

The New CSS Layout

Rachel Andrew
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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 ...

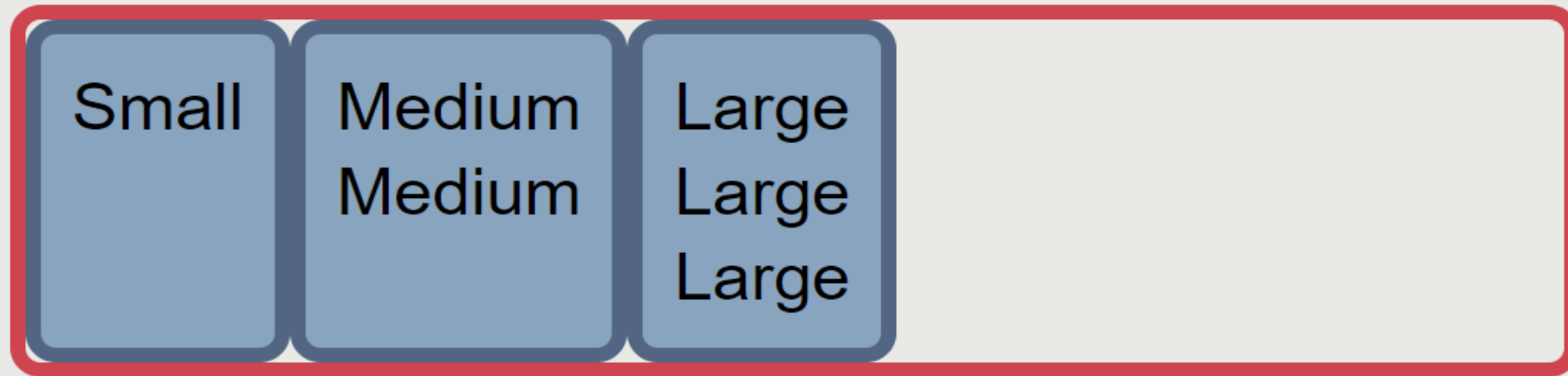
Box Alignment

Intrinsic and Extrinsic Sizing

Logical Properties and Values

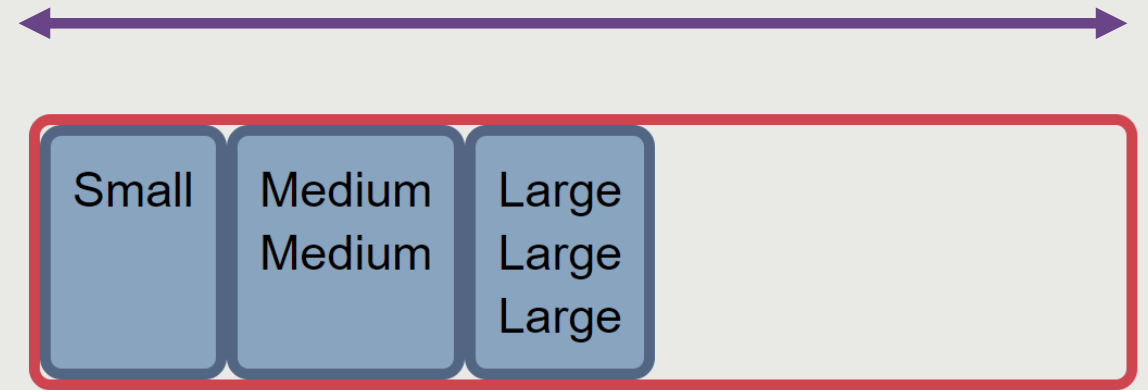
Flexbox

Layout in one dimension. A row or a column.



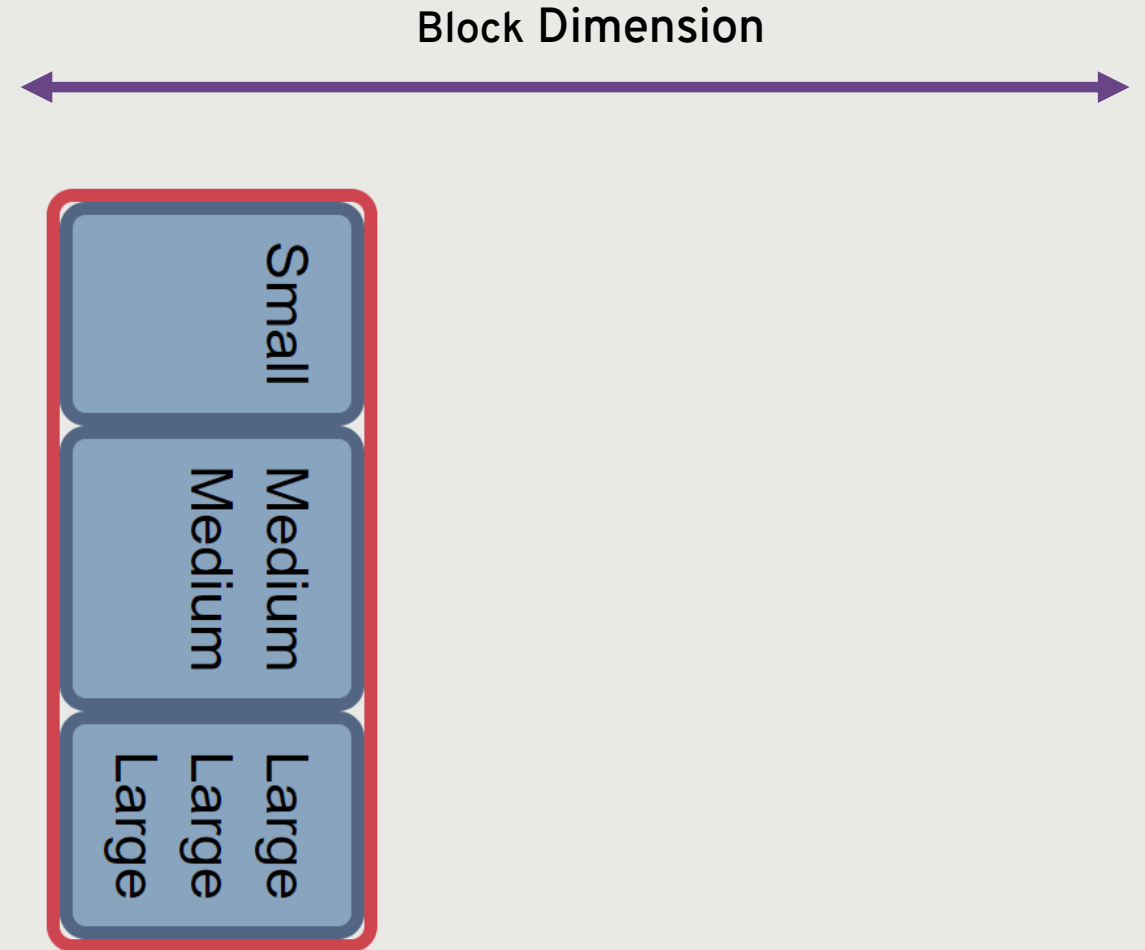
```
.flex {  
  display: flex;  
  width: 500px;  
}
```

Inline Dimension



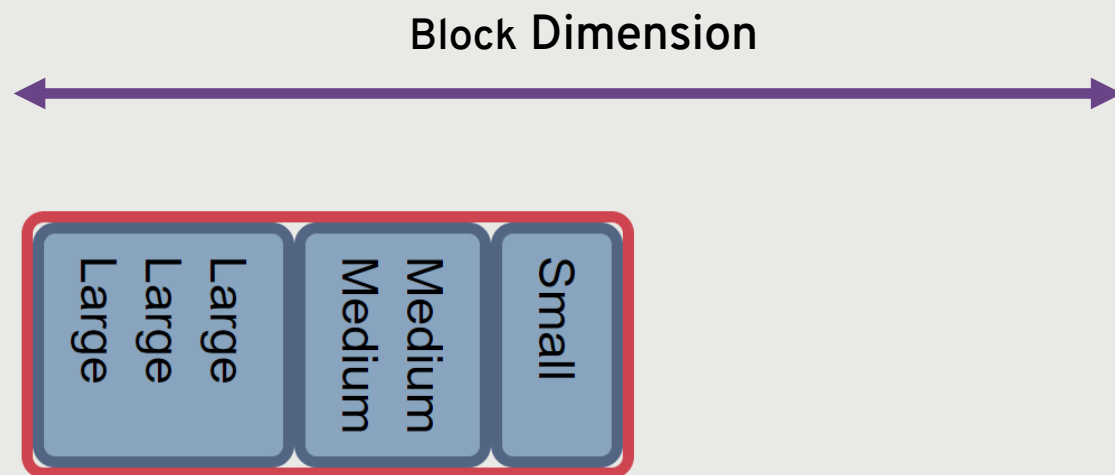

```
.flex {  
  writing-mode: vertical-rl;  
  display: flex;  
  width: 500px;  
}
```

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

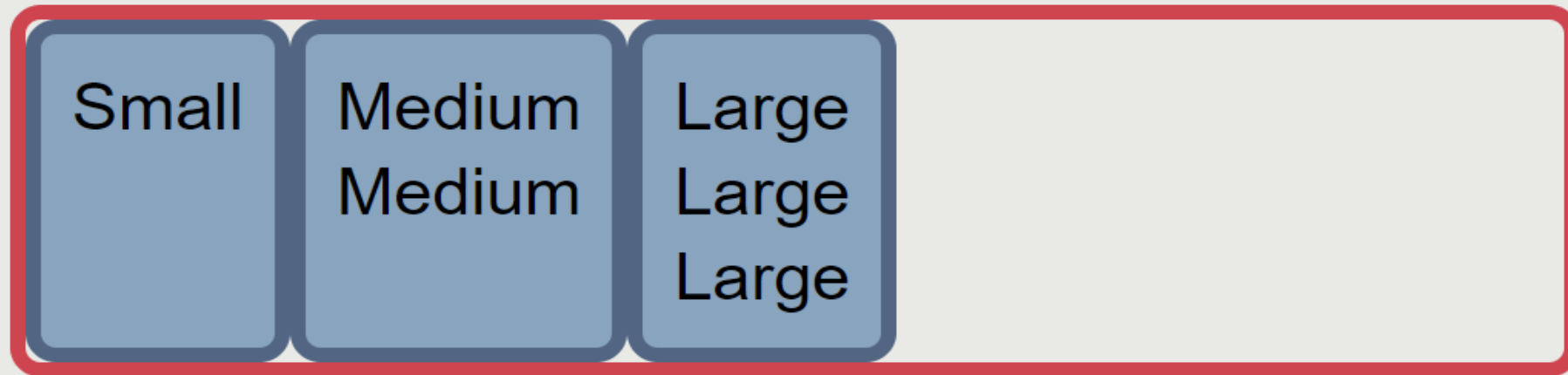


```
.flex {  
  writing-mode: vertical-rl;  
  display: flex;  
  flex-direction: column;  
}
```

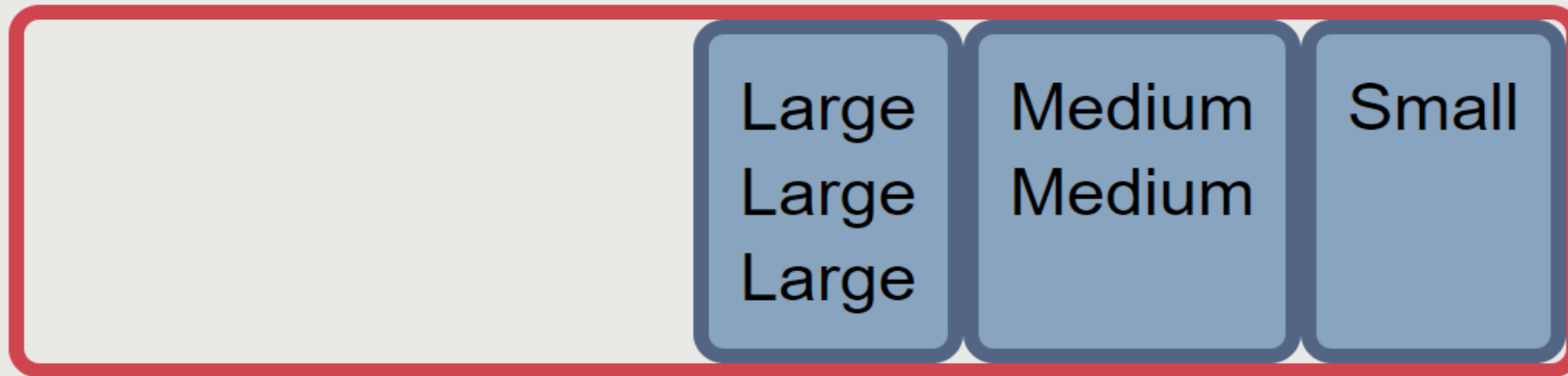
```
.flex {  
  writing-mode: vertical-rl;  
  display: flex;  
  flex-direction: column;  
}
```



Start Left to Right



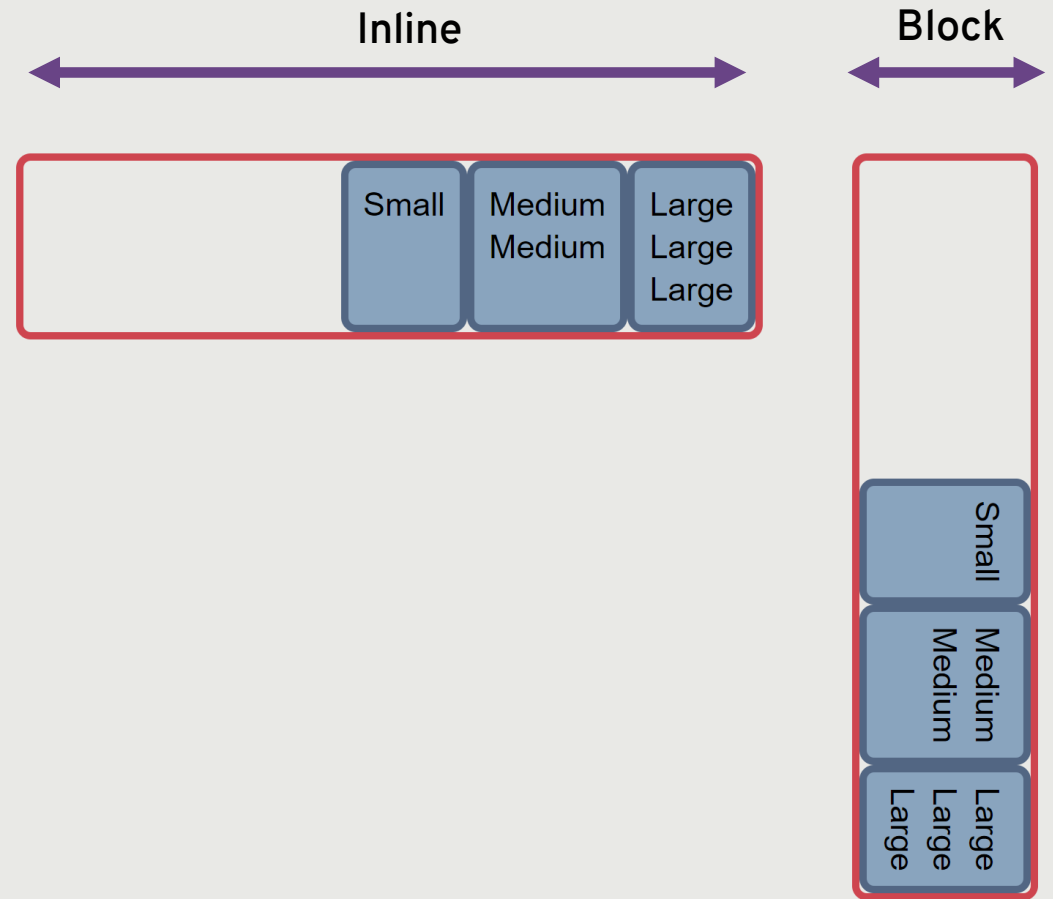
Start Right to Left



```
.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;  
}
```

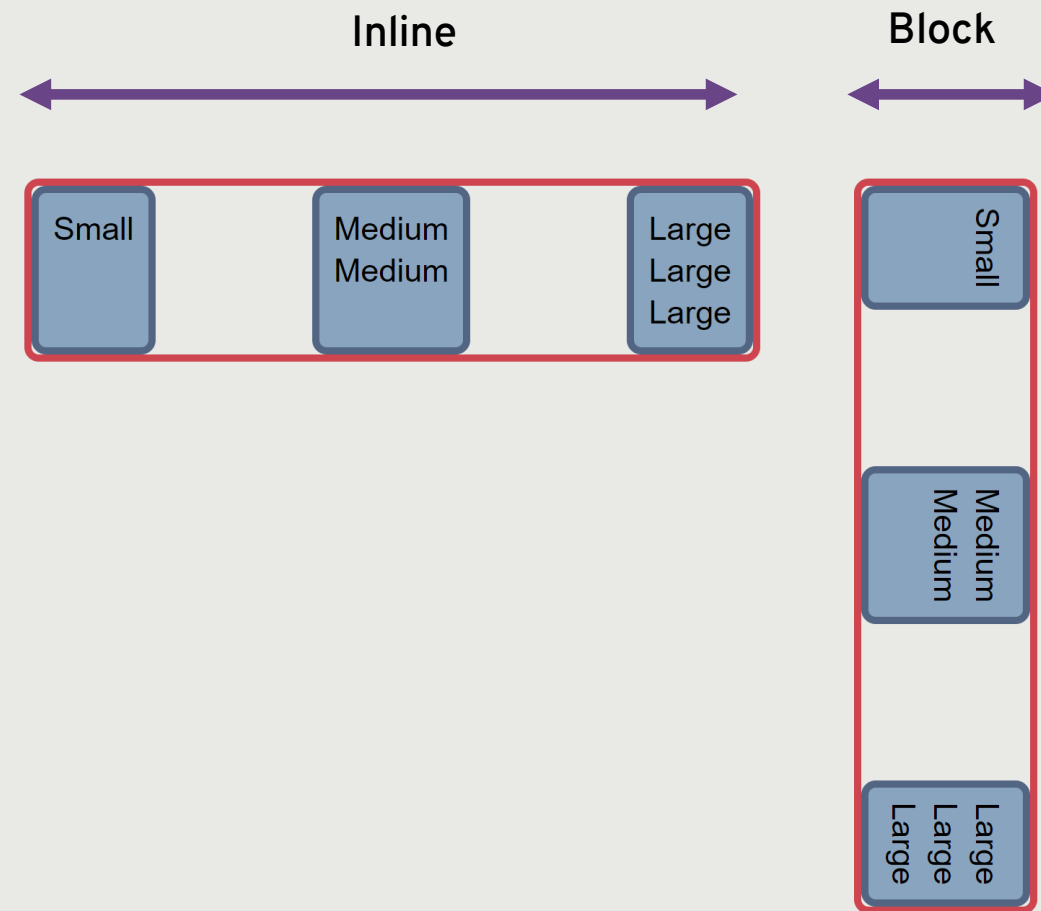
```
.flex-vertical {  
  writing-mode: vertical-rl;  
  width: auto;  
  inline-size: 500px;  
}
```




```
.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;  
}
```

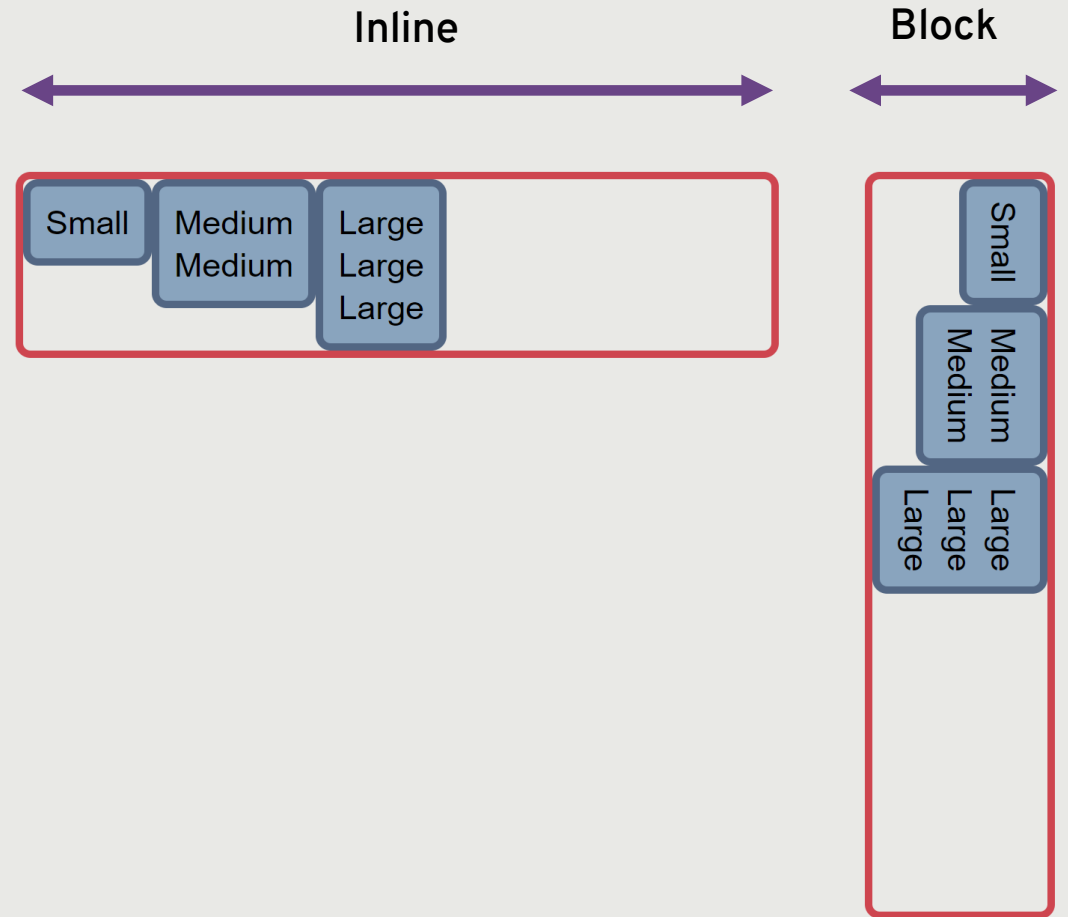
```
.flex-vertical {  
  writing-mode: vertical-rl;  
  width: auto;  
  inline-size: 500px;  
}
```



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

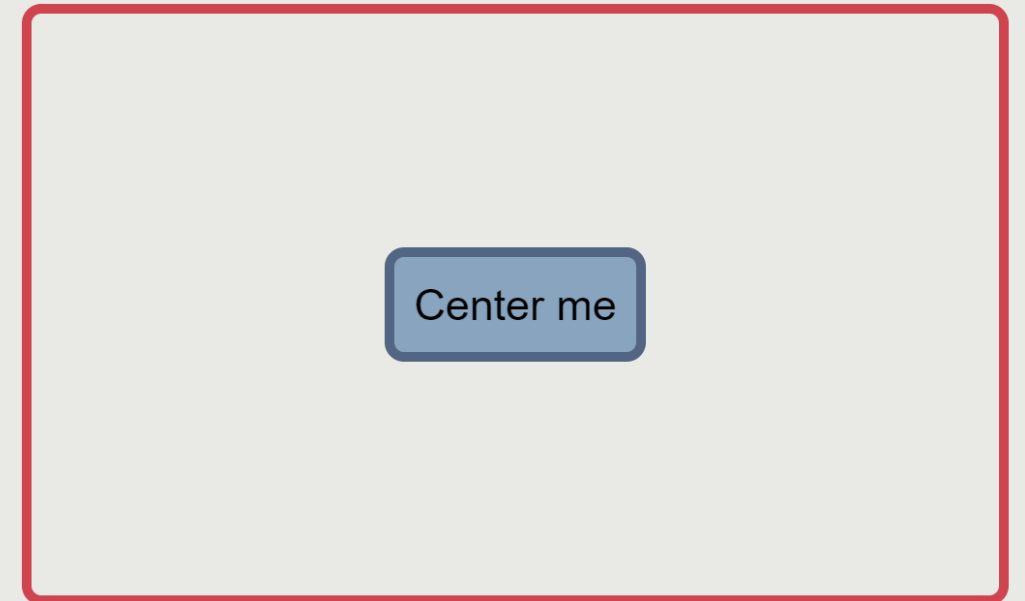
```
.flex {  
  display: flex;  
  align-items: flex-start;  
}  
  
.flex-vertical {  
  writing-mode: vertical-rl;  
}
```

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



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

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



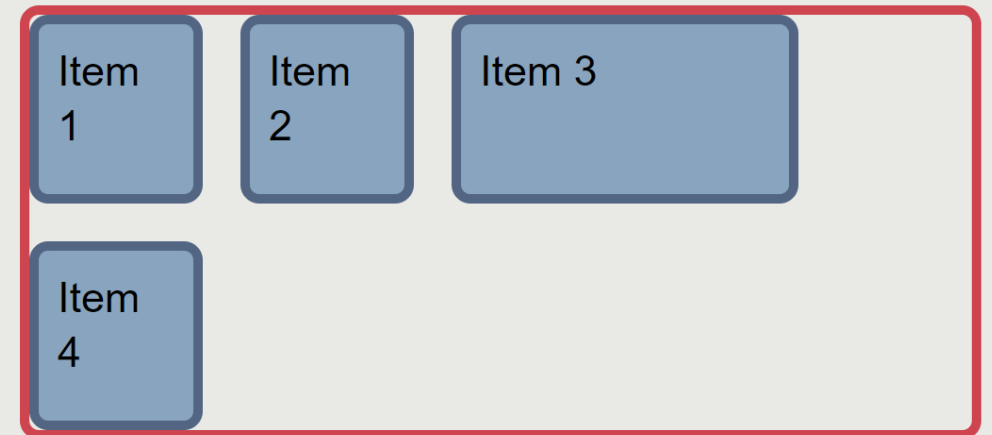
CSS Grid Layout

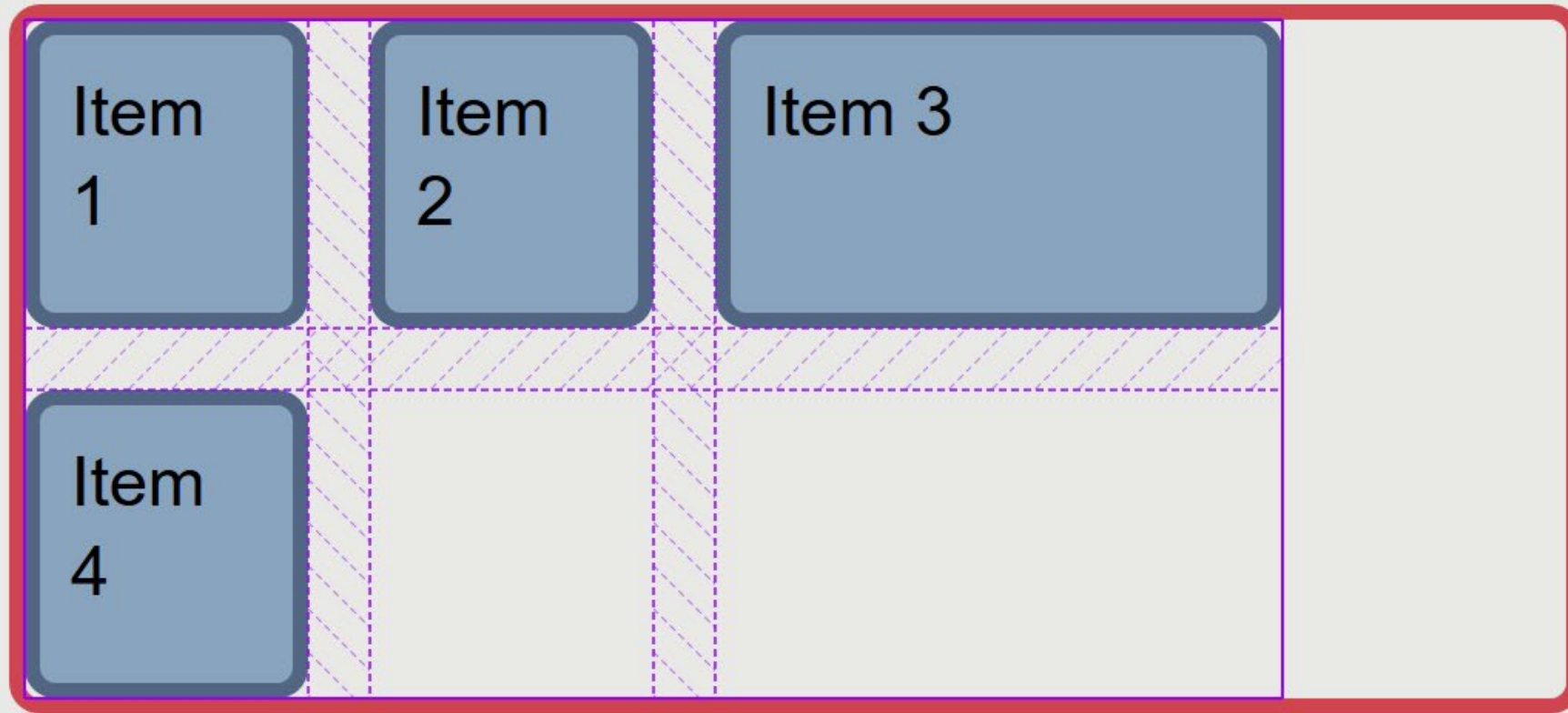
Layout in two dimensions. Rows and Columns.

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



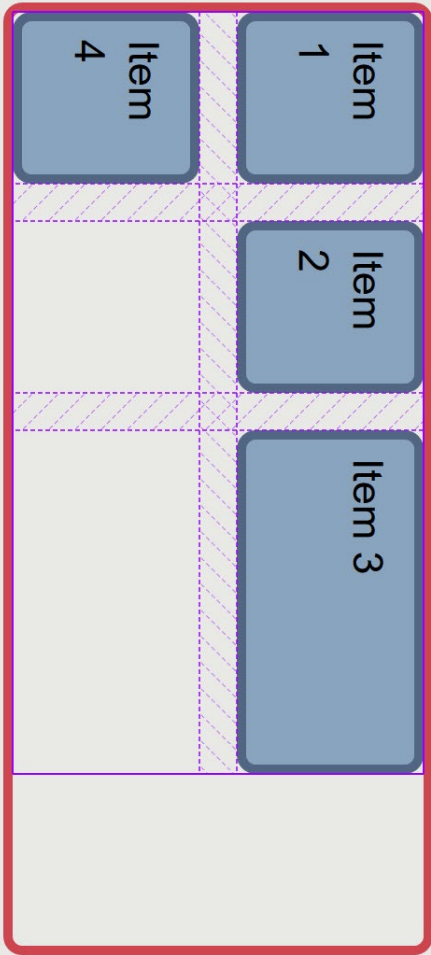
```
.grid {  
  display: grid;  
  width: 500px;  
  grid-template-columns: .2fr .2fr .4fr;  
  grid-template-rows: 100px 100px;  
  grid-gap: 20px;  
}
```





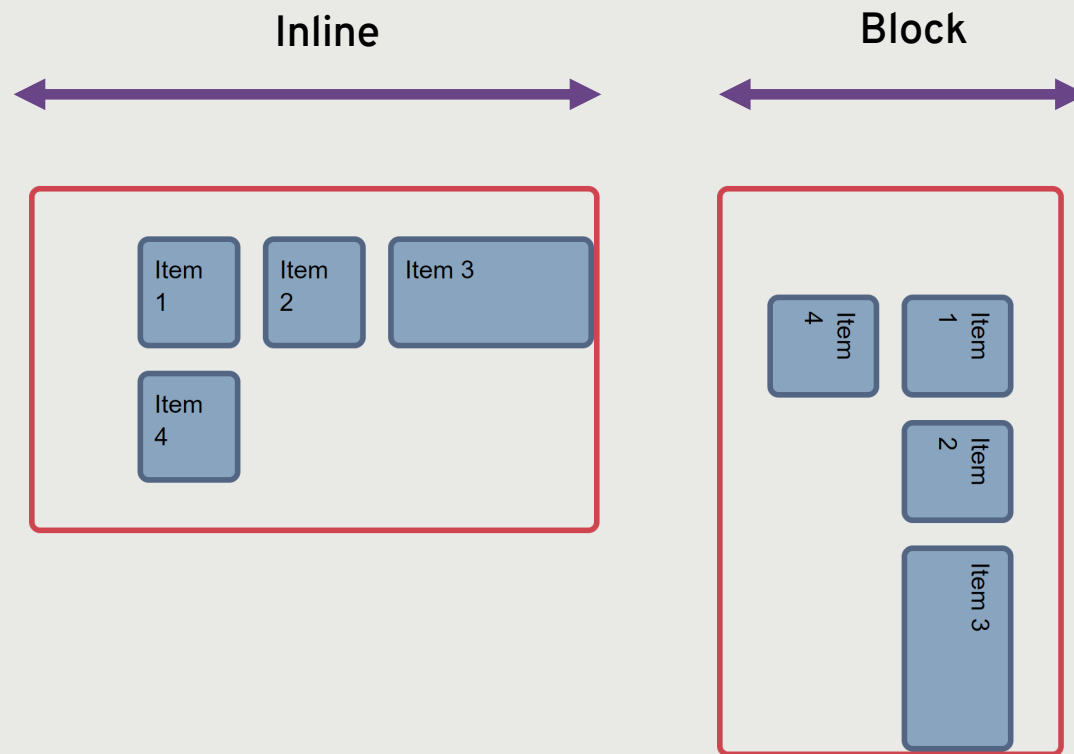
Firefox Grid Inspector

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



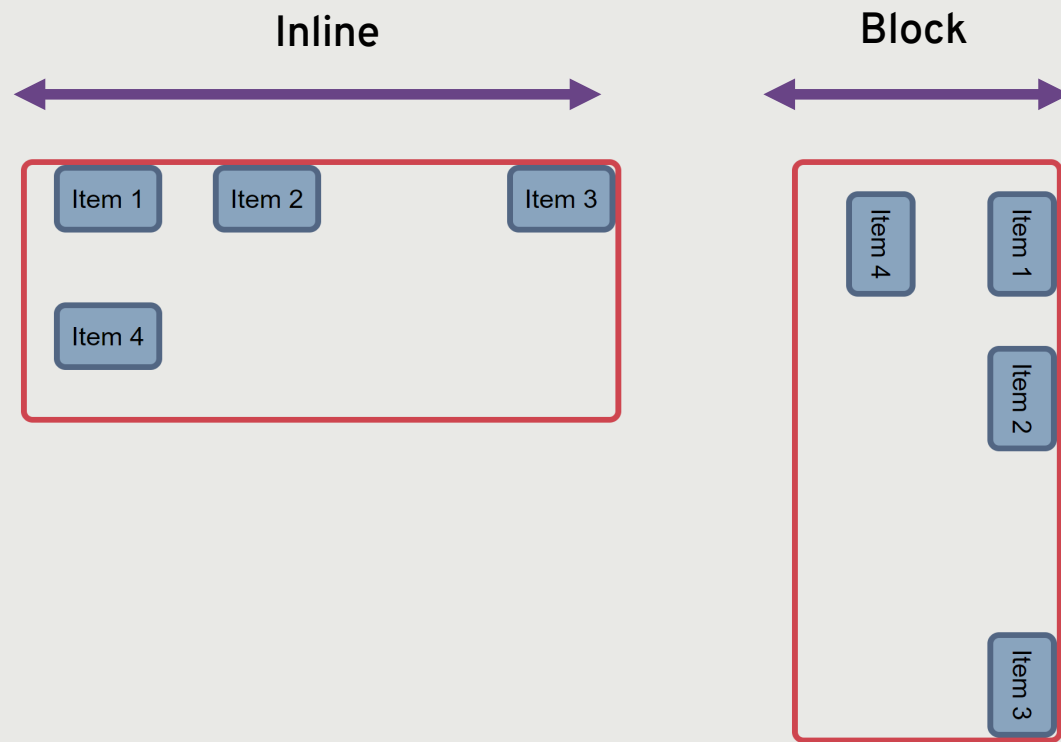
```
.grid {  
  display: grid;  
  width: 500px;  
  height: 300px;  
  grid-template-columns: .2fr .2fr .4fr;  
  grid-template-rows: 100px 100px;  
  grid-gap: 20px;  
  justify-content: end;  
  align-content: center;  
}  
  
.grid.vertical {  
  writing-mode: vertical-rl;  
  width: auto;  
  inline-size: 500px;  
  block-size: 300px;  
}
```

```
.grid {  
  display: grid;  
  width: 500px;  
  height: 300px;  
  grid-template-columns: .2fr .2fr .4fr;  
  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;  
}
```



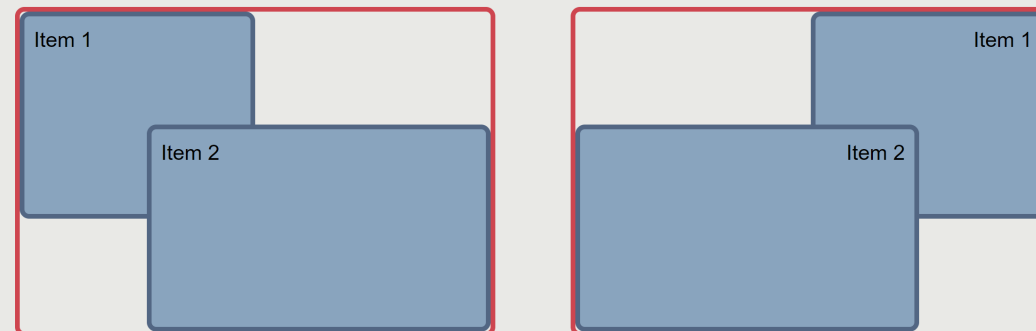
```
.grid {  
  display: grid;  
  width: 500px;  
  grid-template-columns: 1fr 1fr 2fr;  
  grid-template-rows: 100px 100px;  
  grid-gap: 20px;  
  align-items: start;  
  justify-items: end;  
}  
  
.grid.vertical {  
  writing-mode: vertical-rl;  
  width: auto;  
  inline-size: 500px;  
}
```

```
.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;  
}
```

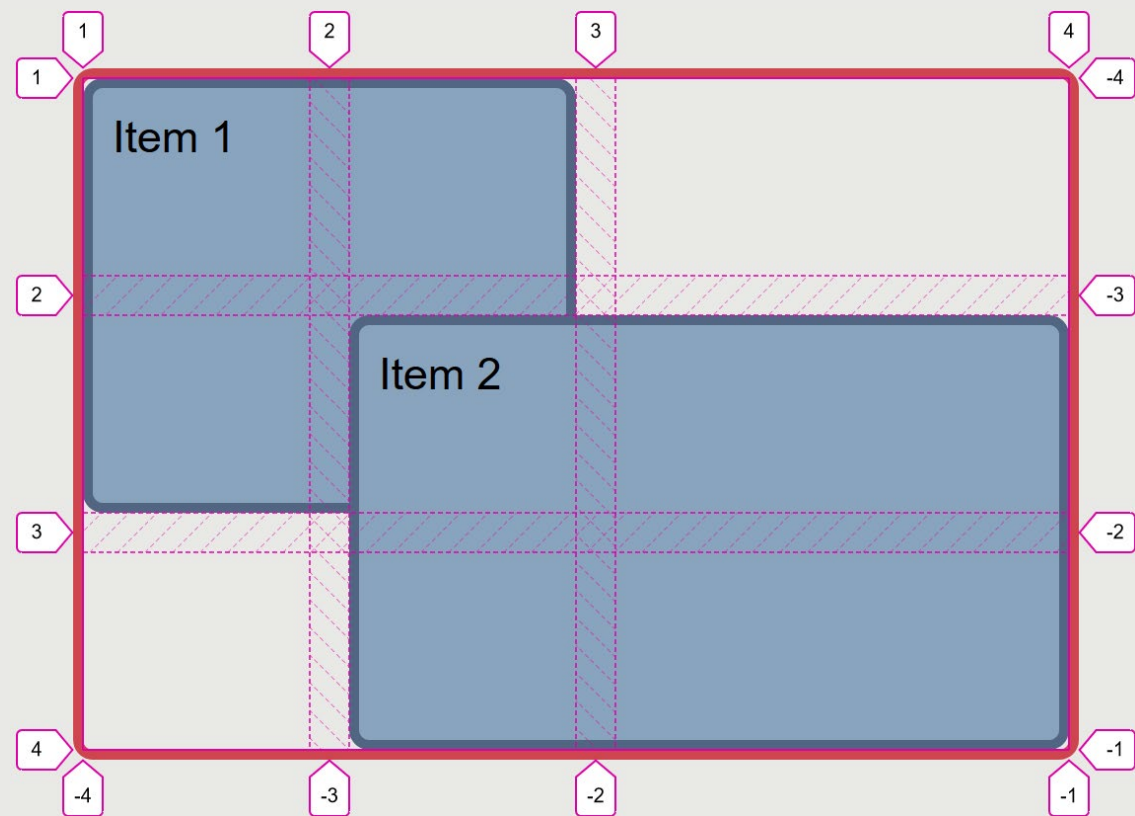



```
.grid {  
  display: grid;  
  width: 500px;  
  grid-template-columns: 1fr 1fr 2fr;  
  grid-template-rows: 100px 100px 100px;  
  grid-gap: 20px;  
}  
.grid.rtl {  
  direction: rtl;  
}  
.grid div:nth-child(1) {  
  grid-column: 1 / 3;  
  grid-row: 1 / 3;  
}  
.grid div:nth-child(2) {  
 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

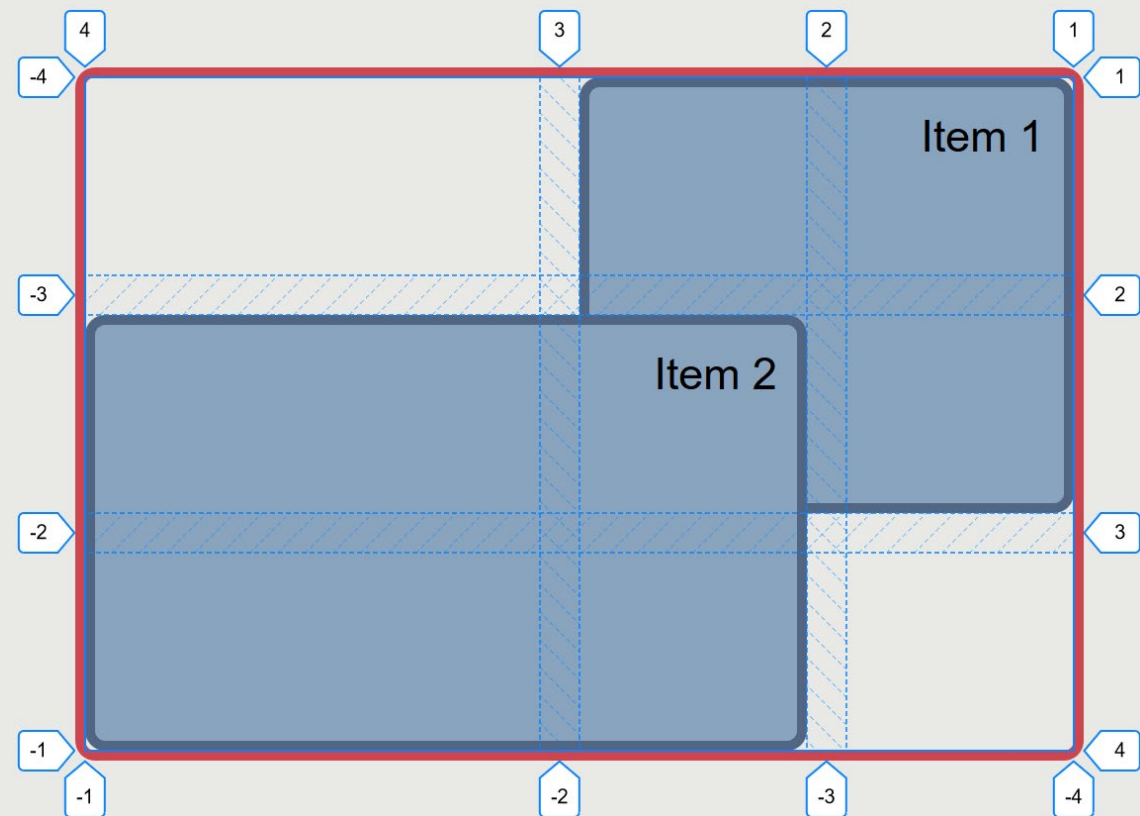
```
.grid {  
  display: grid;  
  width: 500px;  
  grid-template-columns: 1fr 1fr 2fr;  
  grid-template-rows: 100px 100px 100px;  
  grid-gap: 20px;  
}  
.grid.rtl {  
  direction: rtl;  
}  
.grid div:nth-child(1) {  
  grid-column: 1 / 3;  
  grid-row: 1 / 3;  
}  
.grid div:nth-child(2) {  
 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

🔍 Topics



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.

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

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

📅 13 min read

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What's next?

Logical Properties & Values



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Find work & employees

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Webinars & early-birds

🔍 Topics



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MARCH 29, 2018 • [8 comments](#)

Understanding Logical Properties And Values

QUICK SUMMARY ↔ CSS 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.

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

📅 9 min read

📌 [CSS](#), [Layouts](#), [Browsers](#)

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What's next?

Box Alignment in Block Layout

What's next?

What's important to you?



w3c / csswg-drafts

Watch

273

Star

1,174

Fork

206

Code

Issues 1,152

Pull requests 22

Projects 4

Insights

is:issue is:open

Labels

Milestones

New issue

1,152 Open ✓ 1,565 Closed

Author

Labels

Projects

Milestones

Assignee

Sort

[css-transitions-1] Effect of manipulating a CSSTransition via the Web Animations API on the list of running transitions

#3233 opened an hour ago by graouts

2

[css-text] Syntax for percentage-of-width-of-space for 'word-spacing' css-text-3 css-text-4

#3232 opened 3 hours ago by fantasai

[css-inline-3] Sizing atomic inlines as initial letters css-inline-3

#3231 opened 6 hours ago by fantasai

[css-transforms-2] Algorithm for decomposing a 3D matrix, produces different results to 2D matrix

#3230 opened 7 hours ago by birtles

[css-text-4] Text-spacing is too strict css-text-4 i18n-tracking

#3229 opened a day ago by lithrum

1

[css-shadow-parts] Expose parts programmatically

#3228 opened 3 days ago by JanMiksovsky

2

[css-forms] Allow making <button> a real inline css-forms-1

#3226 opened 3 days ago by zcorpan

7

[css-sizing-4][css-grid-2][css-align-4] Rename 'ar' unit? Needs Naming (Request to Bikeshed) css-grid-2 css-sizing-4

#3225 opened 4 days ago by fantasai

4

Thank you!

<https://noti.st/rachelandrew/SIXCfs>