Coming soon to CSS

Rachel Andrew

Coming soon to CSS

Rachel Andrew

Gaps for everyone

Slides & resources https://noti.st/rachelandrew

The gap properties gap, row-gap, column-gap

```
.flex {
   display: flex;
   margin: 0 -10px;
}
```

```
.flex > * {
   flex: 1 1 auto;
   margin: 0 10px;
}
```

```
.flex {
  display: flex;
 gap: 20px;
}
.flex > * {
 flex: 1 1 auto;
}
```

What happened to grid-gap?

Box alignment

The specification for alignment and space distribution across all layout methods.

The grid- properties are maintained as aliases.

gap property for Flexbox 🗈 - wd

gap for flexbox containers to create gaps/gutters between flex items

Curr	ent aligr	ned Usage re	elative Date	relative	Apply filters	Show all	?									
	IE	Edge	Firefox	Chrome	Safari	Opera	iOS Safari *	Opera Mini *	Android * Browser	Opera Mobile	Chrome for Android	Firefox for Android	UC Browser for Android	Samsung Internet	QQ Browser	Baid Brow:
			2-62													
6	-10	12-83	63-78	4-83	3.1-13	10-68	3.2-13.3		2.1-4.4.4	12-12.1				4-11.2		
	11	84	79	84	13.1	69	13.5	all	81	46	84	68	12.12	12.0	10.4	7.1
			80-81	85-87	14-TP		14.0									



Usage % of all users \$? Global 50.53%

Can we detect Flexbox gap support with Feature Queries?

```
Slides & resources https://noti.st/rachelandrew
```

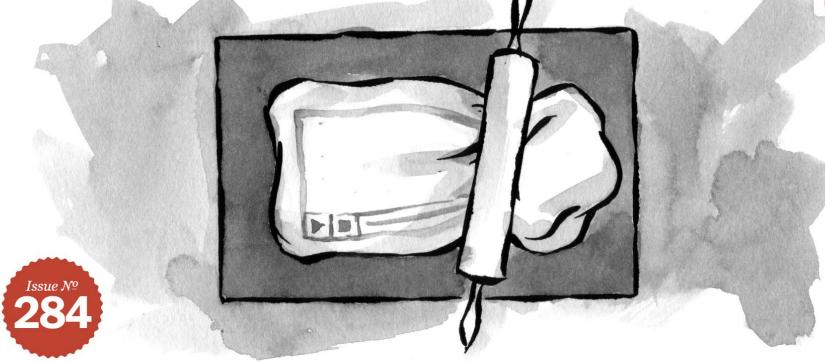
```
@supports (display: grid) {
   .grid {
      /* grid things here */
   }
}
```

```
@supports (gap: 20px) {
   .flex {
      /* matches due to support
  for gap in grid. */
   }
}
```

Aspect Ratios

Northwestern

Northwestern's Online MS in Information Design and Strategy. Choose from tracks in content strategy, data science and analytics, and learning design.



A LIJI AFAN

Creating Intrinsic Ratios for Video

by Thierry Koblentz · May 25, 2009

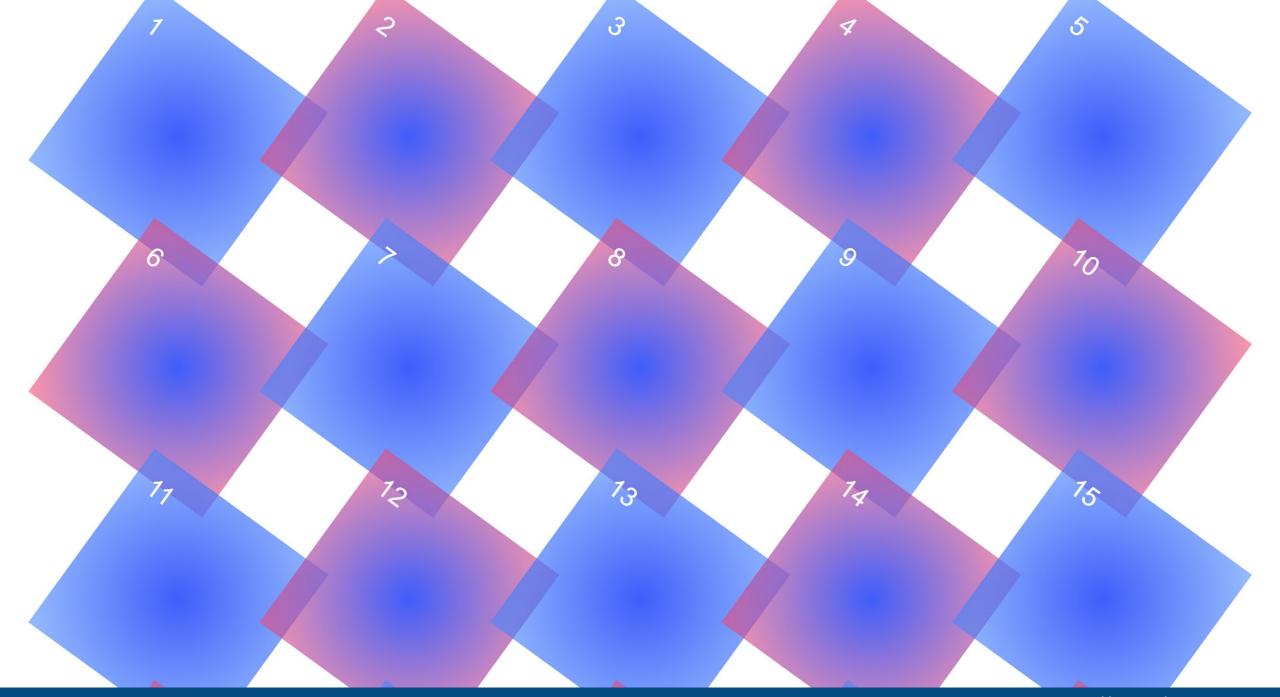
Published in CSS, HTML, JavaScript, Responsive Design

The aspect-ratio property

https://developer.mozilla.org/en-US/docs/Web/CSS/aspect-ratio

.grid { display: grid; gap: 20px; grid-template-columns: repeat(auto-fill, minmax(250px, 1fr)); }

```
.grid > * {
  aspect-ratio: 1 / 1;
  transform: rotate(0.1turn);
}
```

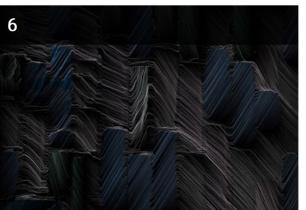


Internal mapping

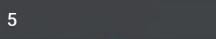
Modern browsers use the width & height attributes to internally map image aspect ratios to prevent loading shifts.

Masonry in CSS







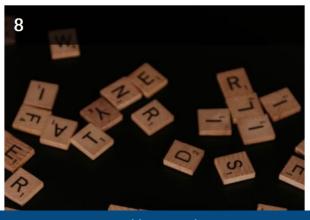












```
.masonry {
   display: grid;
   gap: 20px;
   grid: masonry / repeat(auto-fill, minmax(250px, 1fr));
```

Does masonry belong in the CSS Grid Spec?

https://rachelandrew.co.uk/archives/2020/05/05/does-masonry-belong-in-the-css-grid-specification/

Subgrid

Subgrid examples

https://gridbyexample.com/examples/#css-grid-level-2-examples

a taam at Migraaft Edge are marking on

... a team at Microsoft Edge are working on rearchitecting Chromium's Grid support to use the new LayoutNG engine - and as part of this are intending to add subgrid support!

https://blog.chromium.org/2020/06/improving-chromiums-browser.html

prefers_reduced_data

@media (prefers-reduced-data: no-preference) { .hero { /* download large image */ } }

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🕞 🖬 Elements Console Sources Network Performance Memory Application Security Lighthouse	◎ 4 ☆ : ×
html	Styles Computed Event Listeners >>>
<html class="enhanced js wf-loaded-stage1 wf-loaded-stage2" lang="en"></html>	These sheet all a little
▶ <head></head>	Filter :hov .cls +
▼ <body class="homepage enhanced js anonymous non-subscriber" id="home"></body>	element.style {
▶ <div class="cookies hidden" dir="ltr" id="cookiebanner" lang="en" name="cookiebanner" style="display: block;"></div>	}
▶ <div data-handler="PreLoad" id="top"></div>	.featured-article_title main.css:7
<a class="skip-main" href="<u>#main</u>">Skip to main content	.featured-articletitlea {
Jump to list of all articles	<pre>color: #fff;</pre>
▶ <header class="main-header"></header>	text shadow: none;
▶ <div></div>	background: ► 0 0;
▶ <div class="constrast-switch-container"></div>	text-shadow: □1px 1px 1px ■rgba(0,0,0,.25);
▼ <main id="main" tabindex="-1"></main>	position: static;
▼ <div class="featured-articles-container"></div>	}
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loaded-stage1.wf-loaded-stage2 body#home.homepage.enhanced.js.anonymous.non-subscriber main#main div.featured-articles-container article.featured-article h2.featured-article_title a.featured-article_title_a	.featured-articles-container .featured-
Console Rendering ×	×
Emulate a focused page	

Emulates a focused page.

Emulate CSS media type

Forces media type for testing print and screen styles

No emulation 🔻

Emulate CSS media feature prefers-color-scheme

Forces CSS prefers-color-scheme media feature

No emulation

Emulate CSS media feature prefers-reduced-motion Forces CSS prefers-reduced-motion media feature

•

•

No emulation

Emulate CSS media feature prefers-reduced-data

Forces CSS prefers-reduced-data media feature

No emulation

No emulation

prefers-reduced-data: reduce

No emulation 🔹

User preference media features

Part of Media Queries Level 5

::marker

```
li:first-child {
   background-color: rgb(74, 112, 122);
   color: #fff;
}
li:first-child::marker {
   color: black;
}
```

- Stop worrying if your vision is new
- Let others make that decision
- They usually do.

```
h1 {
   display: list-item;
}
h1::marker {
   content: "$\overline{"";
}
```



Veggies es bonus vobis, proinde vos postulo essum magis kohlrabi welsh onion daikon amaranth tatsoi tomatillo melon azuki bean garlic. Gumbo beet greens corn soko endive gumbo gourd. Parsley shallot courgette tatsoi pea sprouts fava bean collard greens dandelion okra wakame tomato. Dandelion cucumber earthnut pea peanut soko zucchini. Turnip greens yarrow ricebean rutabaga endive cauliflower sea lettuce kohlrabi amaranth water spinach avocado daikon napa cabbage asparagus winter purslane kale. Celery potato scallion desert raisin horseradish spinach carrot soko. Lotus root water spinach fennel kombu maize bamboo shoot green bean swiss chard seakale pumpkin onion chickpea gram corn pea.

leading-trim Losing the **extra spacing** around text.

```
h1 {
    text-edge: cap alphabetic;
    leading-trim: both;
}
```

Alphabetic baseline Leading-trim – the future

The problem with text boxes today

In a standard text box, there's almost always extra space above and below the actual text. Because of this, when you use a text box to measure and implement spacing, it ends up larger than you intended. The bigger the line height, the bigger the problem. The example below shows distances between text boxes set to 32px. As you can see, all the vertical spacing is visually much bigger than 32px, even though you set them all to the same value.

https://medium.com/microsoft-design/leading-trim-the-future-of-digital-typesetting-d082d84b202

Anyone can contribute to specifications

You don't need to be an Invited Expert or representative.

WEB PLATFORM CONTRIBUTION GUIDE

Navigation

Web Platform Governance

Intellectual Property Rights Management

Skills

Step by step guide to fix a W3C or WHATWG bug

Paths For Growth

Case Study Examples

Interviews

Finding who to talk to

Glossary of Terms and Jargon

May 2020 / Version 1.0 / Various Authors 1

Getting started with a history, skill guide and how-to of web standards.

Browser (w3c, whatwg) HTML CSS ARIA Window Object

Introduction

The "web platform" is comprised of a collection of standardized application programming interfaces (APIs) that programmers use to make web pages and web applications. This includes technologies, like HTML, CSS and JavaScript. In addition to including a full implementation of the JavaScript programming language that web browsers share with Node.js, web browsers expose their own standardized APIs specifically made for interacting with web pages.

The web platform is powerful and expressive, but it's also a little broken in parts. That's where the other part of the web platform comes in. The term "web platform" *also* describes the people and practices that are meant to include everyone in improving the standard programming interfaces. The web can only work if it's built with an understanding of all its constituents—the whole world! This

https://wpc.guide/

Read and comment on specification issues

https://github.com/w3c/csswg-drafts/issues

₽w3c	/ csswg-drafts	O Unwatch ▼ 31	7 ★ Unstar 1,822 % Fork	k 286
<> Coo	de 🛈 Issues 1,532 🕅 Pull requests 50 💿 Actions 🔟 Projects 9 🕕 S	Security Insights	🔅 Settings	
	-grid] Ability to target items in nth-ro	w or autor	Tilled, Edit	ew issue
imp •• ••••	licit grid #1943			
	licit grid #1943	Member + 🔃 ····	Assignees	¢
	n rachelandrew opened this issue on 6 Nov 2017 · 14 comments			¢
	rachelandrew opened this issue on 6 Nov 2017 · 14 comments		Assignees	¢

}

grid-template-columns: repeat(auto-fill, minmax(150px, 1fr));

They then want to style items on the second (or nth) row differently to the first, they don't have a way to target it. I've mocked it up using MQs. https://codepen.io/rachelandrew/pen/yPJKeo?editors=1100

It's really a selectors issue, would the table pseudo-class selectors (https://drafts.csswg.org/selectors-4/#table-pseudos) work on grid items, or is this another instance of needing to be able to target a row or column of the grid, with the added complication of wanting to target the children of that row or column?

At the moment to do so, they need to go back to taking more control over the grid, rather than using auto-fill, so that they know where each item sits and can use nth-child on the items, or use media queries which makes for less flexible components.

Labels	¢
css-grid-3	
Projects	¢
None yet	
Milestone	\$
No milestone	

Notifications Customize

4× Unsubscribe

You're receiving notifications because you're watching this repository.

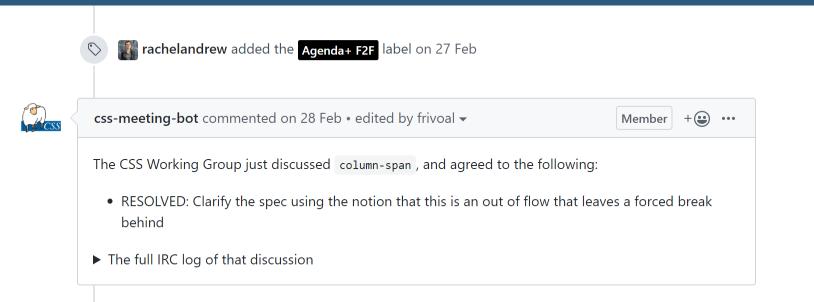
15 participants

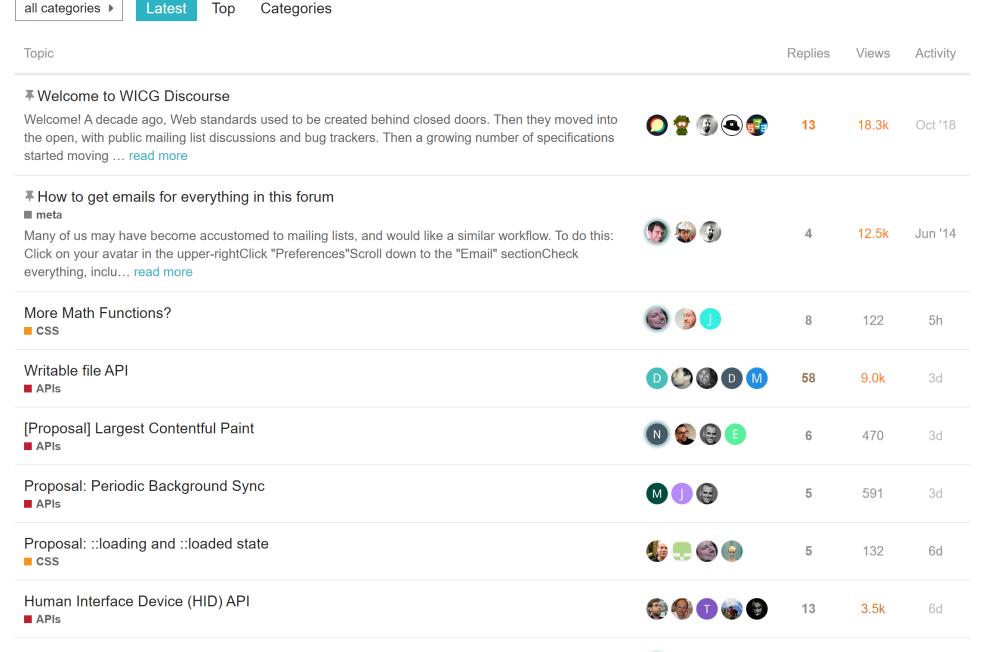


Show use cases

As with any software development, real use cases are valuable.

Contribute examples and diagrams to specifications





[Dronocol] Add owned 25510 and arous 140 to the web or integraphy and

WICG Discourse

https://discourse.wicg.io/

It will probably take longer than you think for changes to be made!

Patience is required for web platform contributions.

Raise browser bugs

Fix bugs, or request that features are implemented.

Learn to create a Reduced Test Case

📀 bugs	chromium 👻 New issue	Open issues Q Search chromium issues	 me@rachelandrew.co.u
	tarred by 326 users	Issue 618969: [css-grid] Implement subgrid support Reported by r@igalia.com on Fri, Jun 10, 2016, 12:24 PM GMT+2 Project Member	Code :
Owner:		There's a new reduced subgrid proposal that we could try to implement at some point.	
CC:	j <u>fernan@igalia.com</u> r <u>@igalia.com</u>		
	svil@igalia.com	The spec section: <u>https://drafts.csswg.org/css-grid/#subgrids</u>	
Status:	Available (Open)	Just reporting the bug to keep track of it and use it as meta-bug during the implementation.	
Components:	Blink>Layout>Grid	<u>Comment 1</u> by <u>m@mko.io</u> on Sun, Jun 12, 2016, 10:56 AM GMT+2	:
Modified:	11 days ago	This makes grid really useful!	•
Editors:			
EstimatedDays:		Comment 2 by sheriffbot@chromium.org on Mon, Jun 12, 2017, 5:05 PM GMT+2 Project Member	:
NextAction:		Status: Untriaged (was: Available) Labels: Hotlist-Recharge-Cold	
Notes:		This issue has been Available for over a year. If it's no longer important or seems unlikely to be fixed, please consider closing it out. If it is important, plea	ase re-triage
OKR_link:		the issue.	
OS :	All	Sorry for the inconvenience if the bug really should have been left as Available. If you change it back, also remove the "Hotlist-Recharge-Cold" label.	
Pri:	<u>3</u>	For more details visit https://www.chromium.org/issue-tracking/autotriage - Your friendly Sheriffbot	
Туре:	<u>Feature</u>	Comment 3 by e@chromium.org on Mon, Jun 12, 2017, 7:55 PM GMT+2 Project Member	:
Hotlist-Recharge-	Cold	Status: Available (was: Untriaged)	÷
Blocking:	Issue 79180	Labels: -Type-Bug Type-Feature	
Your Hotlists:	Update your hotlists	Comment 4 by svil@gmail.com on Fri, Jun 23, 2017, 5:39 PM GMT+2	:
Other Hotlists:	<u>css-grid</u> <u>hotlist</u>	It's just simply delayed. Subgrids were moved to Level 2 of the specs, so they are not a priority at all ATM. But it'll be eventually implemented.	
	<u>Watch</u>	Comment 5 by sheriffbot@chromium.org on Mon, Jun 25, 2018, 6:04 PM GMT+2 Project Member	:
		Status: Untriaged (was: Available)	
		This issue has been Available for over a year. If it's no longer important or seems unlikely to be fixed, please consider closing it out. If it is important, plea the issue.	ase re-triage
		Sorry for the inconvenience if the bug really should have been left as Available.	

Test and offer feedback on features behind flags.

This is the **best time** to make changes to a spec.

CSS Working Group Wiki

Home Specs Ideas Testing About

Search

Search

You are here: CSS Working Group Wiki » Ideas and Resolutions » Incomplete List of Mistakes in the Design of CSS

Incomplete List of Mistakes in the Design of CSS

That should be corrected if anyone invents a time machine. :P

- white-space: nowrap should be white-space: no-wrap
 - and line wrapping behavior should not have been added to white-space
- vertical-align should not apply to table cells. Instead the CSS3 alignment properties should exist in Level 1.
- vertical-align: middle should be text-middle or x-middle because it's not really in the middle, and such a name would better describes what it does.
- Percentage heights should be calculated against fill-available rather than being undefined in auto situations.
- Table layout should be sane.
- Box-sizing should be border-box by default.
- background-size with one value should duplicate its value, not default the second one to auto. Ditto translate().
- background-position and border-spacing (all 2-axis properties) should take *vertical* first, to match with the 4-direction properties like margin.
- The 4-value shorthands like margin should go counter-clockwise (so that the inline-start value is before the block-start value).
- z-index should be called z-order or depth and should Just Work on all elements (like it does on flex items).
- word-wrap/overflow-wrap should not exist. Instead, overflow-wrap should be a keyword on 'white-space', like nowrap (no-wrap).
- The top and bottom margins of a single box should never have been allowed to collapse together automatically as this is the **root of all margin-collapsing evil**.
- Partial collapsing of margins instead of weird rules to handle min/max-heights?
- Tables (like other non-blocks, e.g. flex containers) should form pseudo-stacking contexts.
- The currentcolor keyword should have a dash, current-color. Likewise all other color multi-word keyword names.
- There should have been a predictable color naming system instead of arbitrary X11 names.
- border-radius should have been corner-radius.
- Absolutely-positioned replaced elements should stretch when opposite offset properties (e.g. left+right) are set, instead of being start-aligned.
- The hyphens property should be called hyphenate. (It's called hyphens because the XSL:FO people objected to hyphenate.)
- rgba() and hsla() should not exist, rgb() and hsl() should have gotten an optional fourth parameter instead (and the alpha value should have used the same format as R, G, and B or S and L).

Web Platform Tests

Help us **test** the web platform

webplatformtests

Navigation

Test Suite Design Running Tests Writing Tests Reviewing Tests Project Administration

Quick search

Go

web-platform-tests documentation

The web-platform-tests project is a W₃C-coordinated attempt to build a cross-browser test suite for <u>the Web-platform stack</u>. Writing tests in a way that allows them to be run in all browsers gives browser projects confidence that they are shipping software which is compatible with other implementations, and that later implementations will be compatible with their implementations. This in turn gives Web authors/developers confidence that they can actually rely on the Web platform to deliver on the promise of working across browsers and devices without needing extra layers of abstraction to paper over the gaps left by specification editors and implementors.

The most important sources of information and activity are:

- <u>github.com/web-platform-tests/wpt</u>: the canonical location of the project's source code revision history and the discussion forum for changes to the code
- <u>web-platform-tests.org</u>: the documentation website; details how to set up the project, how to write tests, how to give and receive peer review, how to serve as an administrator, and more
- <u>web-platform-tests.live</u>: a public deployment of the test suite, allowing anyone to run the tests by visiting from an Internet-enabled browser of their choice
- <u>wpt.fyi</u>: an archive of test results collected from an array of web browsers on a regular basis
- <u>Real-time chat room</u>: the <u>IRC</u> chat room named <u>#testing</u> on <u>irc.w3.org</u>; includes participants located around the world, but busiest during the European working day; <u>all discussion is archived here</u>
- Mailing list: a public and low-traffic discussion list

If you'd like clarification about anything, don't hesitate to ask in the chat room or on the mailing list.

Watch a Talk

If you prefer watching a video, here is a talk introducing web-platform-tests:

Many people who work on CSS started by writing tests.

Comment on spec issues, raise new issues, contribute examples, raise browser bugs, write tests.

Thank you!