New Tools for CSS Layout

Rachel Andrew @rachelandrew

I do web stuff.

Web developer since 1996, teaching CSS for almost as long. *Co-founder Perch CMS & Notist*. Author or co-author of 23 books on web development. *Smashing Magazine Editor in Chief*. Writer for MDN. *CSS Working Group Invited Expert*. Google Developer Expert. I like long runs and small airplanes.

A layout system for CSS

For the first time!

A layout system for CSS

Flexbox

Grid Layout

Multiple-column Layout

Floats

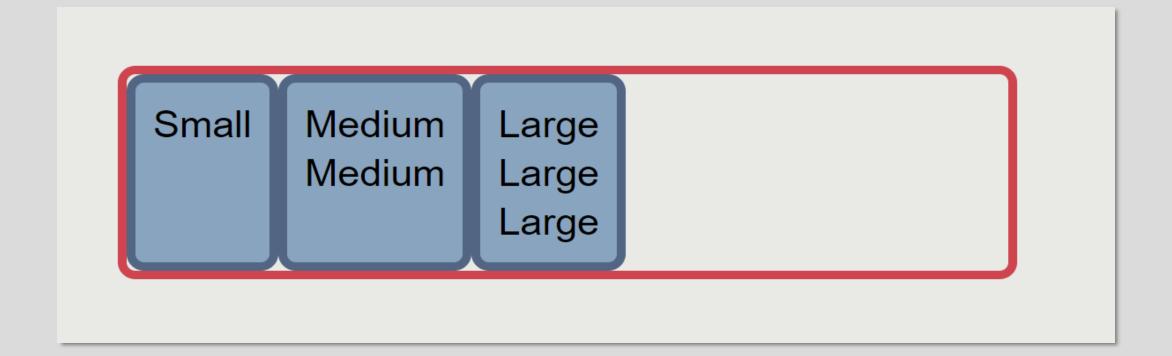
CSS Positioned Layout

Brought together by ...

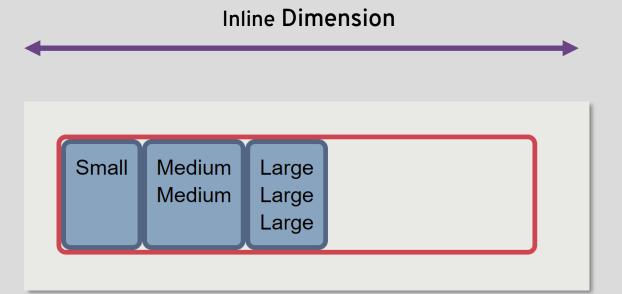
Box Alignment
Intrinsic and Extrinsic Sizing
Logical Properties and Values

Flexbox

Layout in one dimension. A row or a column.



```
.flex {
  display: flex;
  width: 500px;
}
```

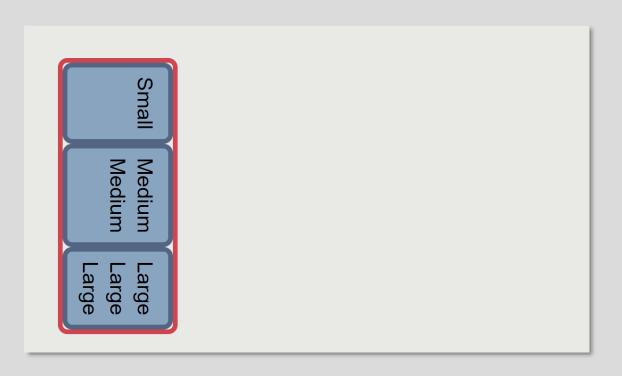


```
.flex {
  writing-mode: vertical-rl;
  display: flex;
  width: 500px;
}
```

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

Block Dimension

```
.flex {
  writing-mode: vertical-rl;
  display: flex;
  width: 500px;
}
```

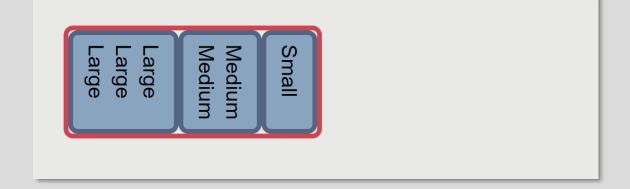


```
.flex {
  writing-mode: vertical-rl;
  flex-direction: column;
  display: flex;
}
```

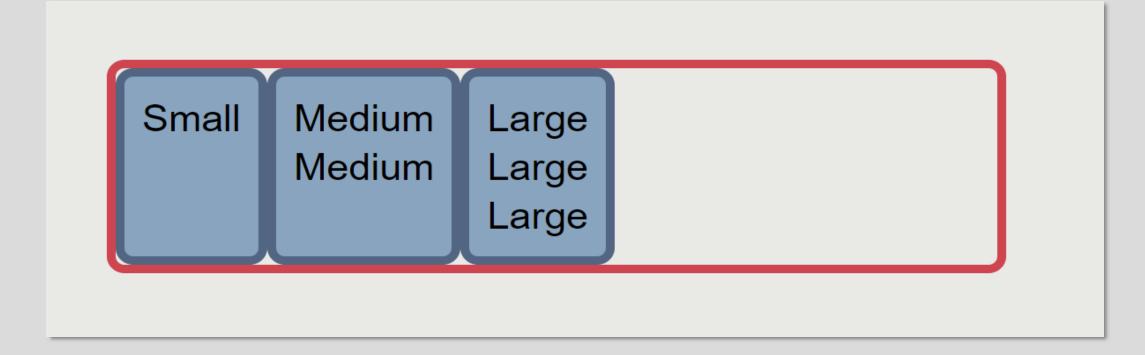
https://codepen.io/rachelandrew/pen/JavRqM

```
.flex {
  writing-mode: vertical-rl;
  flex-direction: column;
  display: flex;
}
```

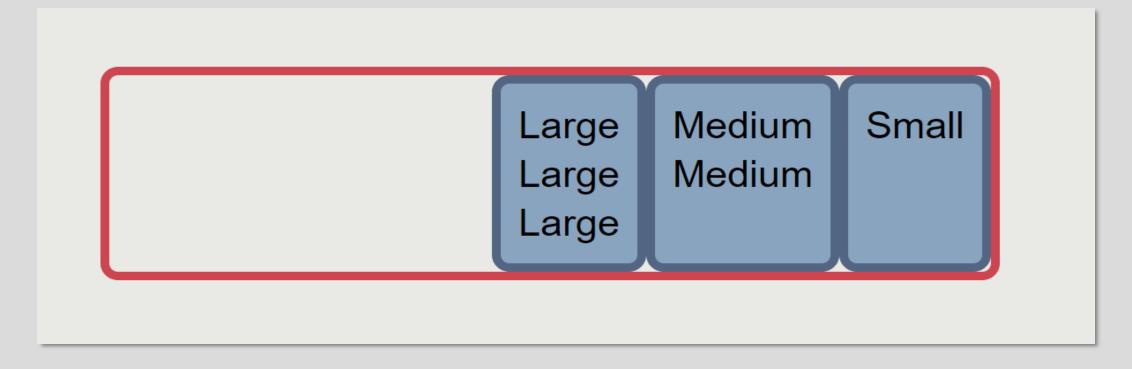
Block Dimension



Start Left to Right

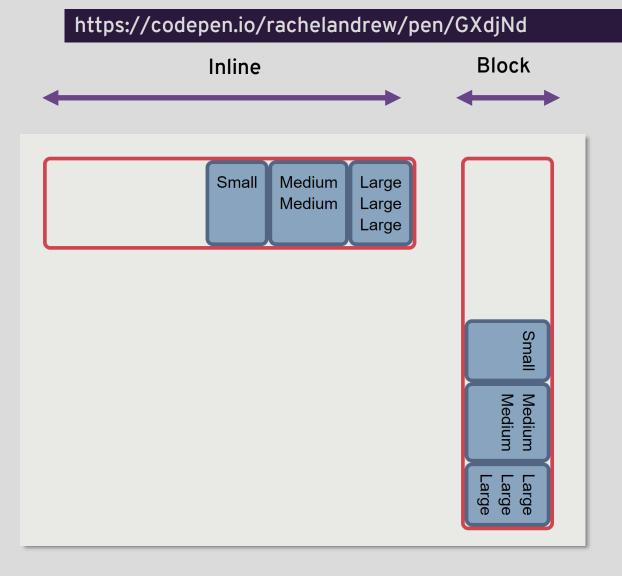


Start Right to Left



```
• • •
.flex {
  display: flex;
  width: 500px;
  justify-content: flex-end;
.flex.vertical {
  writing-mode: vertical-rl;
  width: auto;
  inline-size: 500px;
```

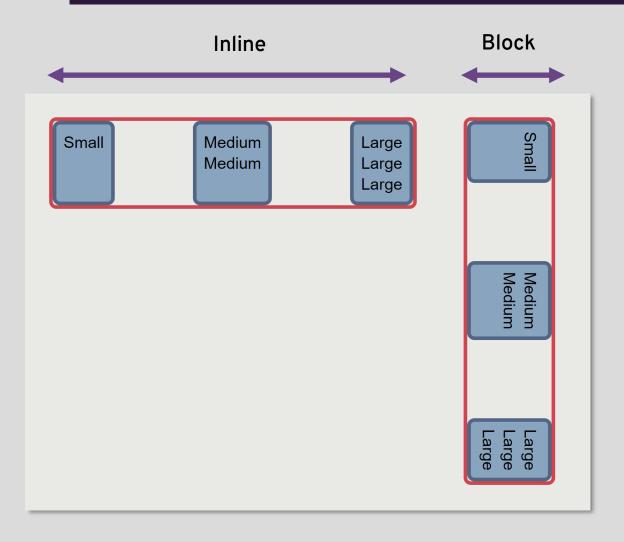
```
.flex {
    display: flex;
    width: 500px;
    justify-content: flex-end;
}
.flex.vertical {
    writing-mode: vertical-rl;
    width: auto;
    inline-size: 500px;
}
```



```
• • •
.flex {
  display: flex;
  width: 500px;
  justify-content: space-between;
.flex.vertical {
  writing-mode: vertical-rl;
  width: auto;
  inline-size: 500px;
```

```
.flex {
    display: flex;
    width: 500px;
    justify-content: space-between;
}
.flex.vertical {
    writing-mode: vertical-rl;
    width: auto;
    inline-size: 500px;
}
```

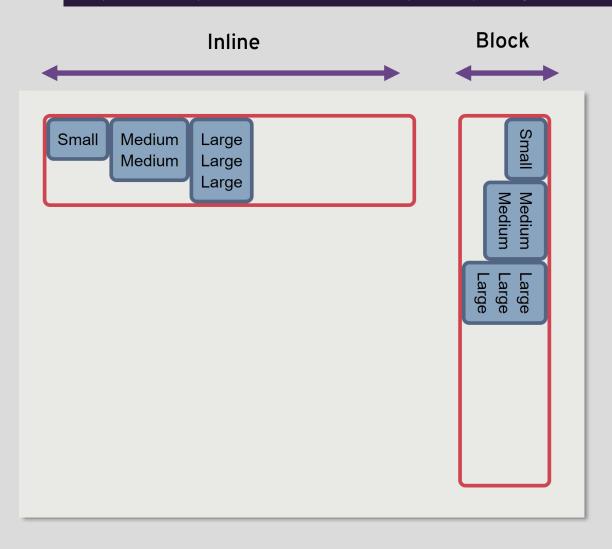
https://codepen.io/rachelandrew/pen/ZMoBGe



```
• • •
.flex {
  display: flex;
  align-items: flex-start;
.flex.vertical {
  writing-mode: vertical-rl;
```

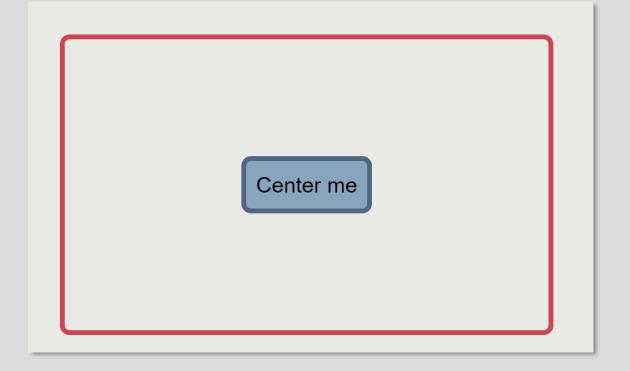
```
.flex {
   display: flex;
   align-items: flex-start;
}
.flex.vertical {
   writing-mode: vertical-rl;
}
```

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



```
.flex {
   display: flex;
   align-items: center;
   justify-content: center;
}
```

```
.flex {
  display: flex;
  align-items: center;
  justify-content: center;
}
```

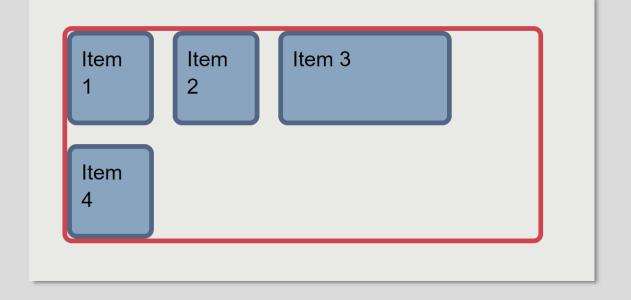


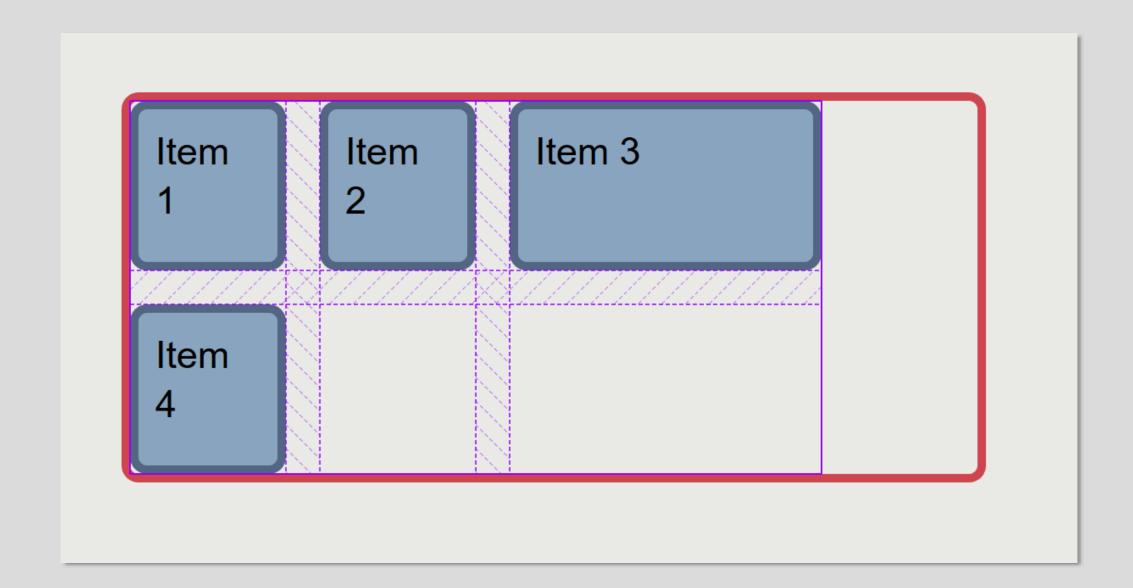
CSS Grid Layout

Layout in two dimensions. Rows and Columns.

```
.grid {
   display: grid;
   width: 500px;
   grid-template-columns: .2fr .2fr .4fr;
   grid-template-rows: 100px 100px;
   grid-gap: 20px;
}
```

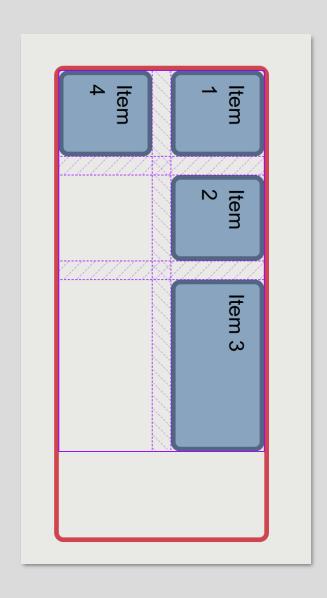
```
.grid {
  display: grid;
  width: 500px;
  grid-template-columns: .2fr .2fr .4fr;
  grid-template-rows: 100px 100px;
  grid-gap: 20px;
}
```





Firefox Grid Inspector

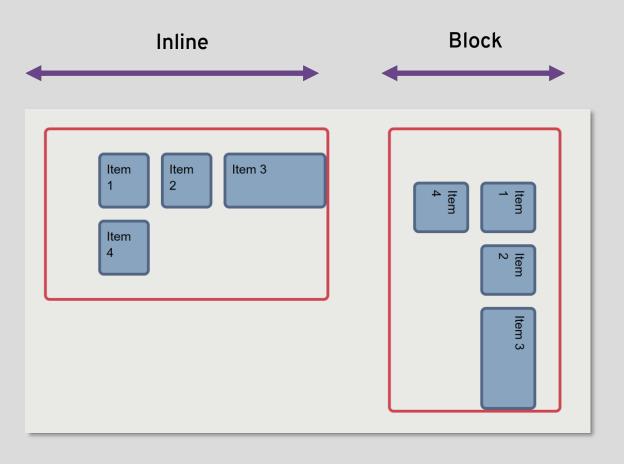
https://developer.mozilla.org/en-US/docs/Tools/Page_Inspector/How_to/Examine_grid_layouts



```
.grid {
  display: grid;
  width: 500px;
  height: 300px;
  grid-template-columns: 1fr 1fr 2fr;
  grid-template-rows: 100px 100px;
  grid-gap: 20px;
  justify-content: end;
  align-content: center;
.grid.vertical {
  writing-mode: vertical-rl;
  width: auto;
  inline-size: 500px;
  block-size: 300px;
```

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

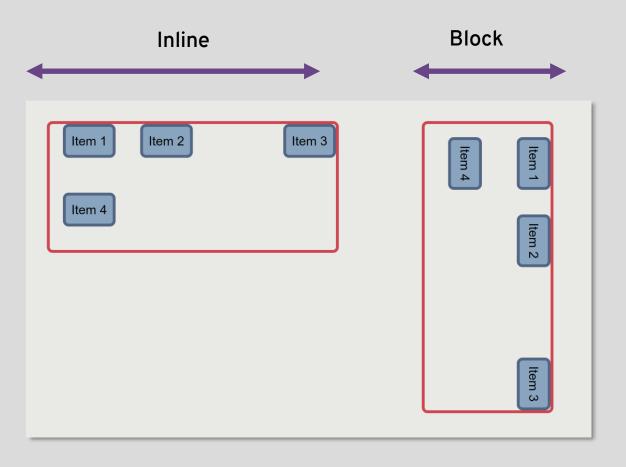
```
display: grid;
 width: 500px;
 height: 300px;
  grid-template-columns: 1fr 1fr 2fr;
  grid-template-rows: 100px 100px;
  grid-gap: 20px;
 justify-content: end;
  align-content: center;
.grid.vertical {
 writing-mode: vertical-rl;
 width: auto;
 inline-size: 500px;
  block-size: 300px;
```



```
.grid {
  display: grid;
  width: 500px;
  grid-template-columns: 1fr 1fr 2fr;
  grid-template-rows: 100px 100px;
  grid-gap: 20px;
  align-items: start;
  justify-items: end;
.grid.vertical {
  writing-mode: vertical-rl;
  width: auto;
  inline-size: 500px;
```

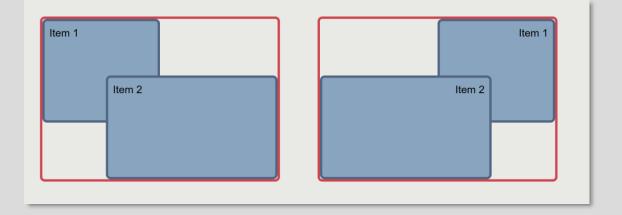
https://codepen.io/rachelandrew/pen/mGLRRr

```
display: grid;
 width: 500px;
  grid-template-columns: 1fr 1fr 2fr;
  grid-template-rows: 100px 100px;
 grid-gap: 20px;
 align-items: start;
 justify-items: end;
 writing-mode: vertical-rl;
 width: auto;
  inline-size: 500px;
```

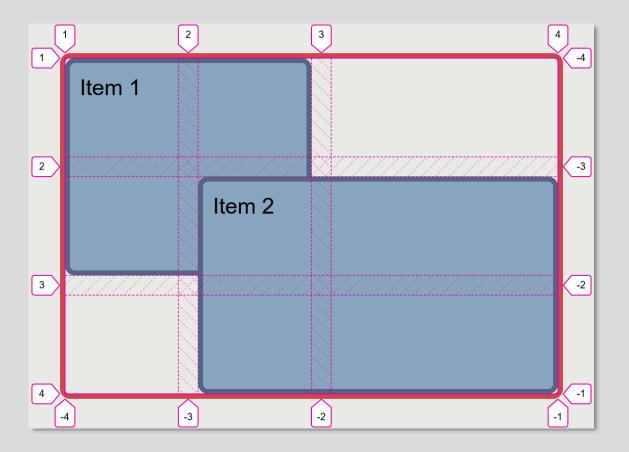


```
• • •
.grid {
 display: grid;
 width: 500px;
 grid-template-columns: 1fr 1fr 2fr;
  grid-template-rows: 100px 100px;
 grid-gap: 20px;
.grid-rtl { direction: rtl; }
.grid div:nth-child(1) {
 grid-column: 1 / 3;
 grid-row: 1 / 3;
.grid div:nth-child(2) {
 grid-column: -1 / -3;
 grid-row: -1 / -3;
```

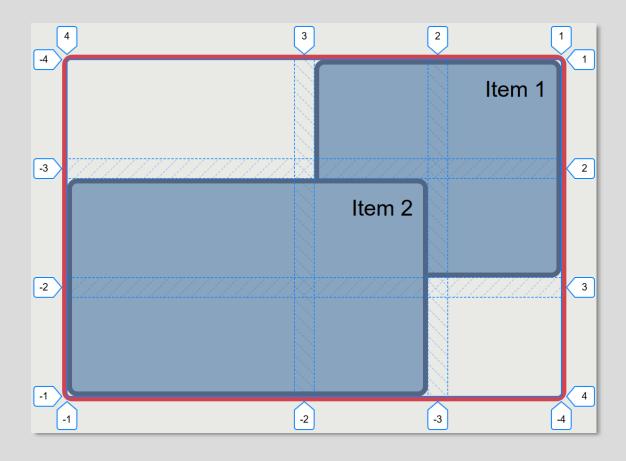
```
display: grid;
 width: 500px;
 grid-template-columns: 1fr 1fr 2fr;
 grid-template-rows: 100px 100px;
 grid-gap: 20px;
.grid-rtl { direction: rtl; }
.grid div:nth-child(1) {
 grid-column: 1 / 3;
 grid-row: 1 / 3;
.grid div:nth-child(2) {
 grid-column: -1 / -3;
 grid-row: -1 / -3;
```



Left to Right



Right to Left



A true system for layout

Designed for the job. Writing mode aware. Consistent.

What's next?

CSS Grid Level 2 "subgrids"



Articles

Design & development

Books

Physical & digital books

Events

Conferences & workshops

Jobs

Find work & employees

Membership

Webinars & early-birds





ABOUT THE AUTHOR

Rachel Andrew is not only editor-in-chief of Smashing Magazine, but also a web developer, writer and speaker. She is the author of a number of JULY 3, 2018 • 8 comments

CSS Grid Level 2: Here Comes Subgrid

QUICK SUMMARY •• CSS Grid Level 2 is already in the process of being specified, and the main feature of this level of the spec is to bring us subgrid. In this article, Rachel Andrew explains the new features.

- iii 13 min read
- CSS, Browsers, Layouts
- Share on <u>Twitter</u> or <u>LinkedIn</u>

WE ARE NOW OVER A YEAR ON FROM CSS GRID LAYOUT

landing in the majority of our browsers, and the CSS Working Group are already working on Level 2 of the specification. In this article, I'm going to explain what is currently part of the Working and Editor's

What's next?

Logical Properties & Values



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hooks_including More

MARCH 29, 2018 • 8 comments

Understanding Logical Properties And Values

QUICK SUMMARY SCSS Logical Properties and Values aren't quite ready to be used yet, however learning about them can help you to understand CSS Layout, and the interaction with Writing Modes.

9 min read

CSS, Layouts, **Browsers**

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IN THE PAST, CSS HAS TIED ITSELF TO PHYSICAL

dimensions and directions, physically mapping the placement of elements to the left, right and top and bottom. We float an element

What's next?

Box Alignment in Block Layout

What's next?

What's important to you?

Thank you!

https://noti.st/rachelandrew/tJeWKI