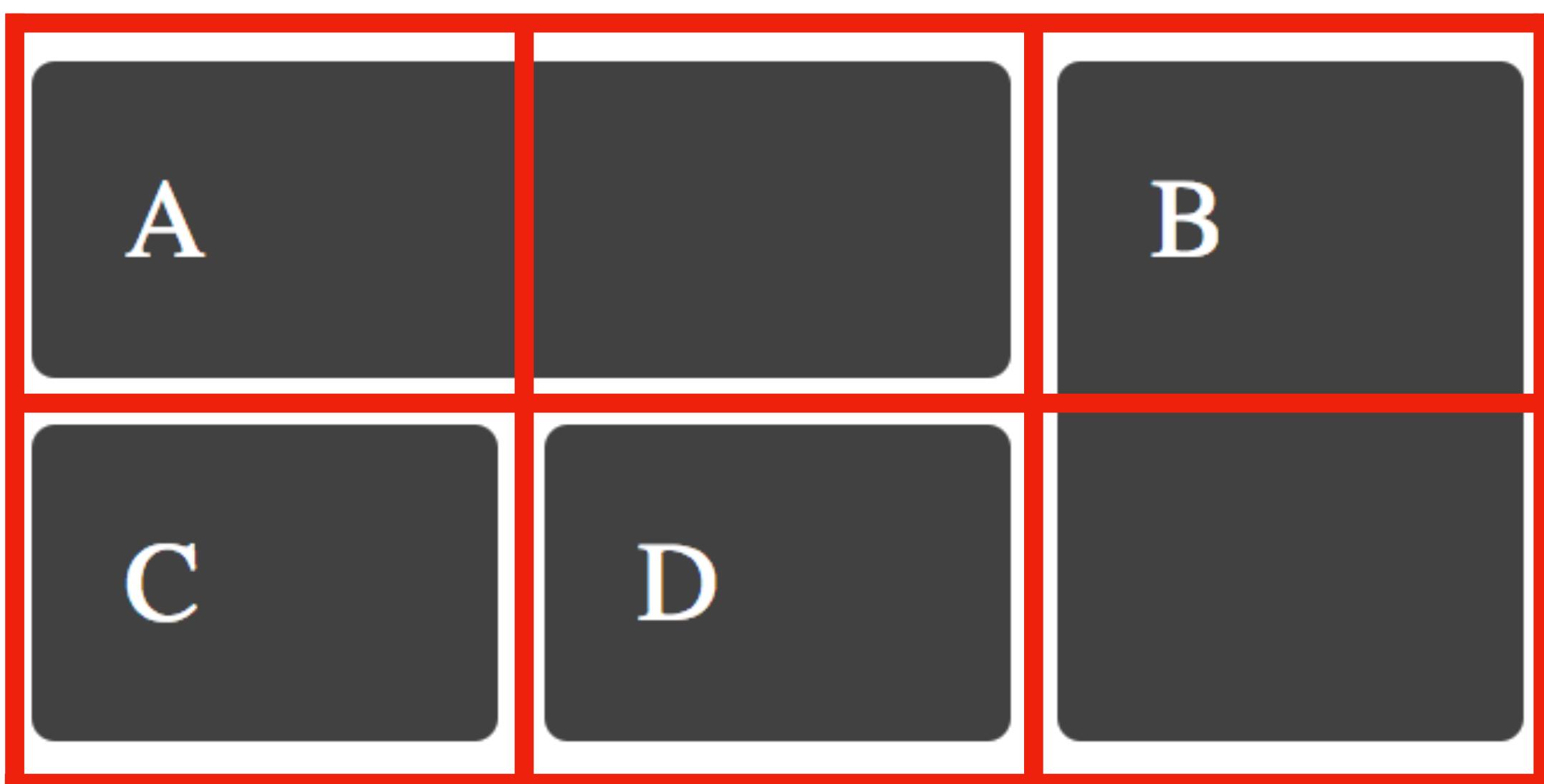


Что такое Grid Layout?

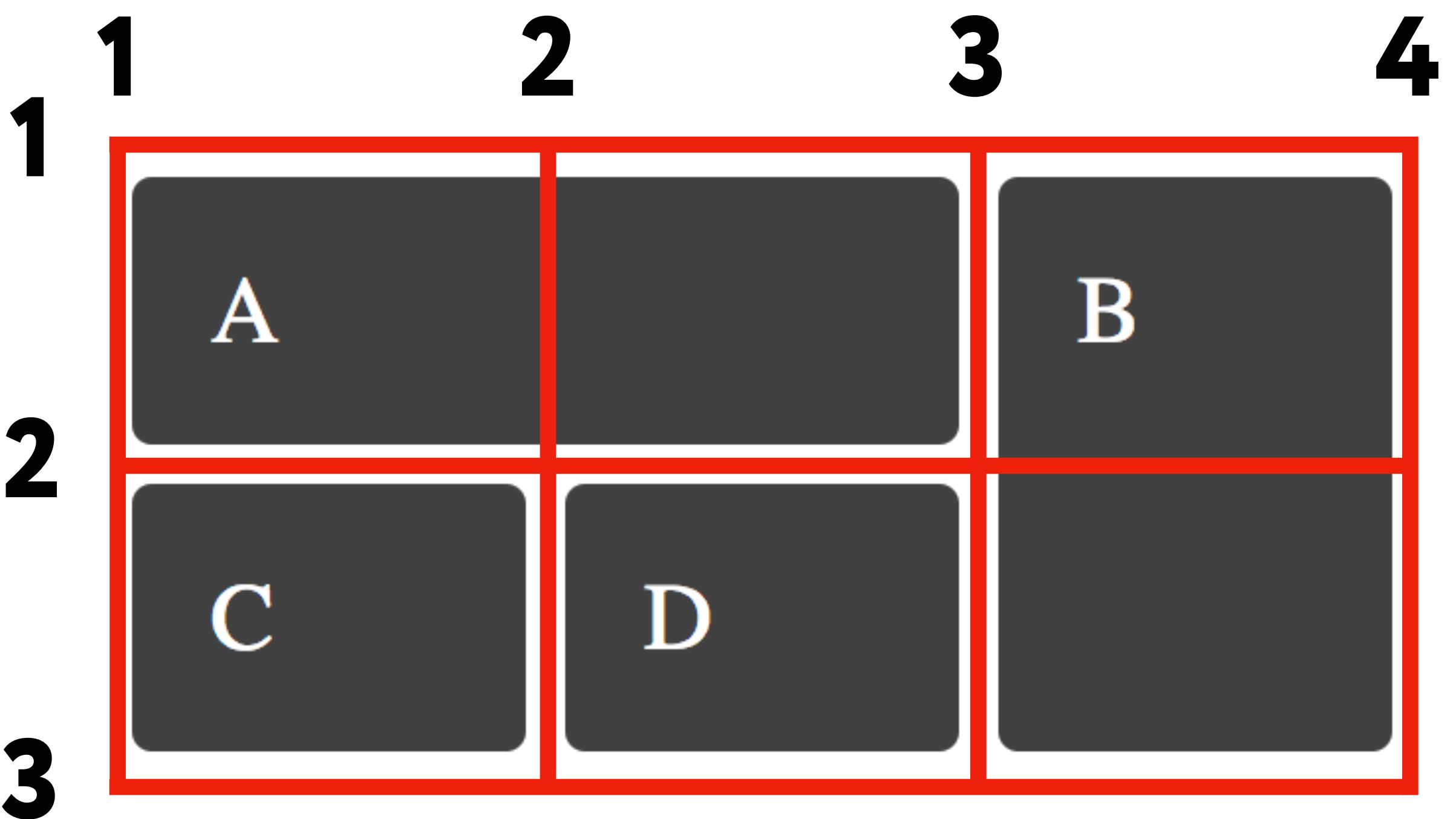
```
.wrapper {  
  display: grid;  
  grid-template-columns: 100px 100px 100px;  
}  
  
.a {  
  grid-column: 1 / 3;  
  grid-row: 1;  
}  
  
.b {  
  grid-column: 3 ;  
  grid-row: 1 / 3;  
}
```

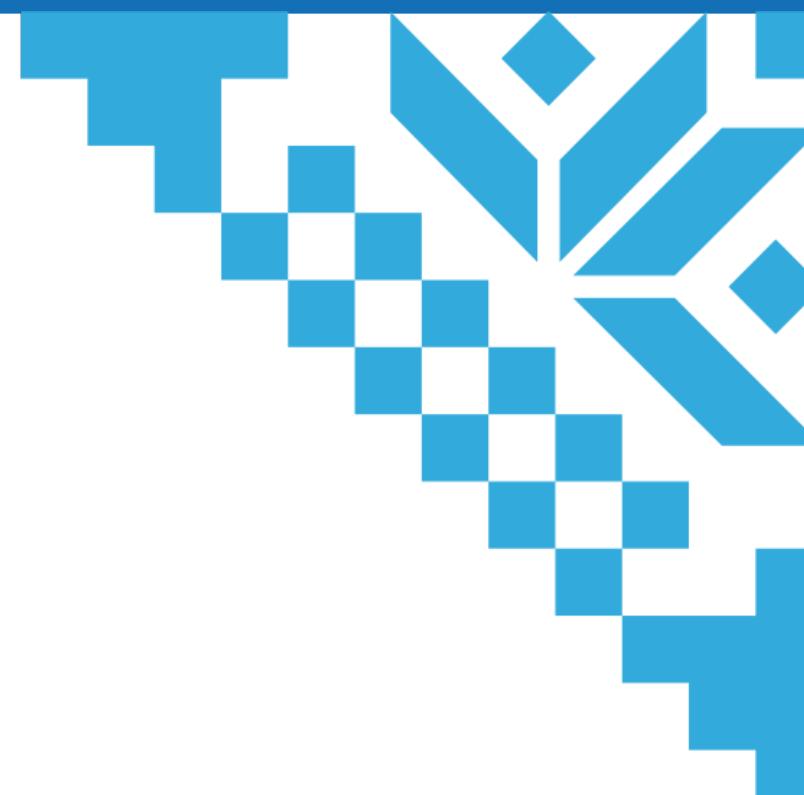


```
.wrapper {  
  display: grid;  
  grid-template-columns: 100px 100px 100px;  
}  
  
.a {  
  grid-column: 1 / 3;  
  grid-row: 1;  
}  
  
.b {  
  grid-column: 3 ;  
  grid-row: 1 / 3;  
}
```



```
.wrapper {  
  display: grid;  
  grid-template-columns: 100px 100px 100px;  
}  
  
.a {  
  grid-column: 1 / 3;  
  grid-row: 1;  
}  
  
.b {  
  grid-column: 3 ;  
  grid-row: 1 / 3;  
}
```



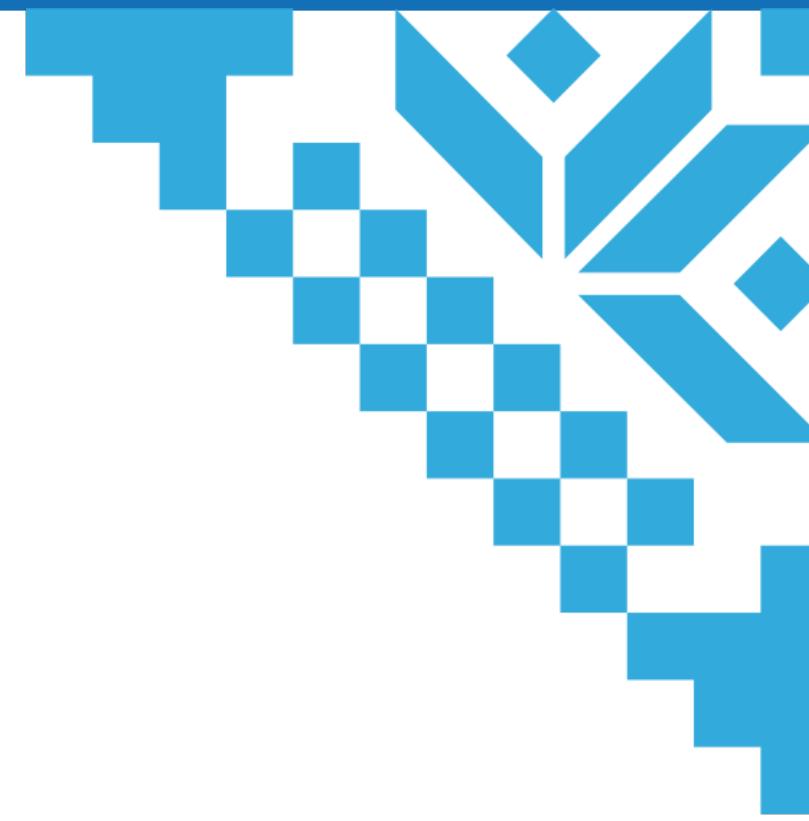


ясно?

Если нет –

<https://youtu.be/UrsI0EGjskY>





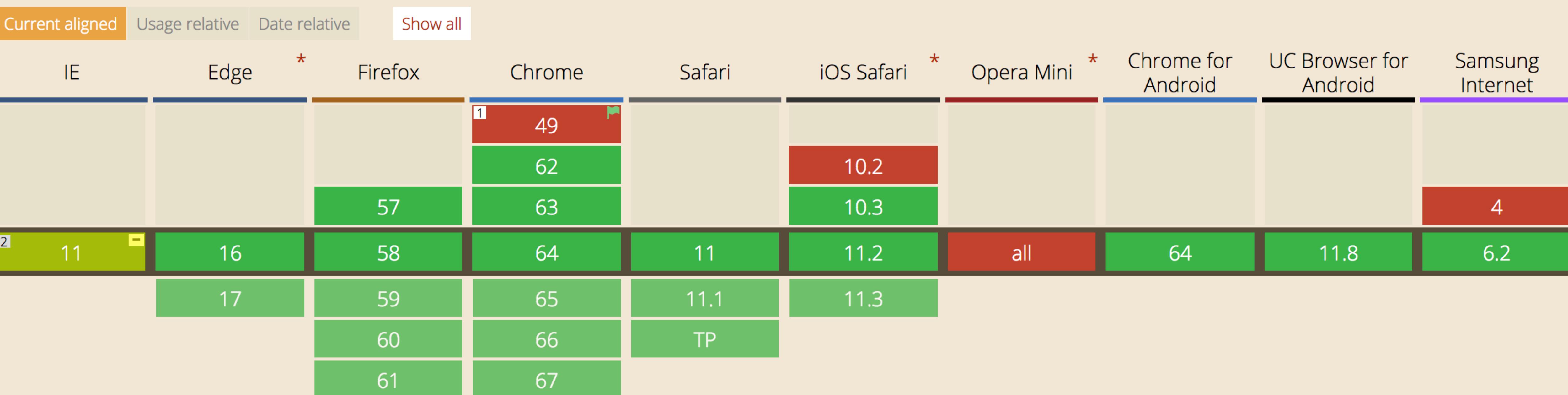
Миф #1

**Grid Layout не поддерживается
браузерами**

CSS Grid Layout - CR

Usage
Global
unprefixed:
% of all users
 $82.8\% + 3.79\% = 86.59\%$
82.8%

Method of using a grid concept to lay out content, providing a mechanism for authors to divide available space for layout into columns and rows using a set of predictable sizing behaviors.
Includes support for all `grid-*` properties and the `fr` unit.



Notes

Known issues (2)

Resources (13)

Feedback

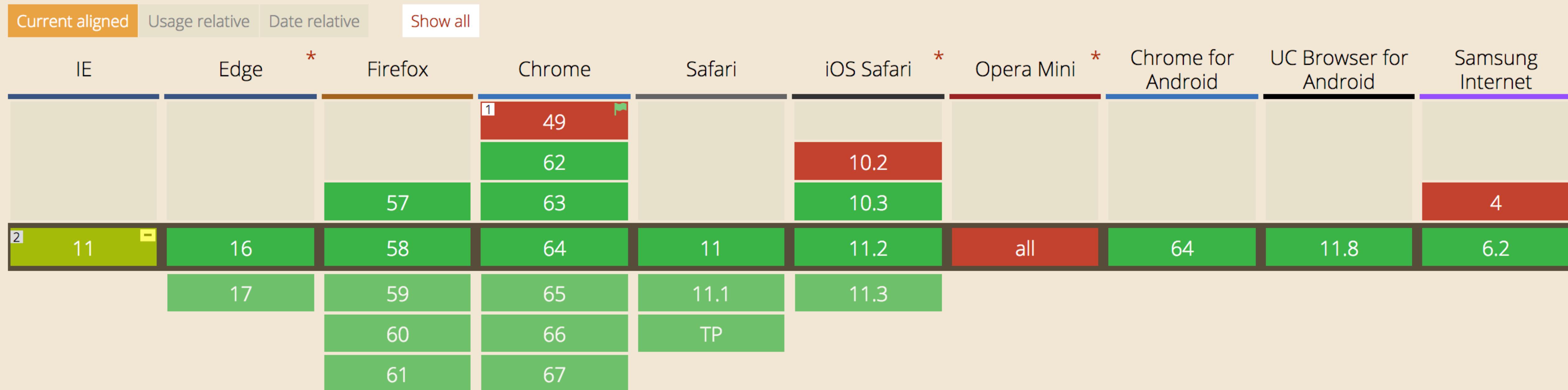
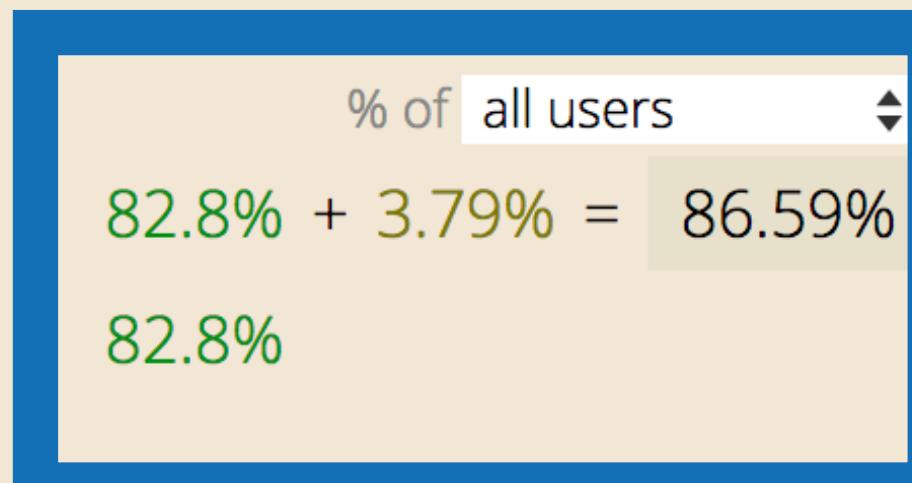
¹ Enabled in Chrome through the "experimental Web Platform features" flag in chrome://flags

² Partial support in IE refers to supporting an older version of the specification.

CSS Grid Layout

Method of using a grid concept to lay out content, providing a mechanism for authors to divide available space for layout into columns and rows using a set of predictable sizing behaviors. Includes support for all `grid-*` properties and the `fr` unit.

Usage
Global
unprefixed:



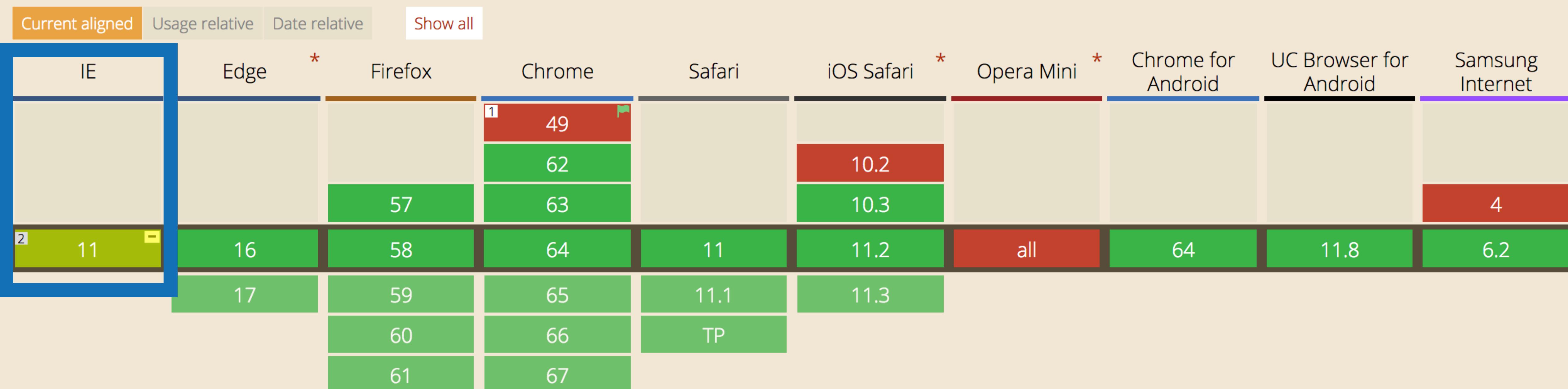
¹ Enabled in Chrome through the "experimental Web Platform features" flag in chrome://flags

² Partial support in IE refers to supporting an older version of the specification.

CSS Grid Layout - CR

Usage
Global
unprefixed:
% of all users
 $82.8\% + 3.79\% = 86.59\%$
82.8%

Method of using a grid concept to lay out content, providing a mechanism for authors to divide available space for layout into columns and rows using a set of predictable sizing behaviors.
Includes support for all `grid-*` properties and the `fr` unit.



Notes

Known issues (2)

Resources (13)

Feedback

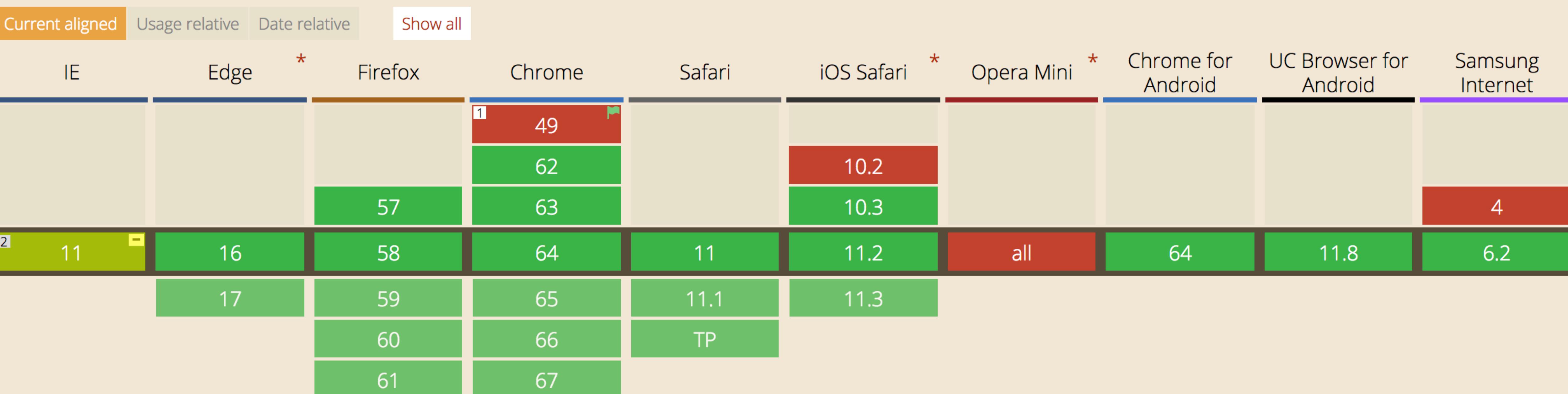
¹ Enabled in Chrome through the "experimental Web Platform features" flag in chrome://flags

² Partial support in IE refers to supporting an older version of the specification.

CSS Grid Layout - CR

Usage
Global
unprefixed:
% of all users
 $82.8\% + 3.79\% = 86.59\%$
82.8%

Method of using a grid concept to lay out content, providing a mechanism for authors to divide available space for layout into columns and rows using a set of predictable sizing behaviors.
Includes support for all `grid-*` properties and the `fr` unit.



Notes

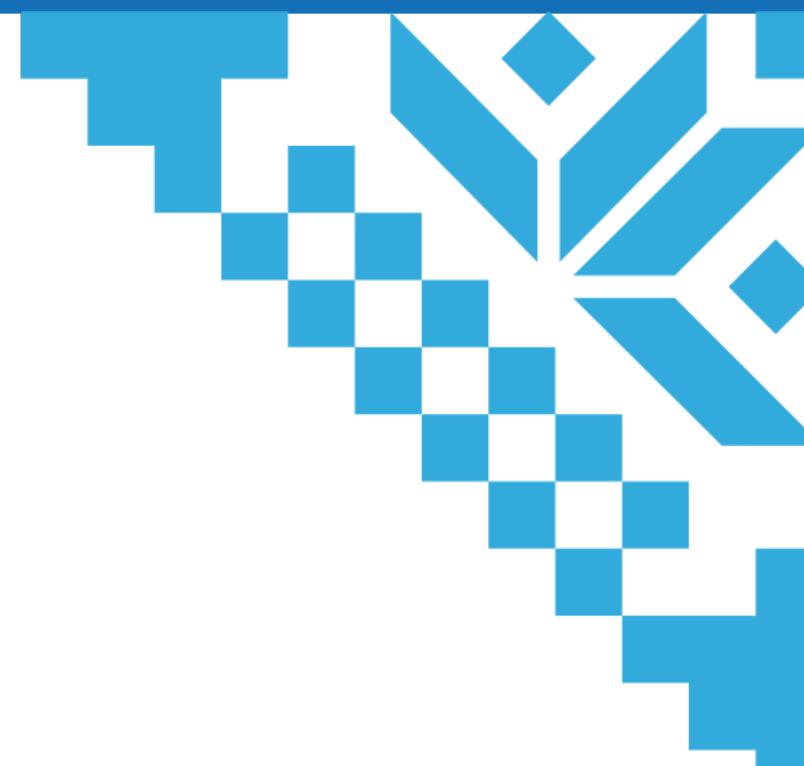
Known issues (2)

Resources (13)

Feedback

¹ Enabled in Chrome through the "experimental Web Platform features" flag in chrome://flags

² Partial support in IE refers to supporting an older version of the specification.



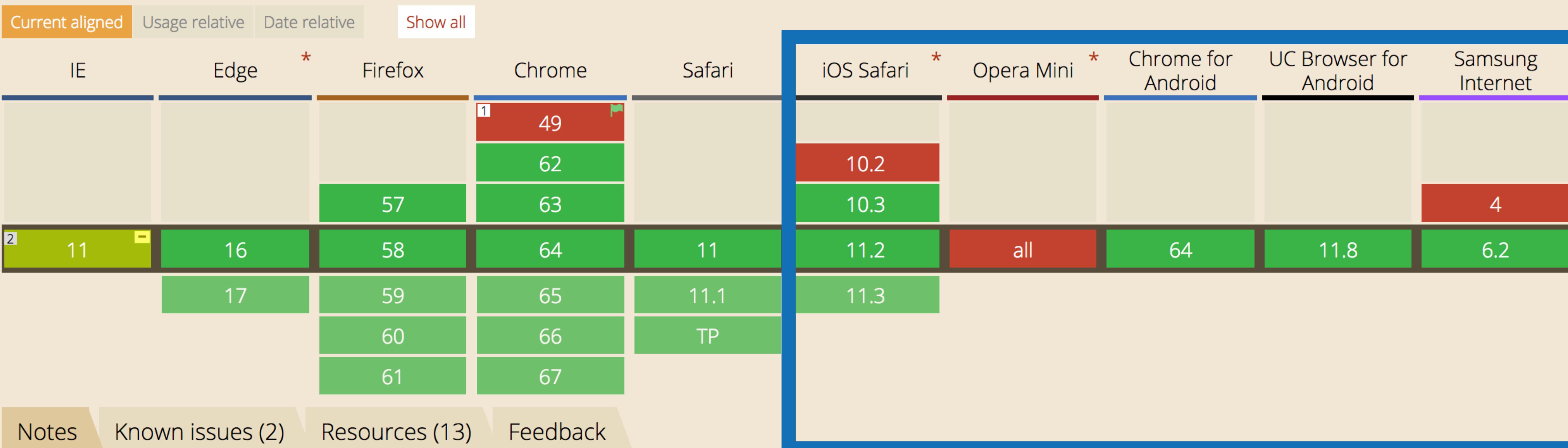
12 января убит Internet Explorer
Снова

[https://support.microsoft.com/en-us/help/
13853/windows-lifecycle-fact-sheet](https://support.microsoft.com/en-us/help/13853/windows-lifecycle-fact-sheet)

CSS Grid Layout - CR

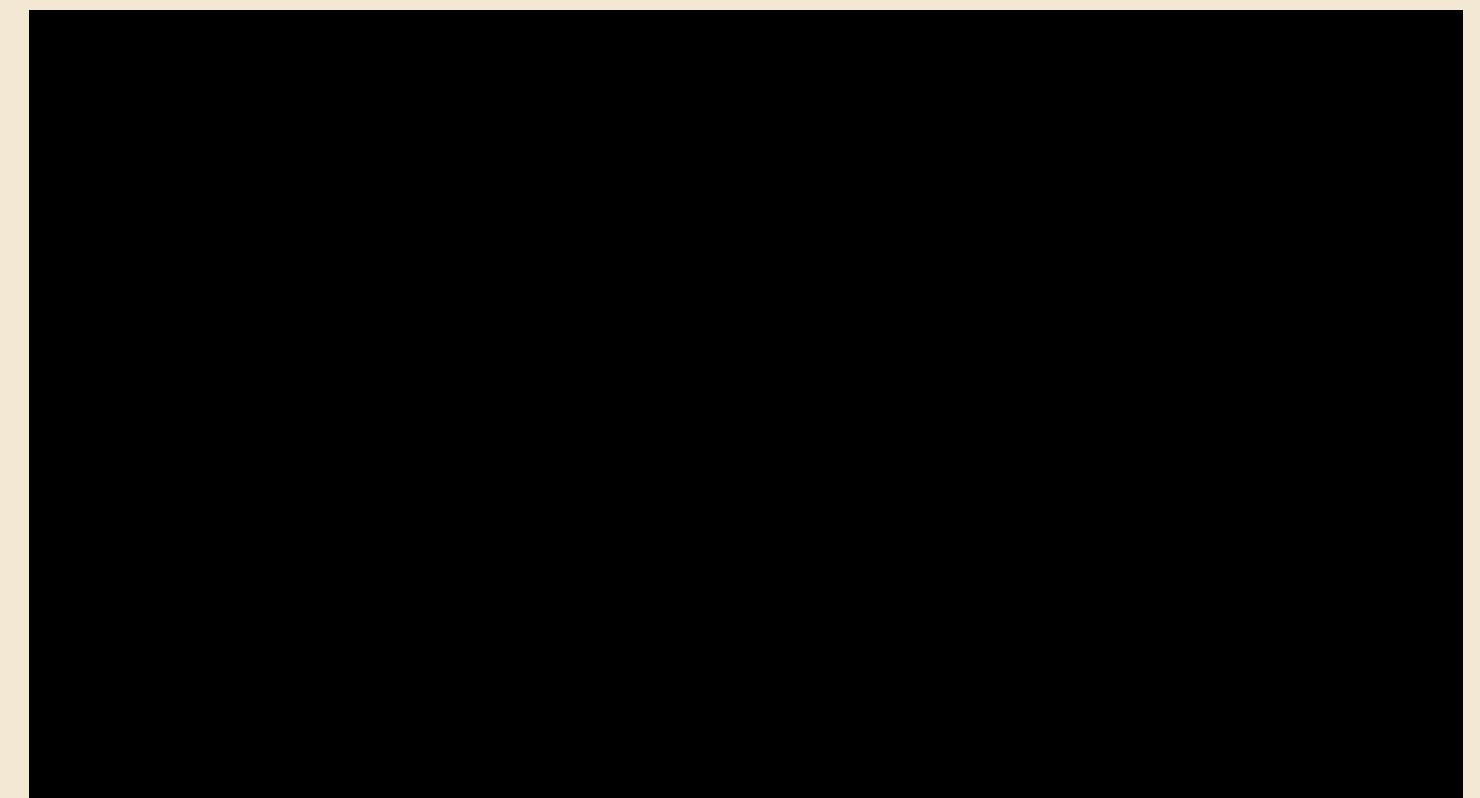
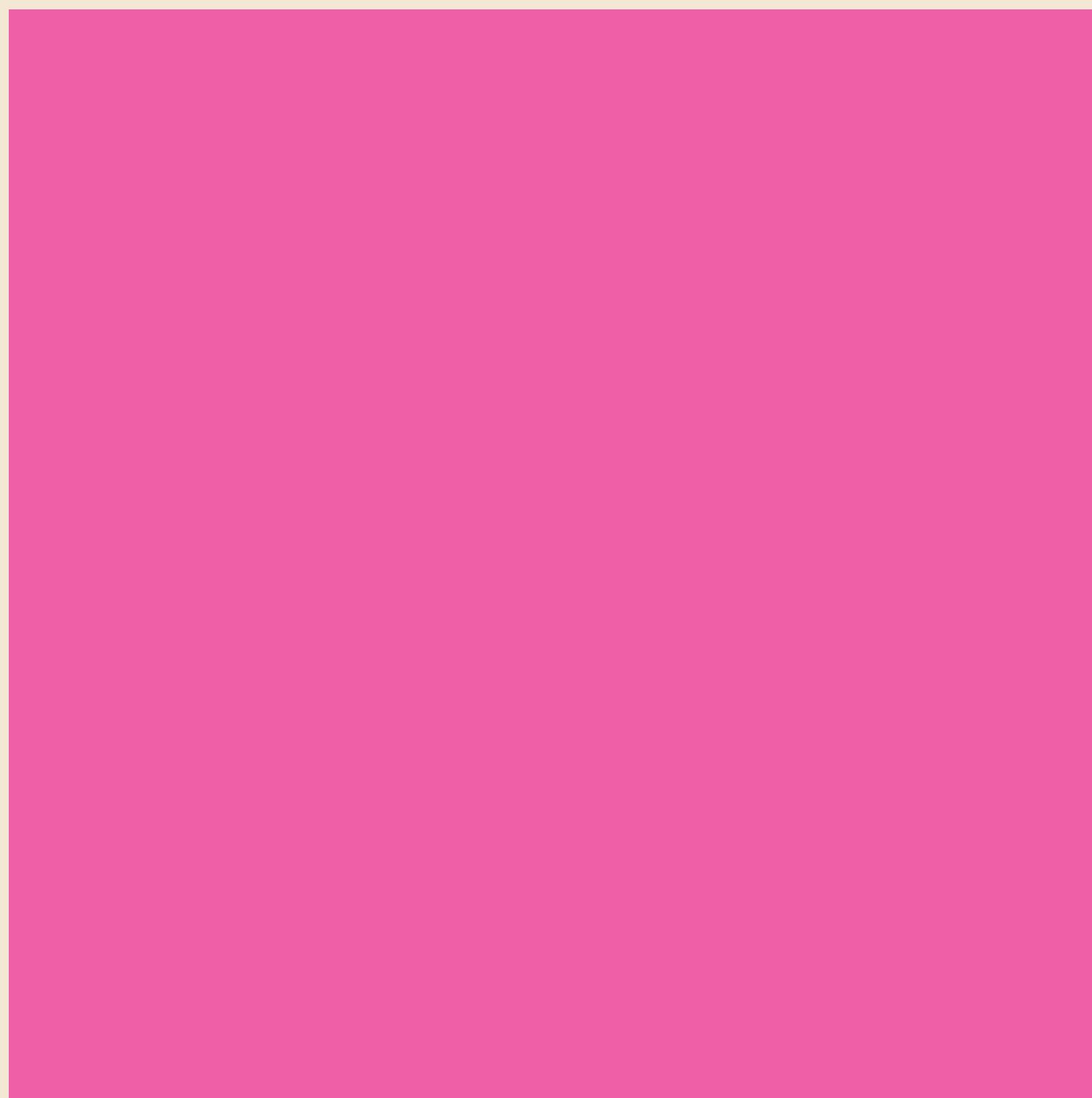
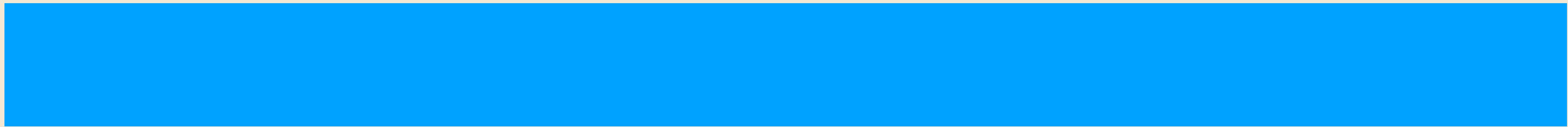
Method of using a grid concept to lay out content, providing a mechanism for authors to divide available space for layout into columns and rows using a set of predictable sizing behaviors.
Includes support for all `grid-*` properties and the `fr` unit.

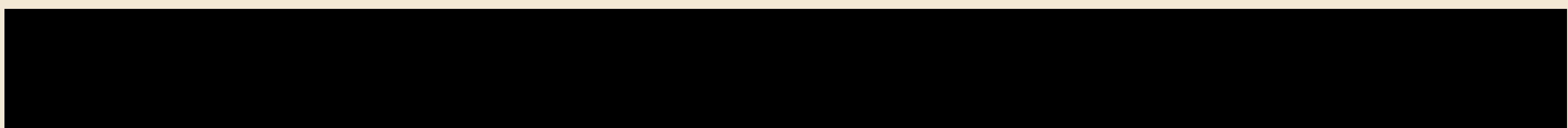
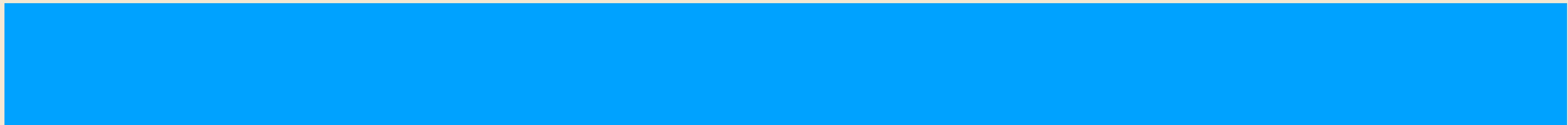
Usage
Global
unprefixed:
% of all users
 $82.8\% + 3.79\% = 86.59\%$
82.8%

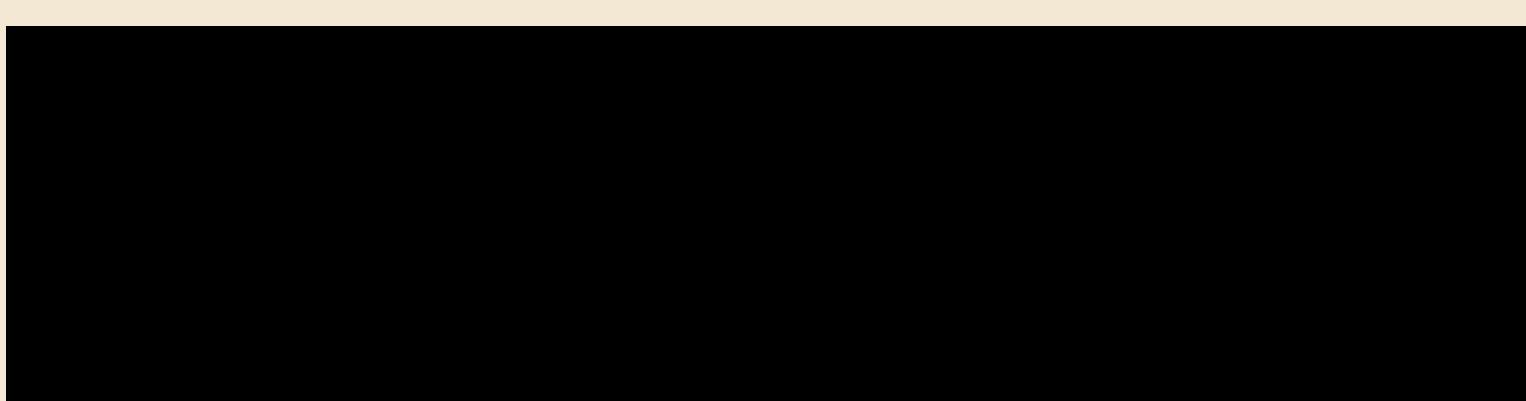
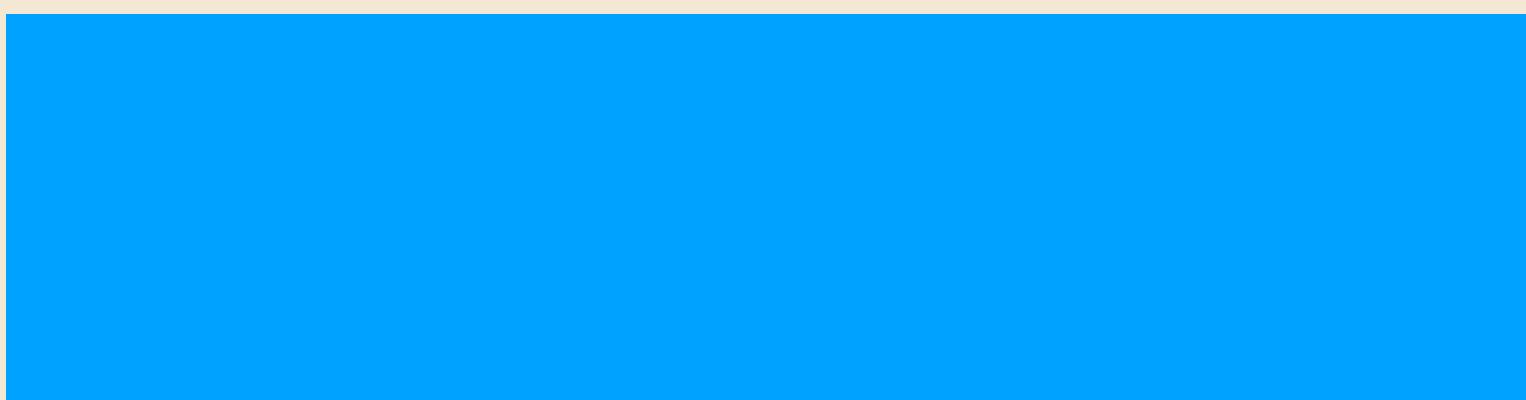


¹ Enabled in Chrome through the "experimental Web Platform features" flag in chrome://flags

² Partial support in IE refers to supporting an older version of the specification.

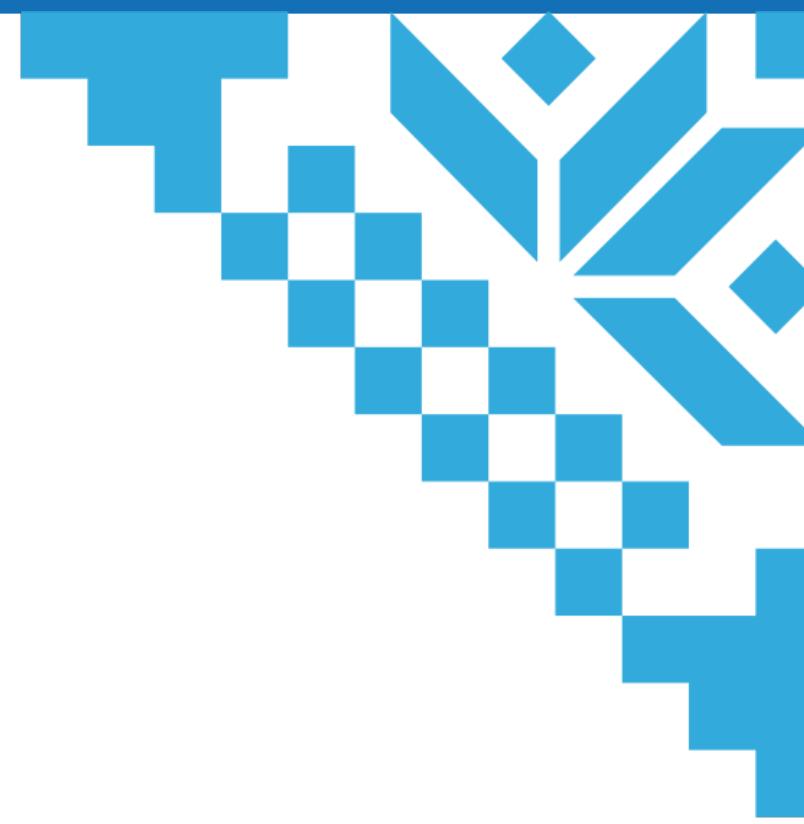






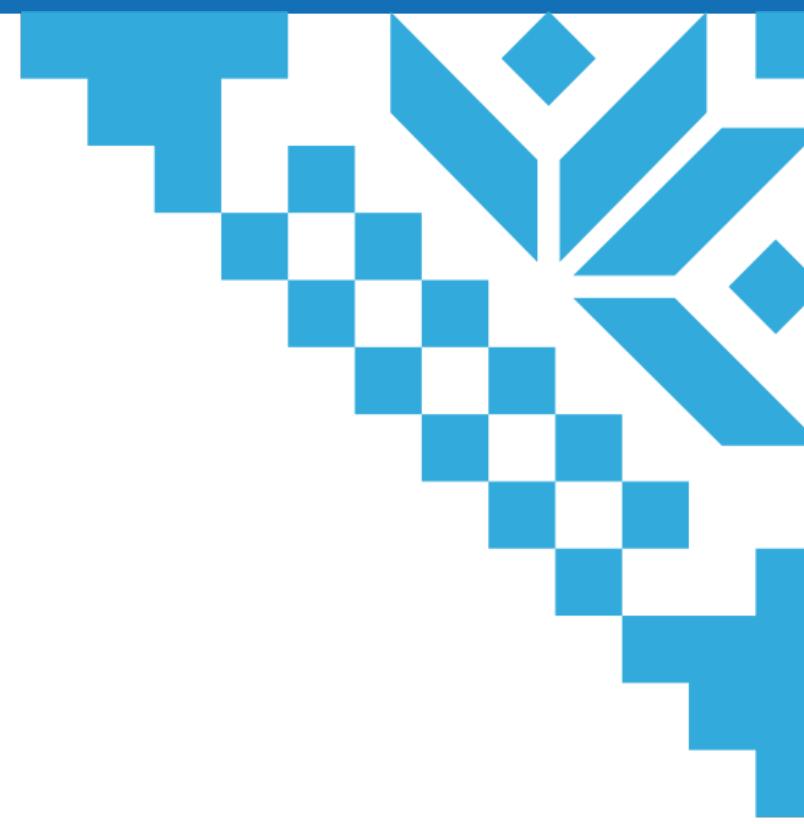


© 2010 DCL



Миф #2

Grid Layout нельзя использовать
по полной



Grid Layout – очень
большая спецификация



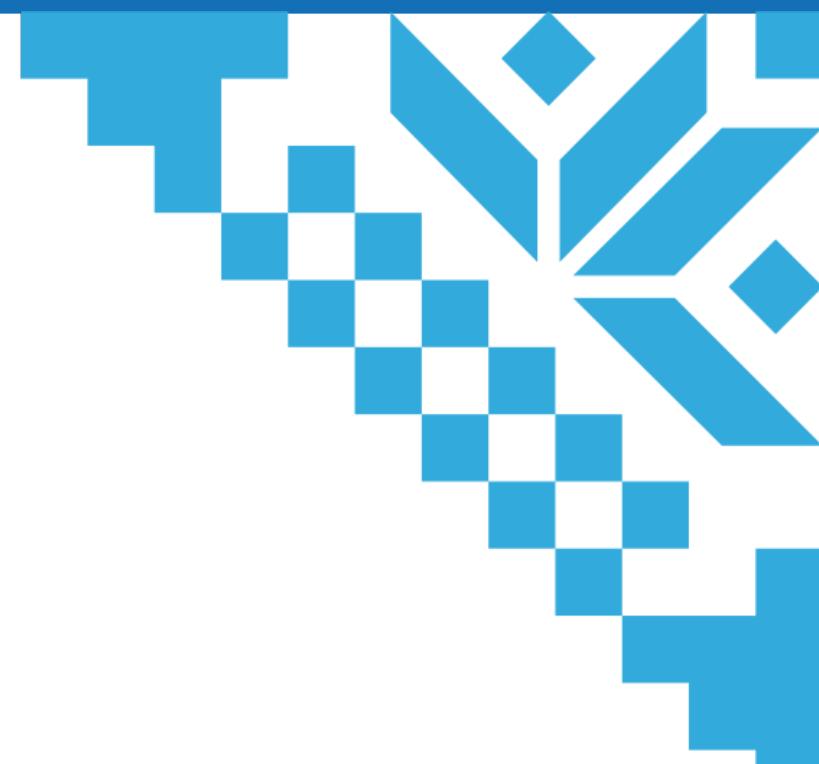
Grid Layout состоит из:

- Grid Template columns/rows
- Grid Template Areas
- Grid Auto Flow
- Grid Functions (minmax, repeat)
- Grid Alignment



Grid Layout состоит из:

- Grid Template columns/rows
- Grid Template Areas
- **Grid Auto Flow**
- **Grid Functions (minmax, repeat)**
- **Grid Alignment**



Адаптивная сетка без @media

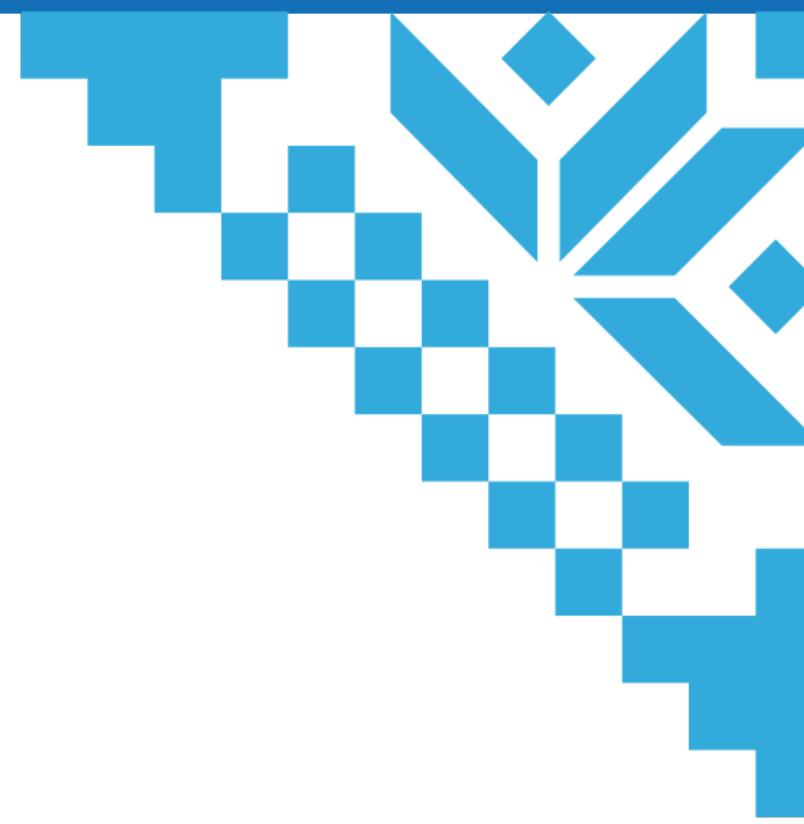
[https://codepen.io/rachelandrew/
pen/GZQYQa](https://codepen.io/rachelandrew/pen/GZQYQa)



Grid Layout состоит из:

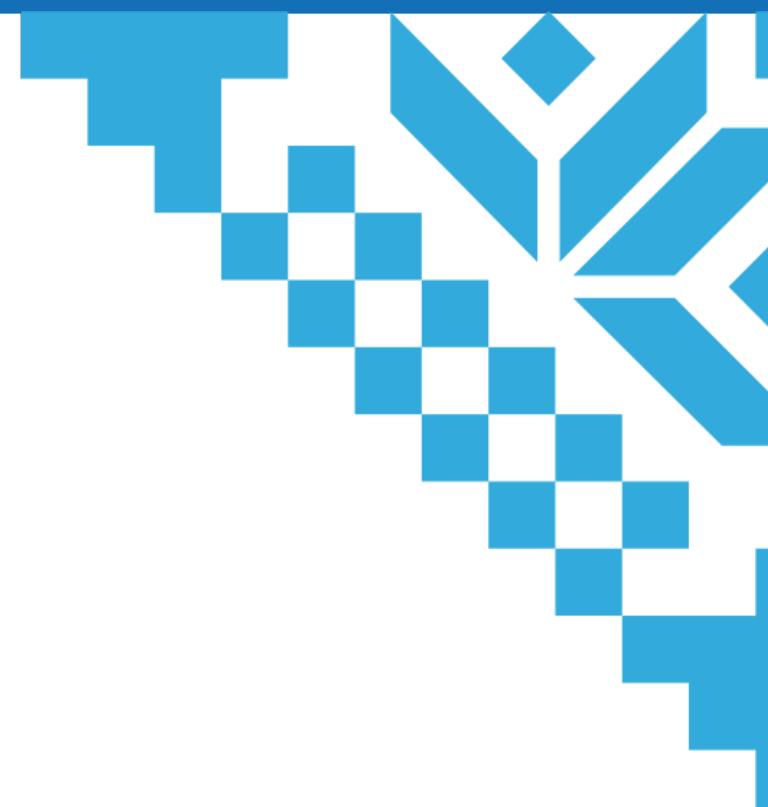
- **Grid Template columns/rows**
- **Grid Template Areas**
- Grid Auto Flow
- Grid Functions (minmax, repeat)
- Grid Alignment

PLAUSIBILE

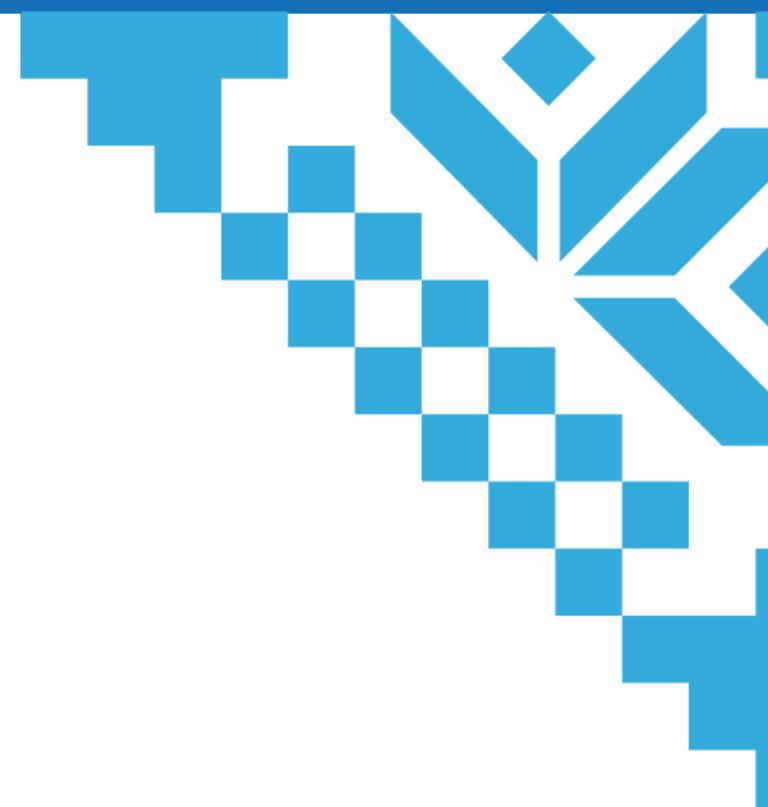


Миф #3

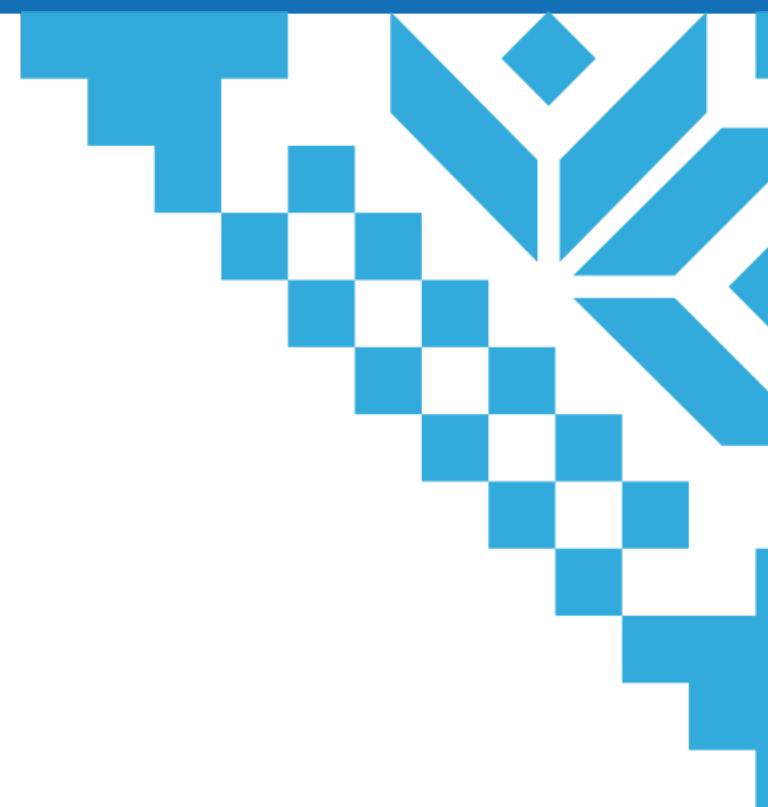
В Grid Layout много багов



**А у FlexBox не было
багов?**



А в CSS нет багов?



[https://github.com/
rachelandrew/gridbugs](https://github.com/rachelandrew/gridbugs)



The bugs

1. `grid-auto-rows` and `grid-auto-columns` should accept a track listing
2. Repeat notation should accept a track listing
3. Fragmentation support
4. Sizing of items with an intrinsic size inside fixed size grid tracks
5. Items with an intrinsic aspect ratio should align start
6. The `grid-gap` property should accept percentage values
7. Grid gaps should behave as auto-sized tracks?
8. Setting max-height to a percentage should scale down a larger image inside a grid track
9. `min-content` and `max-content` in track listings
10. Some HTML elements can't be grid containers
11. A textarea that is a grid item collapses to zero width
12. Space distributed to empty tracks spanned by an item with content
13. Inconsistency with percentage padding and margins
14. `fit-content` is stretching

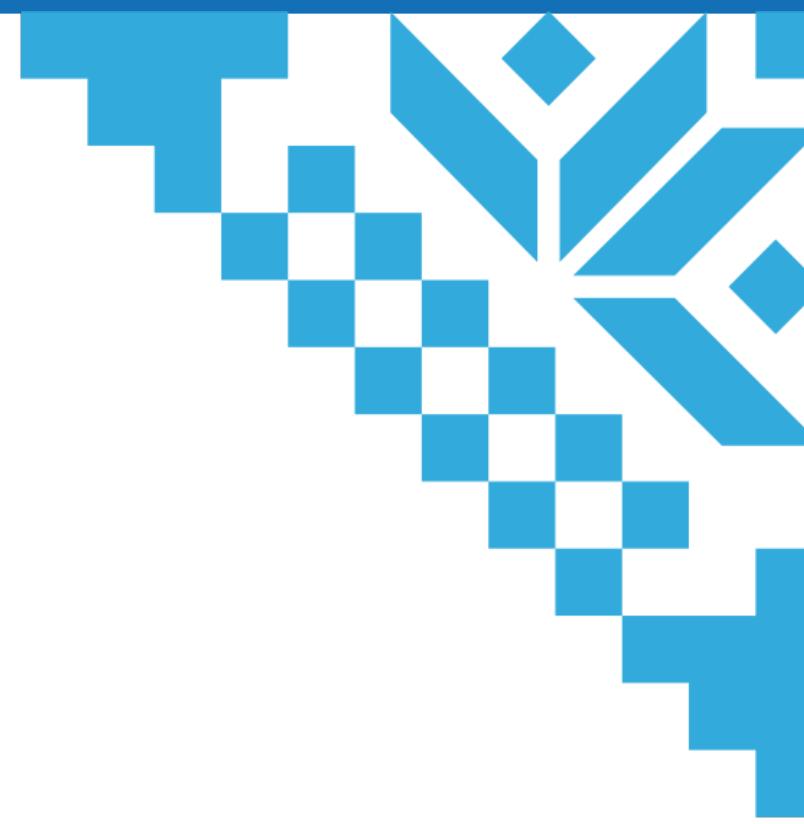


The bugs

1. `grid-auto-rows` and `grid-auto-columns` should accept a track listing
2. Repeat notation should accept a track listing
3. Fragmentation support
4. Sizing of items with an intrinsic size inside fixed size grid tracks
5. ~~Items with an intrinsic aspect ratio should align start~~
6. ~~The `grid-gap` property should accept percentage values~~
7. Grid gaps should behave as auto-sized tracks?
8. Setting max-height to a percentage should scale down a larger image inside a grid track
9. ~~`min-content` and `max-content` in track listings~~
10. Some HTML elements can't be grid containers
11. A textarea that is a grid item collapses to zero width
12. Space distributed to empty tracks spanned by an item with content
13. Inconsistency with percentage padding and margins
14. `fit-content` is stretching



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Миф #4

Grid Layout сложно изучить



Grid Layout состоит из:

- Grid Template columns/rows
- Grid Template Areas
- Grid Auto Flow
- Grid Functions (minmax, repeat)
- Grid Alignment

Header

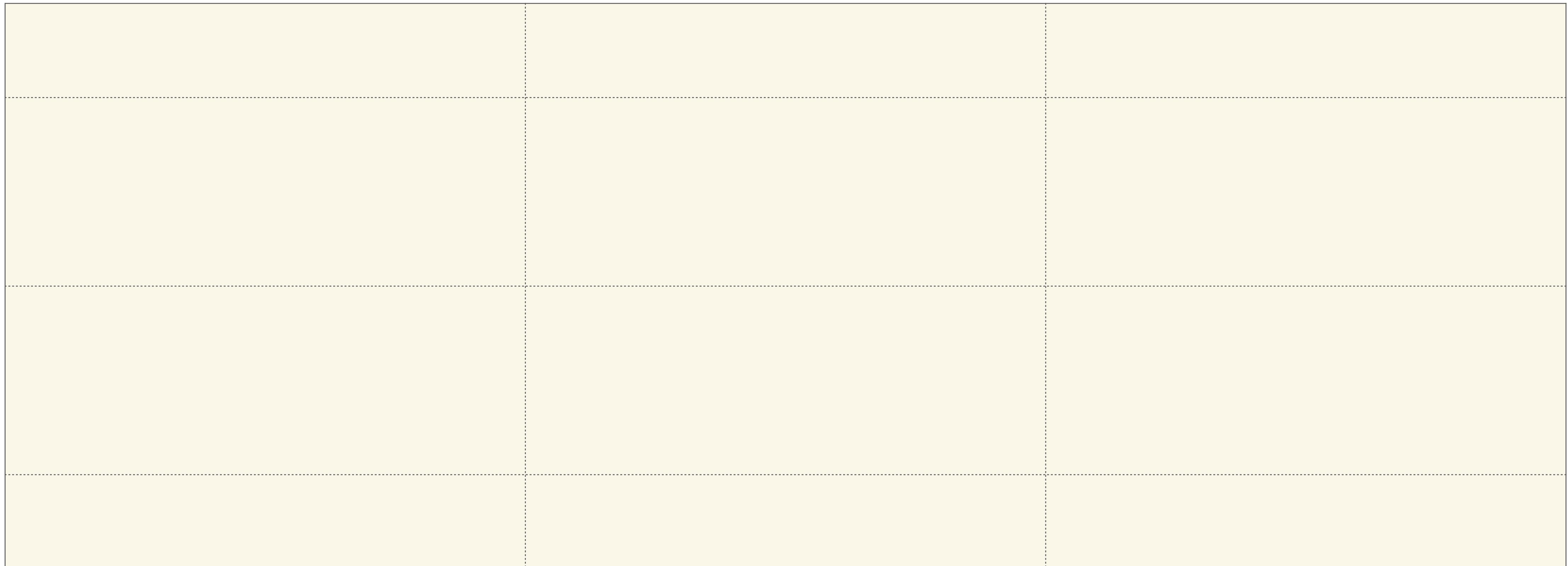
Sidebar 1

Content

Footer

```
<div class="page">
  <header class="header">Header</header>
  <aside class="sidebar">Sidebar 1</aside>
  <div class="content">Content</div>
  <footer class="footer">Footer</footer>
</div>
```

```
.page {  
  display: grid;  
  grid-template-columns: 1fr 1fr 1fr;  
  grid-template-rows: 100px 200px 200px 100px;  
  grid-gap: 40px;  
}
```



33.333333% / 100px	33.333333% / 100px	33.333333% / 100px
33.333333% / 200px	33.333333% / 200px	33.333333% / 200px
33.333333% / 200px	33.333333% / 200px	33.333333% / 200px
33.333333% / 100px	33.333333% / 100px	33.333333% / 100px

HEADER

SIDE BAR 1

CONTENT

FOOTER

Header

Sidebar 1

Content

Footer

```
.header {  
    grid-column: span 3;  
}
```

```
.footer {  
    grid-column: span 3;  
}
```

HEADER	HEADER	HEADER
SIDE BAR 1	CONTENT	
FOOTER	FOOTER	FOOTER

Header

Sidebar 1

Content

Footer

```
.sidebar {  
    grid-row: span 2;  
}  
  
.content {  
    grid-column: auto / span 2;  
    grid-row: span 2;  
}
```

HEADER	HEADER	HEADER
SIDE BAR 1	CONTENT	CONTENT
SIDE BAR 1	CONTENT	CONTENT
FOOTER	FOOTER	FOOTER

Header

Sidebar 1

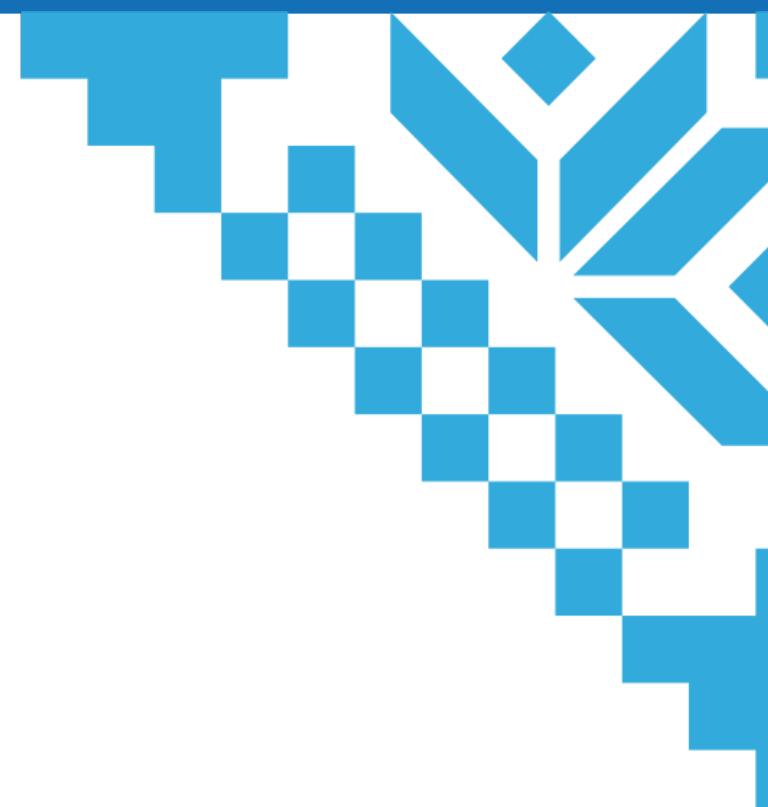
Content

Footer

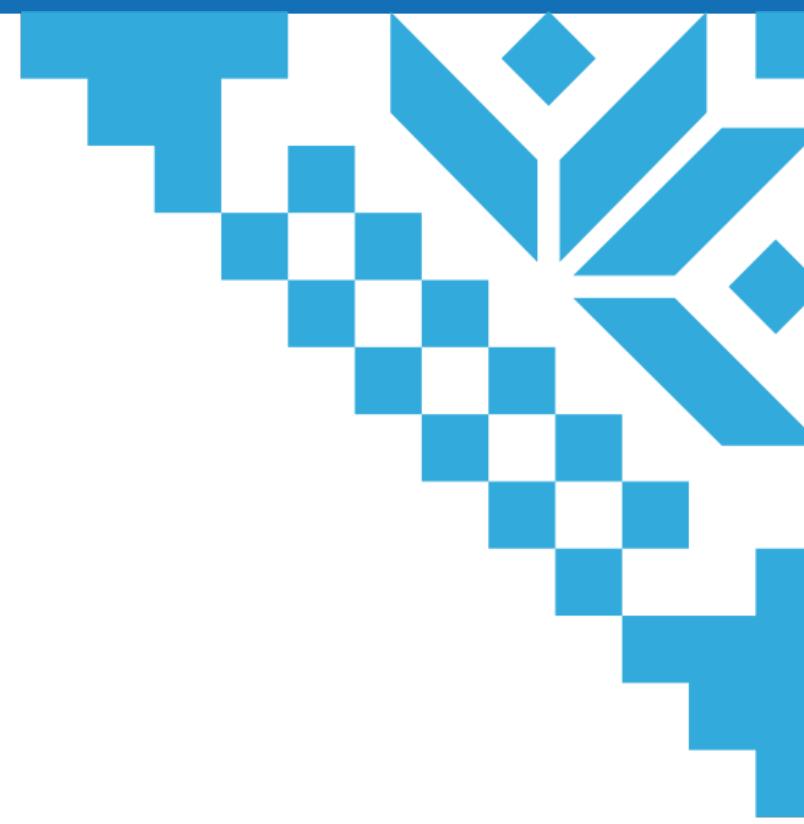


Итого:

- 5 минут работы
- 6 строчек HTML
- 23 строчки CSS для раскладки
- Ни одной лишней обёртки



**Проще сделать,
чем сказать**

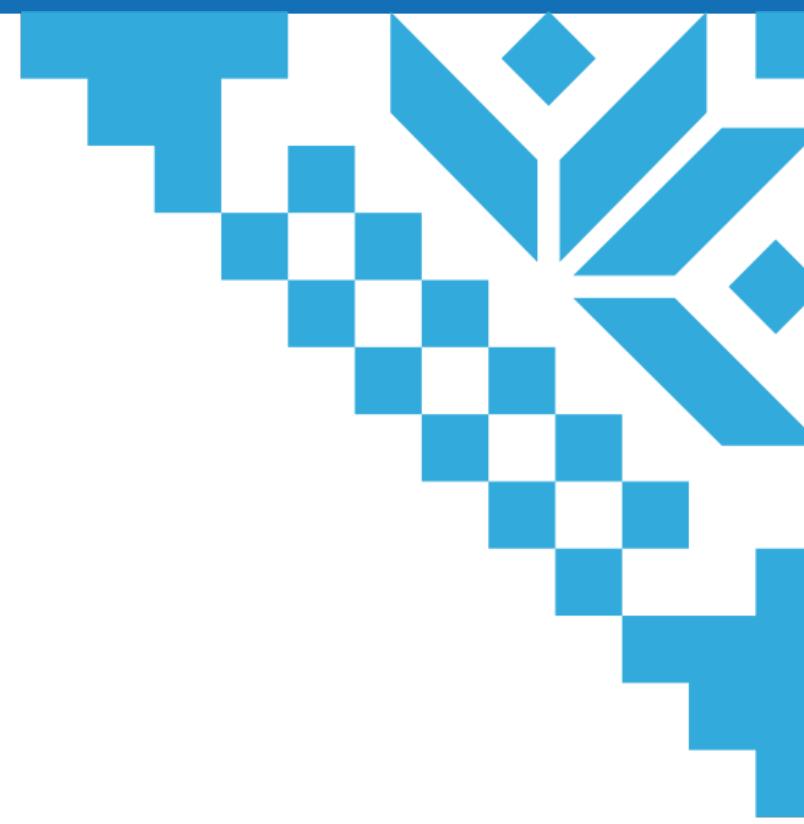


<https://gridbyexample.com/examples/>

<http://cssgridgarden.com/>



© 2010 DCL

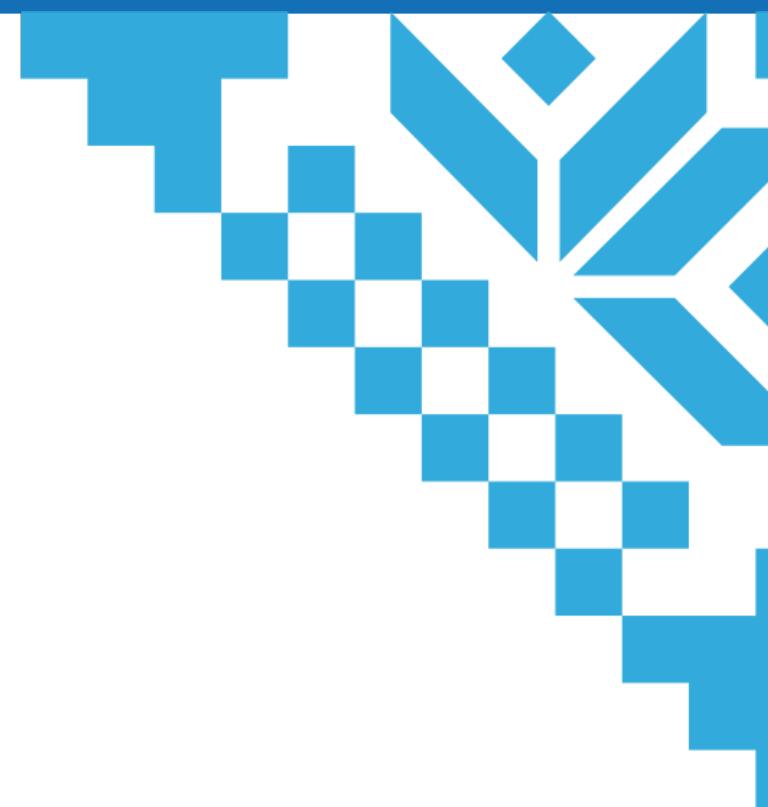


Миф #5

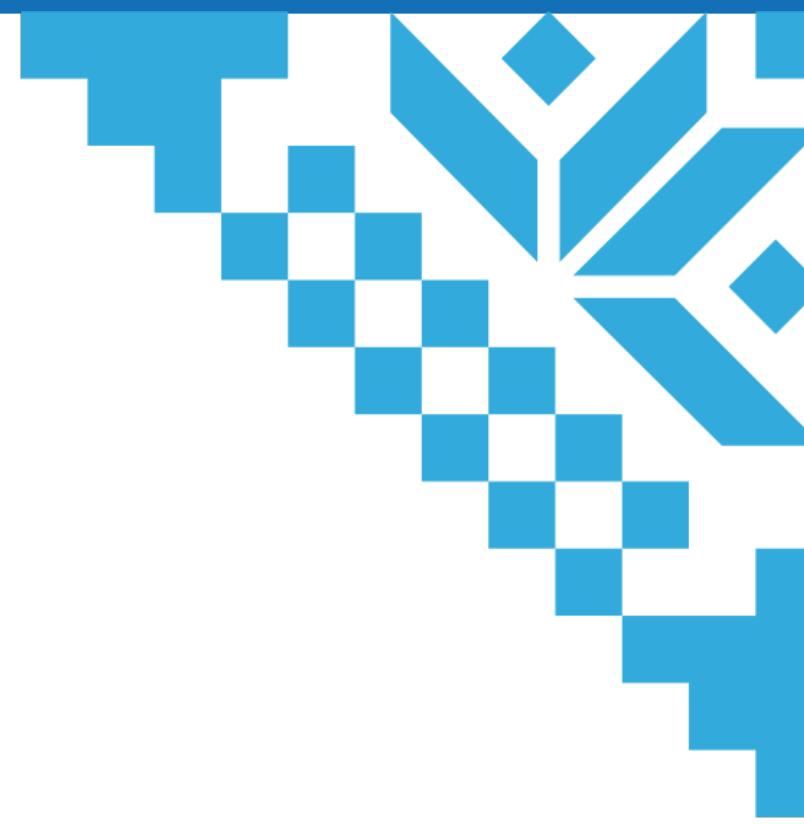
Grid Layout убьёт FlexBox

Нет

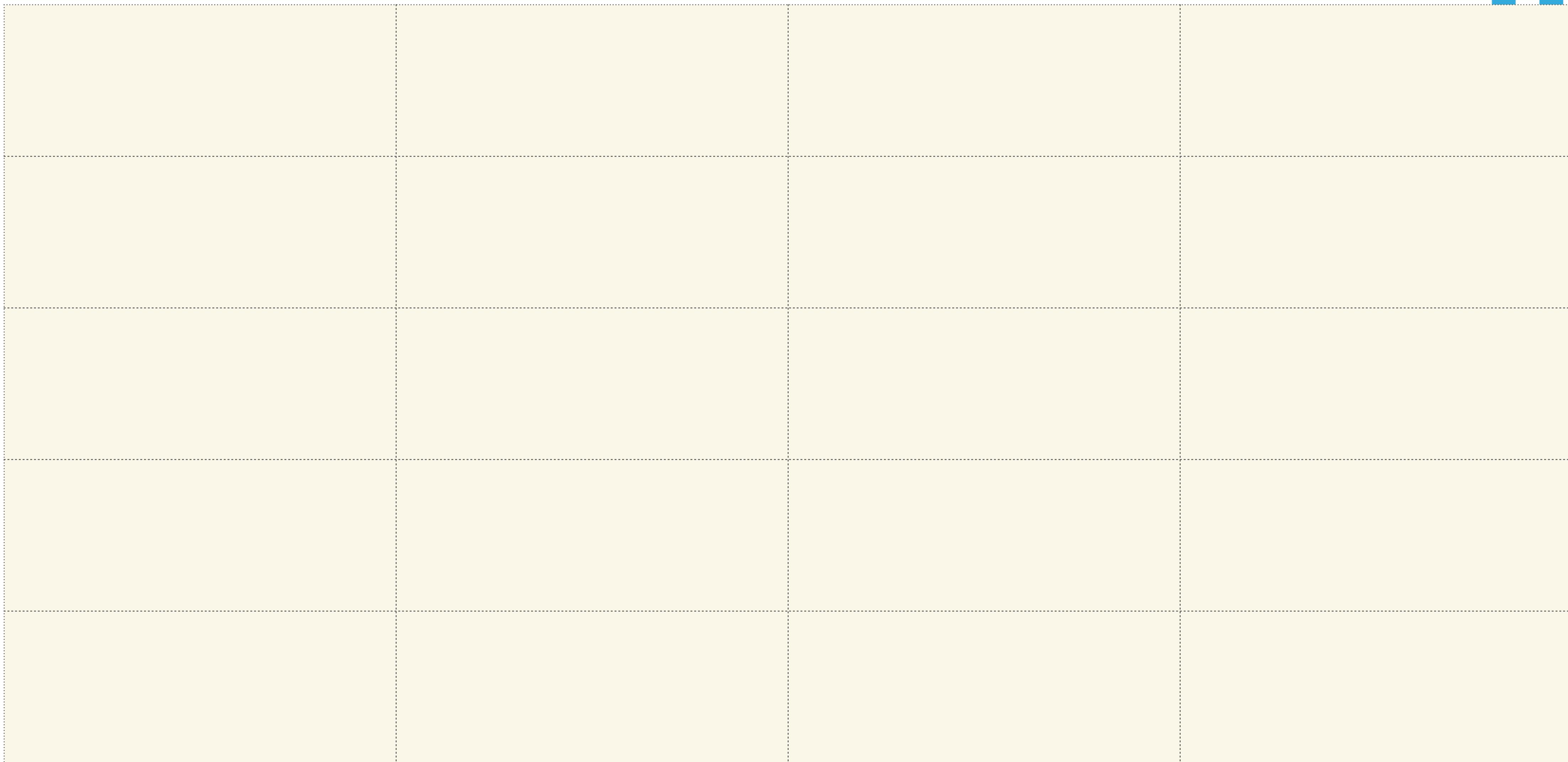


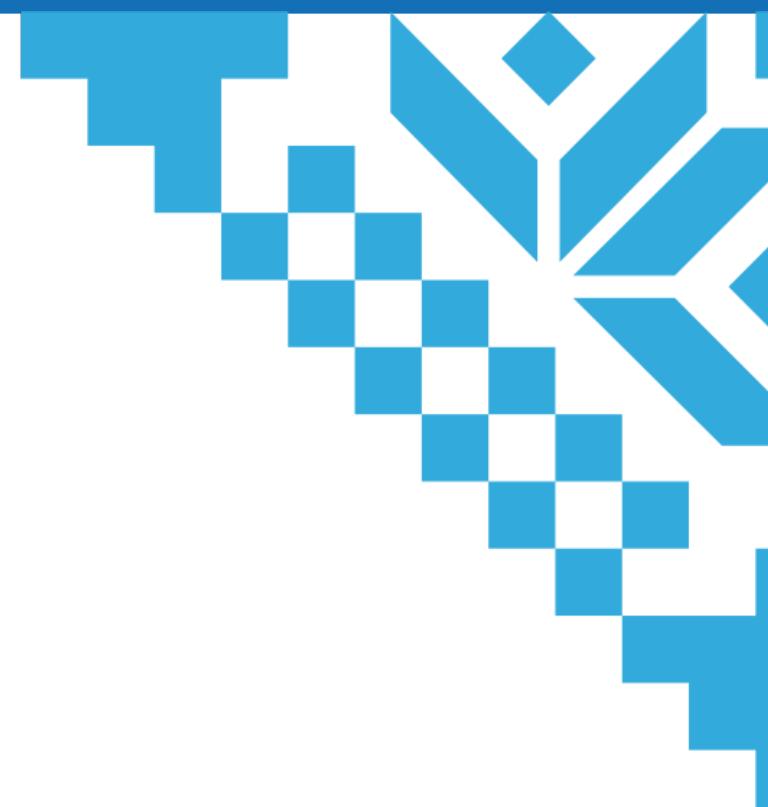


**Grid Layout используется
для раскладки сайта**

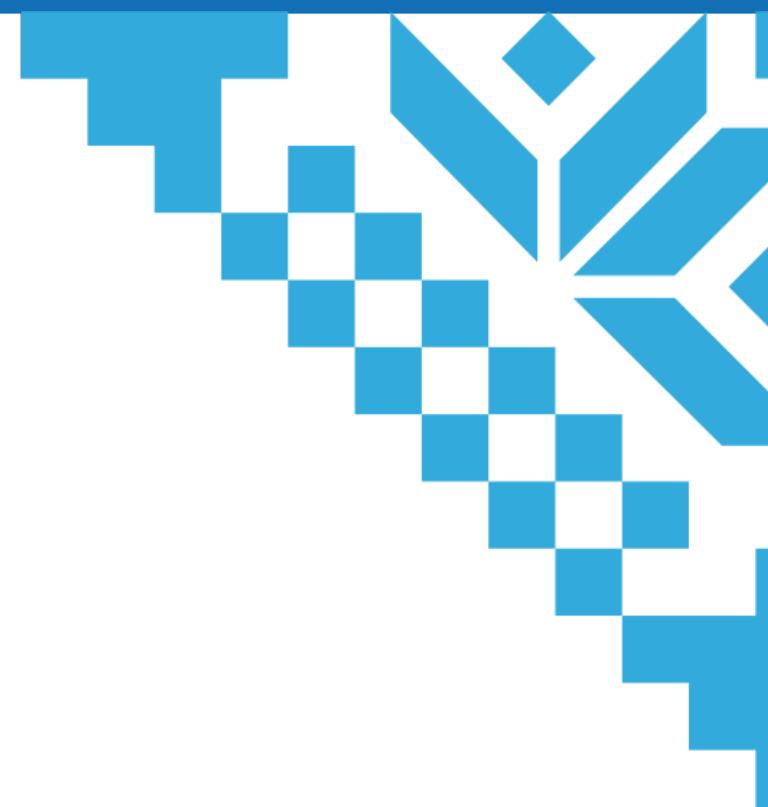


**Grid Layout меняет восприятие
и подход к построению сеток**

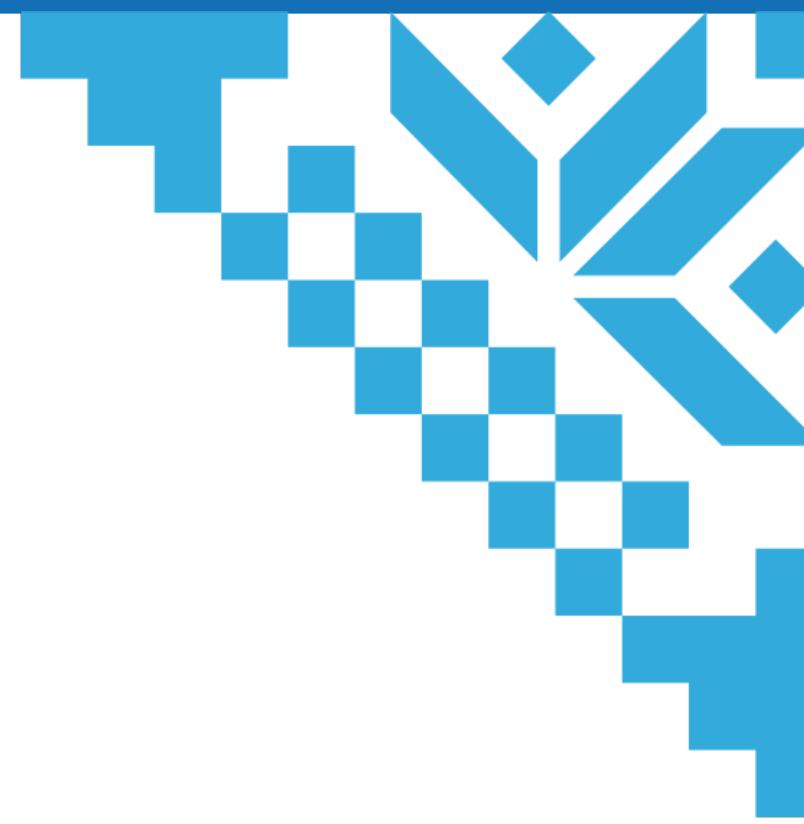




**FlexBox смотрит в масштабе
строк и хорош для контента**



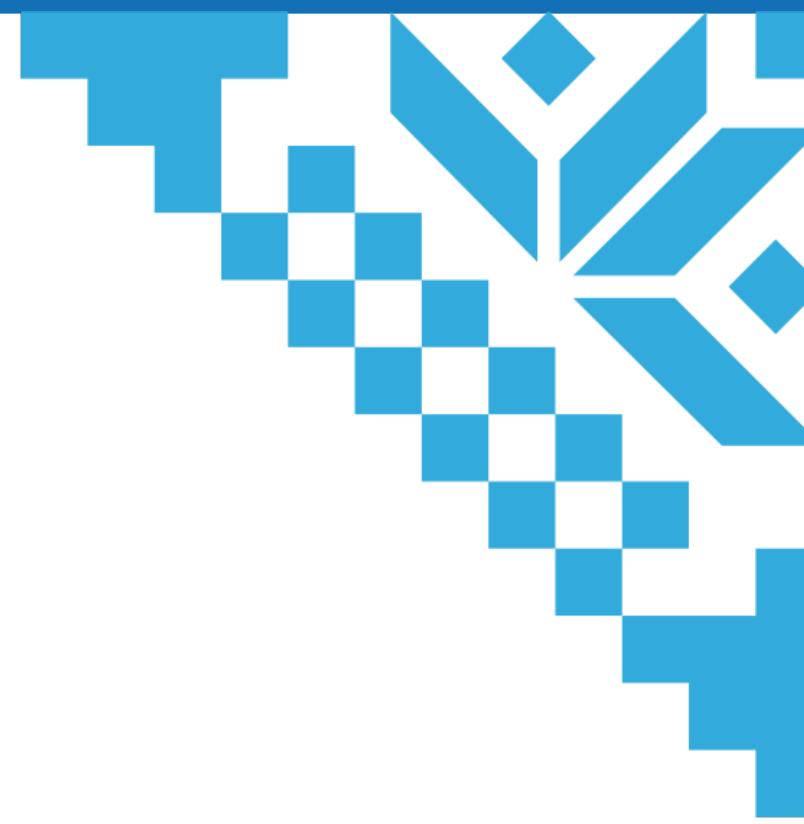
**Grid Layout смотрит глобальнее
на всю раскладку**



Будущее – это
Grid Layout + FlexBox +
CSS Box Alignment 4 level



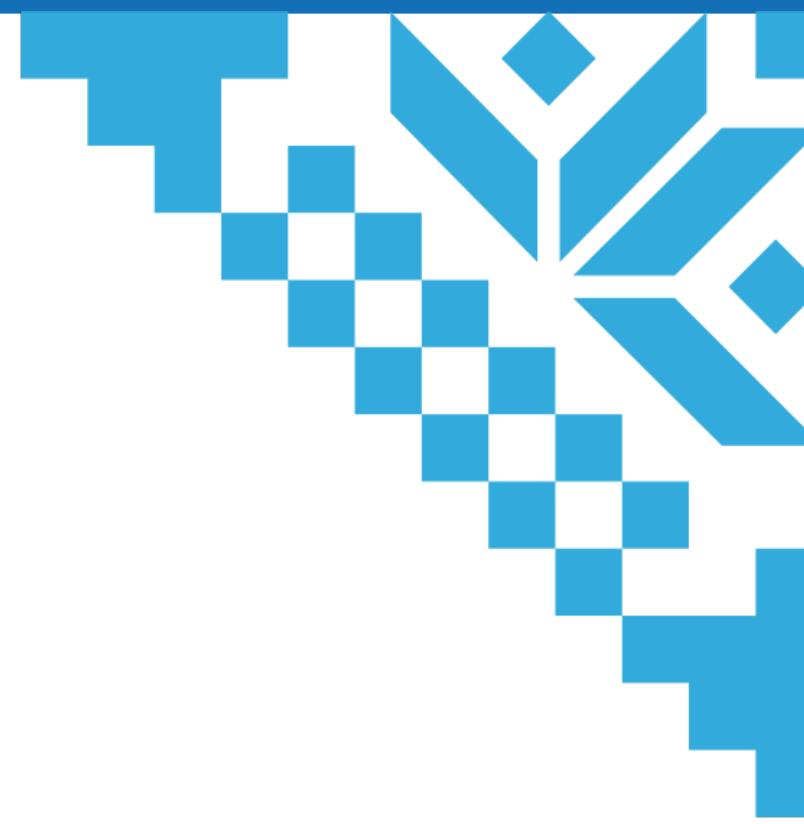
© 2010 DCL



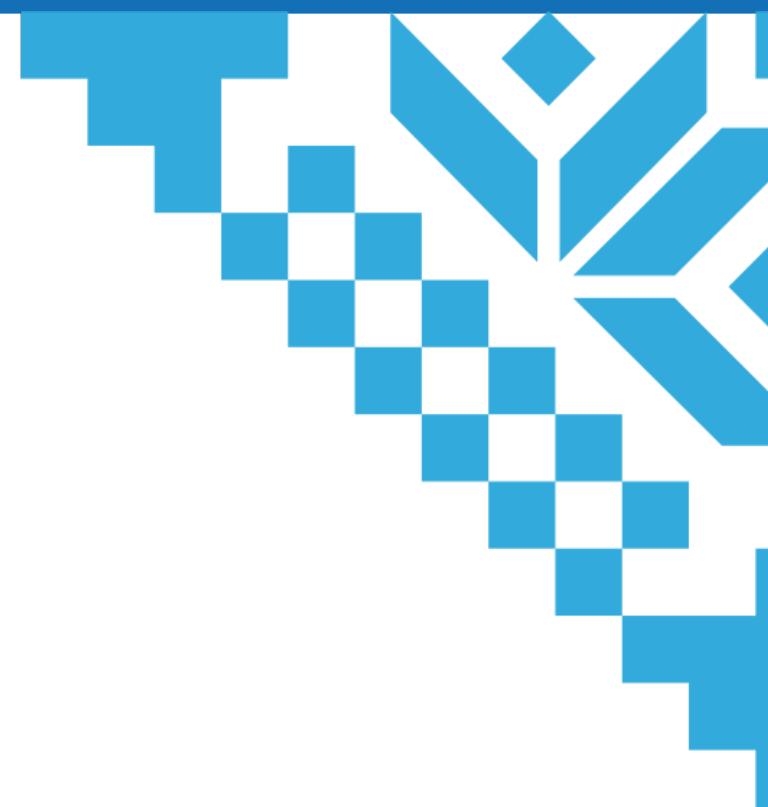
Миф #6

Subgrid всё ещё в разработке

CONFIRMED



<https://www.w3.org/TR/css-grid-2/>



Что такое subgrid?

```
<div class="grid">
  <div class="item">1</div>
  <div class="item">2</div>
  <ul class="item">
    <li class="sub-item">3</li>
    <li class="sub-item">4</li>
    <li class="sub-item">5</li>
    <li class="sub-item">6</li>
    <li class="sub-item">7</li>
    <li class="sub-item">8</li>
  </ul>
  <div class="item">9</div>
  <div class="item">10</div>
</div>
```

```
<div class="grid">
  <div class="item">1</div>
  <div class="item">2</div>
  <ul class="item">
    <li class="sub-item">3</li>
    <li class="sub-item">4</li>
    <li class="sub-item">5</li>
    <li class="sub-item">6</li>
    <li class="sub-item">7</li>
    <li class="sub-item">8</li>
  </ul>
  <div class="item">9</div>
  <div class="item">10</div>
</div>
```



```
<div class="grid">
  <div class="item">1</div>
  <div class="item">2</div>
  <ul class="item">
    <li class="sub-item">3</li>
    <li class="sub-item">4</li>
    <li class="sub-item">5</li>
    <li class="sub-item">6</li>
    <li class="sub-item">7</li>
    <li class="sub-item">8</li>
  </ul>
  <div class="item">9</div>
  <div class="item">10</div>
</div>
```

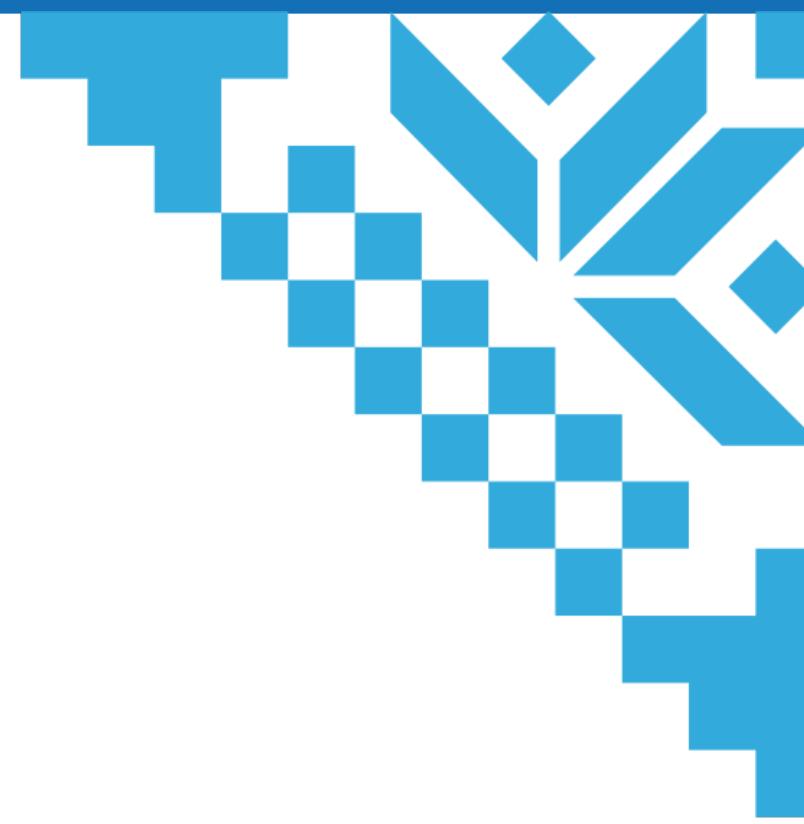
```
<div class="grid">
  <div class="item">1</div>
  <div class="item">2</div>
  <ul class="item">
    <li class="sub-item">3</li>
    <li class="sub-item">4</li>
    <li class="sub-item">5</li>
    <li class="sub-item">6</li>
    <li class="sub-item">7</li>
    <li class="sub-item">8</li>
  </ul>
  <div class="item">9</div>
  <div class="item">10</div>
</div>
```

```
ul {  
  display: subgrid;  
}
```

Или

```
ul {  
  display: grid;  
  grid: subgrid;  
}
```

-
- 1 2 • 3
- 4 • 5 6
- 7 • 8 9
- 10

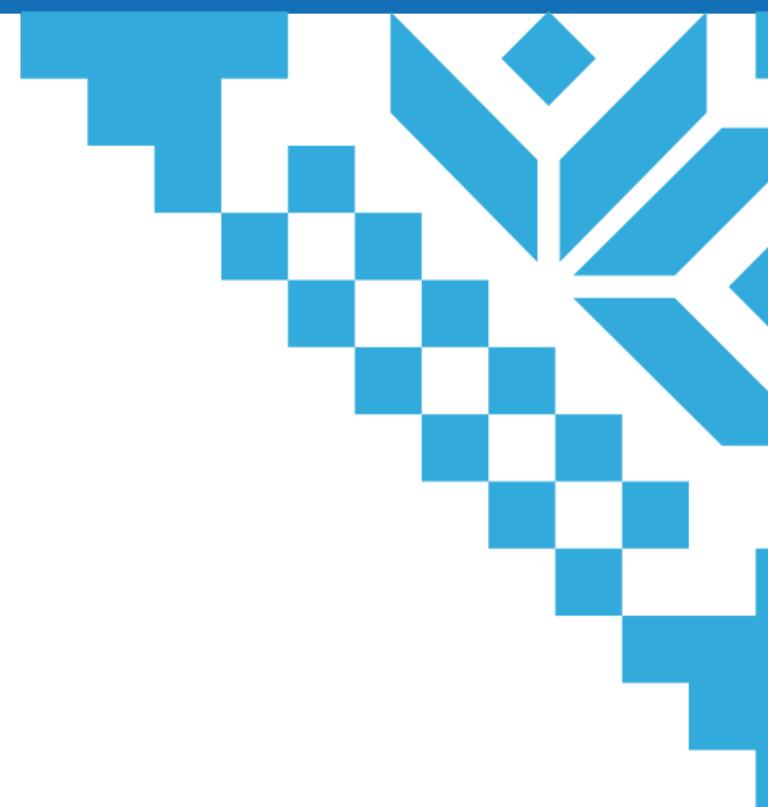


Миф #7

Без Subgrid Grid Layout
бесполезен

Нет

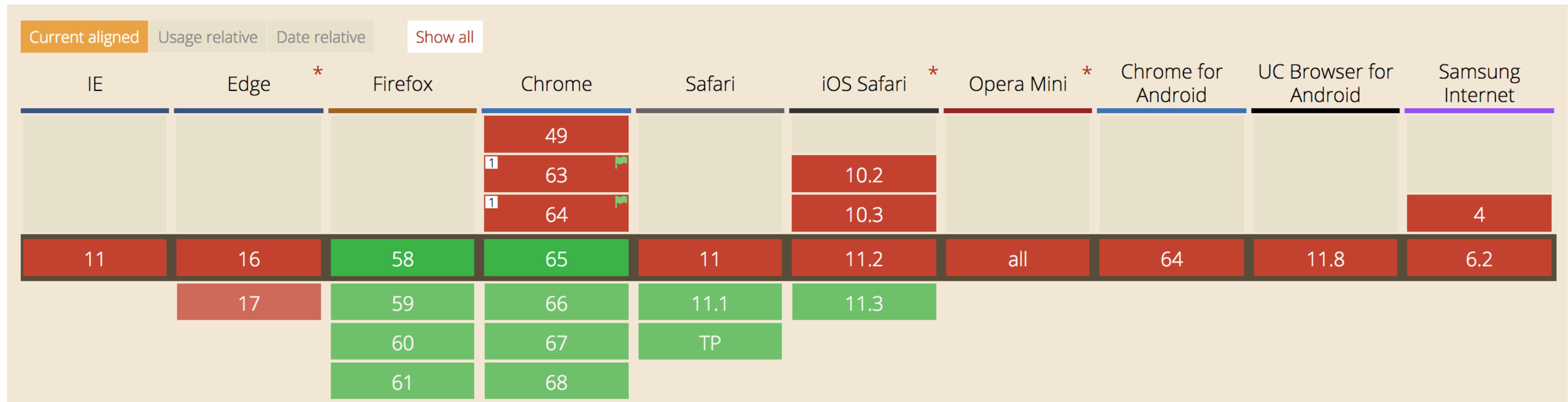




Subgrid не везде и нужен

```
ul {  
    display: contents;  
}
```

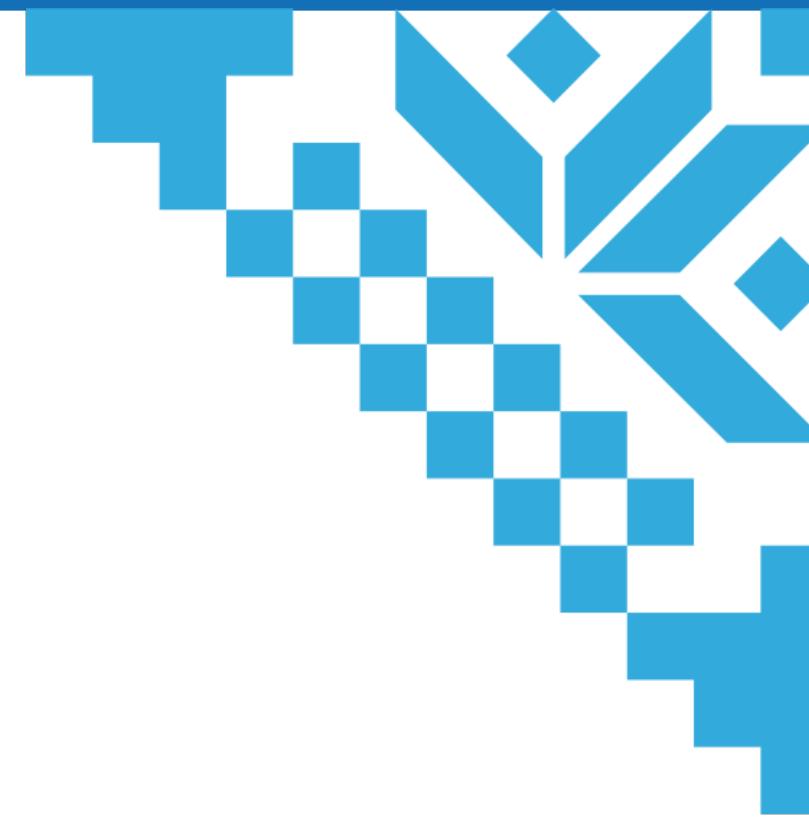
-
- A horizontal bar chart consisting of ten bars of varying lengths. Each bar is a dark grey rectangle positioned above a numerical label. The labels are: 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10. The bars are arranged from left to right in the following approximate order of length: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
- 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8
 - 9
 - 10



<https://codepen.io/lautsevich/pen/NpYobE>

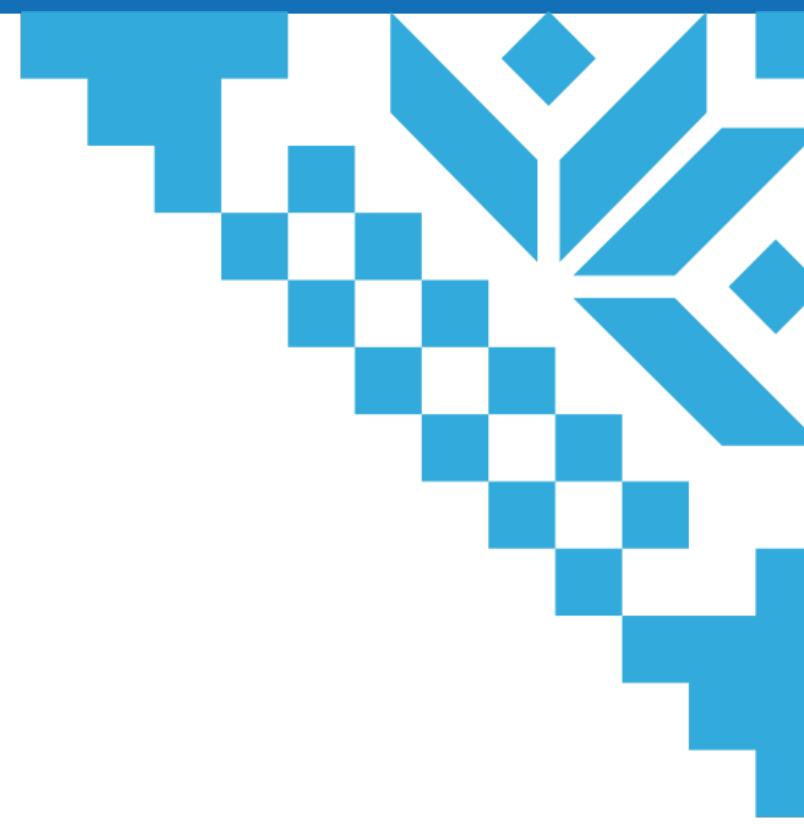


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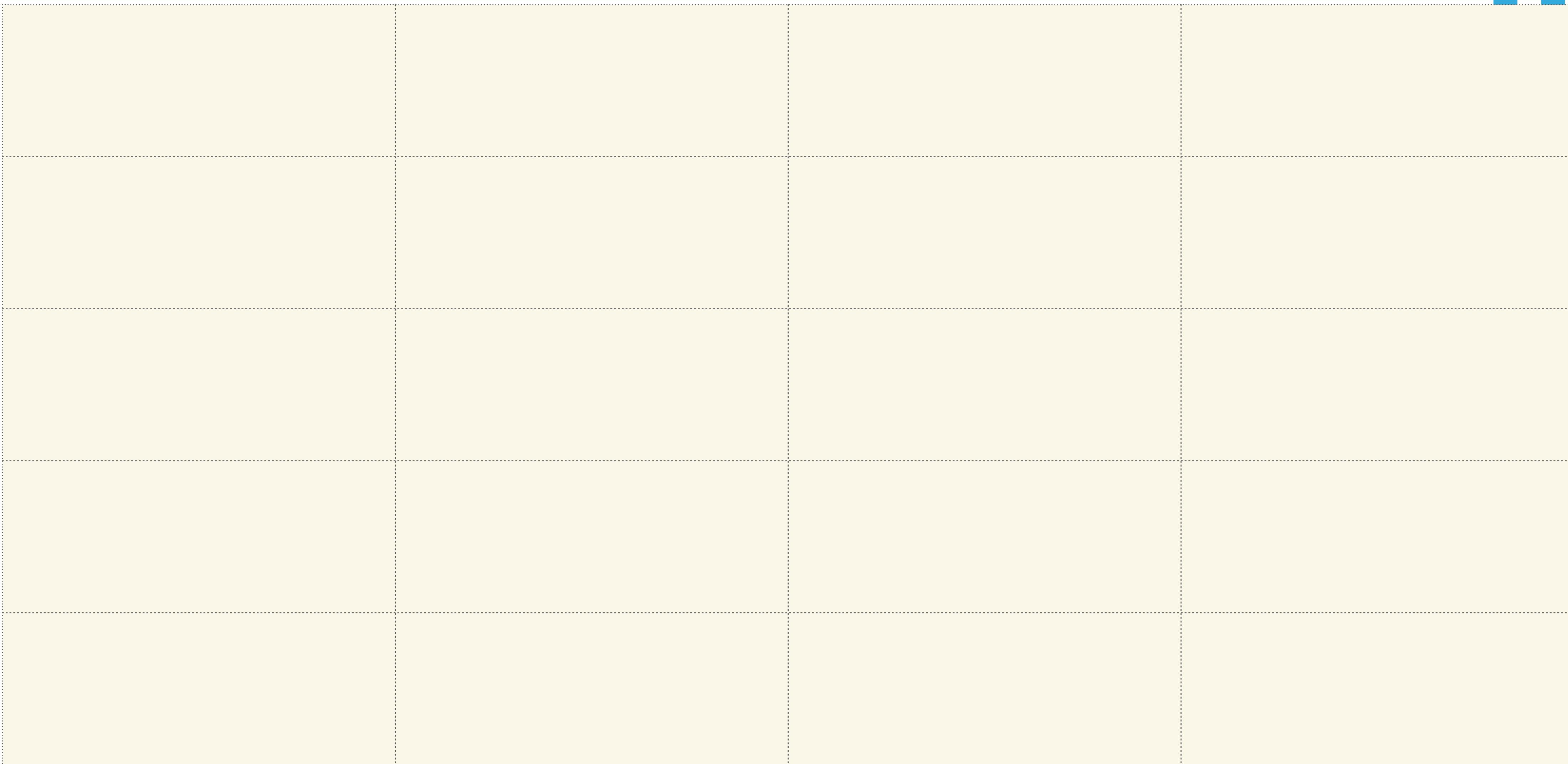


Миф #8

Grid Layout невозможно
применить к реальным проектам



**Grid Layout меняет восприятие
и подход к построению сеток**

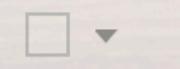




is:starred

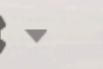
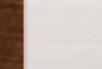


Mail ▾



More ▾

1–14 of 14



COMPOSE

Inbox (2)

Starred

Sent Mail

Drafts

More ▾



Сергей ▾



No recent chats

Start a new one

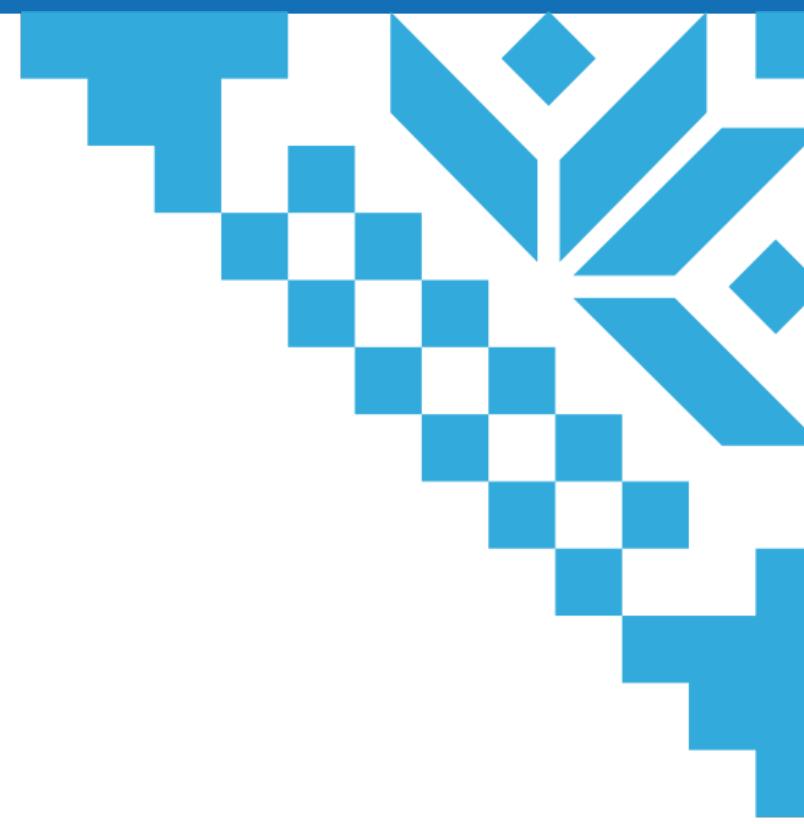
1.49 GB (4%) of 30 GB used
[Manage](#)

[Program Policies](#)
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Last account activity: 2 hours ago
[Details](#)

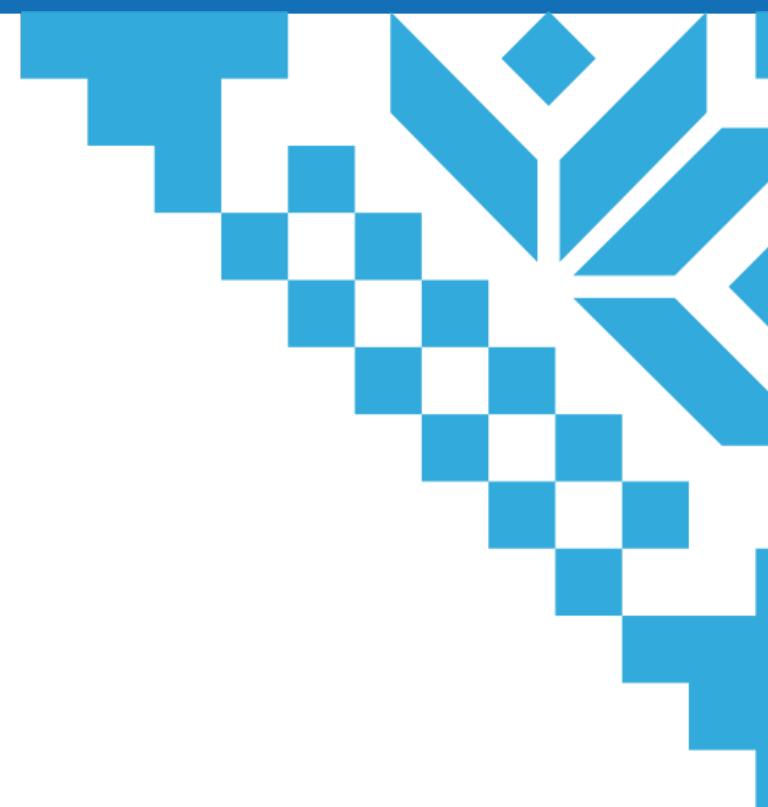


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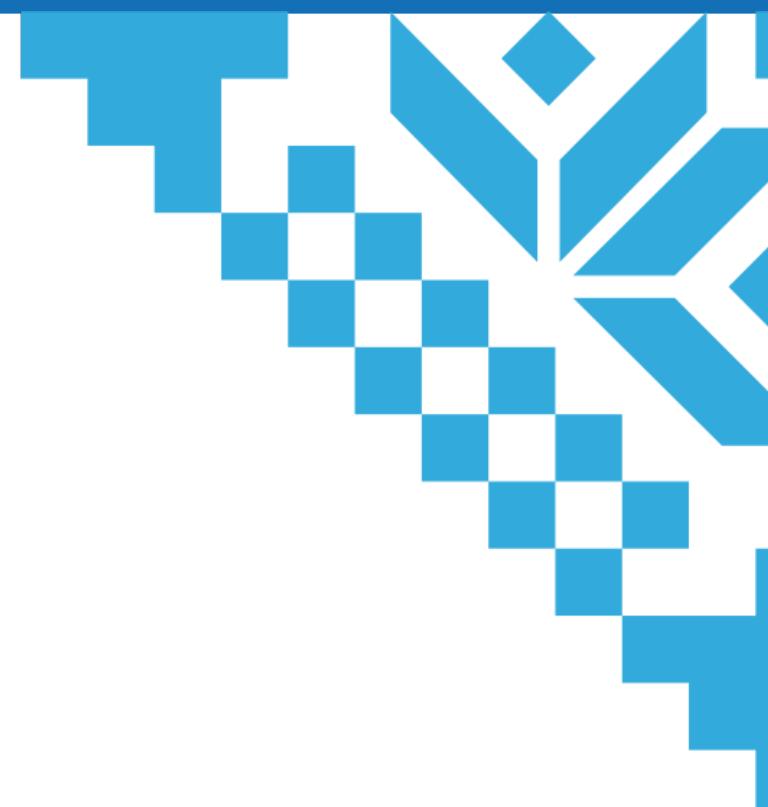


Миф #9

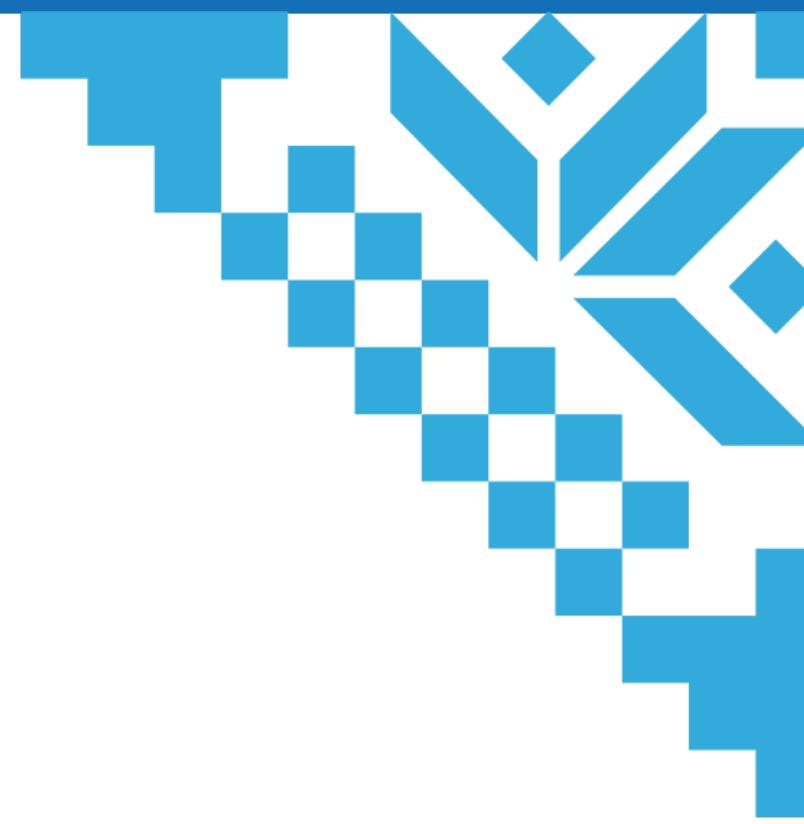
Grid Layout не нужен,
так как всё может FlexBox



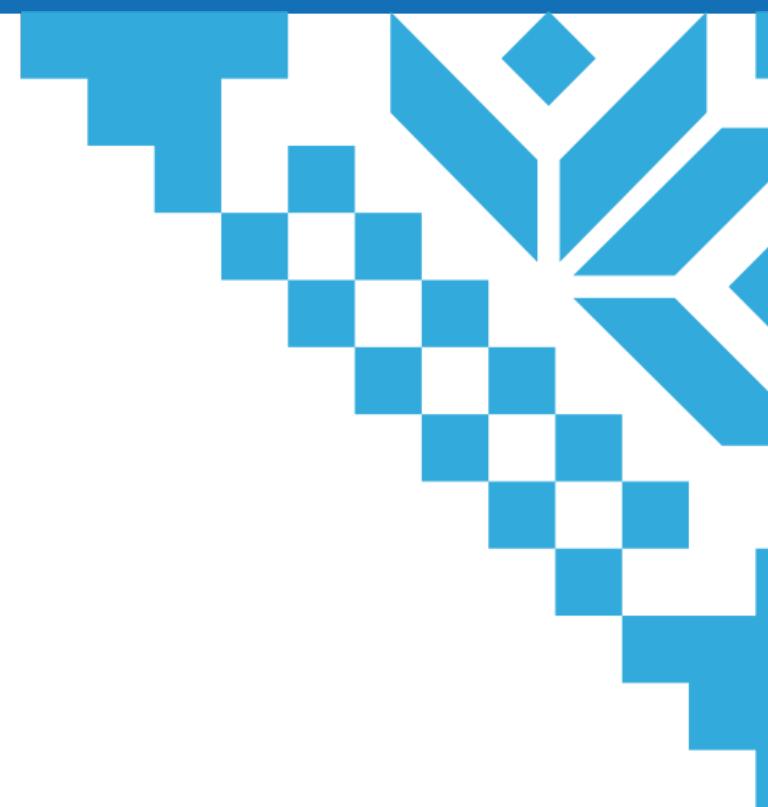
**FlexBox смотрит в масштабе
строк и хорош для контента**



**Grid Layout смотрит глобальнее
на всю раскладку**



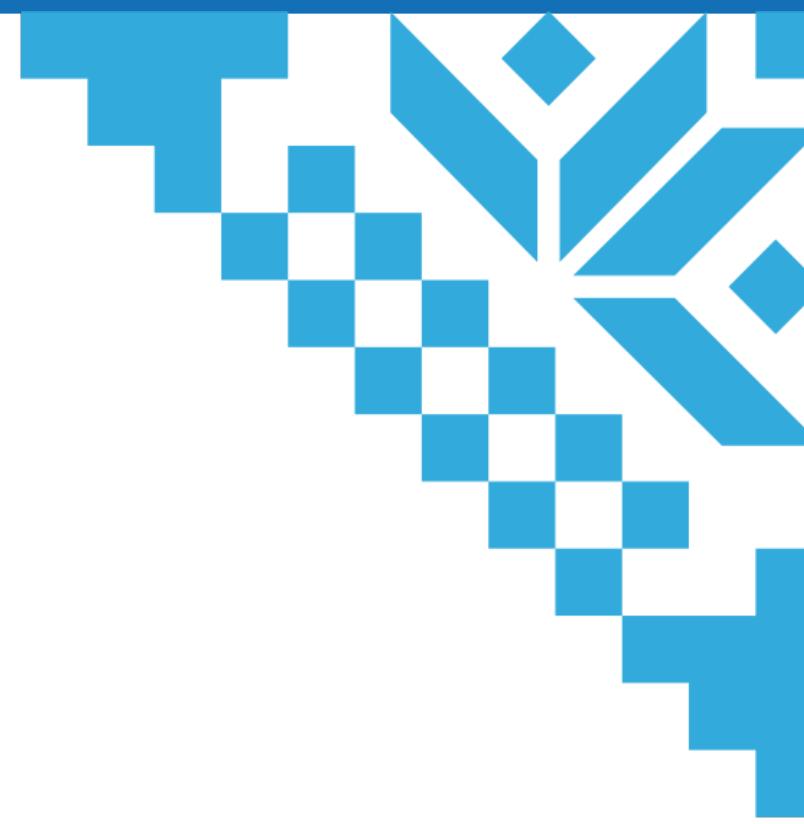
Grid Layout может сделать задачу
быстрее и с меньшим количеством
обёрток



**Зато есть вещи, которые можно
сделать только на Grid Layout**



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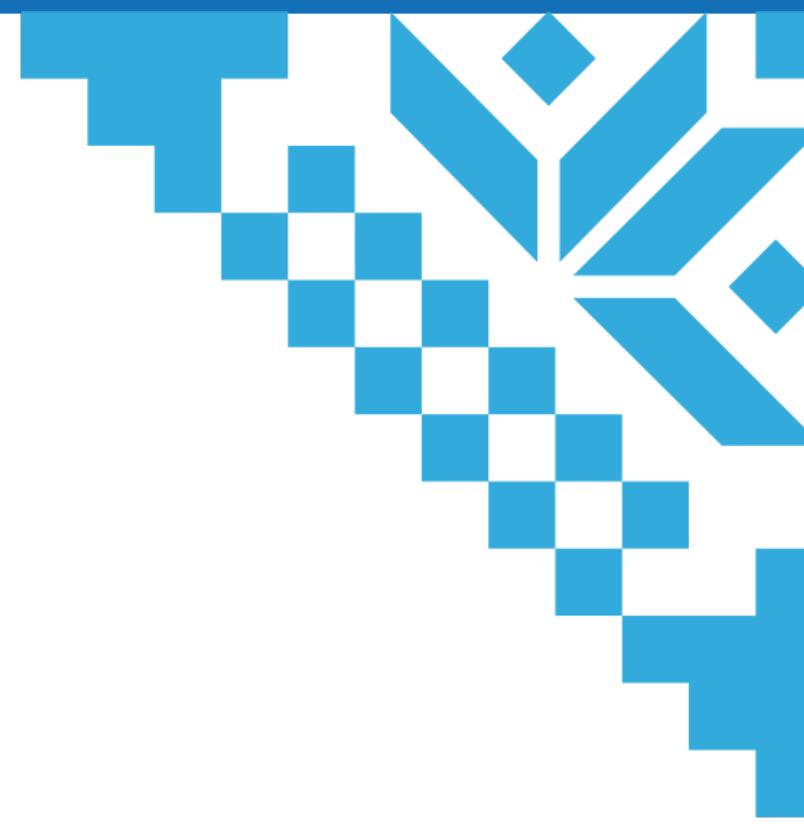


Миф #1

**Grid Layout не поддерживается
браузерами**



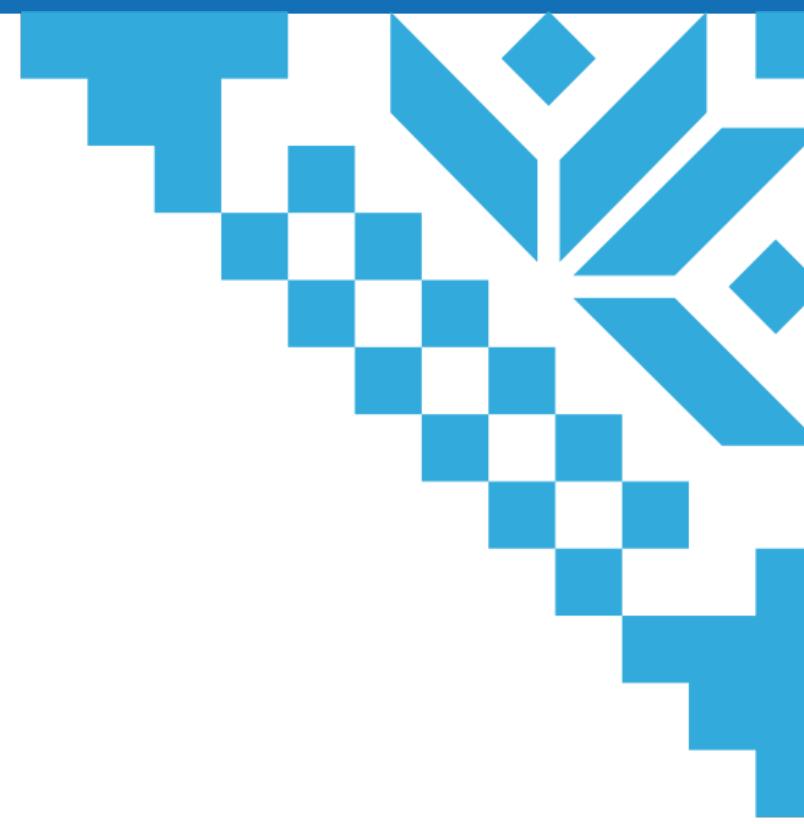
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Миф #2

Grid Layout нельзя использовать
по полной

PLATE
SUB

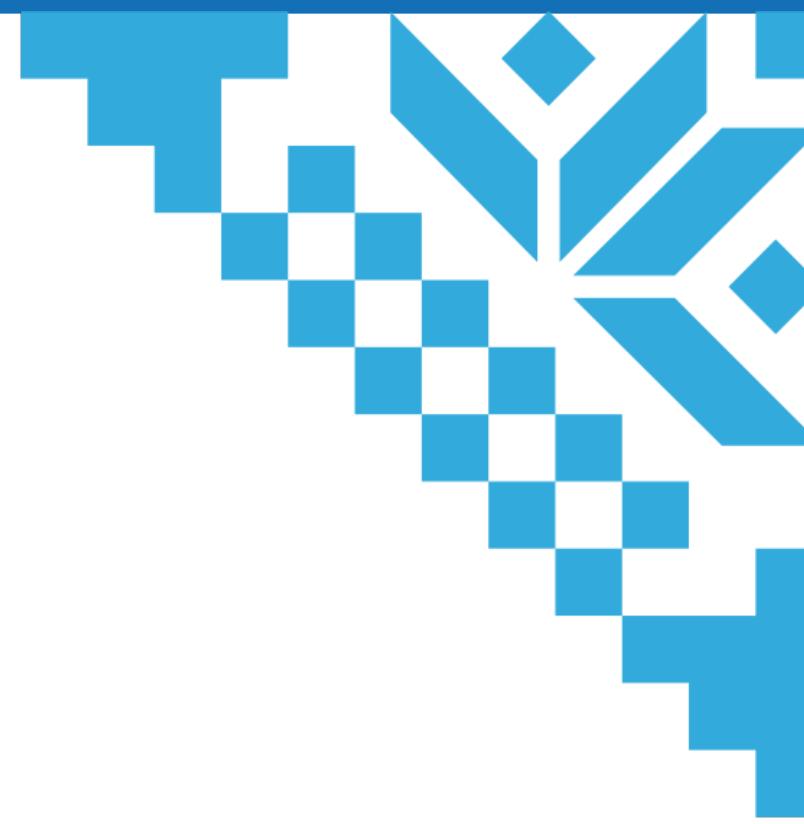


Миф #3

В Grid Layout много багов



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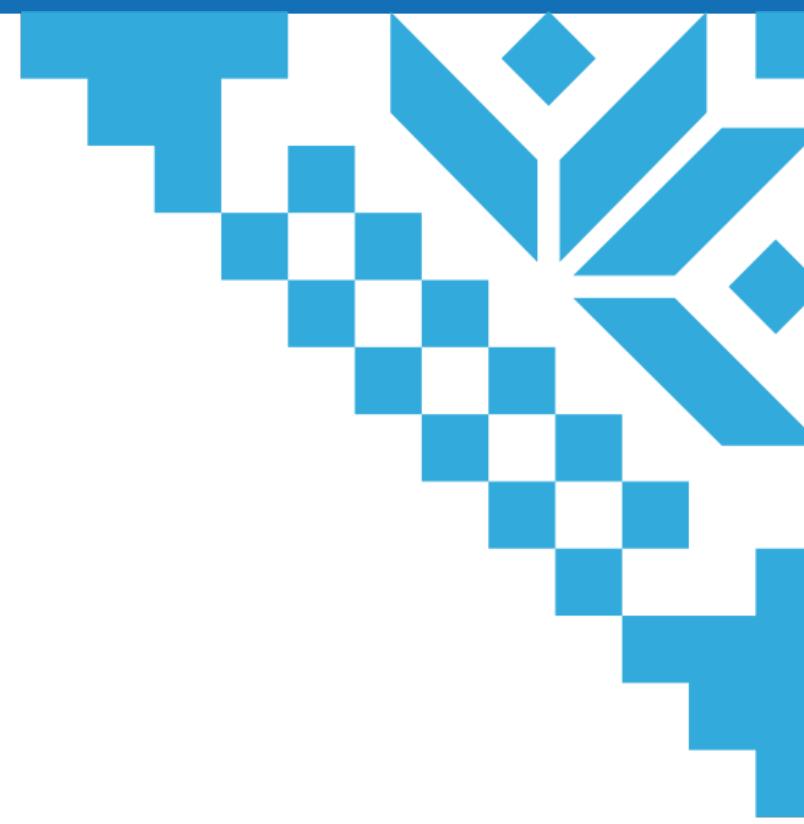


Миф #4

Grid Layout сложно изучить



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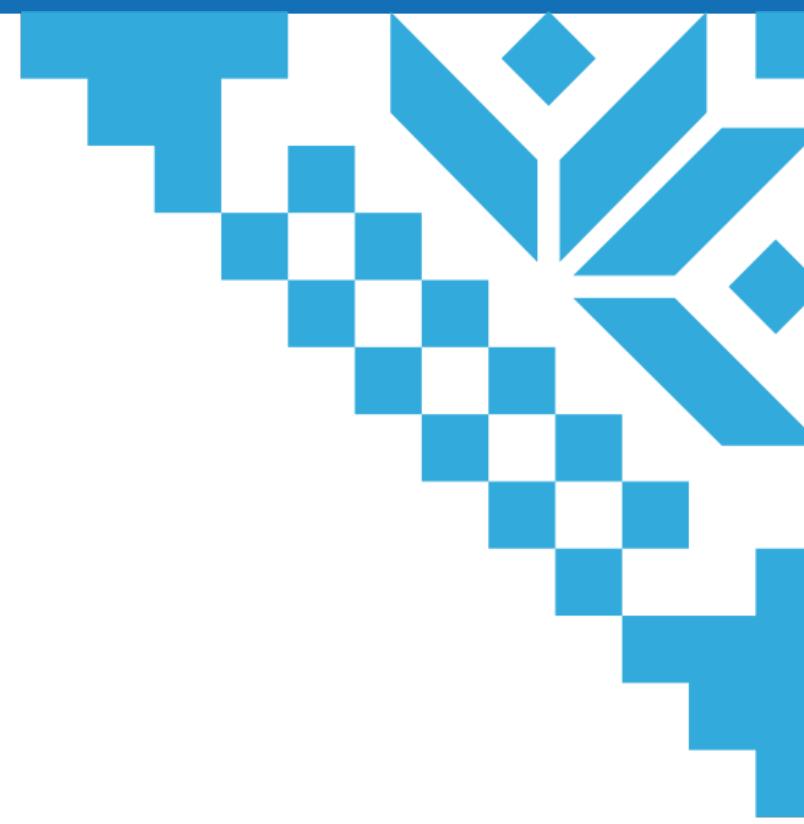


Миф #5

Grid Layout убьёт FlexBox



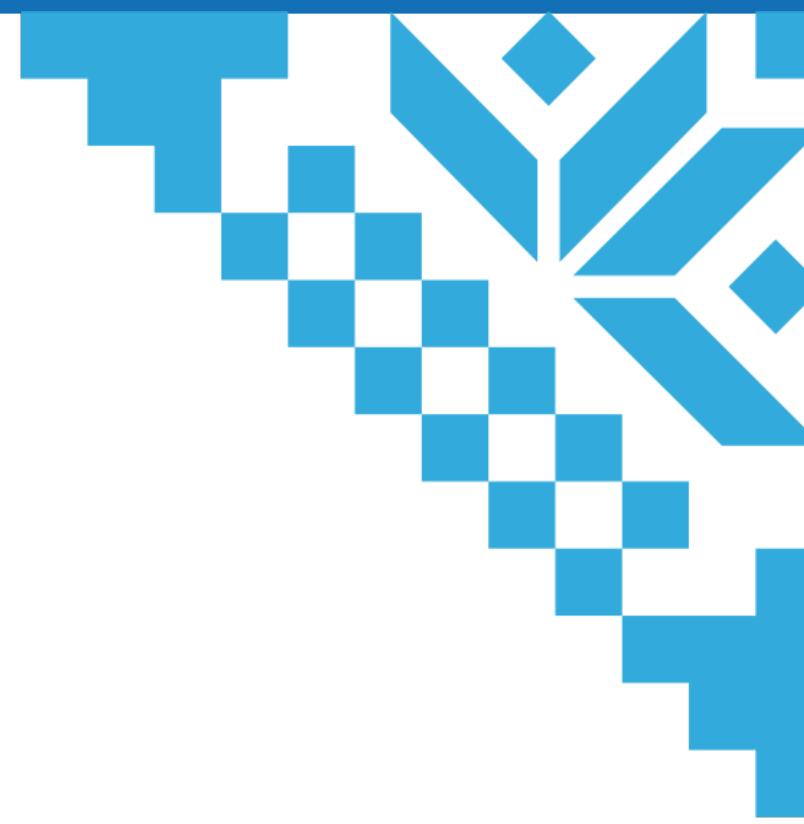
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Миф #6

Subgrid всё ещё в разработке

CONFIRMED

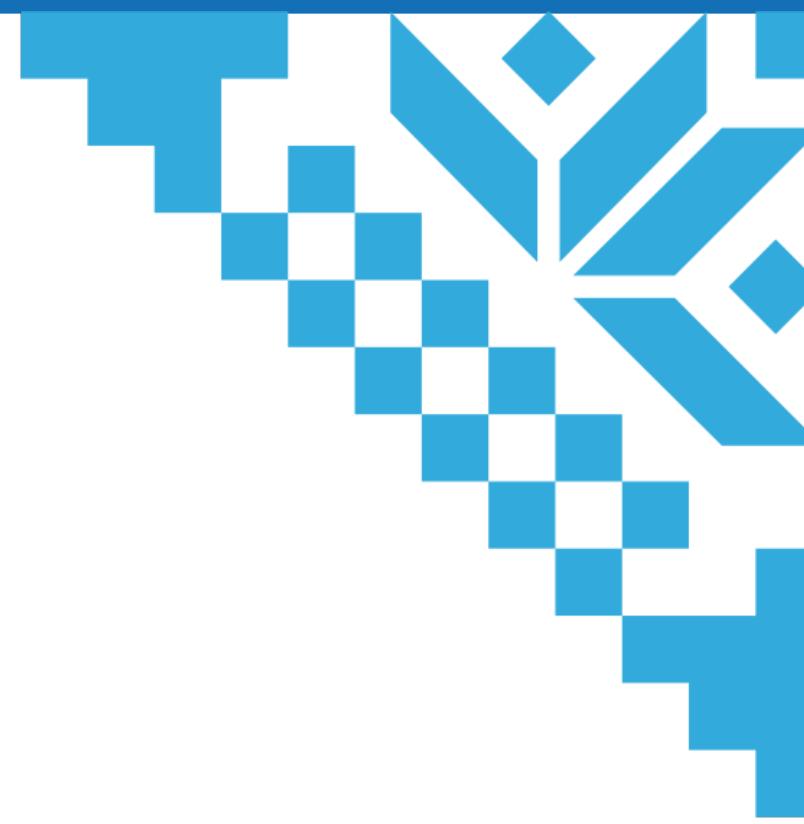


Миф #7

Без Subgrid Grid Layout
бесполезен



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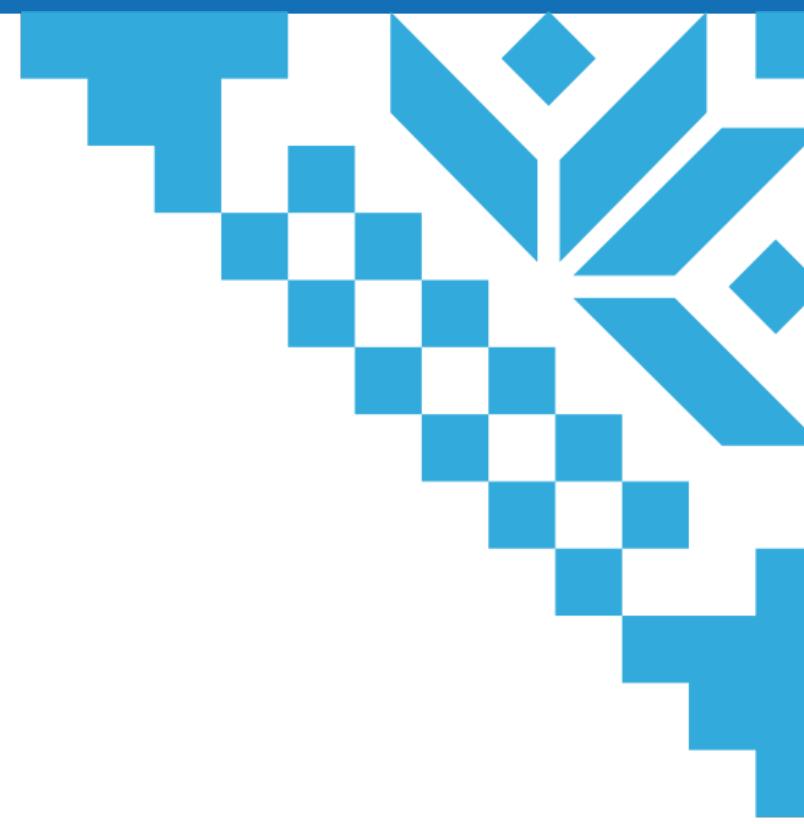


Миф #8

**Grid Layout невозможno
применить к реальным проектам**



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Миф #9

Grid Layout не нужен,
так как всё могут FlexBox



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Миф #10

Сейчас нет смысла изучать
что-либо кроме Grid Layout для
построения сеток

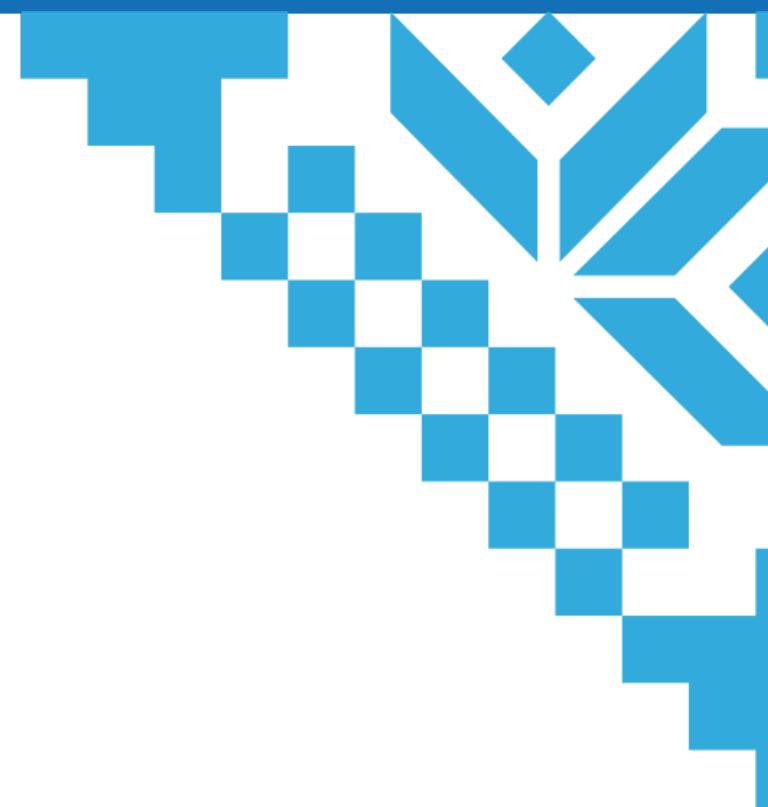


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Все ссылки

- HTML Academy — <https://htmlacademy.ru/>
- Аутсорс по фронетнду — <https://htmlacademy.ru/production>
- Доклад **Пора начинать фыркать** — <https://youtu.be/UrsI0EGjskY>
- **Все сезоны Разрушителей Легенд** — <http://kino-filmi.net/1872-razrushiteli-legend-11-13-14-sezon.html>
- **Поддержка Grid Layout** — <https://caniuse.com/#feat=css-grid>
- **Спецификация Grid Layout** — <https://www.w3.org/TR/css-grid-1/>
- IE мёртв — <https://support.microsoft.com/en-us/help/13853/windows-lifecycle-fact-sheet>
- Почти полное **руководство по Grid Layout** — <https://css-tricks.com/snippets/css/complete-guide-grid/>
- **Примеры Grid Layout** — <https://gridbyexample.com/examples/>
- **Игрушка для познания Grid Layout** — <http://cssgridgarden.com/>
- **Спека Subgrid** — <https://www.w3.org/TR/css-grid-2/>
- Subgrid на кастомных свойствах — <https://codepen.io/lautsevich/pen/NpYobE>



Спасибо за внимание