WHAT'S NEW ON THE WEB PLATFORM?

RACHEL ANDREW, GOOGLE

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New to the web platform

A series of posts to keep you updated with what's landing in web browsers each month.

New to the web platform in April

Discover some of the interesting features that landed in stable and beta web browsers during April 2023.

New to the web platform in March

Discover some of the interesting features that landed in stable and beta web browsers during March 2023.

New to the web platform in February

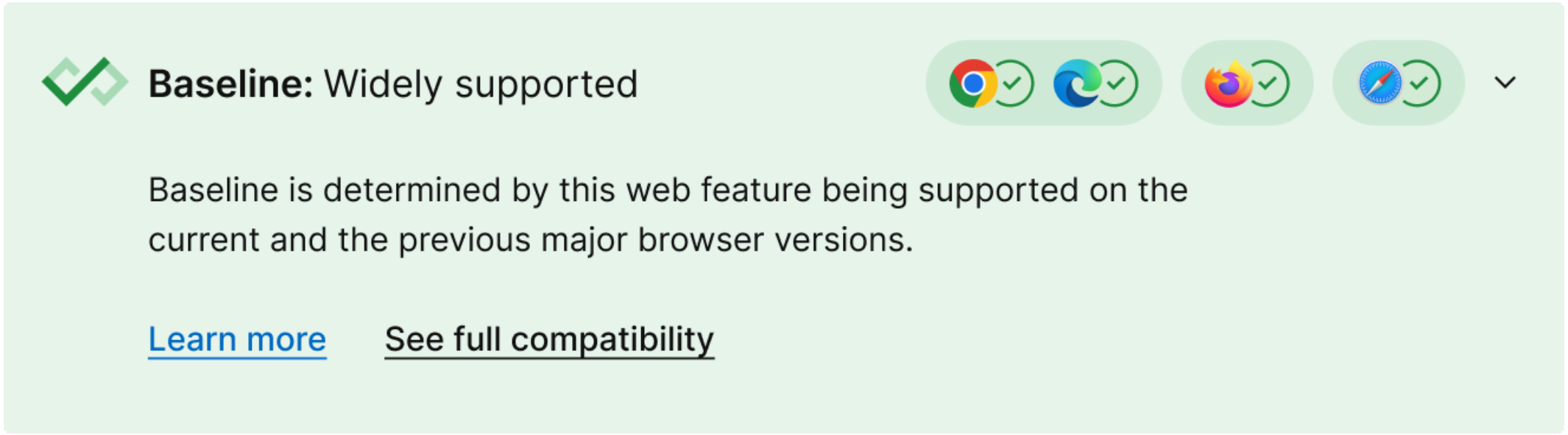
Discover some of the interesting features that landed in stable and beta web browsers during February 2023.

By Chrome DevRel

New web platform features are exciting!

But they also give us more to learn. And, how do we work out if they are available cross-browser and ready to use in production?

Baseline



Learn more at: https://web.dev/baseline/

WHAT'S NEW?

- Web platform features that are part of Baseline.
- Web platform features that are newly interoperable.
- Web platform features we can expect to have broadly available soon.

BASELINE FEATURES

SUPPORTED IN THE CURRENT AND LAST VERSION OF MAJOR BROWSER ENGINES.

Baseline

The <dialog> element

A new HTML element for modal and non-modal dialog pop-ups.

```
<dialog id="myDialog">
  <form method="dialog">
    <p>This is a dialog.</p>
    <button>Close</button>
  </form>
</dialog>
```

Learn more at: https://web.dev/learn/html/dialog/

```
myButton.addEventListener('click', () => {
  myDialog.showModal();
});
```

Learn more at: https://web.dev/learn/html/dialog/

```
dialog::backdrop {
  background: rgba(0, 0, 0, 0.5);
}
```

Baseline

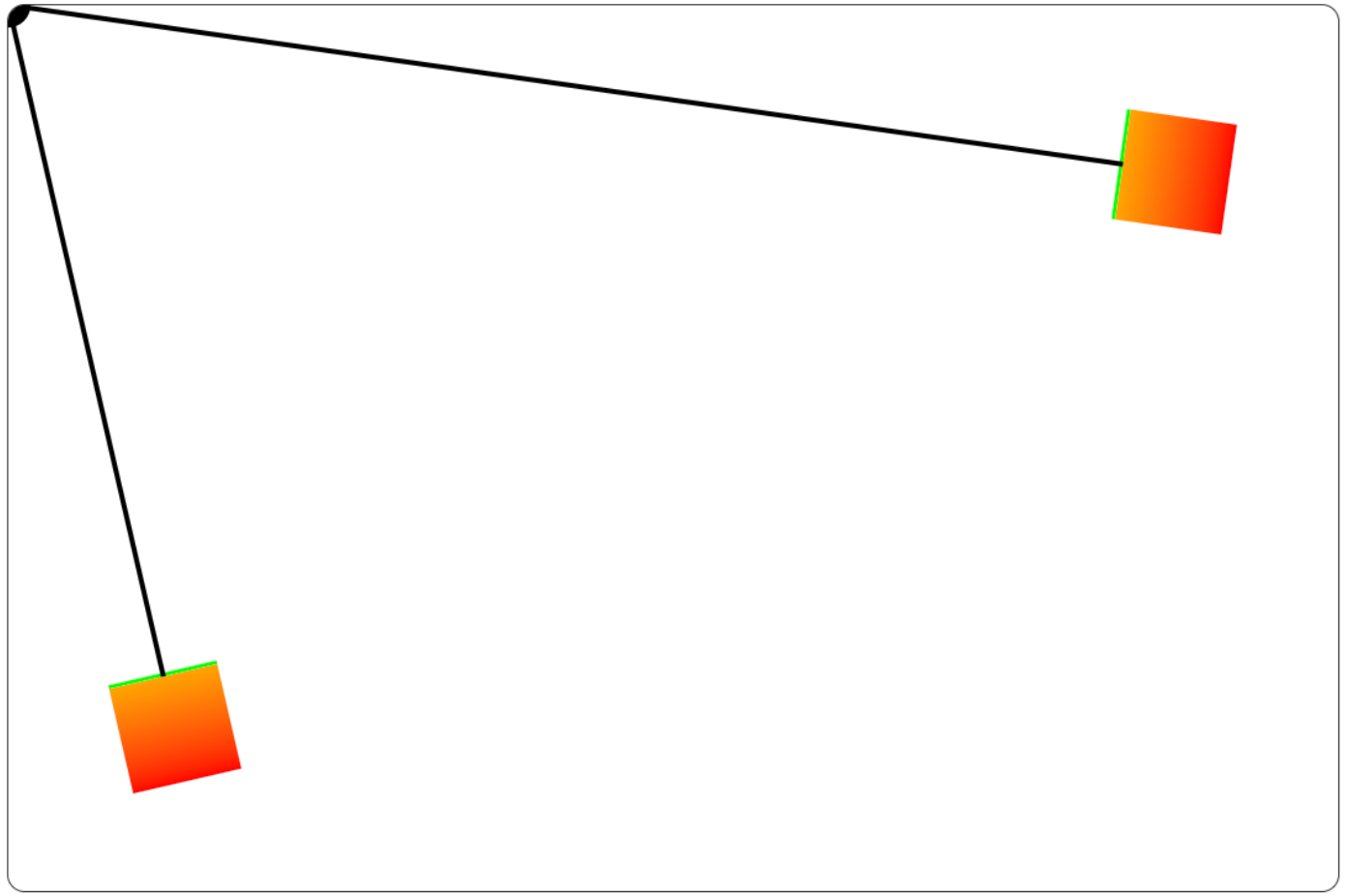
CSS trigonometric functions

More mathematical functions in CSS with the
sin(), cos(), tan(), asin(), acos(), atan(), and atan2() functions.

```
.element {
  width: calc(sin(30deg) * 100px);
  height: calc(sin(30deg) * 100px);
}
```

Learn more at: https://web.dev/css-trig-functions/

💡 *With atan2, you can calculate the rotation for an object so that it points back to a specific point*

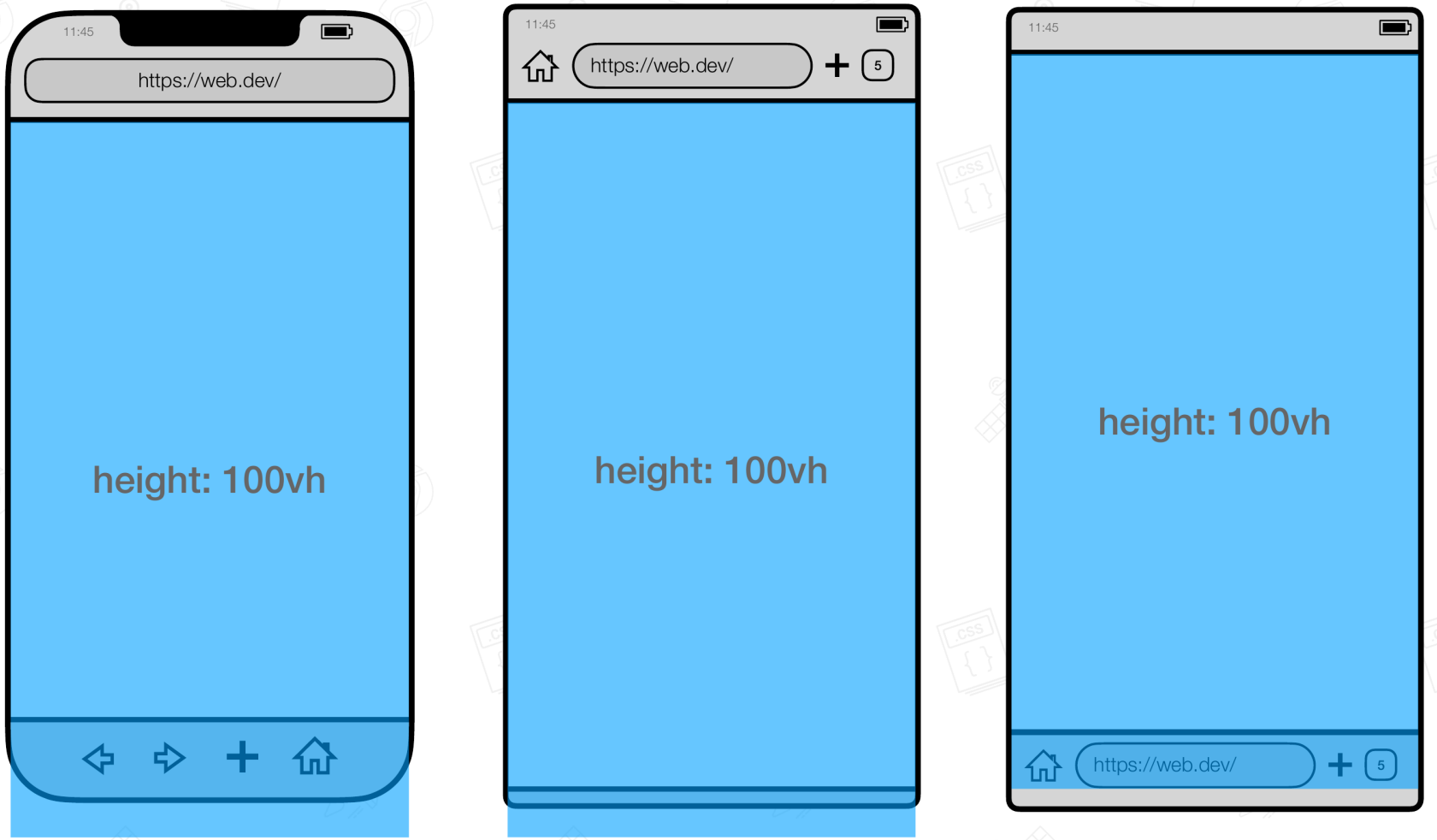


Learn more at: https://web.dev/css-trig-functions/

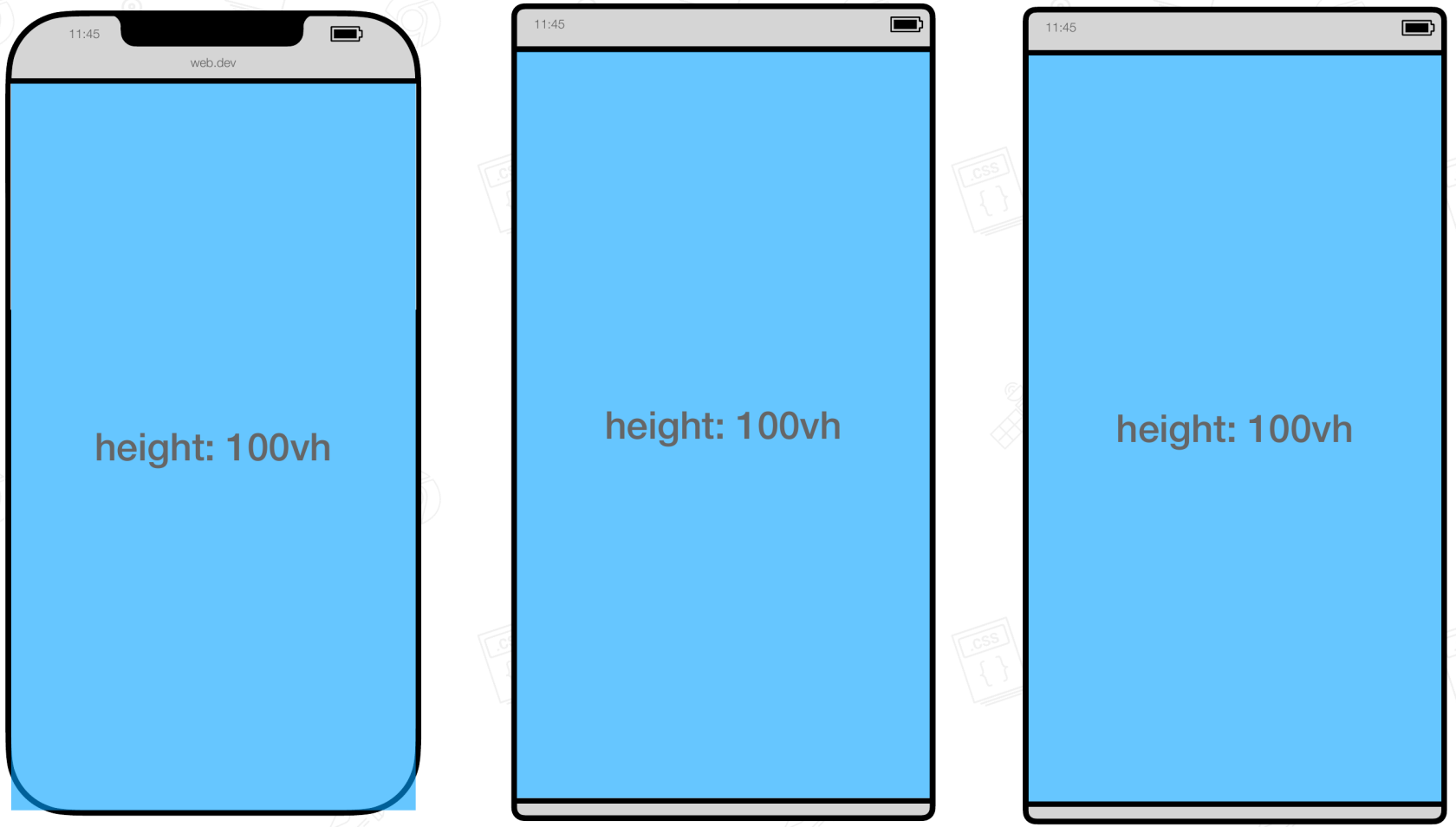
Baseline

Viewport units

Representing the large, small, and dynamic viewport.



Learn more at: https://web.dev/viewport-units/



Learn more at: https://web.dev/viewport-units/

LARGE, SMALL, AND DYNAMIC UNITS

- **Small:** svw, svh, svi, svmin, svmax
- **Large:** lvw, lvh, lvi, lvmin, lvmax
- **Dynamic:** dvw, dvh, dvi, dvmin, dvmax

Baseline

:focus-visible

Show a different focus indicator based on the way a user is interacting with the page.

```
.button:focus-visible {
  outline: 3px solid orange;
  outline-offset: 3px;
}
```

Learn more at: https://hidde.blog/focus-visible-more-than-keyboard/

Baseline

Cascade Layers

Manage the cascade and prevent specificity problems.

```
@layer utilities {
  .padding-sm {
    padding: 0.5rem;
  }

  .padding-lg {
    padding: 0.8rem;
  }
}
```

Learn more at: https://developer.chrome.com/blog/cascade-layers/

```
@layer framework, layout, utilities;
```

Learn more at: https://developer.chrome.com/blog/cascade-layers/

NEWLY INTEROPERABLE

NOW SUPPORTED IN ALL MAJOR BROWSER ENGINES.

Last baseline alignment

All major browser engines now support last baseline alignment in CSS grid and flexbox.

Rachel Andrew
Feb 20, 2023

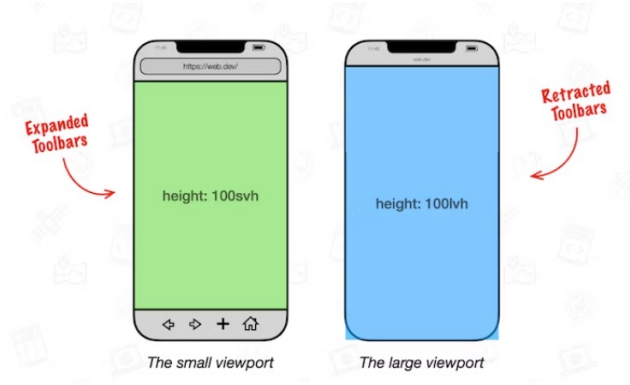
CSS
Newly interoperable

Container queries land in stable browsers

This Valentine's day, we're celebrating size container queries and container query units landing in all stable browsers.

Una Kravets
Feb 14, 2023

CSS
Newly interoperable



The large, small, and dynamic viewport units

New CSS units that account for mobile viewports with dynamic toolbars.

Bramus
Nov 29, 2022

CSS
Newly interoperable

SUBSCRIBE

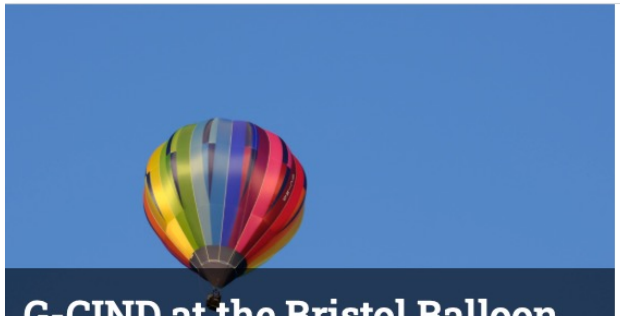
105

110

16

Size container queries

Testing the size of the container, rather than the viewport.



G-CIND at the Bristol Balloon Fiesta 2022

After two years the Bristol Balloon Fiesta was back. Most of Bristol could be found trekking up the hill at 5.30am to worship their strange hot-air demanding gods.

G-CIND at the Bristol Balloon Fiesta 2022

After two years the Bristol Balloon Fiesta was back. Most of Bristol could be found trekking up the hill at 5.30am to worship their strange hot-air demanding gods.

```
.element {
  container-type: inline-size;
}
```

```
.element {
  container-type: inline-size;
  container-name: sidebar;
}
```

```
@container (min-width: 500px) {

}
```

```
@container sidebar (min-width: 500px) {

}
```

104

102

16.4

Media queries range syntax

Streamline your media queries.

```
@media (min-width: 400px) {
/* Styles for viewports with a width
of 400 pixels or greater. */
}
```

Learn more at: https://developer.chrome.com/blog/media-query-range-syntax/

```
@media (width >= 400px) {
/* Styles for viewports with a width
of 400 pixels or greater. */
}
```

Learn more at: https://developer.chrome.com/blog/media-query-range-syntax/

```
@media (min-width: 400px) and (max-width: 600px)
{
/* Styles for viewports between
400px and 600px. */
}
```

Learn more at: https://developer.chrome.com/blog/media-query-range-syntax/

```
@media (400px <= width <= 600px ) {
/* Styles for viewports between
400px and 600px. */
}
```

Learn more at: https://developer.chrome.com/blog/media-query-range-syntax/

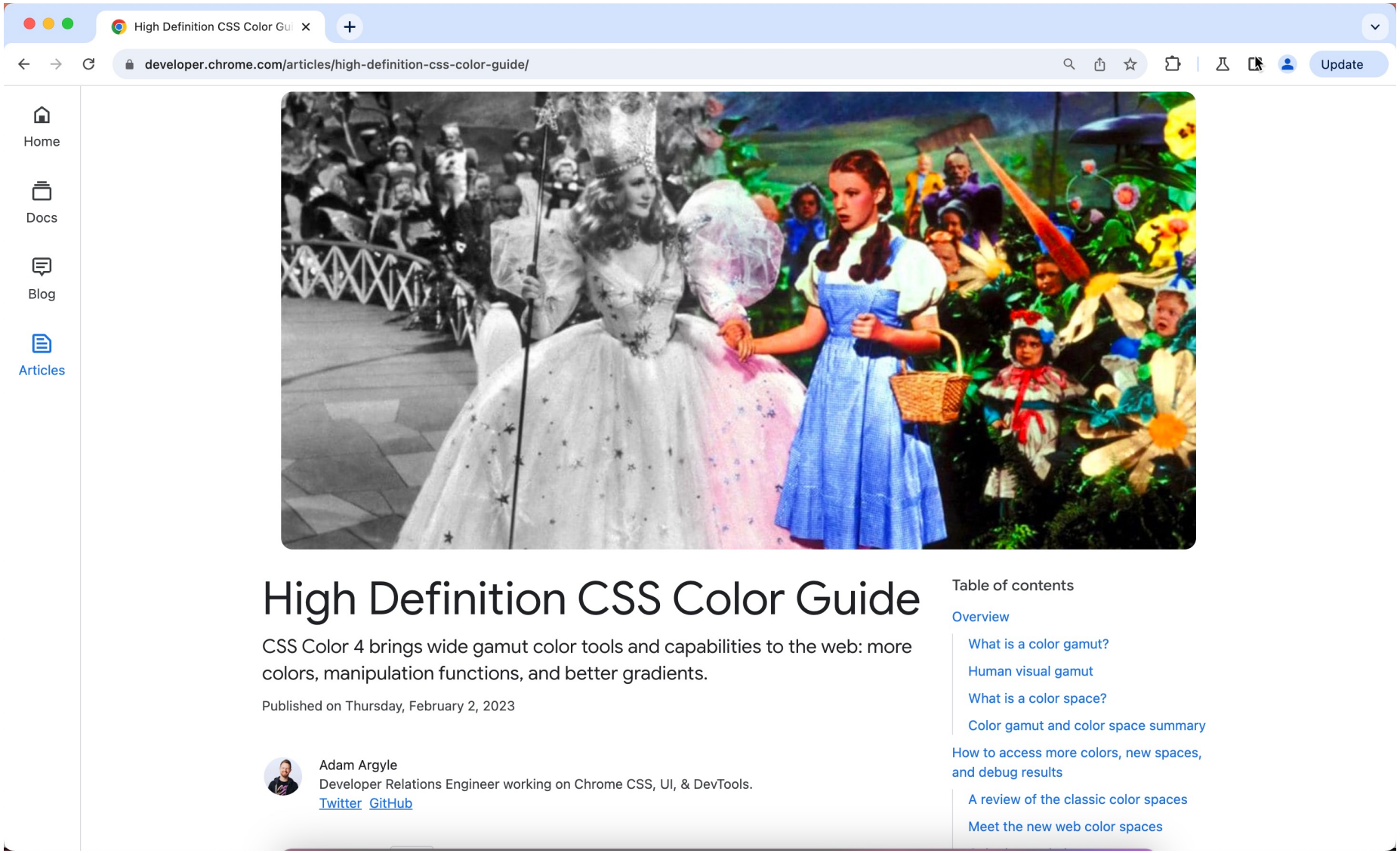
111

113

16.2

New color spaces and functions

The color(), lab(), lch(), oklab(), oklch(), and color-mix() CSS functions.



Learn more: https://developer.chrome.com/articles/high-definition-css-color-guide/

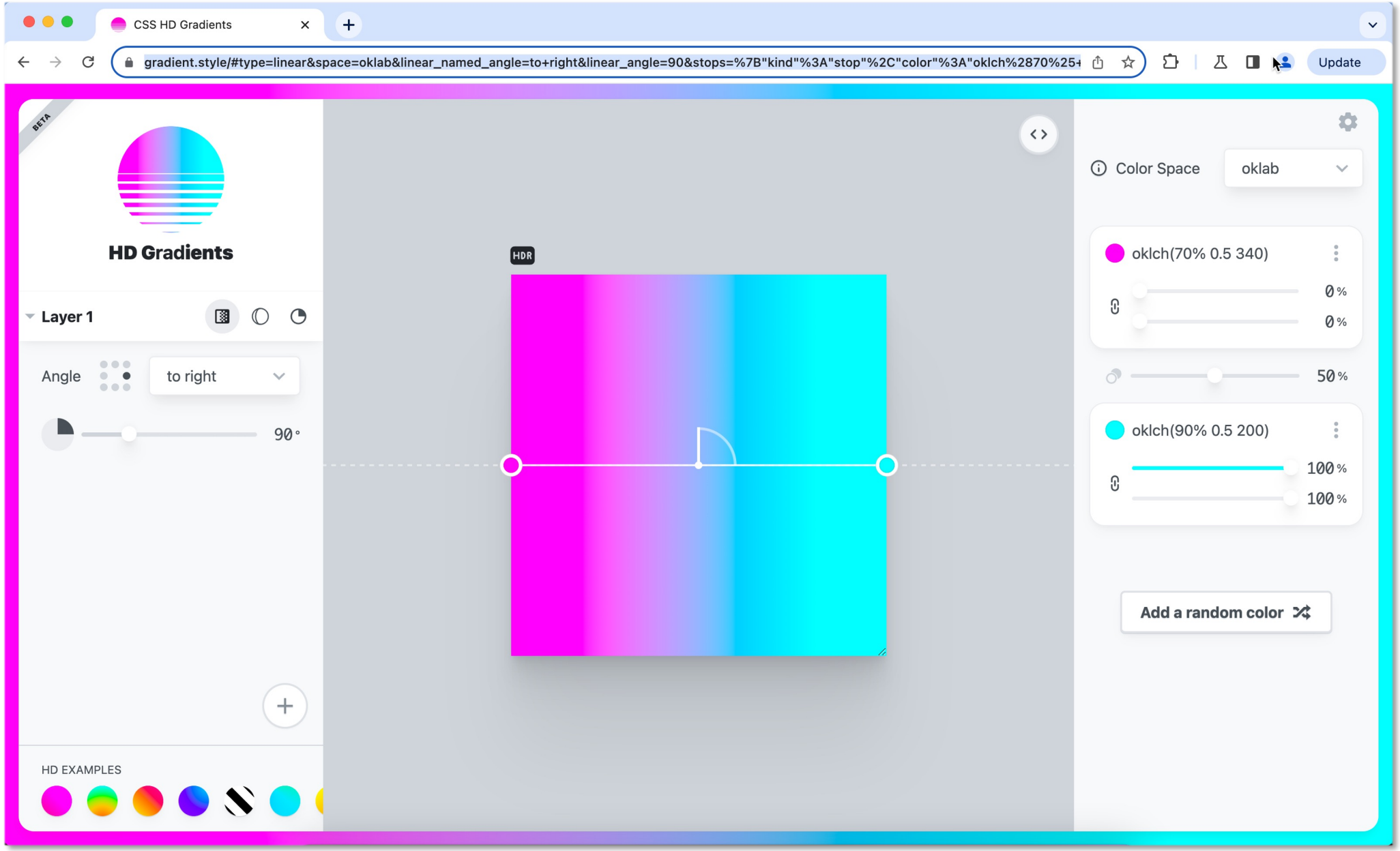
```css
li {
  background-color: color-mix(in srgb, #34c9eb 10%, white);
}

li:nth-child(2) {
  background-color: color-mix(in srgb, #34c9eb 40%, white);
}

li:nth-child(3) {
  background-color: color-mix(in srgb, #34c9eb 70%, white);
}
```

Learn more: https://developer.chrome.com/blog/css-color-mix/

10% #34c9eb
40% #34c9eb
70% #34c9eb



Play with color at: https://gradient.style

80 113 16.4

Compression Streams API

A JavaScript API for compressing and decompressing streams of data.

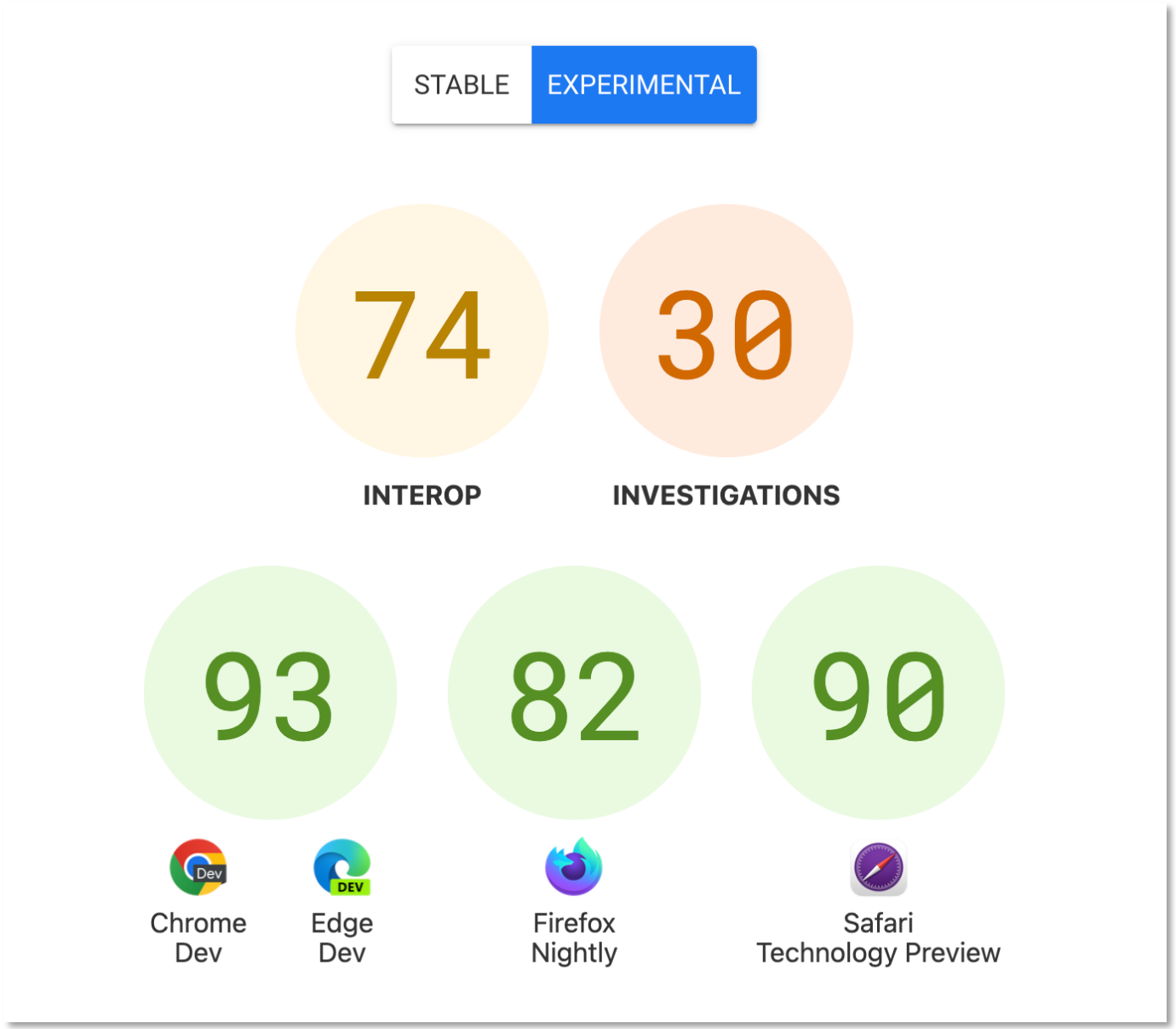
```
const readableStream = await fetch('lorem.txt').then(
  (response) => response.body
);
const compressedReadableStream = readableStream.pipeThrough(
  new CompressionStream('gzip')
);
```

```
const decompressedStream = compressedStream.pipeThrough(
  new DecompressionStream('gzip')
);
```

Learn about streams at: https://web.dev/streams/

COMING SOON

INTEROP 2023 FEATURES.


STABLE
EXPERIMENTAL
74
30
INTEROP
INVESTIGATIONS
93
82
90
Dev
DEV
Chrome Dev
Edge Dev
Firefox Nightly
Safari Technology Preview

Active Focus Areas				INTEROP
Border Image	99.6%	93.3%	99.5%	93.0%
Color Spaces and Functions	99.1%	94.8%	99.5%	94.3%
Container Queries	100%	89.6%	85.7%	81.1%
Containment	99.7%	97.1%	80.9%	79.1%
CSS Math Functions	97.8%	82.9%	87.1%	77.5%
CSS Pseudo-classes	92.8%	95.6%	92.9%	83.0%
Custom Properties	100%	4.8%	93.7%	4.8%
Flexbox	99.5%	96.9%	93.5%	92.6%
Font Feature Detection and Palettes	98.0%	100%	97.9%	96.2%
Forms	94.8%	93.9%	85.9%	80.1%
Grid	99.4%	88.2%	90.6%	82.5%
:has()	100%	24.5%	93.9%	24.5%
Inert	100%	100%	100%	100%
Masking	68.3%	94.7%	85.1%	62.5%
Media Queries 4	100%	97.9%	99.9%	97.9%
Modules	99.7%	92.0%	87.2%	85.9%
Motion Path	97.4%	90.9%	86.0%	82.6%
Offscreen Canvas	98.4%	96.6%	94.5%	93.5%
Pointer and Mouse Events	71.7%	86.2%	49.2%	35.4%
Scrolling	94.2%	93.4%	94.7%	87.7%
Subgrid	74.5%	84.9%	100%	59.4%
Transforms	98.0%	96.4%	97.6%	93.3%
URL	88.4%	88.0%	99.5%	85.4%
Web Codecs (video)	100%	1.3%	61.4%	1.3%
Web Compat 2023	76.2%	69.7%	97.7%	59.3%
Web Components	93.4%	96.5%	99.6%	91.3%
TOTAL	93.8%	82.6%	90.5%	74.0%

105

Soon!

15.4

:has()

A parent selector.

```
<ul>
  <li>I do not contain any headings</li>
  <li><p>I contain a paragraph.</p></li>
  <li><h2>I'm a level 2 heading!</h2></li>
  <li><h2>I'm a level 2 heading!</h2>
    <p>Followed by a paragraph.</p>
  </li>
</ul>
```

Learn more at: https://developer.chrome.com/blog/has-m105/

```
li:has(h2) {
  border: 5px solid red;
}
```

Learn more at: https://developer.chrome.com/blog/has-m105/

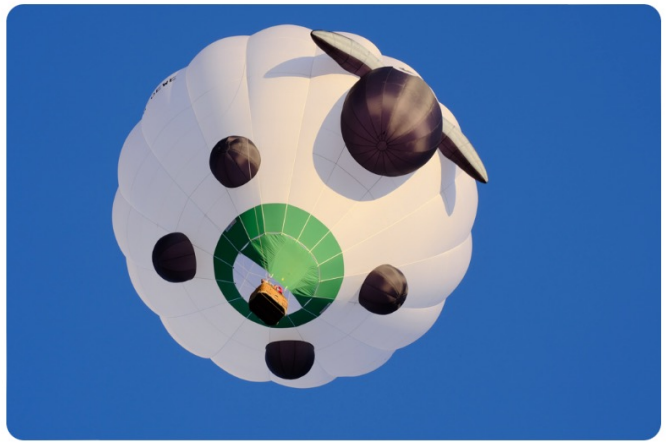
```
li:has(h2+p) {
  border: 5px solid red;
}
```

Learn more at: https://developer.chrome.com/blog/has-m105/

An article about balloons I couldn't be bothered to find an image for.

Read this excellent article about balloons.

Visit this excellent article about balloons.



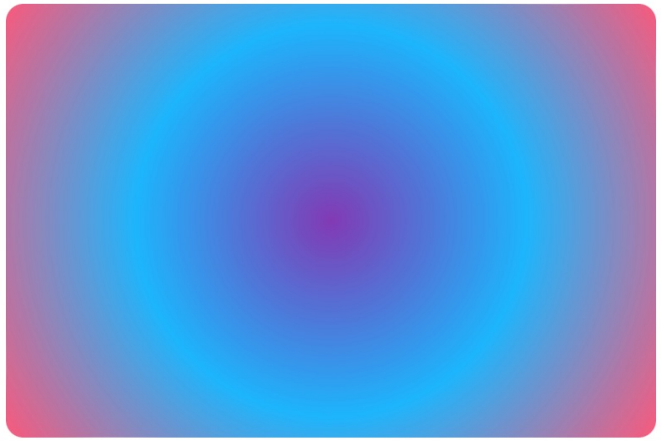
Sorry, all out of balloon pictures.

Visit this excellent article about balloons.

Visit this excellent article about balloons.

```
li:not(:has(img)):before{
  content: "";
  aspect-ratio: 9/6;
  background: rgb(131,58,180);
  background: radial-gradient(circle,
    rgba(131,58,180,1) 0%,
    rgba(29,182,253,1) 50%,
    rgba(252,69,108,.9) 100%);
  border-radius: .5em;
}
```

Read this excellent article about balloons.



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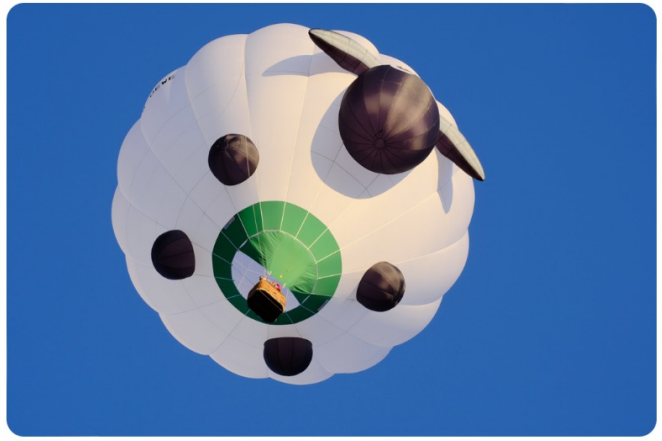

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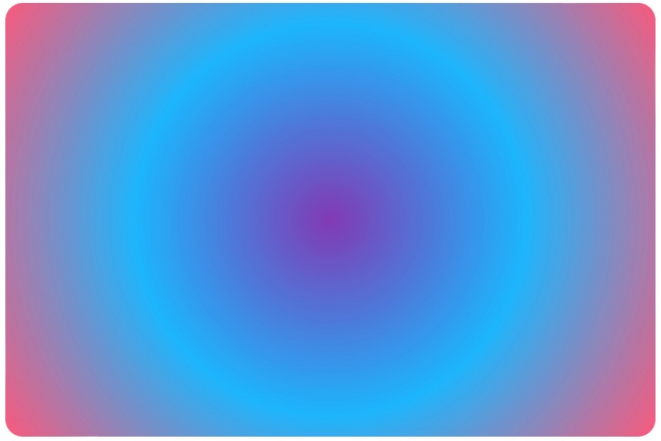


Sorry, all out of balloon pictures.

Soon!

71

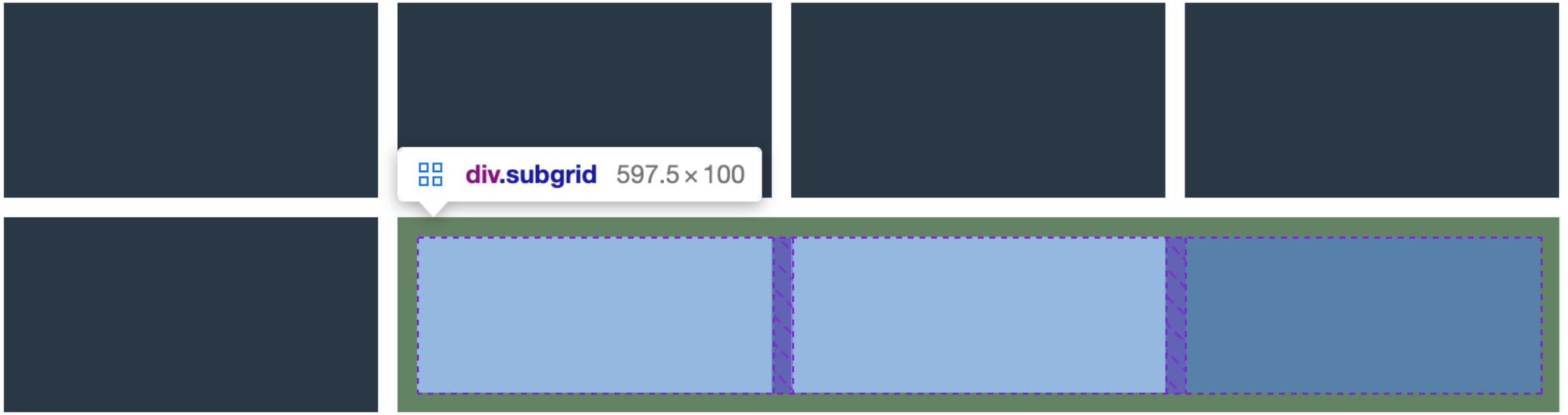
16

Subgrid for CSS grid layout

Allow child grids to inherit track sizing from their parent.

```css
.subgrid {
  grid-column: auto / span 3;
  display: grid;
  grid-template-columns: subgrid;
}

.grid {
  display: grid;
  grid-template-columns: 1fr 1fr 1fr 1fr;
  grid-auto-rows: minmax(100px, auto);
  gap: 10px;
}
```


div.subgrid 597.5 × 100

A longer header	Header	Header
Jolly Dasher decorate elf candy cane decorate angel, fruitcake holiday nutcracker toys.	Jolly Dasher decorate elf candy cane decorate angel, fruitcake holiday nutcracker toys.	Jolly Dasher decorate elf candy cane decorate angel, fruitcake holiday nutcracker toys.

Header	Header	Header
Jolly Dasher decorate elf candy cane decorate angel, fruitcake holiday nutcracker toys.	Jolly Dasher decorate elf candy cane decorate angel, fruitcake holiday nutcracker toys.	Jolly Dasher decorate elf candy cane decorate angel, fruitcake holiday nutcracker toys.

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

.card {
  grid-row: auto / span 2;
  display: grid;
  grid-template-rows: subgrid;
  gap: 1px;
}
```

Learn more at: https://12daysofweb.dev/2022/css-subgrid/

85

Soon!

16.4

@property

Define type, default values, and inheritance for CSS custom properties.

```
:root {
  --colorHilite: rebeccapurple;
}

.element {
  --colorHilite: 2;
  background-color: var(--colorHilite);
}
```

```
@property --colorHilite {
  syntax: '<color>’;
  initial-value: rebeccapurple;
  inherits: false;
}
```

Baseline

What's next for Baseline?

We want your feedback at: https://github.com/web-platform-dx/feature-set/issues

Baseline

Feature grouping

Aiming to complete by the end of 2023.

Baseline

Baseline 24 … 25 …

A yearly moment in time, showing what the state of the web platform is at that point.

https://noti.st/rachelandrew/LMVsa1/