### arachelandrew a Frontend United

## START USING CSS GRID LAYOUT TODAY!









March 2017

March 2017

March 2017



#### March 2017

#### March 2017

Sooooon!



CSS Working Group Invited Expert Google Developer Expert co-founder Perch CMS Old Nerd. You can find me in most places as <u>@rachelandrew</u> you can email

me@rachelandrew.co.uk or check out my site at https://rachelandrew.co.uk

What is grid & why is it different to flexbox? How do I get started using grid in production? What about old browsers? How can we help encourage browsers to give us cool new stuff?

## CSS Grid Layout

# Why not use flexbox?

## Flexbox is for one-dimensional layout









## Grid is for two-dimensional layout







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#### Grid minmax() and auto-fill

Creating a flexible number of flexible tracks, with a little bit of grid spec magic.

http://codepen.io/rachelandrew/pen/evjdLM

```
.grid {
   display: grid;
   grid-gap: 20px;
   grid-template-columns: repeat(auto-
fill, minmax(200px, 1fr));
}
```

If you are adding widths to all your flex items, you probably need grid.



#### Using space-between

http://codepen.io/rachelandrew/pen/MpBbwX

```
.example1 {
   display: flex;
   justify-content: space-between;
   flex-wrap: wrap;
   margin: 30px;
}
```













#### Flexbox

Some things grow larger than other things.

This is defined using flex properties on the **item**.

http://codepen.io/rachelandrew/pen/MpBbwX

```
.example2 {
 display: flex;
 flex-wrap: wrap;
}
.example2 > div {
 flex: 1 1 0;
}
.example2 > div.bigger {
 flex: 4 1 0;
}
```

#### Buffalo Mozzarella



# Tomatoes Spinach



Grid works from the container in

#### Grid

Define column tracks. Items are constrained by those tracks.

http://codepen.io/rachelandrew/pen/JWBbJP

```
.example1 {
   display: grid;
   grid-gap: 20px;
   grid-template-columns: 1fr 1fr 1fr;
   margin: 20px;
}
```

## Buffalo Mozzarella Lettuce Basil Spinach

#### Tomatoes

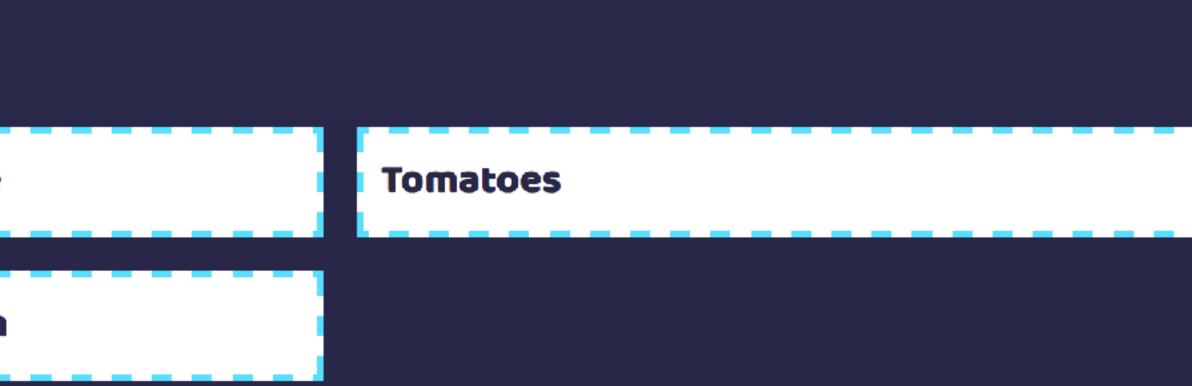


To make some tracks larger than others, we do that when defining the tracks on the **container** not on the item itself.

http://codepen.io/rachelandrew/pen/JWBbJP

```
.example2 {
   display: grid;
   grid-gap: 20px;
   grid-template-columns: 2fr 1fr 2fr;
   margin: 20px;
}
```

# Buffalo Mozzarella Lettuce Basil Spinach





Other layout methods start with the item.



The float property and widths are added to the items.

```
.box {
   float: left;
   width: 33.3333%;
}
```

#### inline-block grid

The display property is set to inlineblock and width is added to the item.

```
.box {
   display: inline-block;
   width: 33.3333%;
}
```

#### Flex grid

We add display: flex to the container however to make a grid out of flex items we need to use the flex properties in the items.

```
.container {
   display: flex;
}
.box {
   flex: 0 0 33.3333%;
}
```

#### Grid Layout

With CSS Grid Layout we create the grid on the parent element. We don't need to add properties to the items.

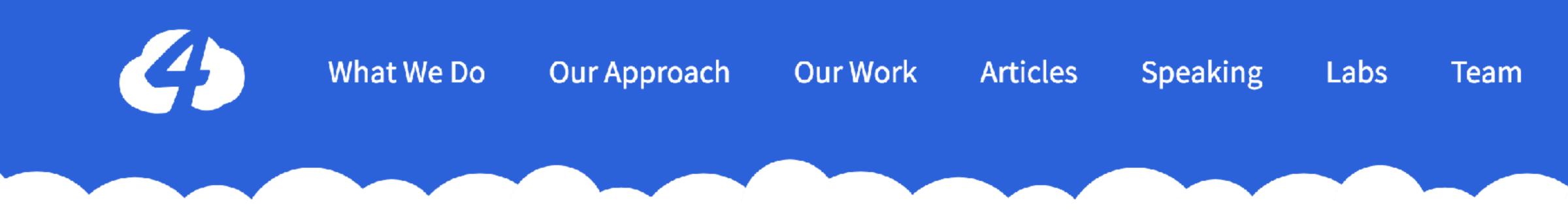
```
.container {
   display: grid;
   grid-template-columns: 1fr 1fr 1fr;
}
```

Grid is all about the container

#### ... and that's just the start

- Grid allows you to layer items, or for two items to occupy the same space
- Grid allows full control of negative space in your designs
- Grid has methods such as the dense packing mode to backfill gaps in a tight-packed grid
- Grid allows you to name lines and areas of your page and position things against those lines and into the areas.

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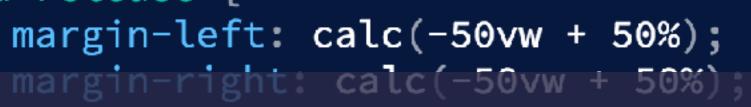


### **Breaking Out With CSS Grid Layout**

Written by <u>Tyler Sticka</u> on May 11, 2017

A while back I shared <u>a simple technique</u> for allowing certain elements to fill the full viewport width from within a fixed-width container:

```
.u-containProse {
 max-width: 40em;
 margin-left: auto;
 margin-right: auto;
}
.u-release {
 margin-left: calc(-50vw + 50\%);
```



https://cloudfour.com/thinks/breaking-out-with-css-grid-layout/



#### Just do this!

Magic occurs.

```
.Prose {
 display: grid;
 grid-template-columns:
    [full-start] minmax(lem, lfr)
    [main-start] minmax(0, 40em) [main-end]
   minmax(lem, lfr) [full-end];
}
.Prose > * {
 grid-column: main;
.Prose-splash {
 grid-column: full;
```



A div containing three direct child elements, one with a class of 'full'.

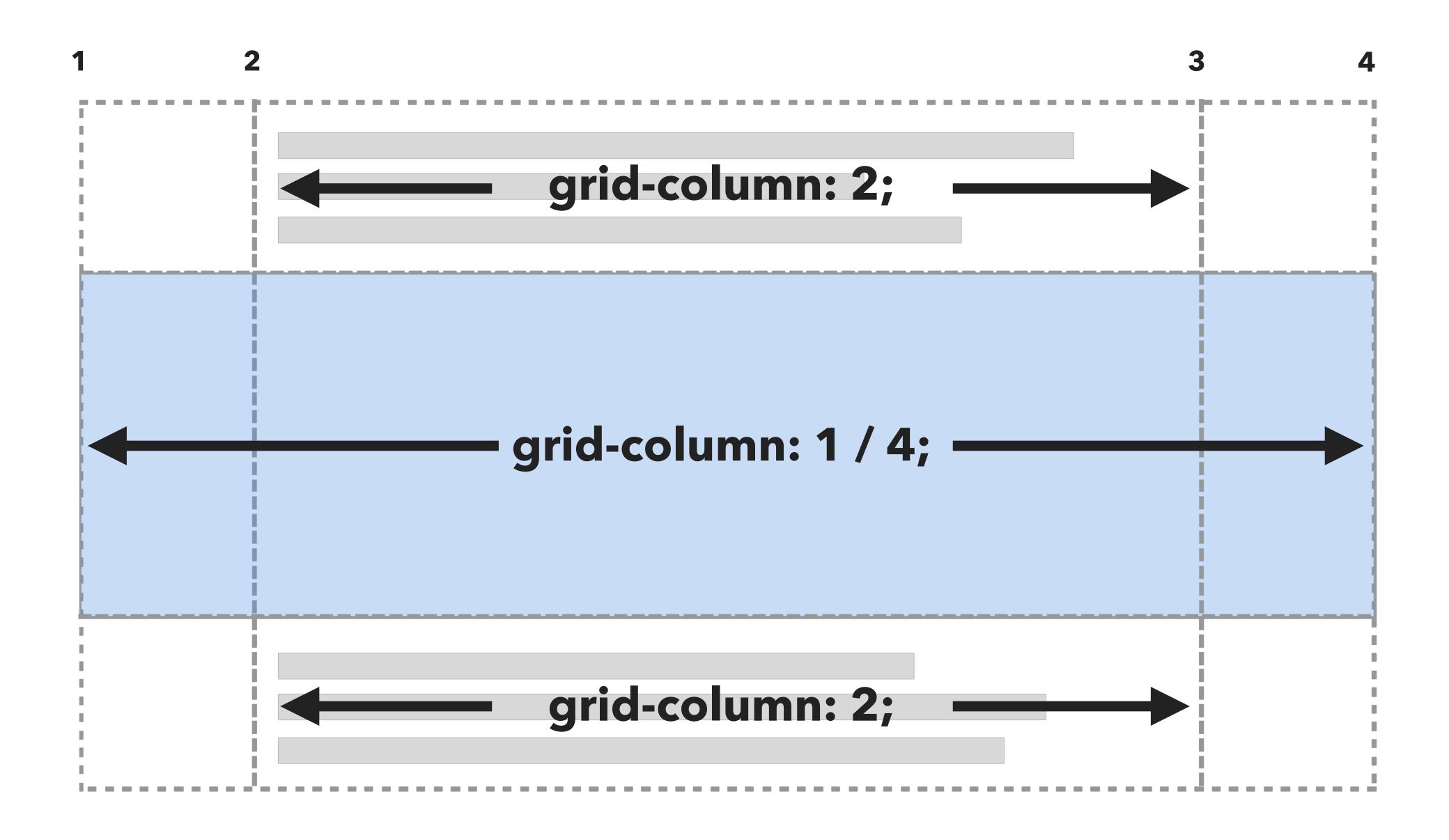
```
<div class="grid">
   <div>Content</div>
   <div class="full">Full width</div>
   <div>Content</div>
   </div>
```

#### A grid with 3 column tracks

Using the line numbers to place our content and full width items.

```
.grid {
 display: grid;
 grid-gap: 20px;
 grid-template-columns:
   minmax(lem, lfr)
   minmax(0, 40em)
   minmax(lem, lfr);
}
.grid > * {
 grid-column: 2;
.grid > .full {
 grid-column: 1 / 4 ;
```

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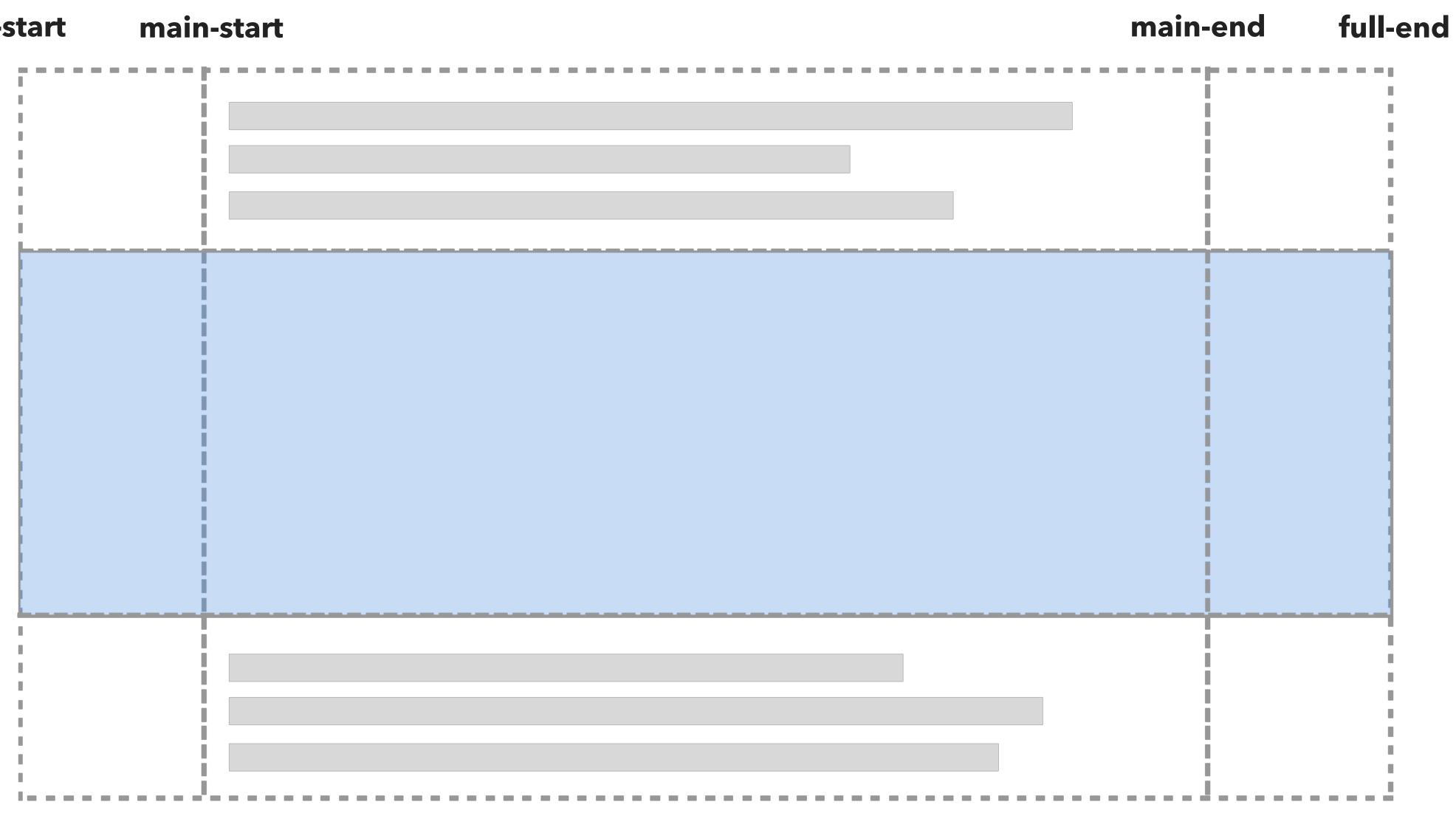


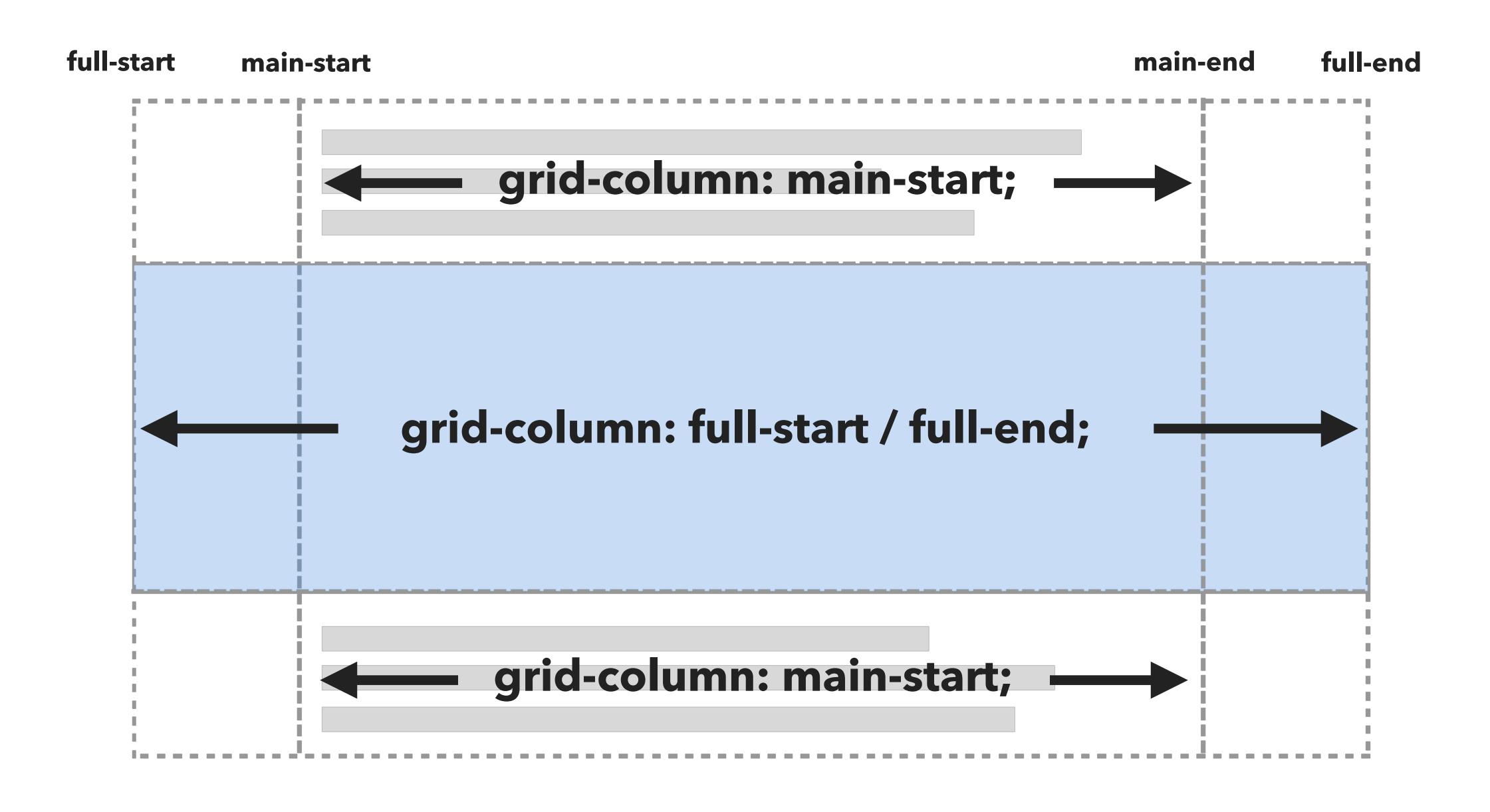
#### Naming lines on the grid

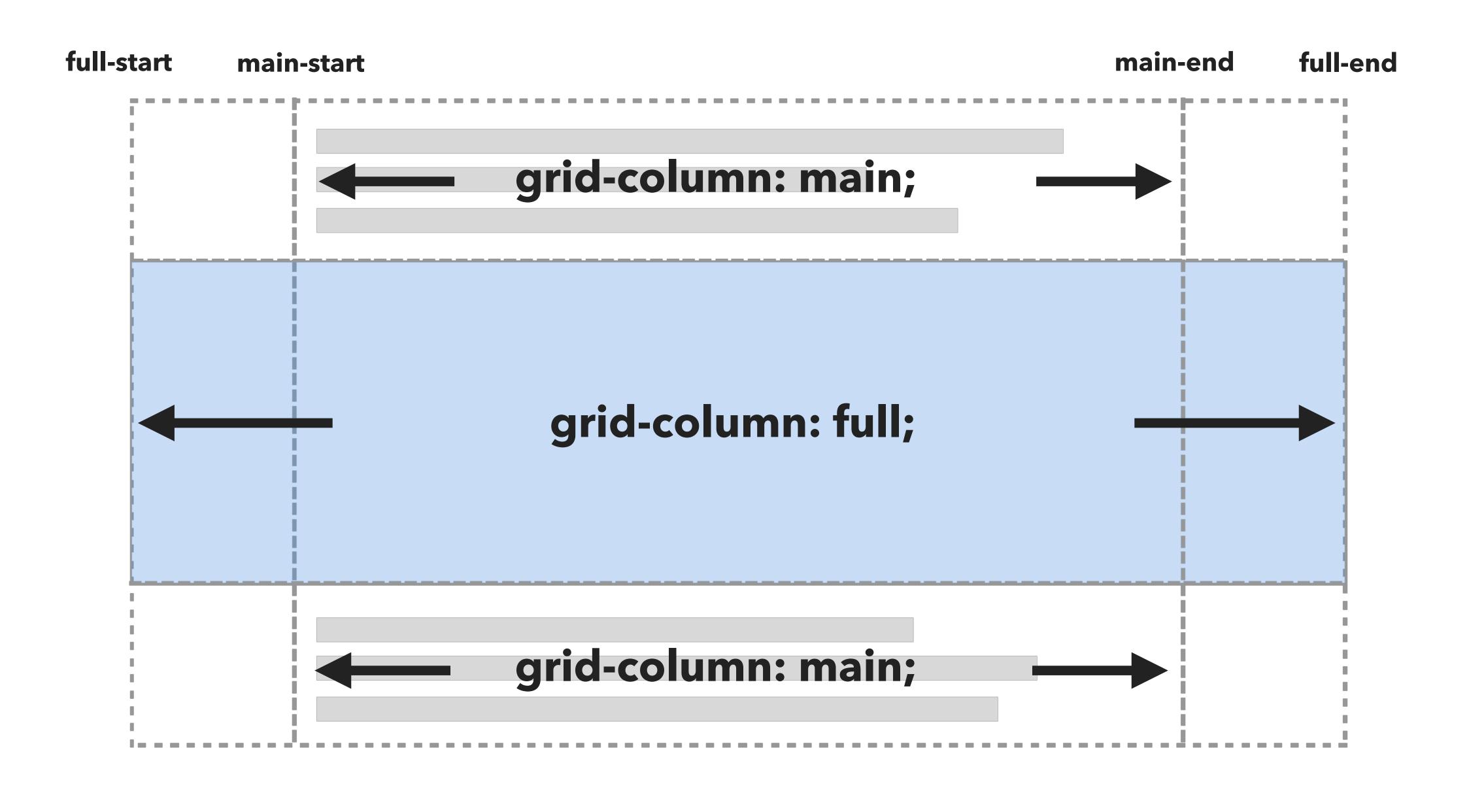
We can now position the items using their line *names*.

```
.grid {
 display: grid;
 grid-gap: 20px;
 grid-template-columns:
    [full-start] minmax(lem, lfr)
    [main-start] minmax(0, 40em) [main-end]
   minmax(lem, lfr) [full-end];
}
.grid > * {
 grid-column: main-start ;
.grid > .full {
 grid-column: full-start / full-end;
```

#### full-start







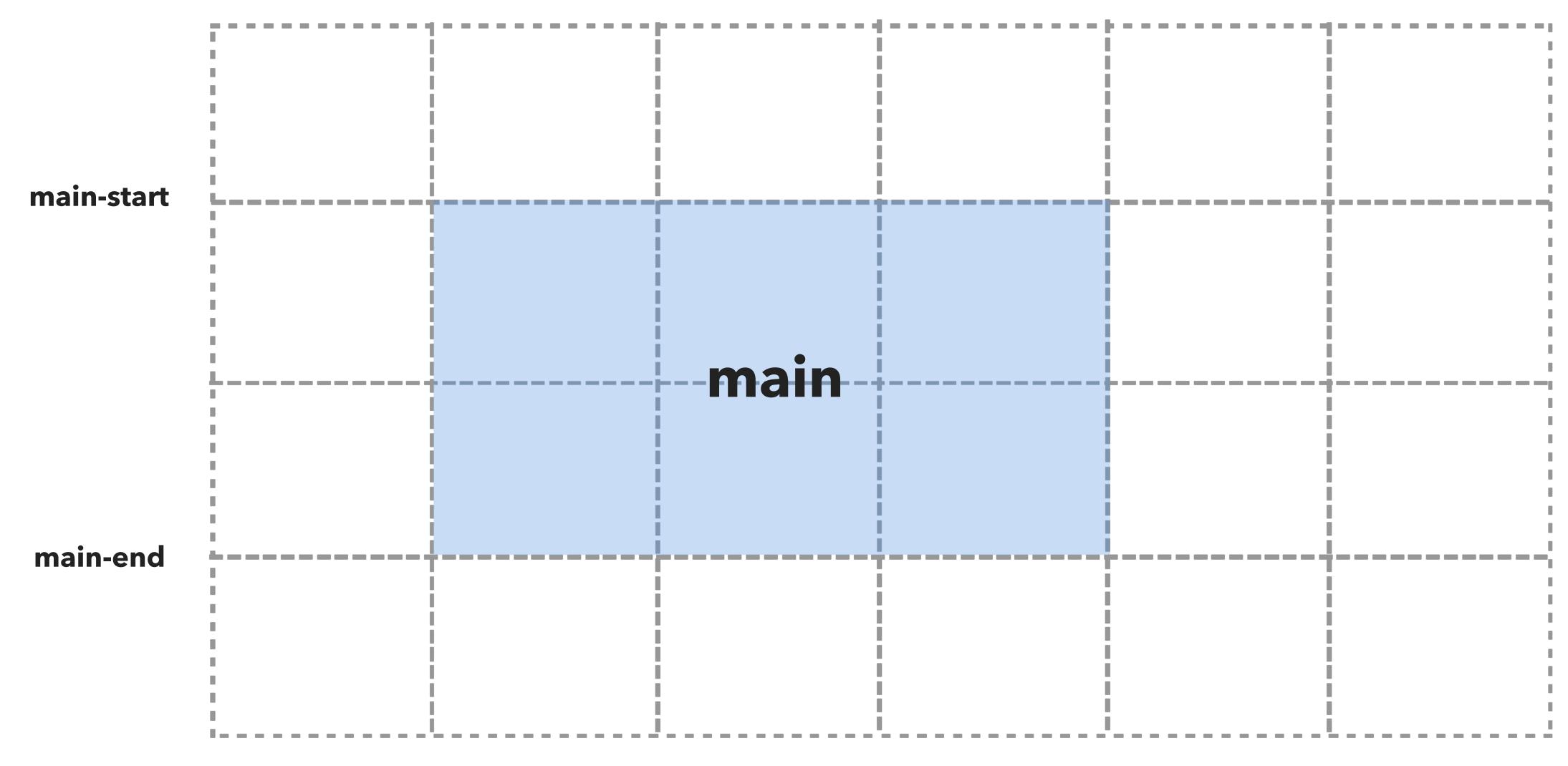
## 'main' and 'full'

These line names don't exist anywhere in our grid definition.

```
.grid {
 display: grid;
 grid-gap: 20px;
 grid-template-columns:
    [full-start] minmax(lem, lfr)
    [main-start] minmax(0, 40em) [main-end]
   minmax(lem, lfr) [full-end];
}
.grid > * {
 grid-column: main;
.grid > .full {
 grid-column: full;
```

"Since a named grid area is referenced by the implicit named lines it produces, explicitly adding named lines of the same form (foo-start/foo-end) effectively creates a named grid area."

## main-start



## main-end

## Implicit named areas

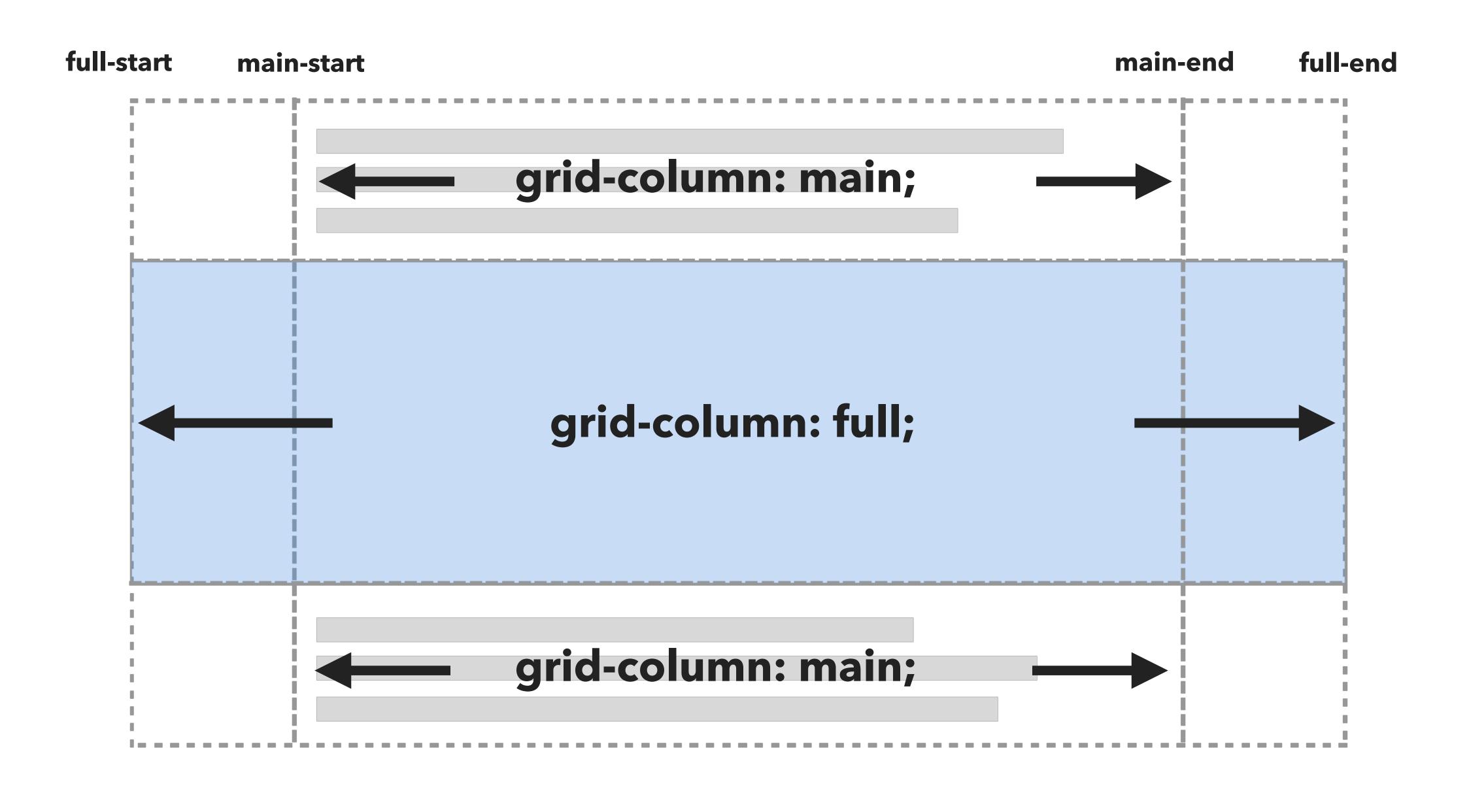
Created by having named lines using an ident with \*-start and \*-end.

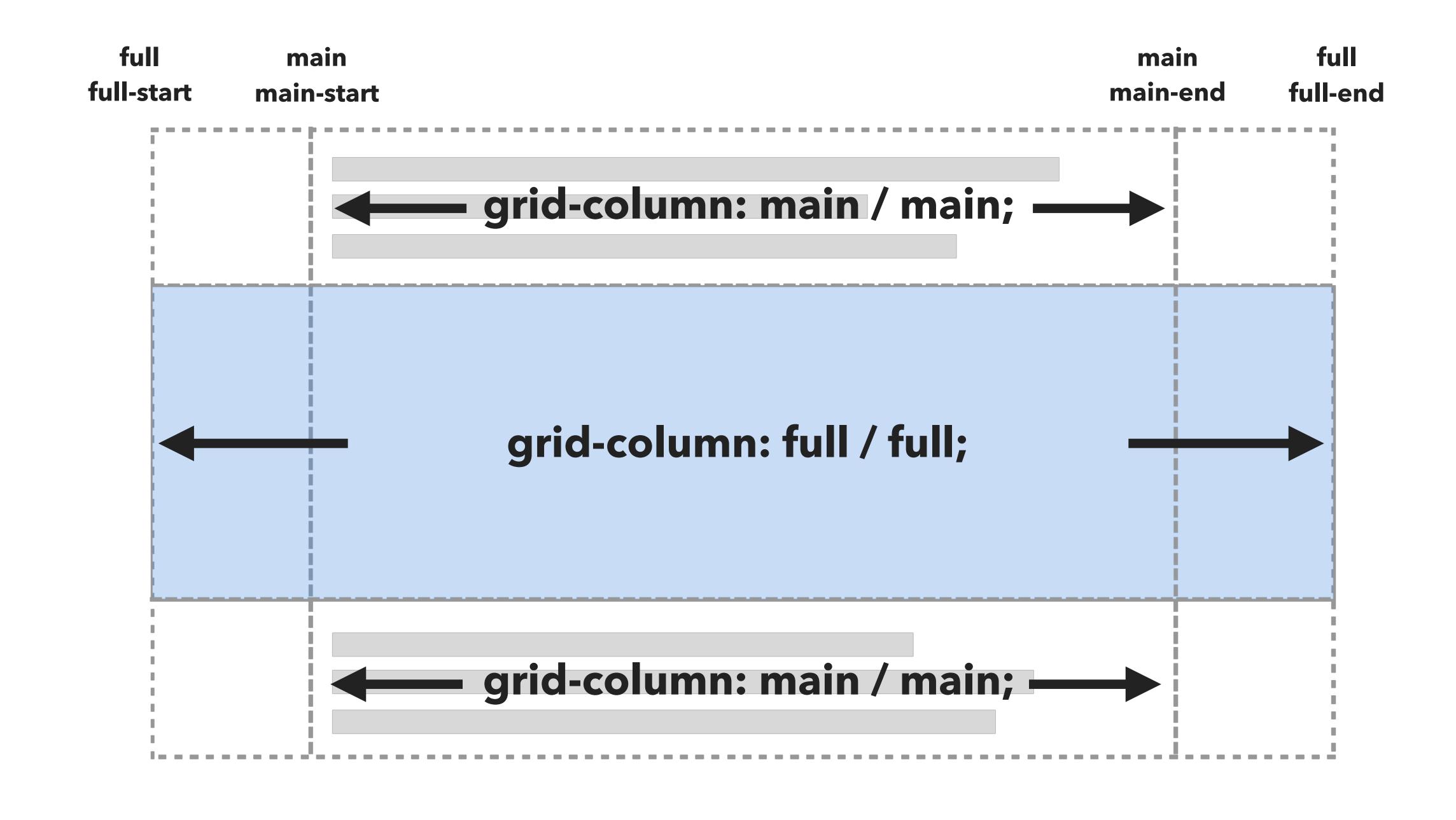
https://codepen.io/rachelandrew/pen/ eWoKmd/

```
.grid {
 display: grid;
 grid-gap: 20px;
 grid-template-columns:
   100px [main-start]
   100px 100px 100px [main-end]
   100px 100px;
 grid-template-rows:
   100px [main-start]
   100px 100px [main-end] 100px;
}
.item {
 grid-area: main;
```

"Note: Named grid areas automatically generate implicit named lines of this form, so specifying grid-row-start: foo will choose the start edge of that named grid area (unless another line named foo-start was explicitly specified before it)." \_\_\_\_\_

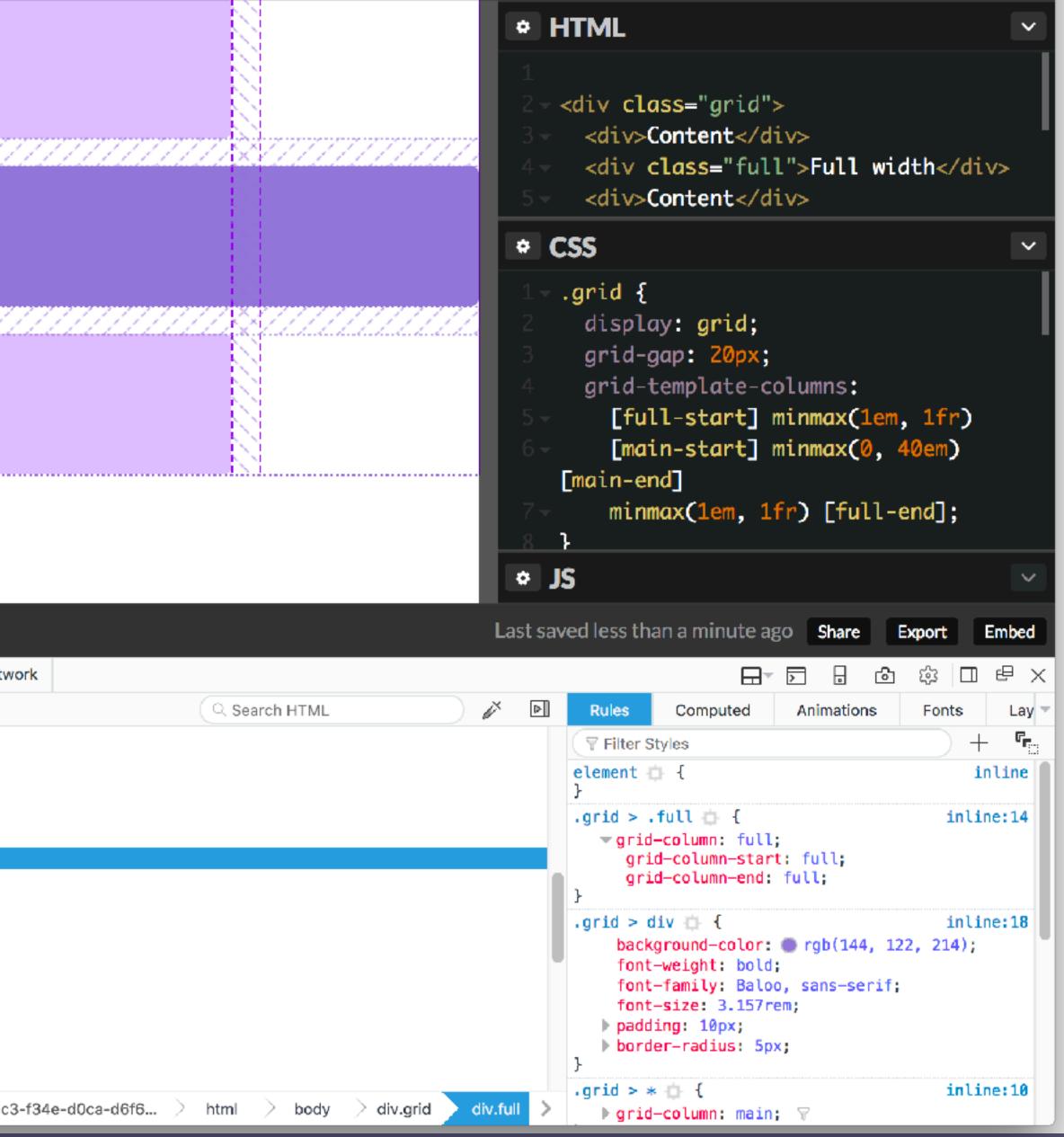
"[when using grid-row and grid-column shorthands] ... When the second value is omitted, if the first value is a <custom-ident>, the grid-rowend/grid-column-end longhand is also set to that <custom-ident>; otherwise, it is set to auto." \_\_\_\_\_





## Content

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https://codepen.io/rachelandrew/pen/xdedMy/



Grid gives us powerful tools to control layout via the containing element.



## Use Flexbox when ...

- Your content is a row OR a column
- You want the size of items to dictate their layout
- You want to distribute space

## Consider grid when ...

- You need to control rows and columns
- You are adding widths to a flex item in order to make it line up with rows above.
- You want control of the layout from the parent
- Items need to occupy the same space or overlap

# CSS Grid Layout

# Using grid in production

## This is a title

This is the introductory text for this section of the site.

The first, therefore usually the latest but could be flagged as a feature, item is the feature. This item gets a big spot up next to the title of this section.

### **New Item**

The newer items or next in priority after the feature are displayed in a larger box. We can show additional content for these items.

## 500×350

### New Item

The newer items or next in priority after the feature are displayed in a larger box. We can show additional content for these items.

## **Older Item**

The newer items or next in priority after the feature are displayed in a smaller box. We can show additional content for these items.

## New Item

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## Featured Item

It might have an image too. It's special like that.

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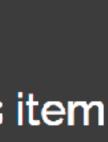
## Older Item

The newer items or next in priority after the feature are displayed in a smaller box. We can show additional content for these items.

# Featured Item

The first, therefore usually the latest but could be flagged as a feature, item is the feature. This item gets a big spot up next to the title of this section.

It might have an image too. It's special like that.



## Feature box

The feature has an image with a heading and body text overlaid.

```
<div class="box-feature">
```

<img class="box-image" src="http://placehold.it/
900x450" alt="placeholder">

<h2 class="box-feature-title">Featured Item</h2></br><div class="box-content">...</div>

</div>



**display: grid** turns on grid layout **grid-gap** defines gutters between grid items

**grid-template-columns** creates column tracks. In this case creating a grid with 6 equal columns.

```
.box-feature {
   display: grid;
   grid-gap: 20px;
   grid-template-columns: repeat(6, 1fr);
}
```

The fr unit defines a fraction of the available space in the grid container



Featured

ltem

The first, therefore usually the latest but could be flagged as a feature, item is the feature. This item gets a big spot up next to the title of this section.

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## Feature box

The image starts at grid column line 1 and ends at -1, which is the end line.

It starts at grid row 1, ending at grid row 4.

Using **box alignment** properties to stretch the image over that area.

```
.box-feature .box-image {
   align-self: stretch;
   justify-self: stretch;
   grid-column: 1 / -1;
   grid-row: 1 / 4;
```

}

Grid lines respect writing mode. Column line 1 is on the left and -1 on the right in a LTR language.

- The Explicit Grid is created when you define tracks with grid-templatecolumns and grid-template-rows
- If you place an item outside of that grid, or auto-placed content requires

further row or column tracks these are added by grid as the **Implicit Grid**.



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## Feature box

Positioning the content inside the area that the image is stretched over.

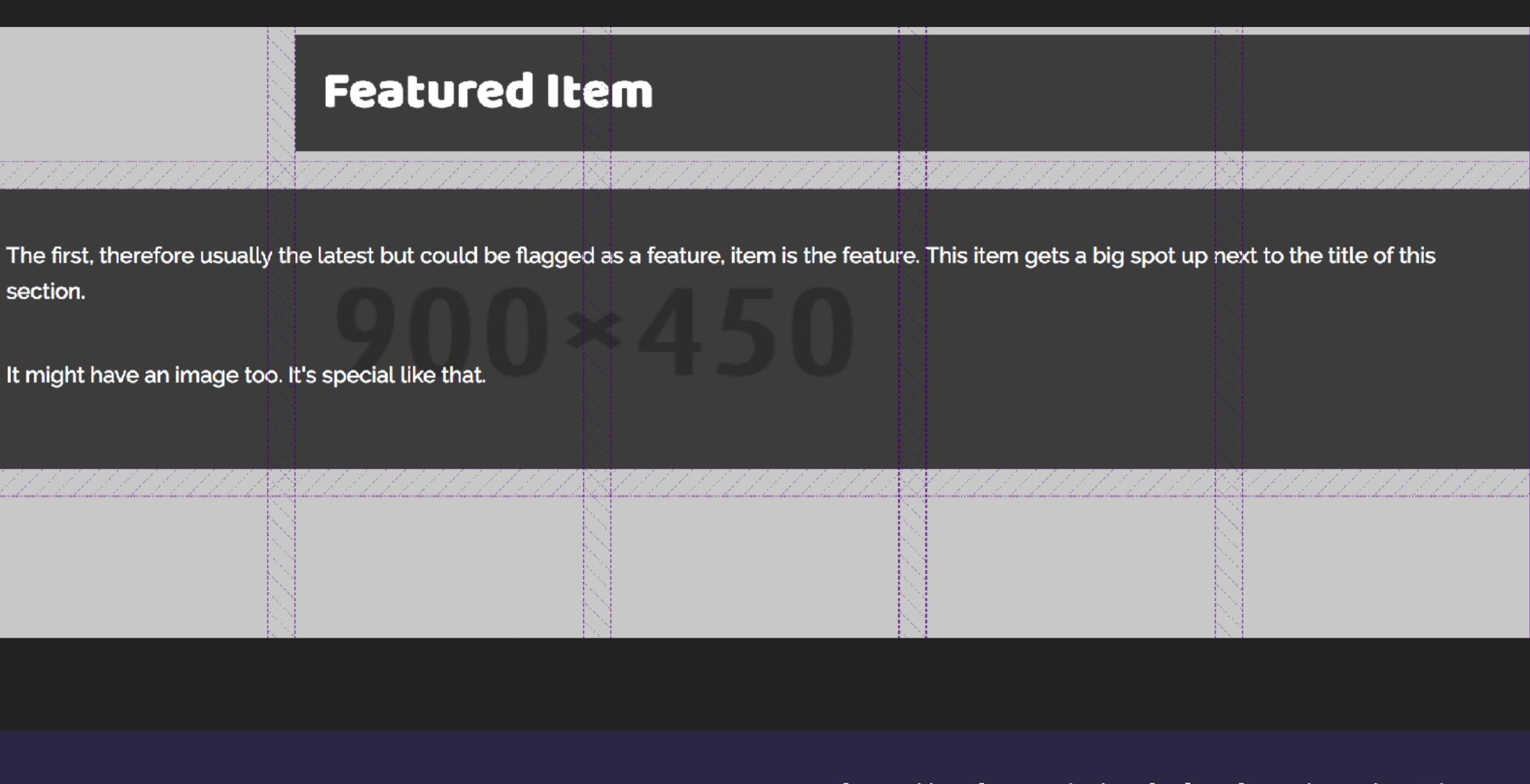
```
.box-feature .box-feature-title {
  grid-column: 3 / -1;
  grid-row: 1;
  background-color: rgba(0,0,0,0.7);
  color: #fff;
  align-self: start;
  padding: 20px;
```

```
.box-feature .box-content {
  grid-column: 2 / -1;
  grid-row: 2;
  background-color: rgba(0,0,0,0.7);
  color: #fff;
  padding: 20px;
```

## Featured Item

section.

It might have an image too. It's special like that.



http://codepen.io/rachelandrew/pen/evQjMx



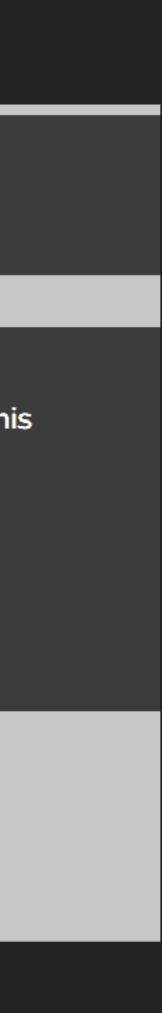
You can position items into the same grid cells Items further down in the source appear on top of earlier items Control the stack using z-index

## Featured Item

section.

It might have an image too. It's special like that.

The first, therefore usually the latest but could be flagged as a feature, item is the feature. This item gets a big spot up next to the title of this



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500×350

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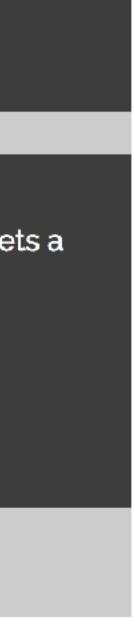
## Featured Item

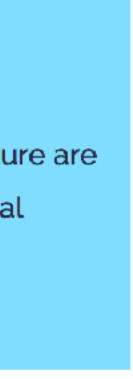
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## The listing

The container for our boxes has 12 equal columns.

```
.listing {
 display: grid;
  grid-template-columns: repeat(12,1fr);
 grid-gap: 20px;
}
```



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500×350

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## New Item

content for these items.

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# Featured Item

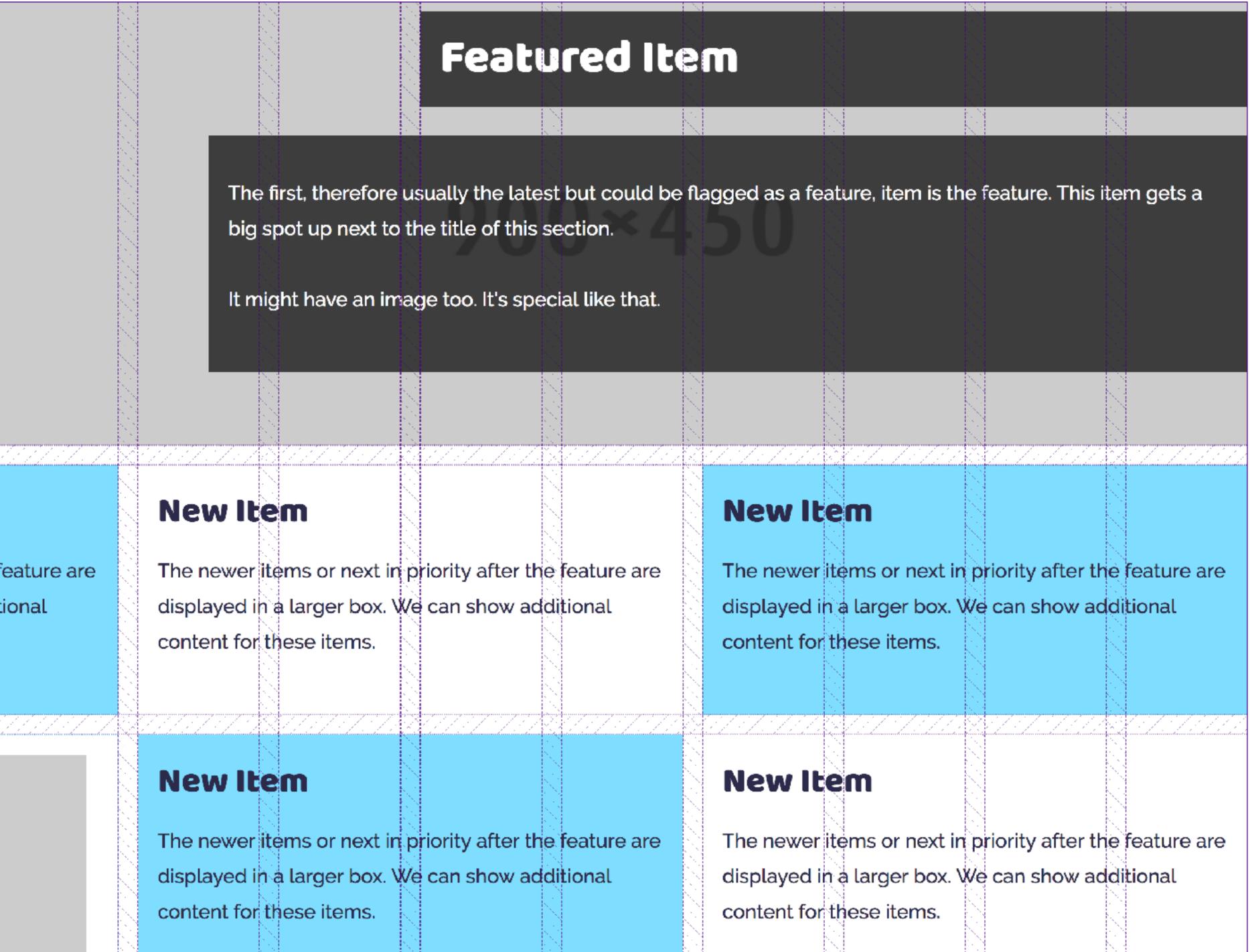
## **New Item**

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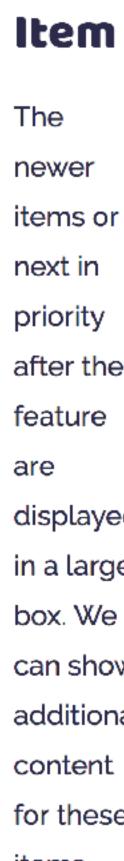
Fea Iten The first, therefore usually the latest but could be flagged as a feature, item is the feature. This item gets a big spot up next to the title of this section.

New Item The newer items or next in priority after the feature are displayed in a larger box. We can show additional content for these items.

New Item The newer items or next in priority after the feature are displayed in a larger box. We can show additional content for these items.

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> newer items or next in priority after the feature are displayed in a larger box. We can show additional content for these items.



500-350

# New

after the

displayed in a larger can show additional for these items.

Item The newer items or next in priority after the feature are displayed in a larger box. We can show additional content for these items.

New

New Item The newer items or next in priority after the feature are displayed in a larger box. We can show additional content for these items.

Older ltem

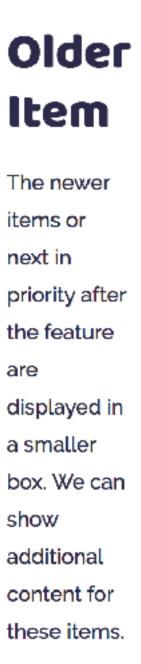
The newer items or next in priority after the feature are displayed in a smaller box. We can show additional content for these items.

## Older ltem

The newer items or next in priority after the feature are displayed in a smaller box. We can show additional content for these items.

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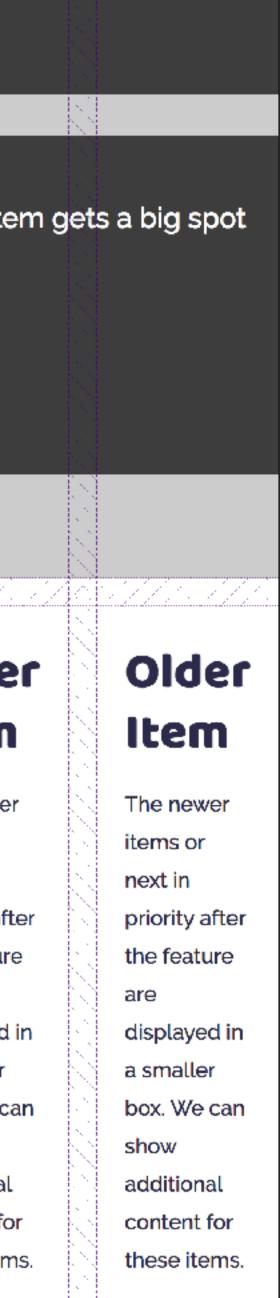
## The listing

Positioning the title top left and the feature top right

```
.box-title {
  grid-column: 1 / 4;
  grid-row: 1 / 2;
}
```

```
.box-feature {
   grid-column: 4 / -1;
   grid-row: 1 / 2;
}
```

This	is a ti	tle				Featu	red Ite			
This is the introductory text for this section of the site.			The first, therefore usually the latest but could be flagged as a feature, item is the feature. This item g up next to the title of this section. It might have an image too. It's special like that.							
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## Larger boxes

Newer items span 4 column tracks. If they also have a class of box-media they span 2 row tracks.

```
.box-newer {
   grid-column: auto / span 4;
}
```

```
.box-newer.box-media {
  grid-row-end: span 2;
```

}



The boxes for older items span 3 tracks.

```
.box-older {
   grid-column: auto / span 3;
}
```

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#### New Item

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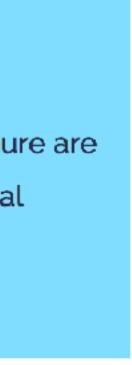
## Featured Item

## **New Item**

The newer items or next in priority after the feature are displayed in a larger box. We can show additional content for these items.

## New Item







CSS Grid

# Going responsive

## Going responsive

Inside media queries we can redefine where items sit on the grid.

```
.box-title {
  grid-column: 1 / -1;
  grid-row: 1;
}
```

```
@media all and (min-width: 53.125em) {
   .box-title {
     grid-column: 1 / 6;
     grid-row: 1 / 3;
   }
}
@media all and (min-width: 75em) {
   .box-title {
     grid-column: 1 / 4;
     grid-row: 1 / 2;
```

## Going responsive

Or redefine how many columns they span.

```
.box-newer {
  grid-column: 1 / -1;
@media all and (min-width: 28.125em) {
  .box-newer {
    grid-column: auto / span 6;
@media all and (min-width: 53.125em) {
  .box-newer {
    grid-column: auto / span 4;
```

## **New Item**

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EXP/2

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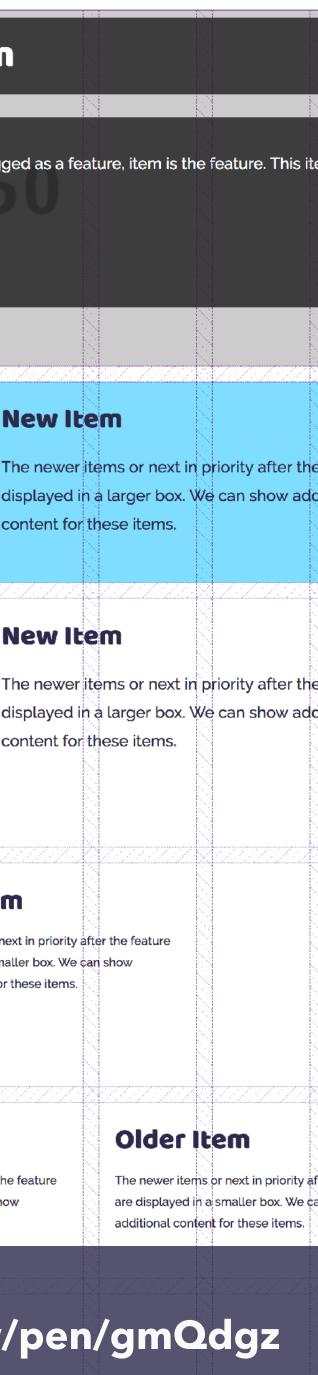
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are displayed in a smaller box. We can show





## CSS Grid Layout

## What about old browsers?



## If using display: grid on a container, child items:

- Using float, lose their float behaviour
- The vertical-align property has no effect
- Flex items become grid items
- Items set to display: block or inline-block become grid items
- Items set to display: table-cell stop creating anonymous boxes

You do not need to build "two layouts"

It makes sense to start using grid on new sites right now.

## Grid Layout: 84%

May 2017 Browser Support

**CSS Support** @font-face Web Font Background Clip/Ori Border Images **Border Radius Box Shadow Box Sizing CSS** Animations CSS Columns CSS Gradients CSS3 Selectors Colors hsl(a)/rgba Flexible Box Module Generated Content Grid Layout Media Queries Multiple Background Text Shadow

## **19,751** Total Data Points

	Support	
nts	92.7%	
rigin/Size	92.7%	
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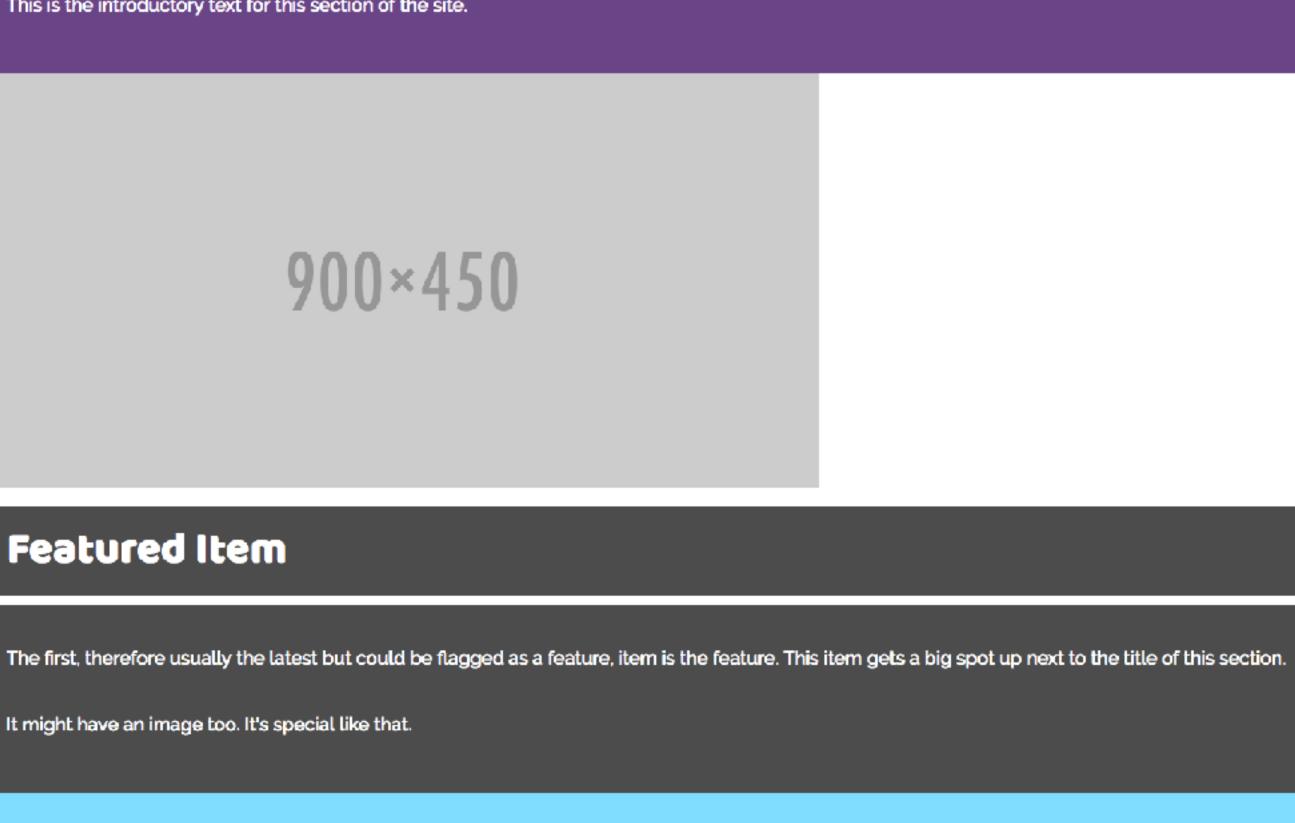
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## Adding a flex fallback

Browsers that support display: flex and not grid will turn the children into flex, not grid, items.

The flex properties applied to those items will be ignored by grid layout.

```
.listing {
 display: flex;
 flex-wrap: wrap;
 margin: 0 20px;
 display: grid;
 grid-template-columns: repeat(12,1fr);
 grid-gap: 20px;
```

```
.listing > * {
 flex: 1 1 30%;
 margin: 0 20px 20px 20px;
```



Feature Queries are your new best friend

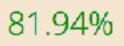
## CSS Feature Queries 🖹 - CR

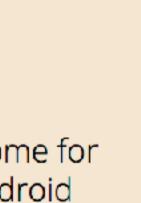
CSS Feature Queries allow authors to condition rules based on whether particular property declarations are supported in CSS using the @supports at rule.

Current alig	ned Usage relative Date	relative Show all							
IE	Edge	* Firefox	Chrome	Safari	Opera	iOS Safari *	Opera Mini *	Android * Browser	Chrom Andr
			49						
			55			9.3		4.4	
		51	56	10		10.2		4.4.4	
11	14	52	57	10.1	44	10.3	all	53	56
	15	53	58	TP	45				
		54	59		46				
		55	60						
Notes	Known issues (2)	Resources (7)	Feedback						

See also the CSS.supports() DOM API

#### Global













## Using feature queries

Add a margin for flex layout, remove it if we are using grid layout.

```
.listing > * {
   flex: 1 1 30%;
   margin: 0 20px 20px 20px;
}
@supports(display: grid) {
   .listing > * {
      margin: 0;
```

}

}

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## Featured Item

The first, therefore usually the latest but could be flagged as a feature, item is the feature. This item gets a big spot up next to the title of this section.

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## New Item

## 900×450

It might have an image too. It's special like

## **New Item**

The newer items or next in priority after the feature are displayed in a larger box. We can show additional content for these items.





Give the feature box a larger flexbasis percentage. .listing .box-feature {
 flex: 1 1 60%;
}

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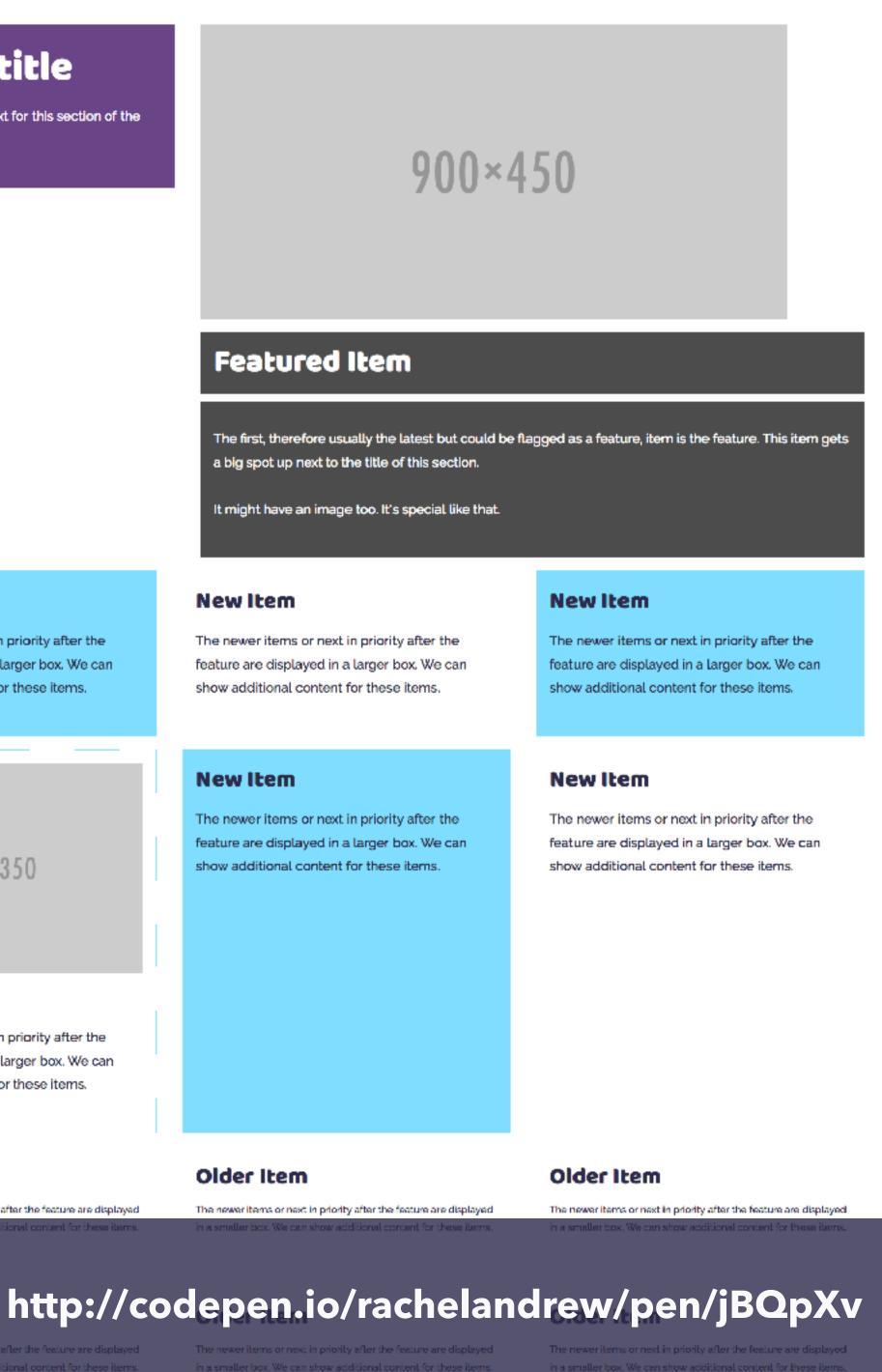
#### Older Item

The newer items or next in priority after the feature are displayed

#### Older Item

n a smaller box. We can show additional content for these items.

in a smaller box. We can show additional content for these items.





The float and clear properties have no effect on a grid item.

https://codepen.io/rachelandrew/pen/YZeqZv

```
.grid > div {
  float: left;
}
.grid {
  display: grid;
  grid-gap: 10px;
  grid-template-columns: repeat(3, auto);
  width: 500px;
}_____
```

## display: inline-block

The properties associated with something being inline-block cease to apply.

https://codepen.io/rachelandrew/pen/vxdGjQ

```
.grid > div {
   display: inline-block;
}
.grid {
   display: grid;
   grid-gap: 10px;
   grid-template-columns: repeat(3, auto);
   width: 500px;
}_____
```

Anonymous boxes will not be generated and the item will become a grid item.

https://codepen.io/rachelandrew/pen/bqLpQN

```
.grid > div {
 display: table-cell;
 vertical-align: top;
}
.grid {
 border-spacing: 10px;
.grid {
 display: grid;
 grid-gap: 10px;
 grid-template-columns: repeat(3, auto);
 width: 500px;
```

## The vertical-align property

Can be used as a fallback for box alignment and ceases to apply on grid items.

https://codepen.io/rachelandrew/pen/vxdGaQ

```
.grid > div {
   display: inline-block;
   vertical-align: top;
}
.grid {
   display: grid;
   grid-gap: 10px;
   grid-template-columns: repeat(3, auto);
   width: 500px;
```

## Multiple-column layout

Multiple-column layout properties cease to apply in grid layout.

https://codepen.io/rachelandrew/pen/JWpXxv

```
.grid {
   column-count: 3;
   width: 500px;
}
.grid {
   display: grid;
   grid-gap: 10px;
   grid-template-columns: repeat(3, auto);
}
```



Grid will override flex layout and shares box alignment properties.

https://codepen.io/rachelandrew/pen/YZeqMB

```
.grid {
 display: flex;
 align-items: center;
 width: 500px;
 height: 200px;
 border: 1px dotted #694486;
}
.grid > div {
 flex: 1;
}
.grid {
 display: grid;
 grid-gap: 10px;
 grid-template-columns: repeat(3, auto);
```

Overrides inside asupports are mostly widths & margins

## Override widths in feature queries

Watch out for widths in your fallback layouts.

https://codepen.io/rachelandrew/pen/JWpXNr

```
* { box-sizing: border-box; }
.grid > div {
 float: left;
 width: 33.333%;
}
@supports (display: grid) {
  .grid > div {
    width: auto;
  }
.grid {
 display: grid;
  grid-gap: 10px;
  grid-template-columns: repeat(3, 1fr);
  width: 500px;
```

## Grid "fallbacks" and overrides

Defined in the CSS Grid Specification are the ways in which grid interacts with other layout methods. These definitions mean that as soon as an item becomes a grid item, other behaviour that you may have used for older browsers is overwritten. This means that you do not have to completely fork your code and build two versions. Where you do need to overwrite CSS used for older browsers, you can do so inside a CSS Feature Query. This enables safe encapsulation of any CSS you only want a grid supporting browser to apply.

Here is a quick reference to the defined overrides with simple examples. See the resources at the end of this cheatsheet for more advice and examples.

#### Floated items

If you float an item, in your CSS for non-grid browsers, when that item becomes a grid item float ceases to have any effect. The clear property applied to an item that becomes a grid item also no longer takes effect.

Example

<div class="grid"> <div>One</div> <div>Two</div> <div>Three</div> </div>

#### Float and clear have no effect on a grid item

https://rachelandrew.co.uk/css/cheatsheets/grid-fallbacks



Follow

21.5K followers

- Currently tied to the IE10 implementation Prefixed with -ms No auto-placement or grid-template-areas layout For simple line-based positioning it works More at <u>https://rachelandrew.co.uk/archives/2017/04/04/edge-starts-work-</u>
  - <u>on-their-grid-implementation-update/</u>

- don't generally want this!
- want to support future Edge: <a href="http://gwhitworth.com/blog/2017/05/">http://gwhitworth.com/blog/2017/05/</a> accurately-checking-for-css-grid-support-in-microsoft-edge

Update to Autoprefixer 7 - previous versions would add -ms-grid prefixes. You

Post from Greg Whitworth of Microsoft if you are using Feature Queries and







March 2017

March 2017

March 2017



## March 2017

## March 2017

Sooooon!



Let browser vendors know which features you want.

#### How can we improve the Microsoft Edge developer experience?

← Microsoft Edge Developer



#### Update CSS Grid

Update the IE implementation of Grid Layout to match the current spec. The current implementation from the IE 10 days is outdated.



mnsth shared this idea · October 02, 2014 · Flag idea as inappropriate ...



Microsoft Edge Developer UserVoice (Admin, Windows Developer) responded · April 03, 2017 WORKING ON IT Since proposing Grid Layout to the CSS Working Group and shipping an experimental implementation in IE10, we have been heavily invested in advancing it through the standard process.

Today we're pleased to announce that work has begun on updating our implementation to the latest Candidate Recommendation spec. We're excited about the level of developer and implementor interest in Grid Layout, and look forward to see how it will be used on the Web.

To track our progress with updating CSS Grid go to https://developer.microsoft.com/en-us/microsoftedge/platform/status/gridupdate/?g=grid

Show previous admin responses (1)

#### 165 comments

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#### dev.windows.com

New and returning users may sign in

Microsoft Edge Developer: CSS
Post a new idea
All ideas
My feedback
Accessibility 10
CSS 97
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Extensions 52
F12 Developer Tools (174)
Graphics 24
HTML 43
JavaScript (77)
Media (29)
Microsoft Edge Dev site 17
Miscellaneous 67
Networking 33
Performance 21
Security 24

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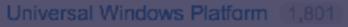
Tweet - Like < 48

Q.

#### **Give feedback**

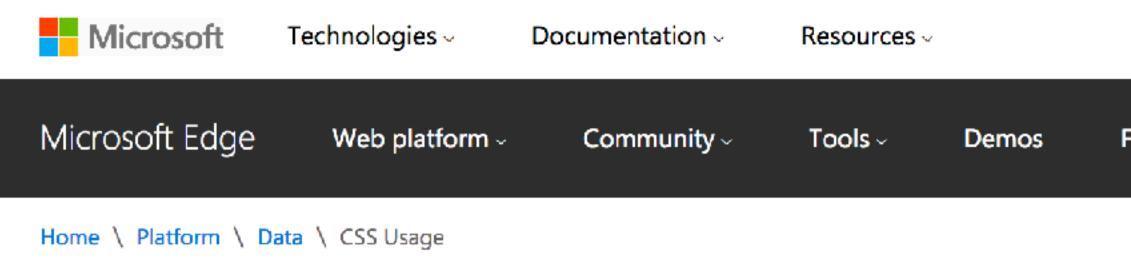
Command Prompt / Console / Bash on Ubuntu on Windows (413)

#### https://wpdev.uservoice.com/forums/257854-microsoft-edge-developer/



Windows App Studio (795)





## CSS usage on the web platform

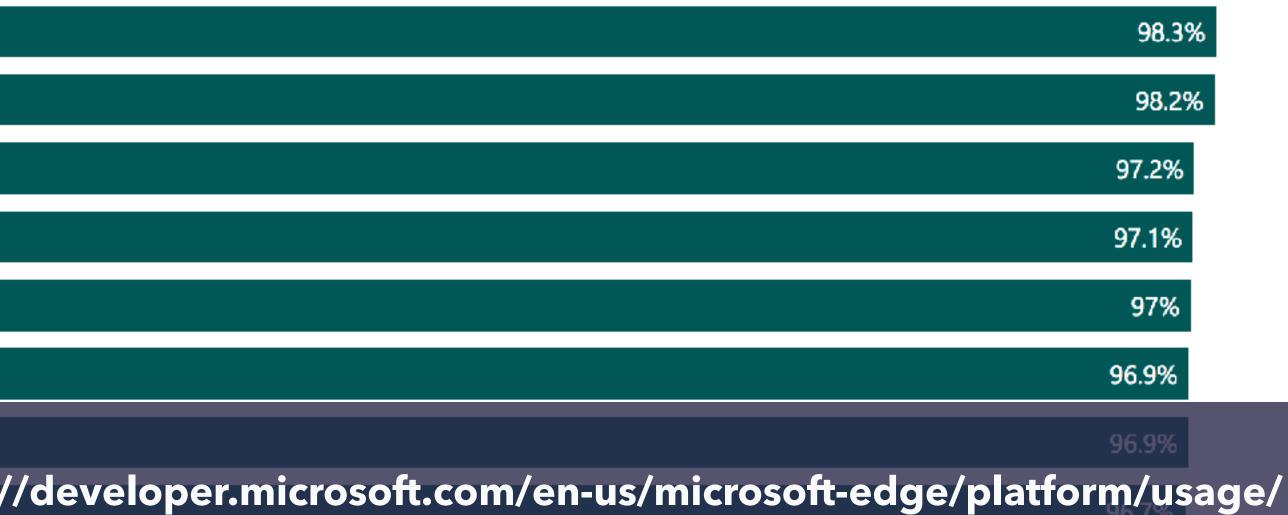
## 352 properties

#### Filter properties

property-name

font-size	
color	
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margin-top	
margin-left	
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margin-bottom	
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Feedback & support



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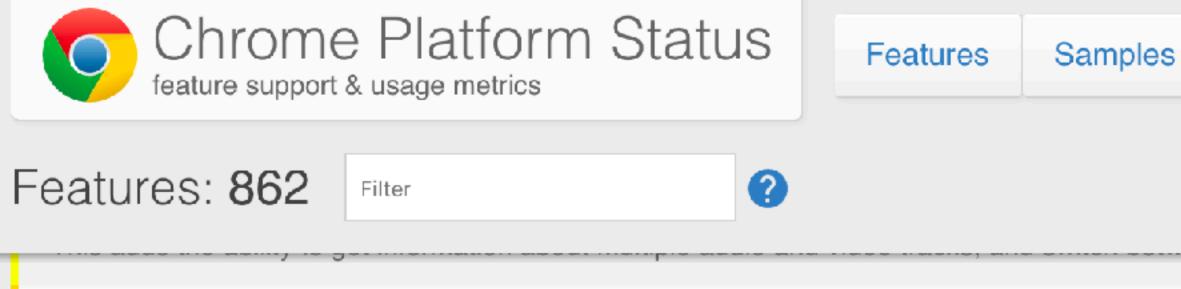
Suspendisse potenti. pretium fermentum varius elementum.



## Exclusions

Defines the wrap-flow property, which enables wrapping content round all sides of an element.

```
.exclusion {
   -ms-wrap-flow: both;
   wrap-flow: both;
}
```



## CSS Exclusions

Define areas inline content should avoid, and how inline content should wrap around them.

Chromium status		Conse	nsus	Web de s	veloper: ignals
Proposed		۲	е	0	Ť
Launch bug	#234749				
Owner(s)	betravis@adobe.com	Working draft or equivalent			it

#### Comments

Rossen Atanassov from Microsoft is co-editor on the spec. IE shipped with a prefix. Apple removed the code saying it "needs some evolution before the actual implementation happens" trac.webkit.org/changeset/166618

## CSS Selector Pseudo class :dir()

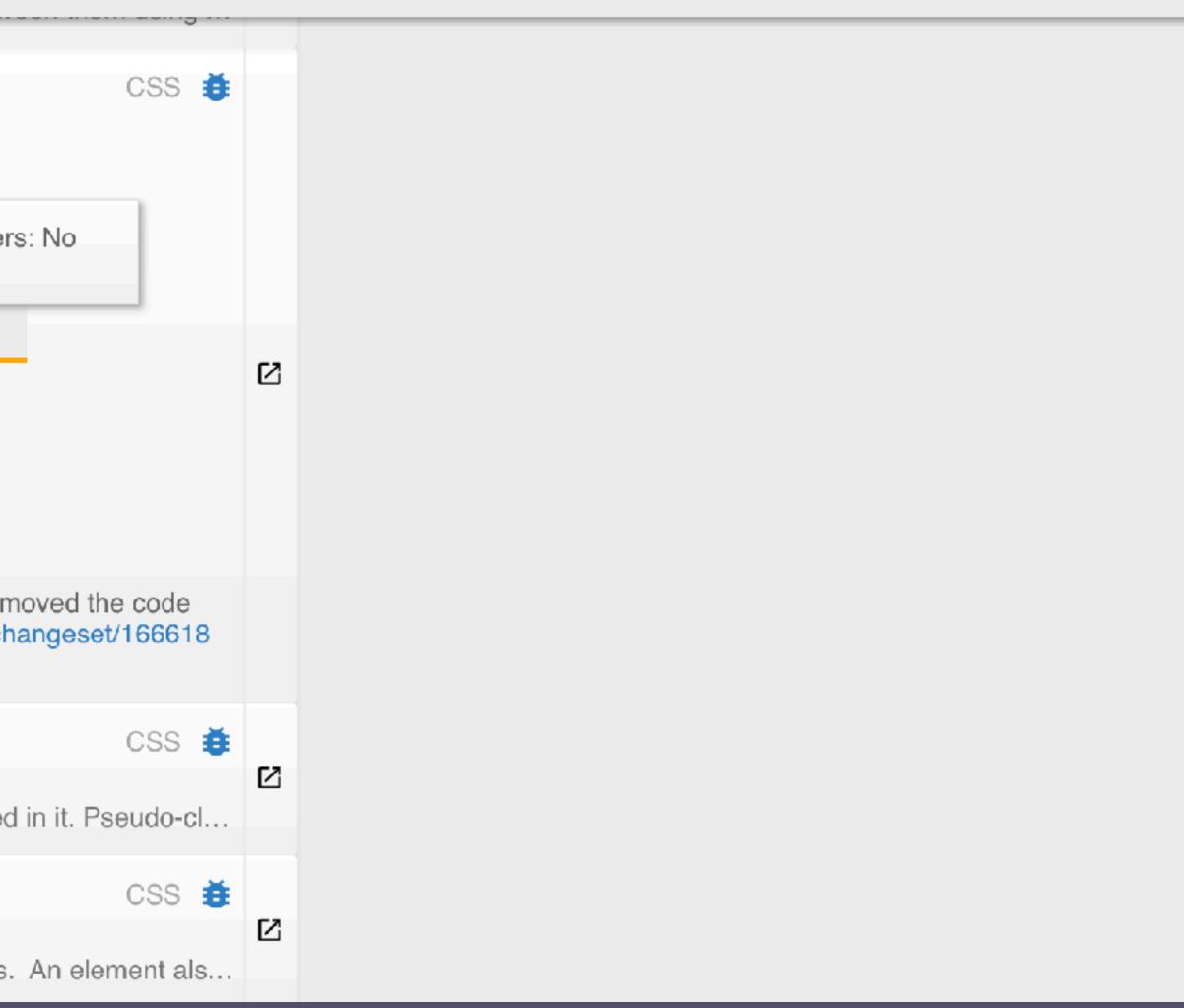
The :dir CSS pseudo-class matches elements based on the directionality of the text contained in it. Pseudo-cl...

## CSS Selectors Level 4: :focus-within pseudo-class

The :focus-within pseudo-class applies to elements for which the :focus pseudo class applies. An element als...

## CSS backdrop-filter property

https://www.chromestatus.com/features/6296903092273152





You can get involved in the future of CSS.

This repository Search Pull requests Issues Gist	🖍 +- 🎆-
□ w3c / csswg-drafts● Unwatch -156	437 ¥ Fork 107
↔ Code ① Issues 557 ① Pull requests 11     Projects 3	
Filters -     Q is:issue is:open css-grid     Labels     Milestones	New issue
Clear current search query, filters, and sorts	
□ ① 40 Open ✓ 78 Closed Author → Labels → Projects → Milestones →	Assignee - Sort -
Image: Content of the second secon	Г З
Image: Image: Content of the second state o	Γ 1
<ul> <li>Icss-grid] Grid Area Section 9. not logically consistant with Section 3.3 definition of Grid Area #1159 opened 4 days ago by sunright</li> </ul>	
Image: Image: text-and stretching tracks fails to feed back into sizing algorithm css-grid-1 #1150 opened 6 days ago by fantasai	Ç. 1
<ul> <li>[css-grid] Automatic Minimum Size for grid items should not min against content size</li> <li>css-grid-1</li> <li>#1149 opened 6 days ago by fantasai</li> </ul>	Ç. 1
Implementations don't match the Flex Container Intrinsic Main Sizes algo, resulting in gratuitous differences from equivalent Grid layouts css-flexbox-1 #1147 opened 6 days ago by tabatkins	Ç 2
I [css-grid] grammar of grid-row-start and friends is ugly and harms value space for line names Agenda+ css-grid-1 #1137 opened 8 days ago by therealglazou	ıb.com/w3c/csswg-drafts



#### w3c / csswg-drafts

<> Code

() Issues 557

11 Pull requests 11

Projects 3

## [css-grid] Decorative grid-cell pseudo-elements #499

() Open

tabatkins opened this issue on 19 Sep 2016 · 6 comments



tabatkins commented on 19 Sep 2016

@jensimmons proposes adding a grid-cell pseudo so you can add (responsive) decorative elements to grids without having to add empty elements to your page.

Syntax like:

```
#grid::grid-area(1 / 2 / 3 / 4) {
  background-color: red; /* etc */
  /* grid-positioning properties are blacklisted */
```

Also some way of controlling whether or not that takes up auto-flow space. Might want to reserve space or not. Can we base this on 'content' or something? Or do we need a new property?

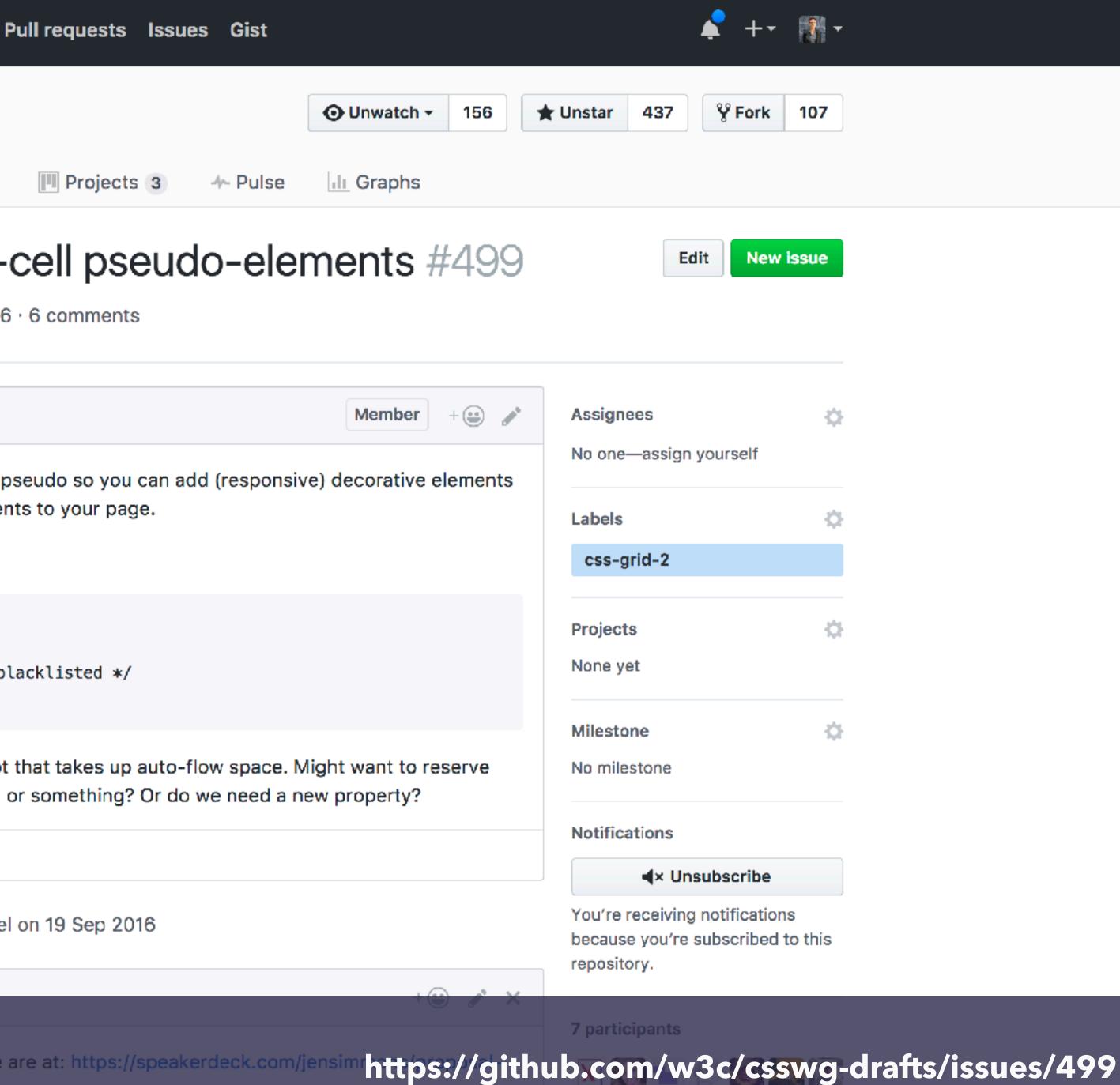
👍 3

X tabatkins added the css-grid-2 label on 19 Sep 2016



10 0.

The slides from the presentation I just gave are at: https://speakerdeck.com/jens to-csswg-sept-2016





Comment on or raise new issues against CSS specifications Raise bugs against browsers Vote on features where browsers have a platform to do so Write about new features - it demonstrates we want them Be nice while doing it. Browser engineers and spec editors work within constraints just as you do in your projects.



# is here!

## I made you some resources

Visit Grid by Example for worked examples, patterns with fallbacks, and a free video tutorial: gridbyexample.com

I created a huge set of guides for MDN: https://developer.mozilla.org/en-US/docs/Web/CSS/ CSS\_Grid\_Layout

Over 4 years of grid thoughts on my site at: https://rachelandrew.co.uk/archives/tag/cssgrid

## @rachelandrew

## Resources & code: https://rachelandrew.co.uk/speaking/event/frontend-united-2017

# THANK YOU!



