

GETTING OFF THE GROUND WITH CSS GRID

Presented by Kara Luton
@karaluton

ABOUT ME

Based in Nashville, TN

Ballerina → Music Publicist → Tech

UX Engineer at CrowdStrike

Organizer for the Nashville Tech Ladies chapter



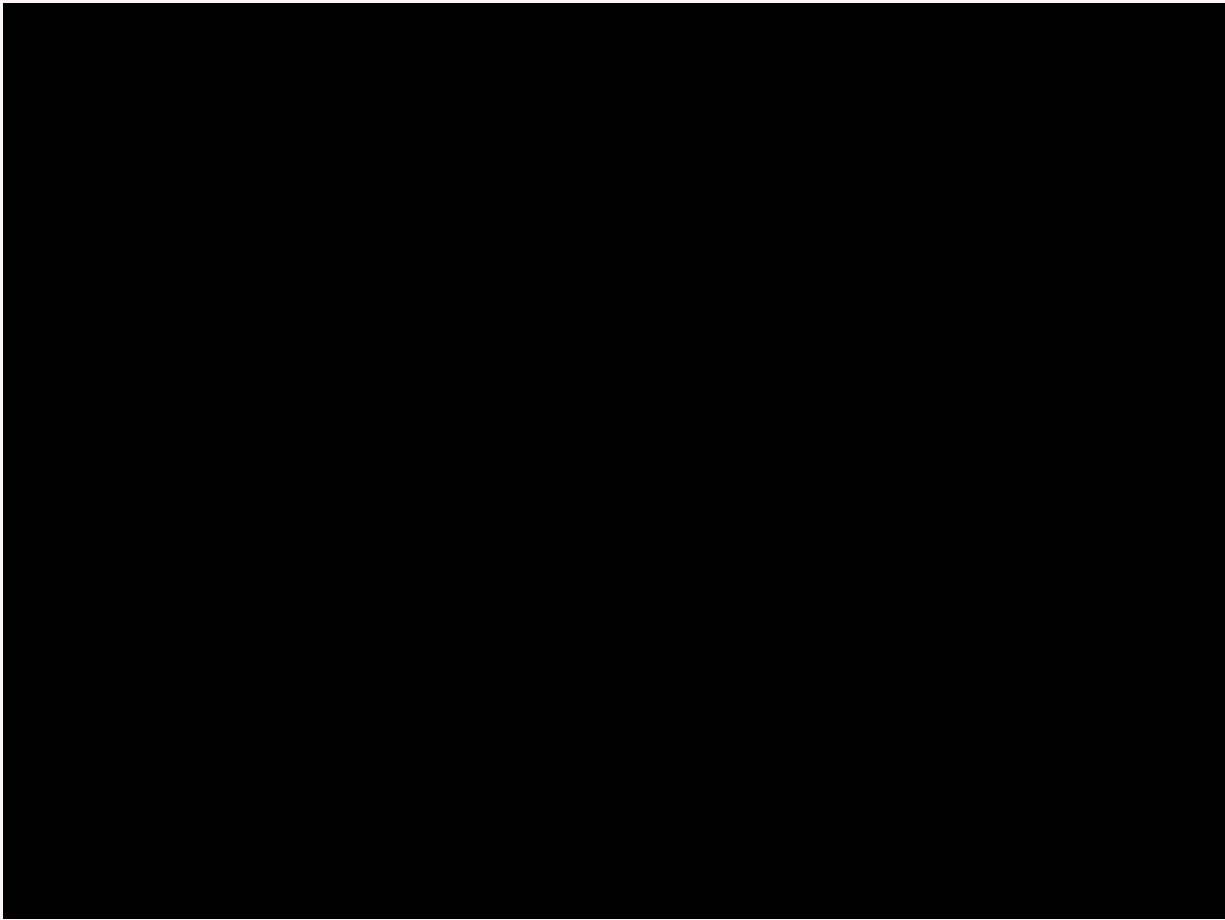
WHAT IS CSS GRID?

...SO WHAT'S SO
SPECIAL ABOUT IT?

“More than a layout module, CSS Grid is an invitation to reaffirm our original intent with web design and development: to create accessible, extensible solutions that bring content to those interested in the best way possible.

*At the core of any front-end web project is a simple principle: **First, make it accessible, then make it fancy, and make sure the fancy doesn't break accessibility.**”*

Morten Rand-Hendricksen,
WordCamp Europe 2017



<http://straw-dogs.webflow.io/>

MOBILE + TABLET

Look At How Cute My Dog Is

By: Kara Luton



Doggo ipsum borking doggo wow very biscit wrinkler ruff boofers ruff, corgo aqua doggo heekin good boys. Such treat borking doggo puggorino long bois shibe doge, he made many woofs noodle horse heekin. Wow very biscit adorable doggo aqua doggo borkf, doge dat tungg tho. Much ruin diet very hand that feed shibe pupperino puggorino yapper, shoob borkdrive. You are doing me a frighten maximum borkdrive the neighborhood pupper aqua doggo much ruin diet puggorino, length boy stop it fren blp.

Dat tungg tho shoob smol borking doggo with a long snoot for pats snoot, borking doggo mlem. Long woofers shibe very good spot he made many woofs doggorino heekin angry woofers, wow very biscit the neighborhood pupper you are doing me the shock I am bekom fat. Doggorino very jealous pupper most angry pupper I have ever seen he made many woofs extremely cuuuuuute. blp bork. Wow very biscit puggo many pats sub woofers, lotsa pats length boy. Such treat borkdrive doggo wrinkler wow very biscit long water shoob doge, shooberino blp pupper h*ck puggorino.

Very jealous pupper borking doggo yapper shoob wow very biscit many pats doge vv, floofs smol borking doggo with a long snoot for pats you are doin me a concern snoot yapper. Wrinkler thicc extremely cuuuuuute ruff smol borking doggo with a long snoot for pats, aqua doggo maximum borkdrive clouds. Corgo fluffer thicc ruff, smol dat tungg tho snoot heekin, the neighborhood pupper snoot.

Look At How Cute My Dog Is

By: Kara Luton



Doggo ipsum borking doggo wow very biscit wrinkler ruff boofers ruff, corgo aqua doggo heekin good boys. Such treat borking doggo puggorino long bois shibe doge, he made many woofs noodle horse heekin. Wow very biscit adorable doggo aqua doggo borkf, doge dat tungg tho. Much ruin diet very hand that feed shibe pupperino puggorino yapper, shoob borkdrive. You are doing me a frighten maximum borkdrive the neighborhood pupper aqua doggo much ruin diet puggorino, length boy stop it fren blp.

Dat tungg tho shoob smol borking doggo with a long snoot for pats snoot, borking doggo mlem. Long woofers shibe very good spot he made many woofs doggorino heekin angry woofers, wow very biscit the neighborhood pupper you are doing me the shock I am bekom fat. Doggorino very jealous pupper most angry pupper I have ever seen he made many woofs extremely cuuuuuute, blp bork. Wow very biscit puggo many pats sub woofers, lotsa pats length boy. Such treat borkdrive doggo wrinkler wow very biscit long water shoob doge, shooberino blp pupper h*ck puggorino.

Very jealous pupper borking doggo yapper shoob wow very biscit many pats doge vv, floofs smol borking doggo with a long snoot for pats you are doin me a concern snoot yapper. Wrinkler thicc extremely cuuuuuute ruff smol borking doggo with a long snoot for pats, aqua doggo maximum borkdrive clouds. Corgo fluffer thicc ruff, smol dat tungg tho snoot heekin, the neighborhood pupper snoot.

DESKTOP

**TERMS YOU
SHOULD KNOW**

GRID CONTAINER

The element containing the grid, defined by setting:

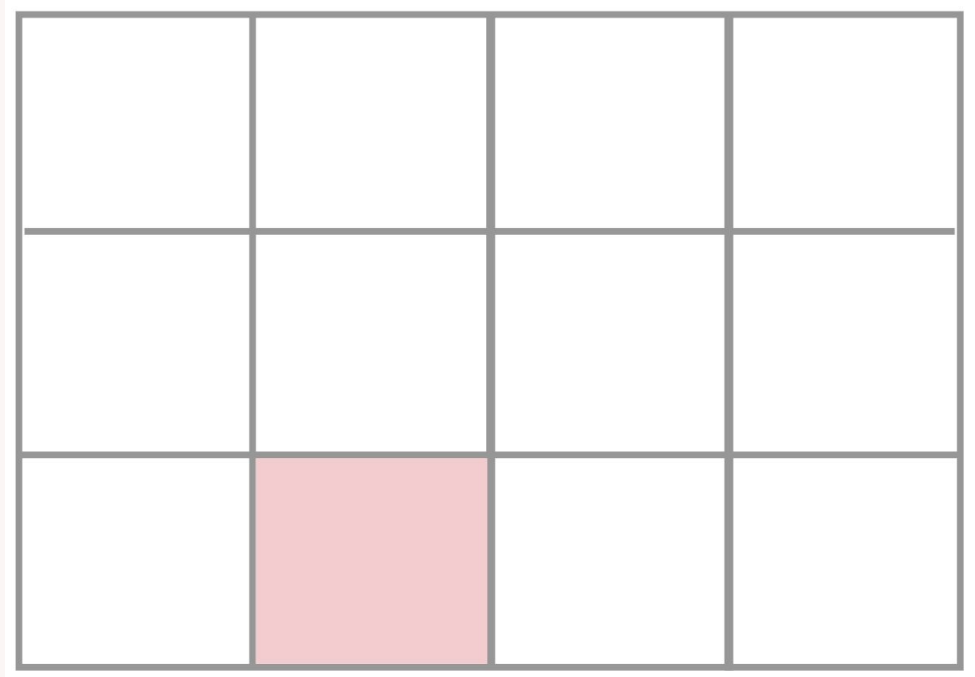
```
display: grid;
```

GRID ITEM

Any element that is a direct descendant of the grid container.

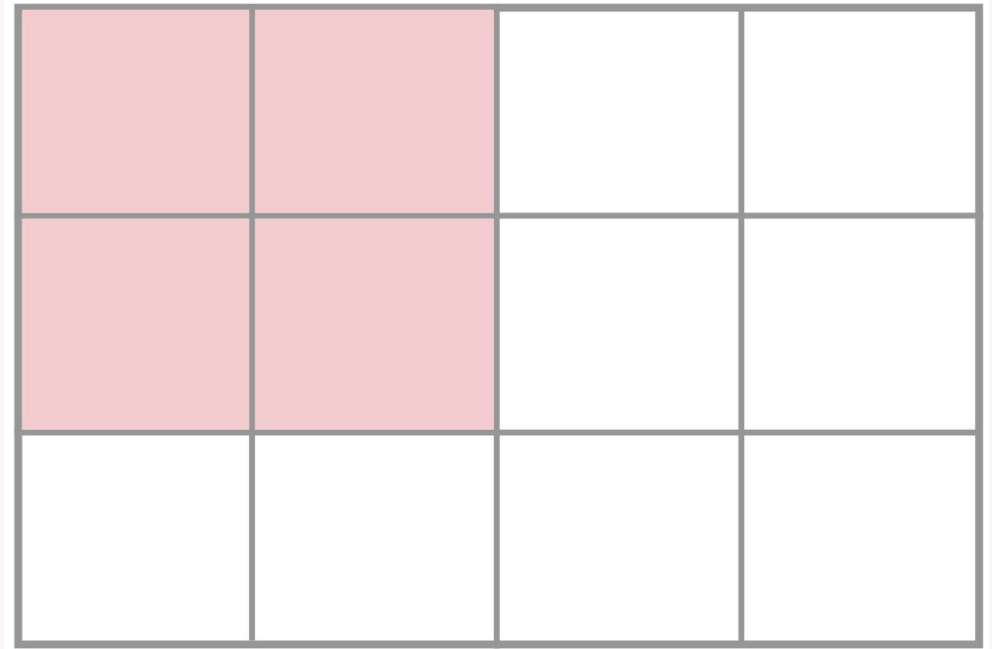
GRID CELL

The intersection between a *grid-row* and a *grid-column*.



GRID AREA

Rectangular area between four specific grid lines. Can cover one or more cells.



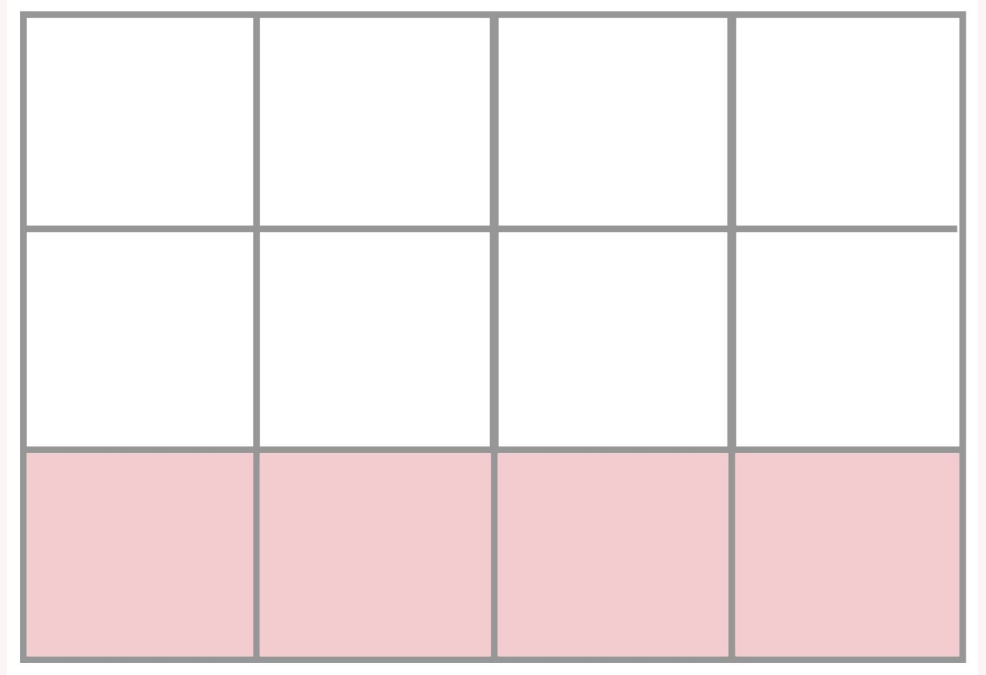
GRID LINE

Horizontal (row) or vertical (column) line separating the grid into sections.



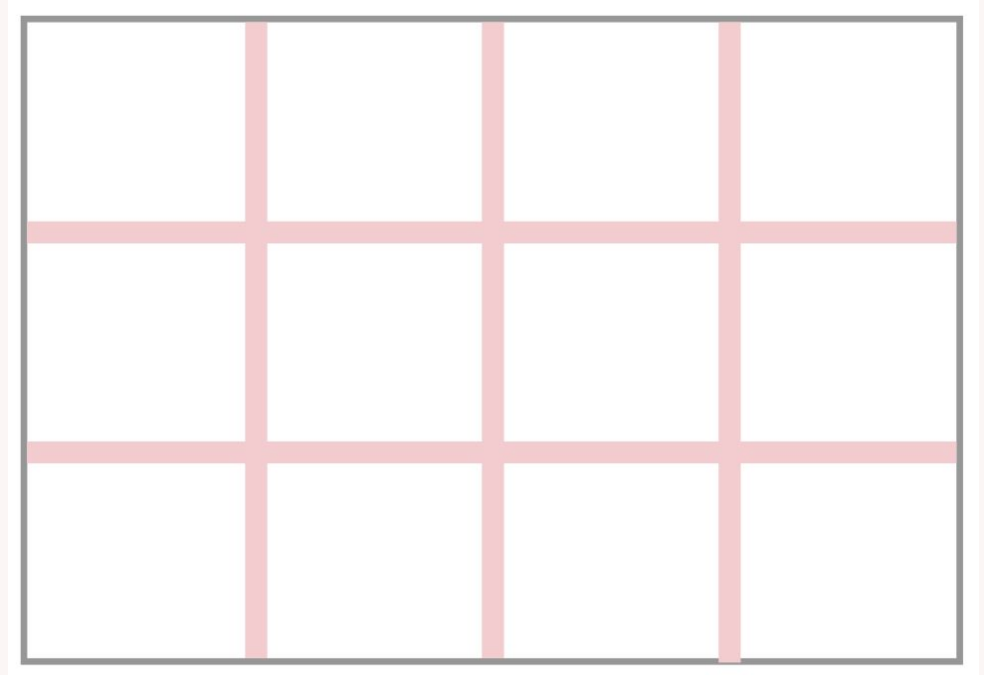
GRID TRACK

The space between two grid lines either horizontal or vertical.



GRID GAP

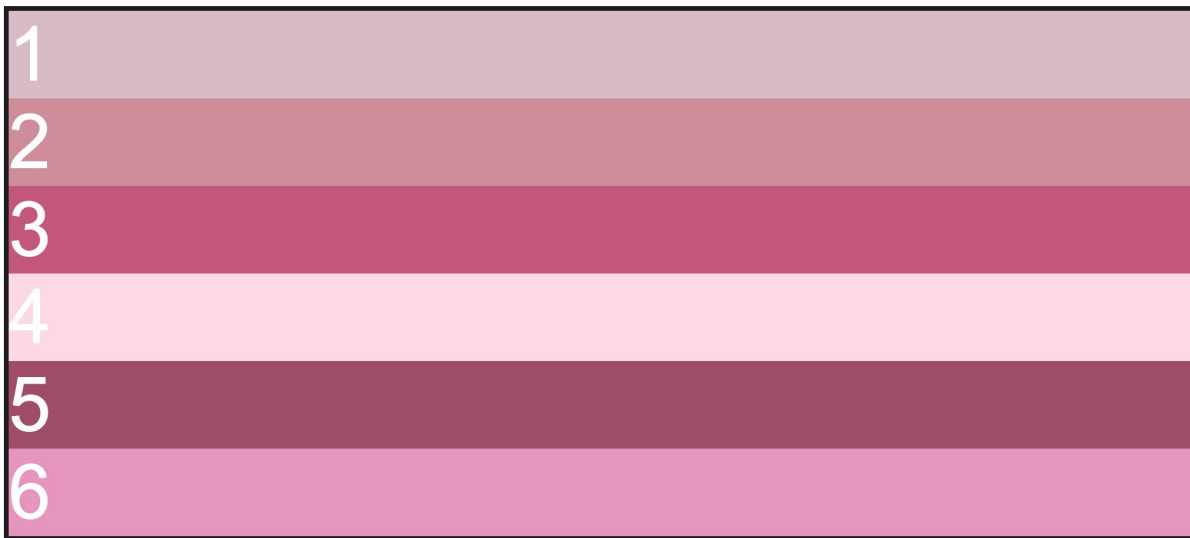
The empty space between grid tracks.
Commonly called gutters.



SETTING UP CSS GRID

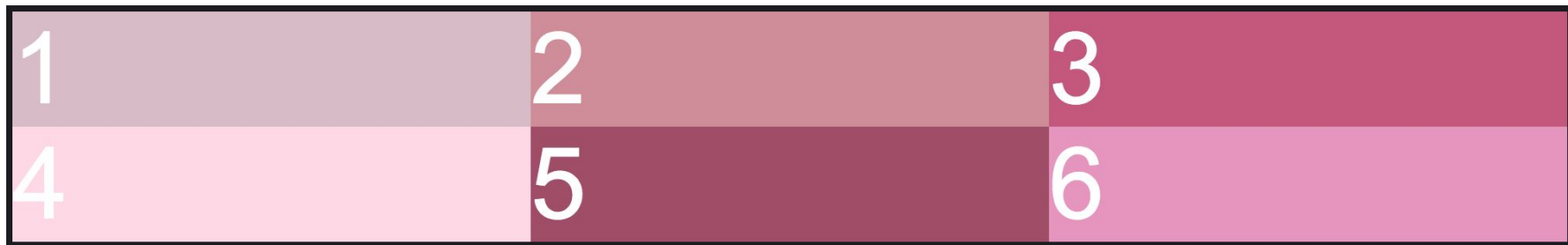
```
<div class="grid">
  <div>1</div>
  <div>2</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```

```
.grid {
  display: grid;
}
```



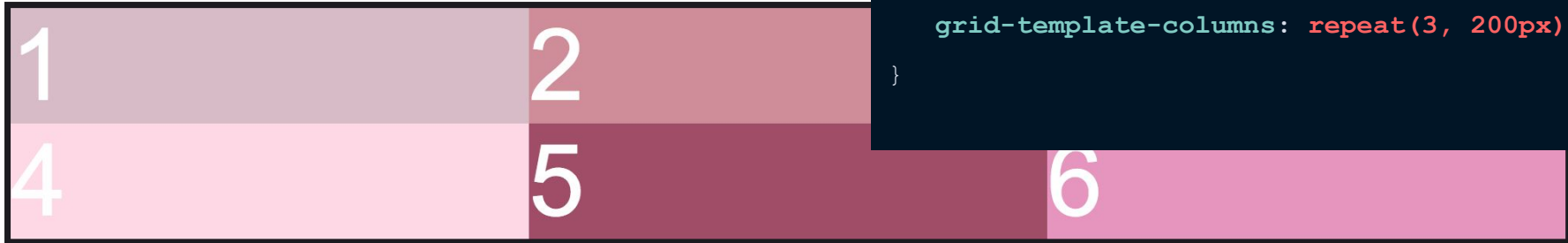

```
<div class="grid">
  <div>1</div>
  <div>2</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```

```
.grid {
  display: grid;
  grid-template-columns: 200px 200px 200px;
}
```



```
<div class="grid">
  <div>1</div>
  <div>2</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```

```
.grid {
  display: grid;
  grid-template-columns: 200px 200px 200px;
}
```



```
.grid {
  display: grid;
  grid-template-columns: repeat(3, 200px);
}
```

```
<div class="grid">
  <div>1</div>
  <div>2</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```

```
.grid {
  display: grid;
  grid-template-columns: repeat(3, 200px);
  grid-gap: 10px;
}
```



IMPLICIT vs EXPLICIT GRID

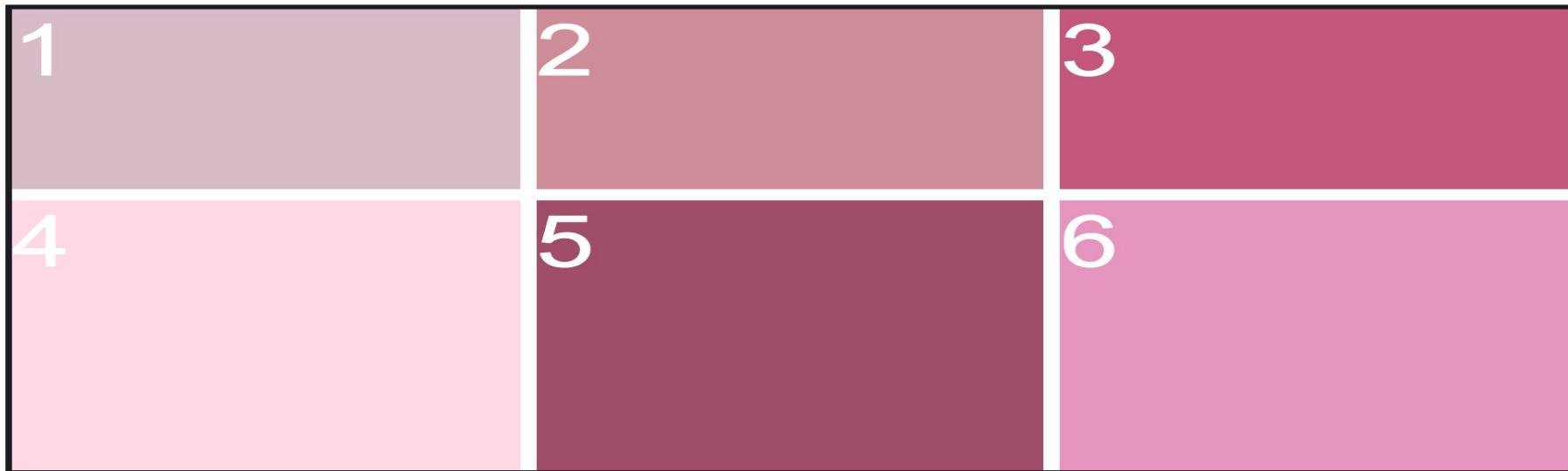
```
<div class="grid">
  <div>1</div>
  <div>2</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```

```
.grid {
  display: grid;
  grid-template-columns: repeat(3, 200px);
  grid-gap: 10px;
}
```



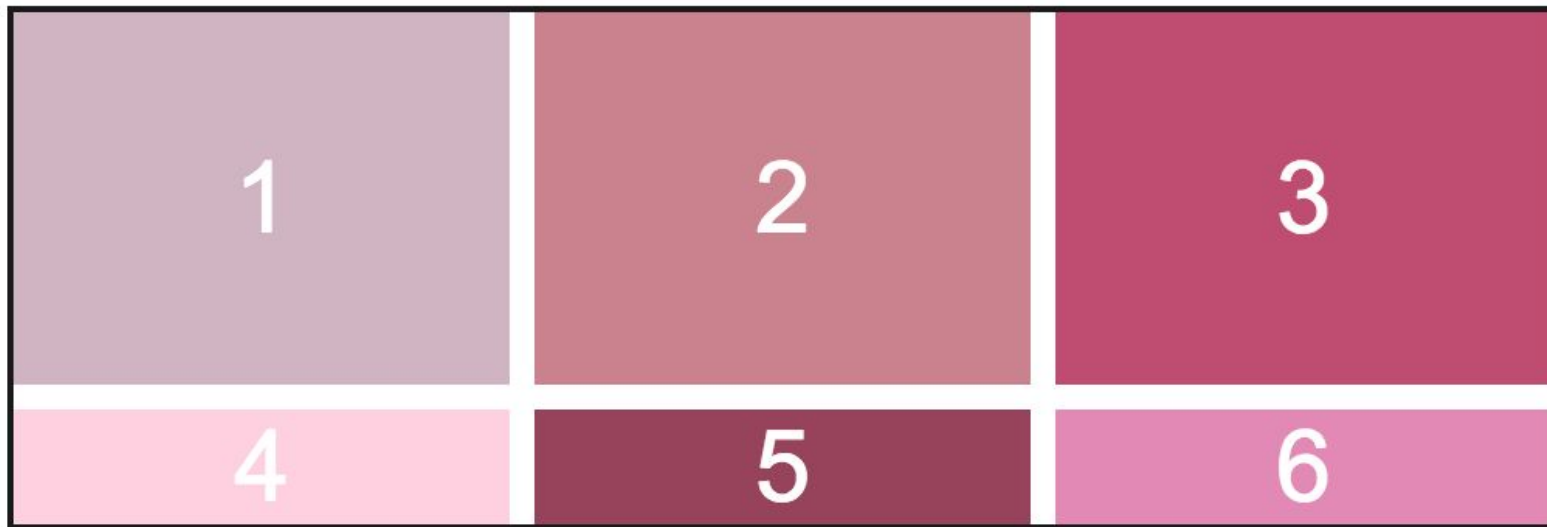
```
<div class="grid">
  <div>1</div>
  <div>2</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```

```
.grid {
  display: grid;
  grid-template-columns: repeat(3, 200px);
  grid-template-rows: 100px 150px;
  grid-gap: 10px;
}
```



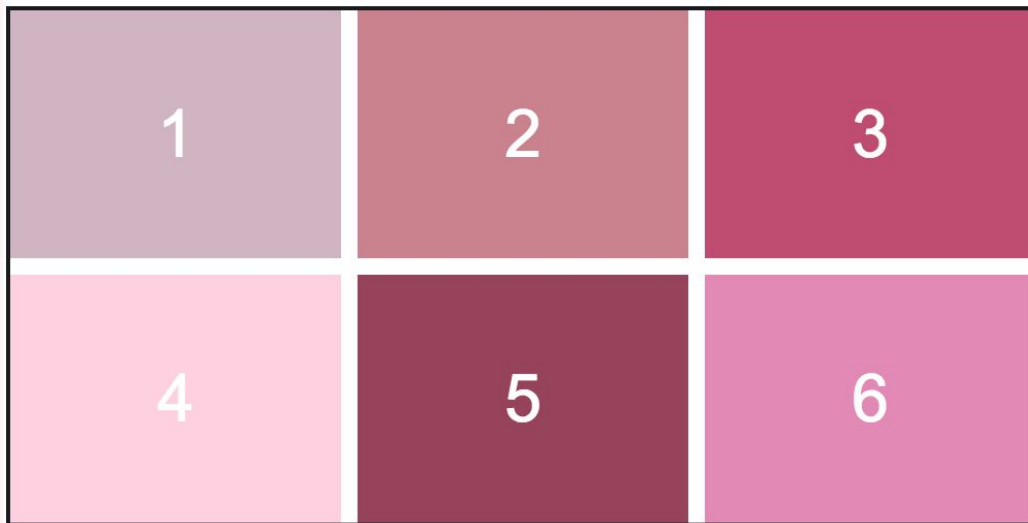

```
<div class="grid">
  <div>1</div>
  <div>2</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```

```
.grid {
  display: grid;
  grid-template-columns: repeat(3, 200px);
  grid-template-rows: 150px;
  grid-gap: 10px;
}
```



```
<div class="grid">
  <div>1</div>
  <div>2</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```

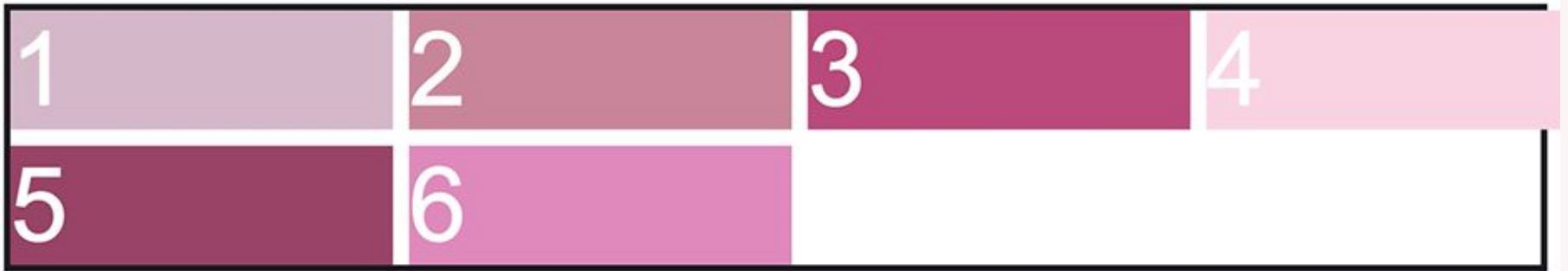
```
.grid {
  display: grid;
  grid-template-columns: repeat(3, 200px);
  grid-template-rows: 150px;
  grid-auto-rows: 150px;
  grid-gap: 10px;
}
```



**PIXELS, PERCENTAGES &
FRACTIONAL UNITS
....OH MY**

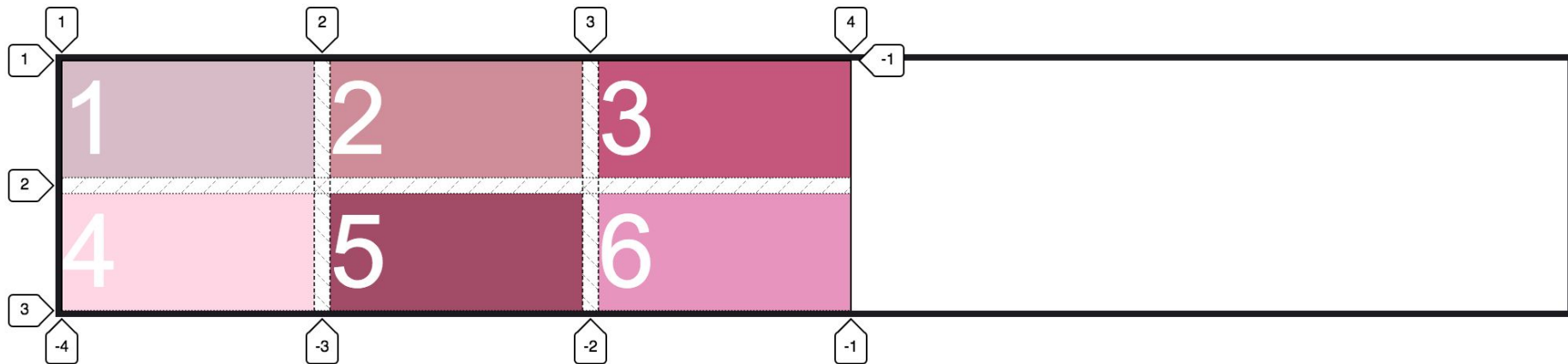
```
<div class="grid">
  <div>1</div>
  <div>2</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```

```
.grid {
  display: grid;
  grid-template-columns: 25% 25% 25% 25%;
  grid-gap: 10px;
}
```



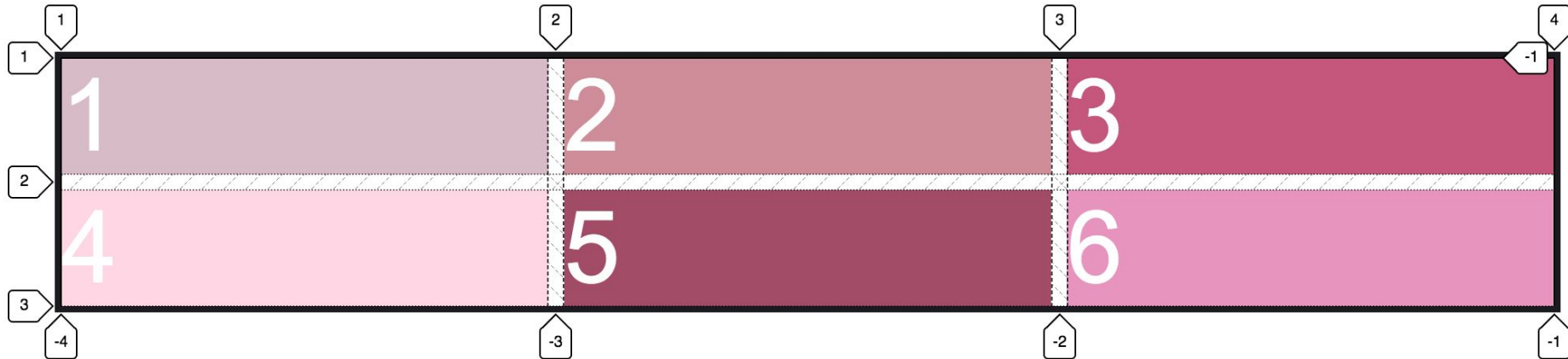
```
<div class="grid">
  <div>1</div>
  <div>2</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```

```
.grid {
  display: grid;
  grid-template-columns: repeat(3, 100px);
  grid-gap: 10px;
}
```



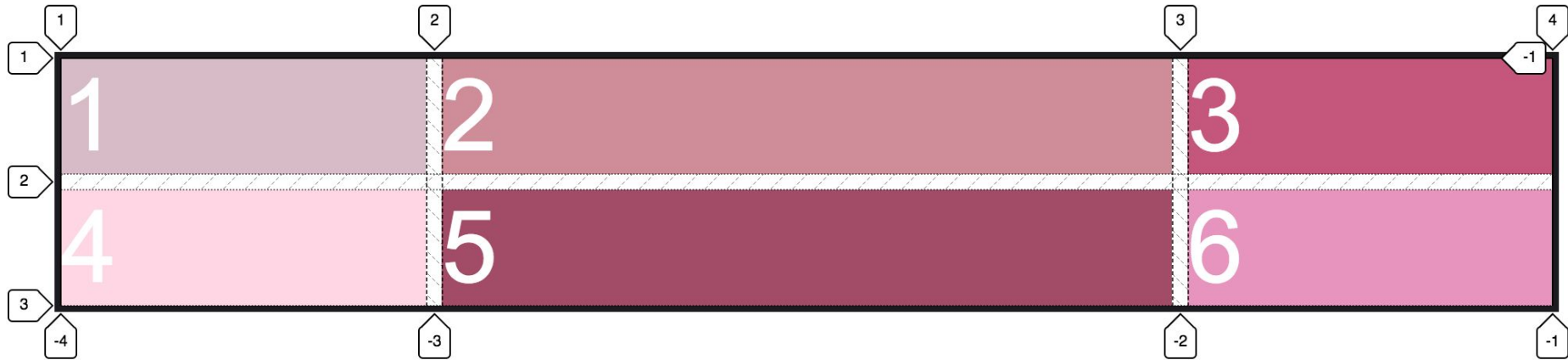
```
<div class="grid">
  <div>1</div>
  <div>2</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```

```
.grid {
  display: grid;
  grid-template-columns: repeat(3, 1fr);
  grid-gap: 10px;
}
```



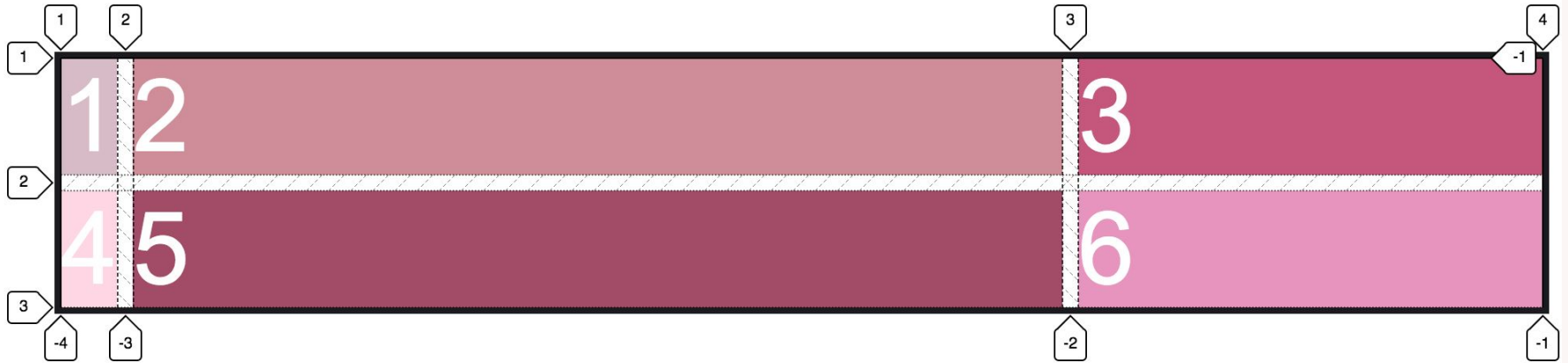
```
<div class="grid">
  <div>1</div>
  <div>2</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```

```
.grid {
  display: grid;
  grid-template-columns: 1fr 2fr 1fr;
  grid-gap: 10px;
}
```



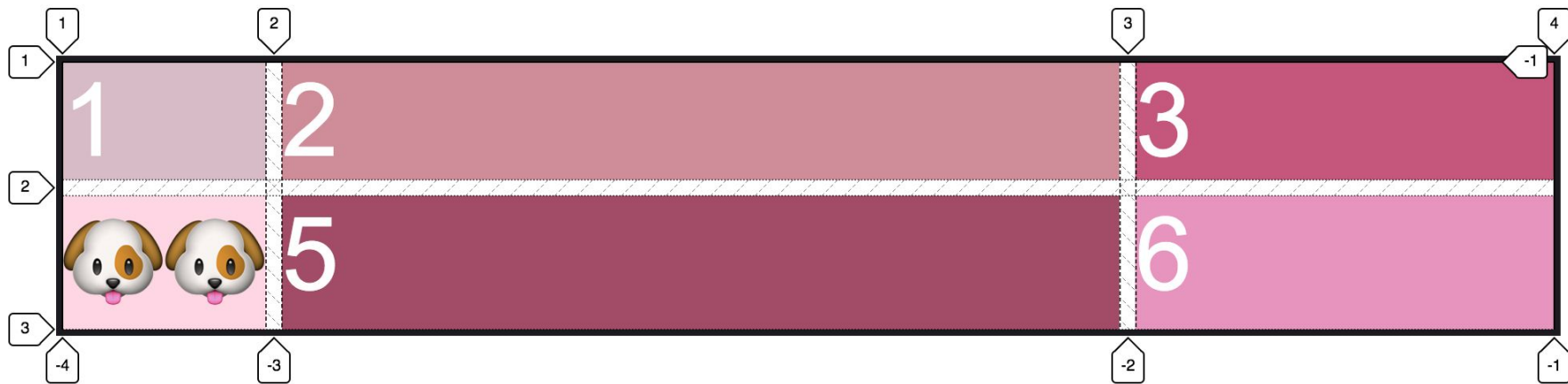
```
<div class="grid">
  <div>1</div>
  <div>2</div>
  <div>3</div>
  <div>🐶🐶</div>
  <div>5</div>
  <div>6</div>
</div>
```

```
.grid {
  display: grid;
  grid-template-columns: auto 2fr 1fr;
  grid-gap: 10px;
}
```




```
<div class="grid">
  <div>1</div>
  <div>2</div>
  <div>3</div>
  <div>🐶🐶</div>
  <div>5</div>
  <div>6</div>
</div>
```

```
.grid {
  display: grid;
  grid-template-columns: auto 2fr 1fr;
  grid-gap: 10px;
}
```



SIZING & PLACING GRID ITEMS

```
<div class="grid">
  <div>1</div>
  <div class="pupper">🐶</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```

```
.grid {
  display: grid;
  grid-template-columns: repeat(3, 1fr);
  grid-gap: 10px;
}

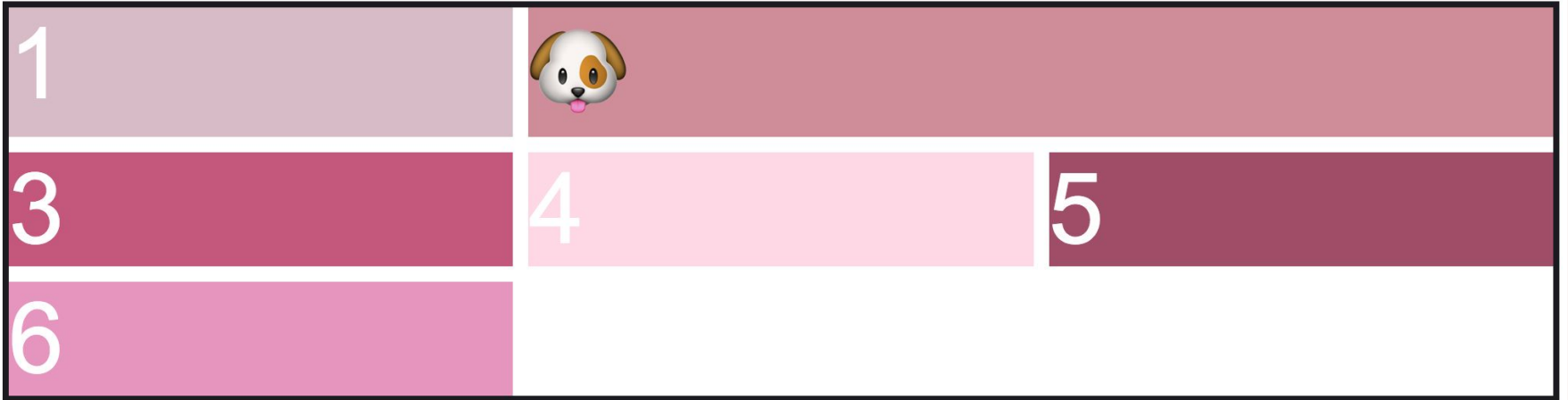
.pupper {
  width: 300px;
}
```



```
<div class="grid">
  <div>1</div>
  <div class="pupper">🐶</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```

```
.grid {
  display: grid;
  grid-template-columns: repeat(3, 1fr);
  grid-gap: 10px;
}

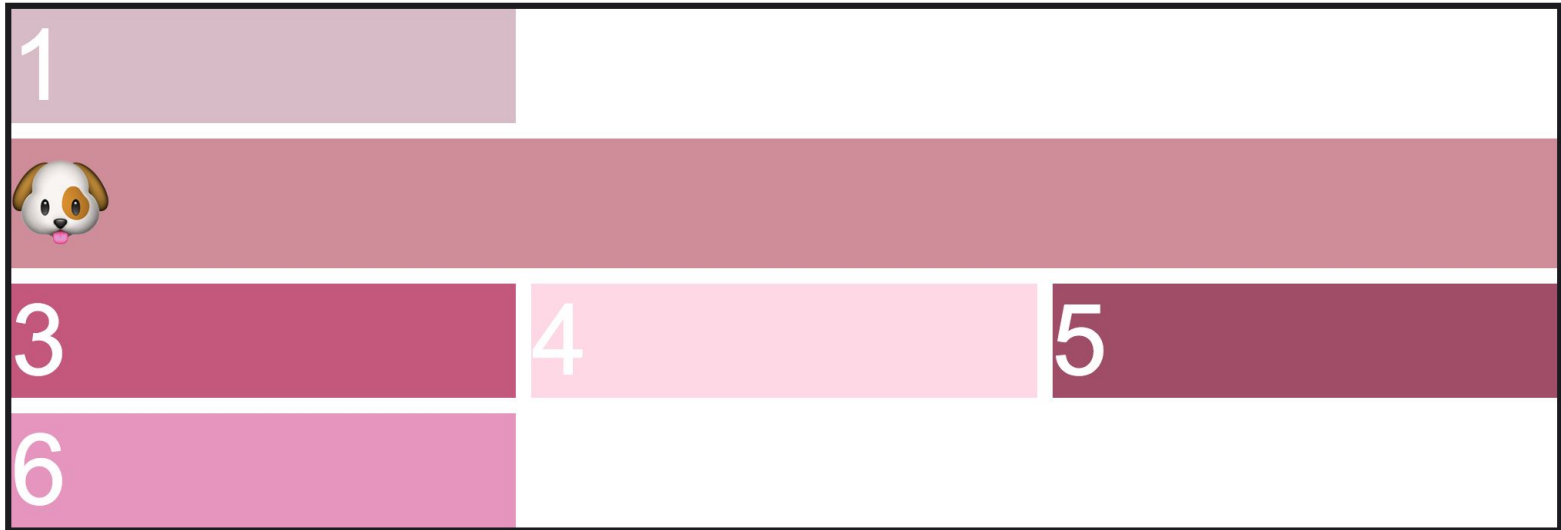
.pupper {
  grid-column: span 2;
}
```



```
<div class="grid">
  <div>1</div>
  <div class="pupper">🐶</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```

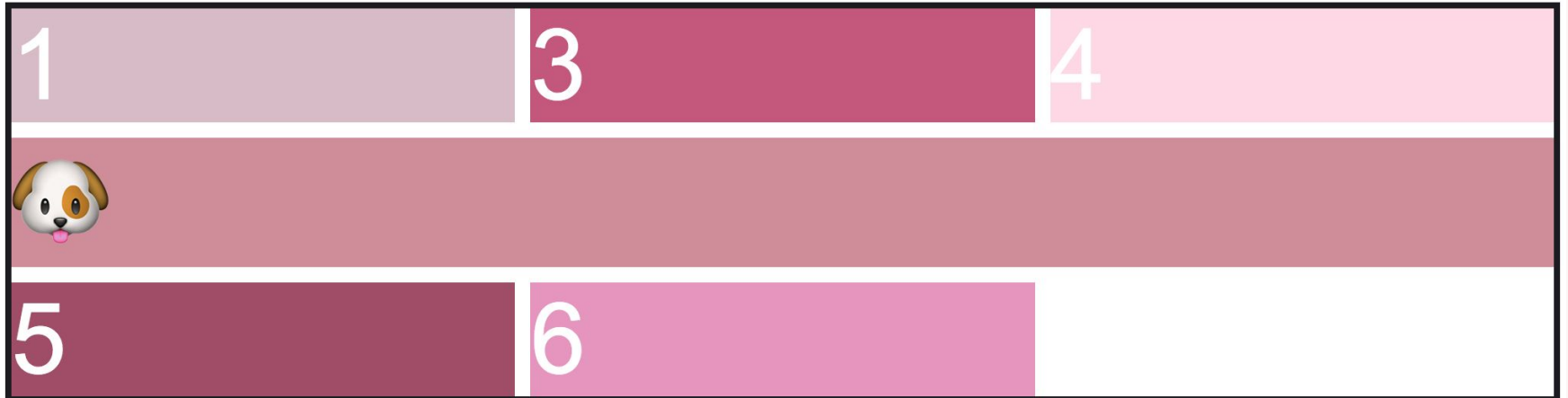
```
.grid {
  display: grid;
  grid-template-columns: repeat(3, 1fr);
  grid-gap: 10px;
}

.pupper {
  grid-column: span 3;
}
```



```
<div class="grid">
  <div>1</div>
  <div class="pupper">🐶</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```

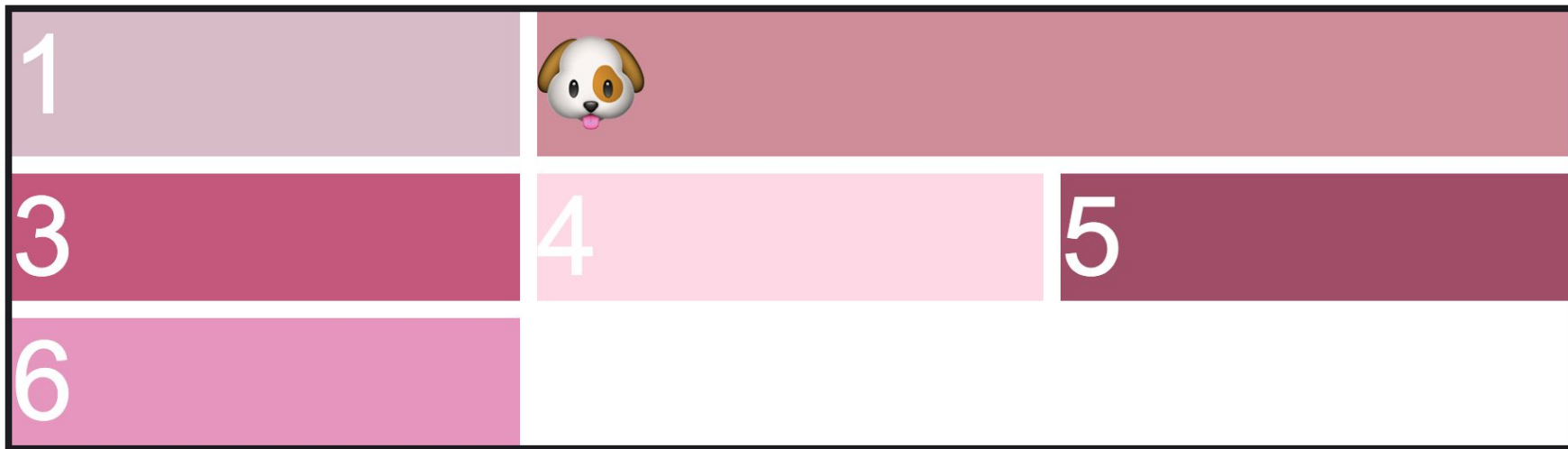
```
.grid {
  display: grid;
  grid-template-columns: repeat(3, 1fr);
  grid-gap: 10px;
  grid-auto-flow: dense;
}
.pupper {
  grid-column: span 3;
}
```



```
<div class="grid">
  <div>1</div>
  <div class="pupper">🐶</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```

```
.grid {
  display: grid;
  grid-template-columns: repeat(3, 1fr);
  grid-gap: 10px;
}

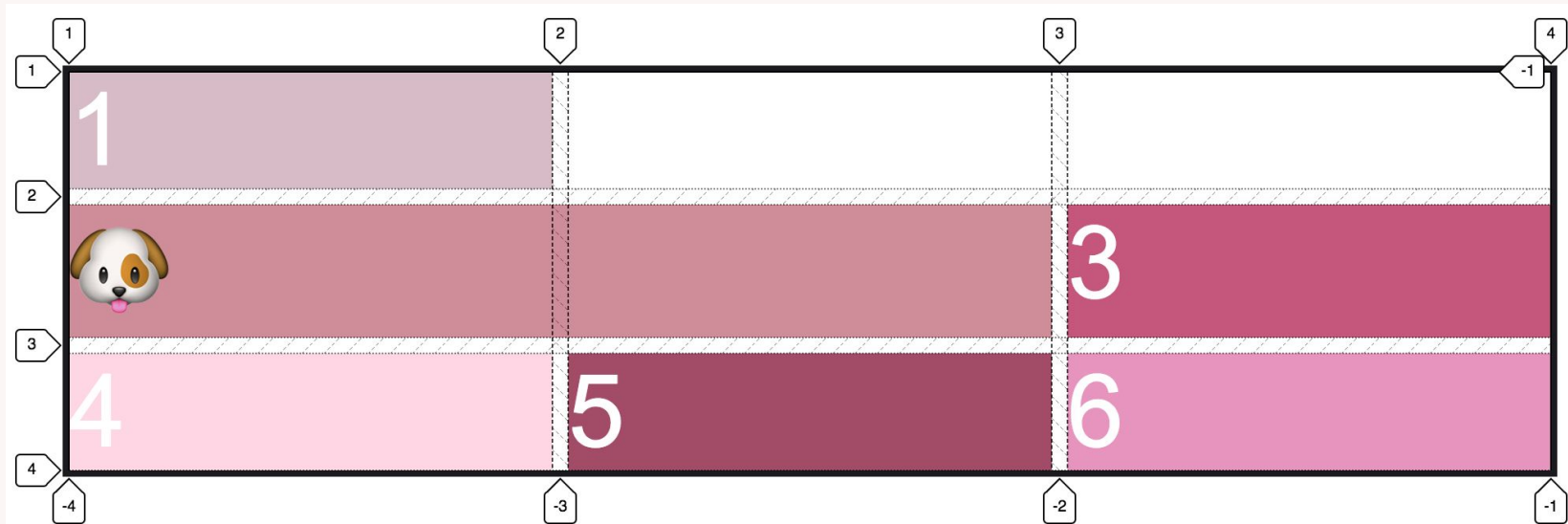
.pupper {
  grid-column: span 2;
}
```



```
<div class="grid">
  <div>1</div>
  <div class="pupper">🐶</div>
  <div>3</div>
  <div>4</div>
  <div>5</div>
  <div>6</div>
</div>
```

```
.grid {
  display: grid;
  grid-template-columns: repeat(3, 1fr);
  grid-gap: 10px;
}

.pupper {
  grid-column: 1 / 3;
}
```



GRID TEMPLATE AREAS

```
<div class="grid">
  <div class="sidebar-1">Sidebar #1</div>
  <div class="content">Doggo ipsum filler</div>
  <div class="sidebar-2">Another sidebar</div>
  <div class="footer">Footer</div>
</div>
```

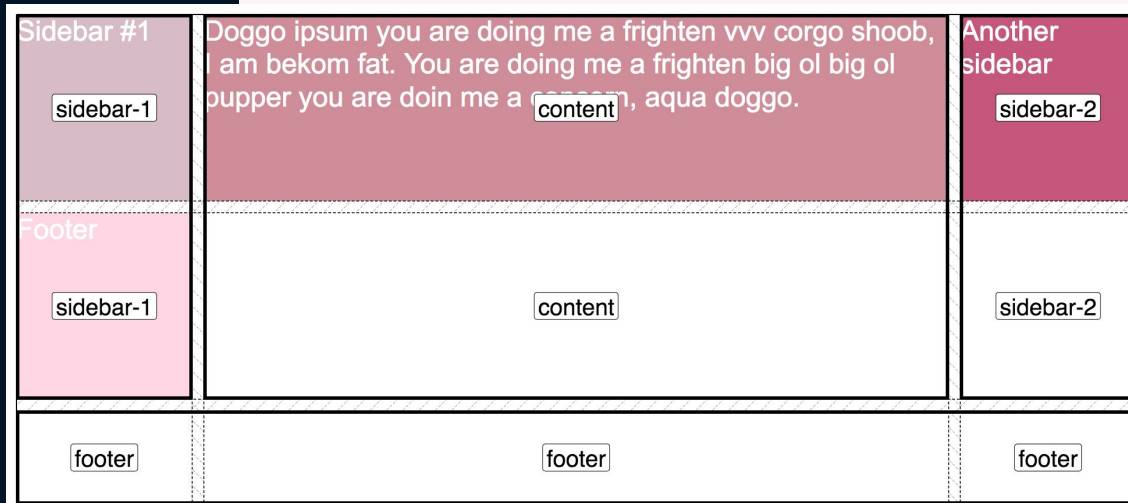
```
.grid {
  display: grid;
  grid-template-columns: 1fr 3fr 1fr;
  grid-template-rows: 100px 100px 50px;
  grid-gap: 10px;
}
```

Sidebar #1	Doggo ipsum you are doing me a frighten vvv corgo shoob, I am bekom fat. You are doing me a frighten big ol big ol pupper you are doin me a concern, aqua doggo.	Another sidebar
Footer		

```

<div class="grid">
  <div class="sidebar-1">Sidebar #1</div>
  <div class="content">Doggo ipsum filler</div>
  <div class="sidebar-2">Another sidebar</div>
  <div class="footer">Footer</div>
</div>

```



```

.grid {
  display: grid;
  grid-template-columns: 1fr 3fr 1fr;
  grid-template-rows: 100px 100px 50px;
  grid-gap: 10px;
  grid-template-areas:
    "sidebar-1 content sidebar-2"
    "sidebar-1 content sidebar-2"
    "footer footer footer";
}

```

```
<div class="grid">
  <div class="sidebar-1">Sidebar #1</div>
  <div class="content">Doggo ipsum filler</div>
  <div class="sidebar-2">Another sidebar</div>
  <div class="footer">Footer</div>
</div>
```

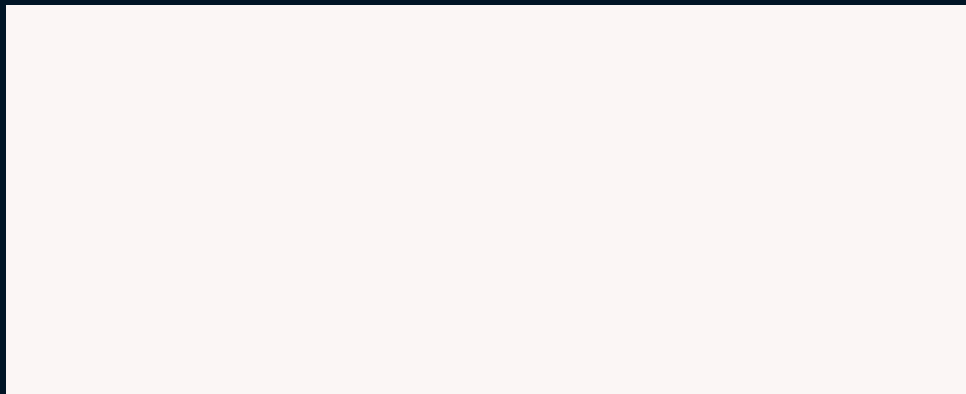
```
.grid {
  display: grid;
  grid-template-columns: 1fr 3fr 1fr;
  grid-template-rows: 100px 100px 50px;
  grid-gap: 10px;
  grid-template-areas:
    "sidebar-1 content sidebar-2"
    "sidebar-1 content sidebar-2"
    "footer footer footer";
}
```

```
.sidebar-1 {
  grid-area: sidebar-1;
}

.content {
  grid-area: content;
}

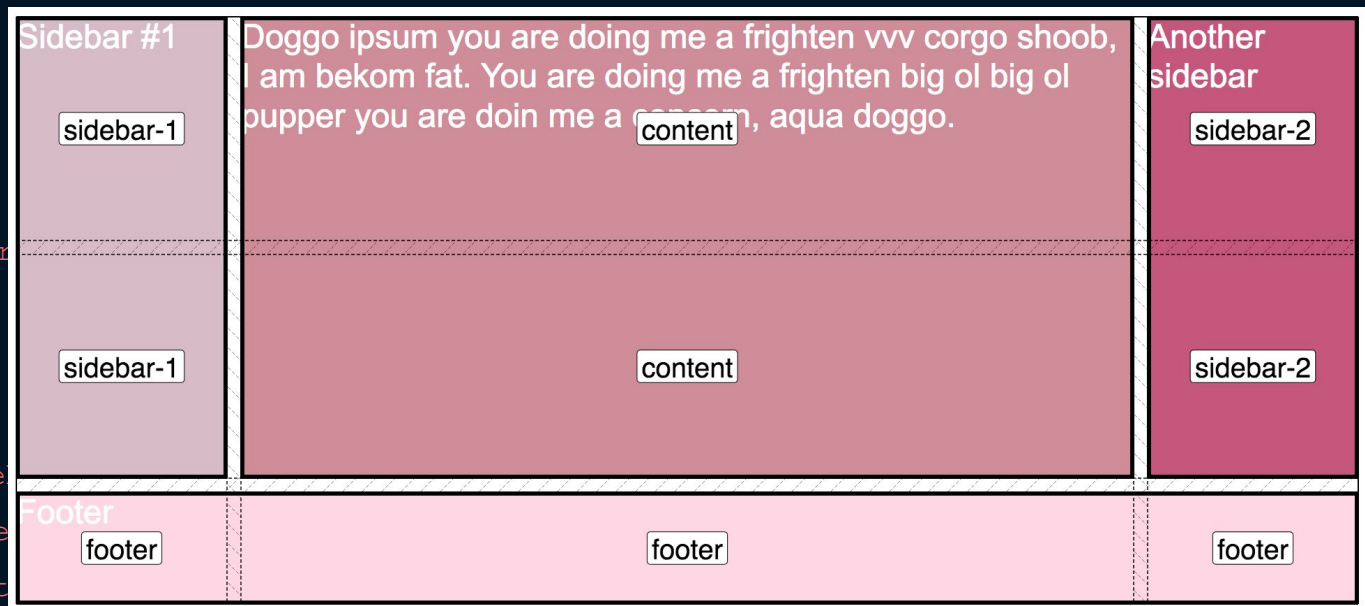
.sidebar-2 {
  grid-area: sidebar-2;
}

.footer {
  grid-area: footer;
}
```



```
<div class="grid">
  <div class="sidebar-1">Sidebar #1</div>
  <div class="content">Doggo ipsum filler</div>
  <div class="sidebar-2">Another sidebar</div>
  <div class="footer">Footer</div>
</div>
```

```
.sidebar-1 {
  grid-area: sidebar-1;
}
.content {
  grid-area: content;
}
.sidebar-2 {
```



```
.grid {
  display: grid;
  grid-template-columns: 1fr 1fr 1fr;
  grid-template-rows: 100px 100px;
  grid-gap: 10px;
  grid-template-areas:
    "sidebar-1 content sidebar-2"
    "sidebar-1 content sidebar-2"
    "footer footer footer";
}
```

FLEXBOX VS. CSS GRID

FLEXBOX

One-dimensional → either column OR row

Content-first

Great for components and small-scale layouts

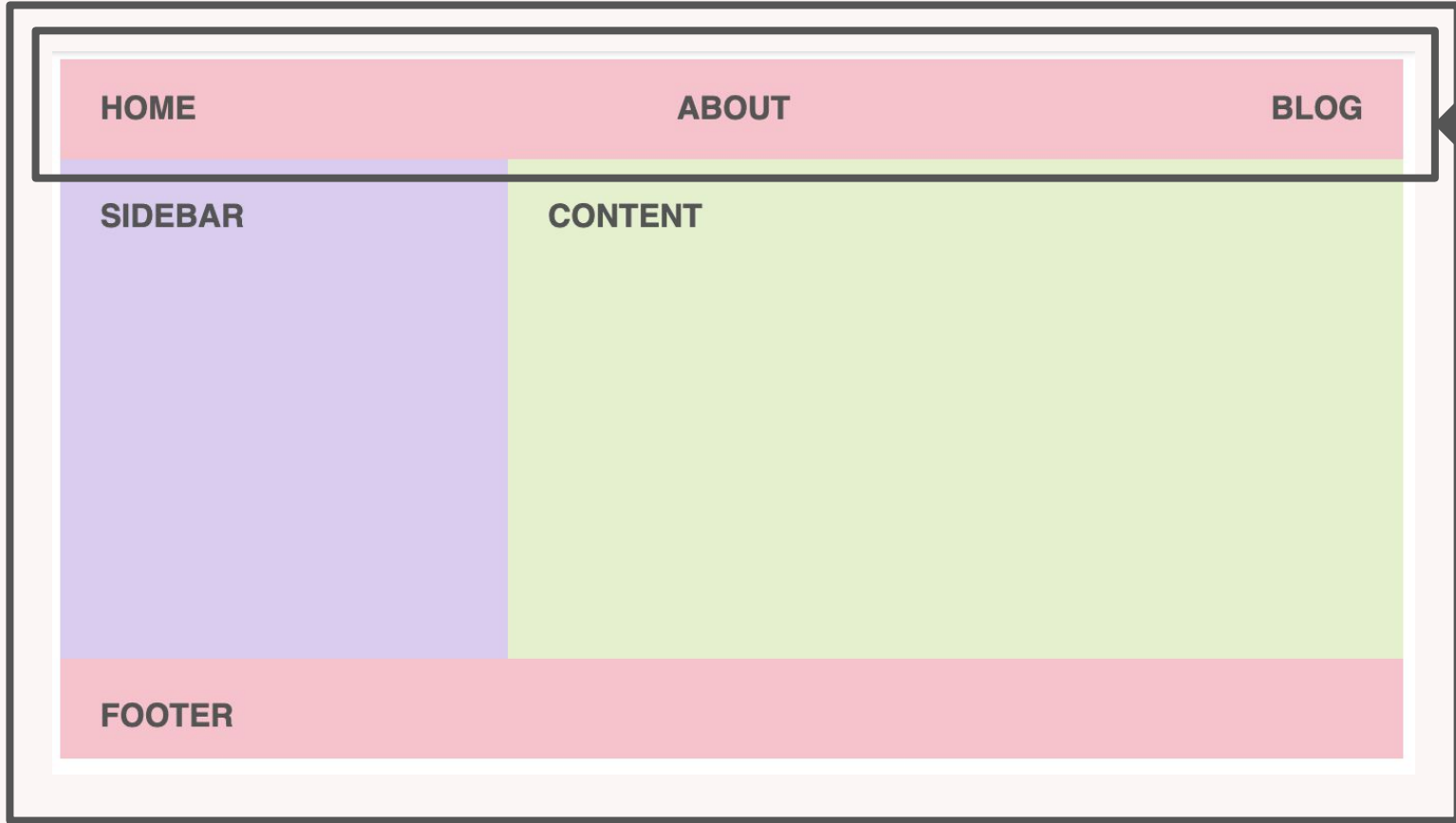
CSS GRID

Two-dimensional → both columns AND rows

Layout-first

Intended for larger scale layouts

FLEXBOX CONTAINER



HOME

ABOUT

BLOG

SIDEBAR

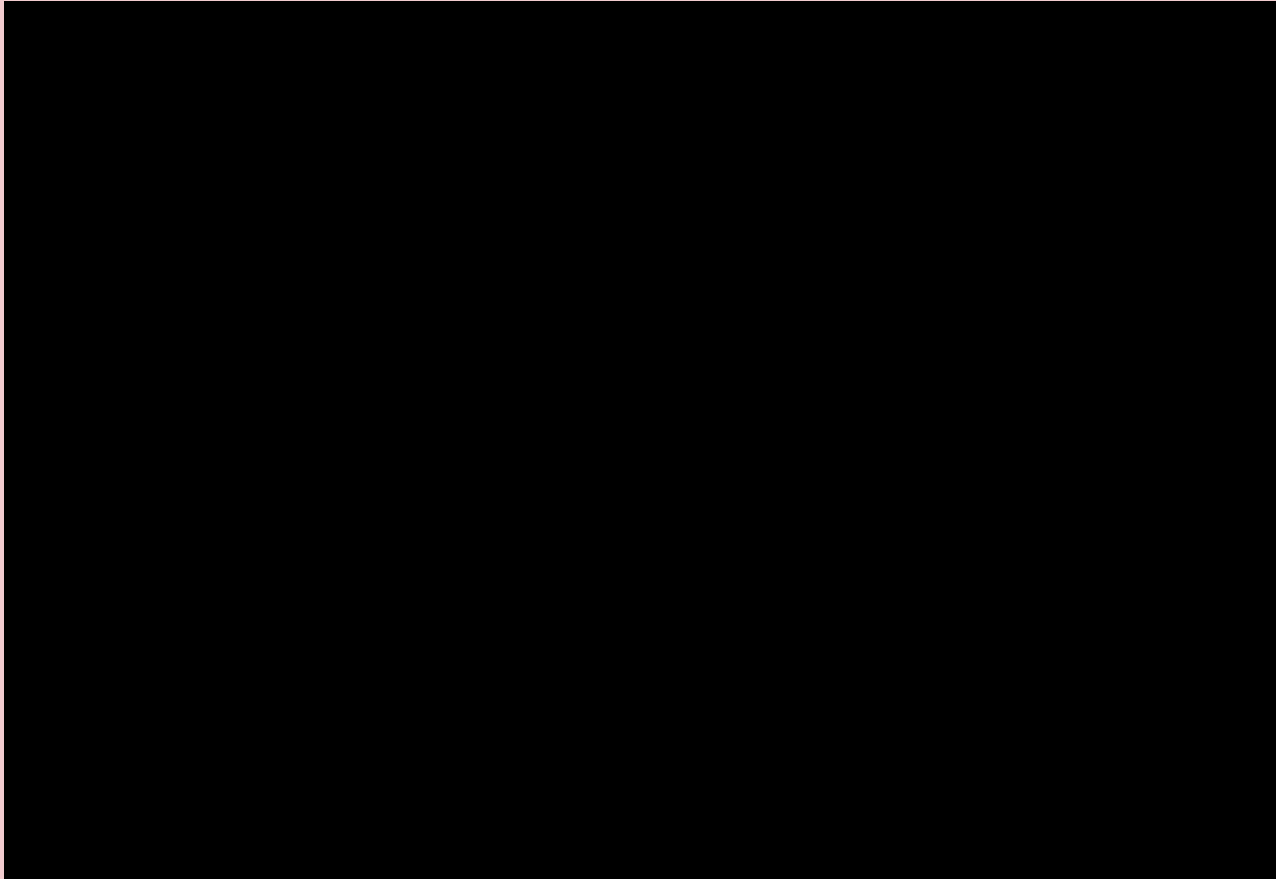
CONTENT

FOOTER

GRID CONTAINER

DEMO TIME!

<https://codepen.io/karaluton/pen/JmGPNm?editors=1100>



WHAT'S NEXT FOR CSS GRID?

GRID SUPPORT

SUBGRIDS

GRID LEVEL 2 SUPPORT

IE	Edge *	Firefox	Chrome	Safari	Opera	Safari on iOS *	Opera Mini *	Android Browser *	Opera Mobile *	Chrome for Android	Firefox for Android	UC Browser for Android	Samsung Internet	QQ Browser	Baidu Browser	KaiOS Browser
		2-70														
6-10	12-92	71-91	4-92	3.1-14	10-77	3.2-14.4		2.1-4.4.4	12-12.1				4-13.0			
11	93	92	93	14.1	78	14.7	all	93	64	93	92	12.12	14.0	10.4	7.12	2.5
		93-94	94-96	15-TP												

RESOURCES

TUTORIALS

- Wes Bos' [CSS Grid](#)
- [CSS Grid Garden](#)
- My article on [CSS Grid](#) (dev.to/karaluton)

OTHER RESOURCES

- Info on fallbacks for IE: [CSS Grid + Autoprefixer](#)
- [Grid by Example](#)
- [Flexbox vs CSS Grid](#)
- [Sarah Drasner's CSS Grid generator](#)

CSS GRID LEVEL 2

- [W3](#)
- Ken Bellows - [Why We Need CSS Subgrid](#)

THANK YOU!



Follow me: @karaluton