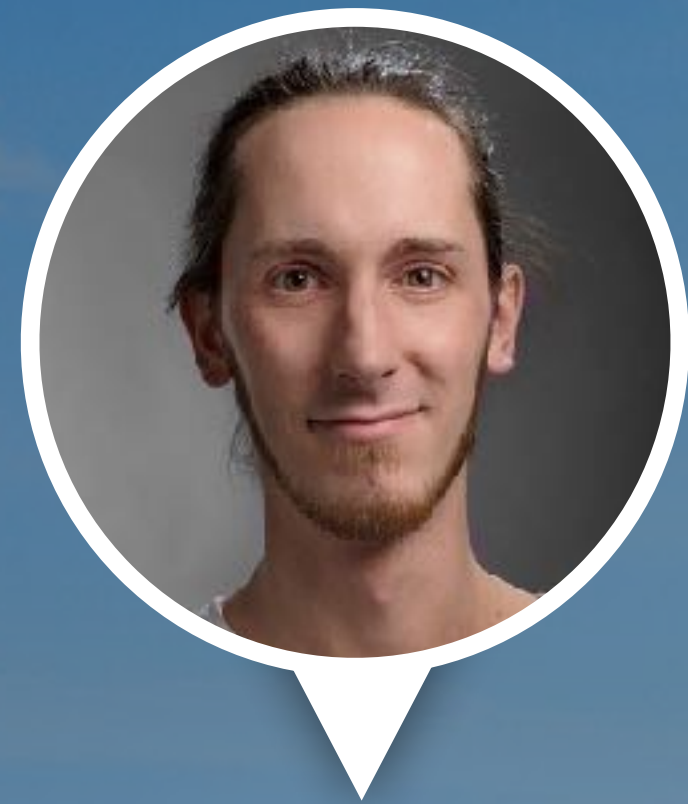


CSS:   
MINSK  
 JS

[bit.ly/css-mindset](https://bit.ly/css-mindset)



**Max Böck @mxbck**

Front-End Lead, Simpleloop

Vienna, Austria



**Max Stoiber**

@mxstbr

Following



How well do you know CSS? 🧑  
Given these classes:

```
.red {  
  color: red;  
}  
.blue {  
  color: blue;  
}
```

Which color would these divs be?

```
<div class="red blue">  
<div class="blue red">
```

16:36 - 7. Sept. 2018



214



666



1,4K






**Max Stoiber**

@mxstbr

Following



How well do you know CSS?   
Given these classes:

```
.red {  
  color: red;  
}  
.blue {  
  color: blue;  
}
```

Which color would these divs be?

```
<div class="red blue">  
<div class="blue red">
```

16:36 - 7. Sept. 2018



214



666



1,4K



214



*"Just shows the ridiculous fragility of CSS."*



*"CSS is such a mess -  
zero predictability. we really  
need a better system."*



*"WTF. this is why I hate  
frontend dev. 🤦"*

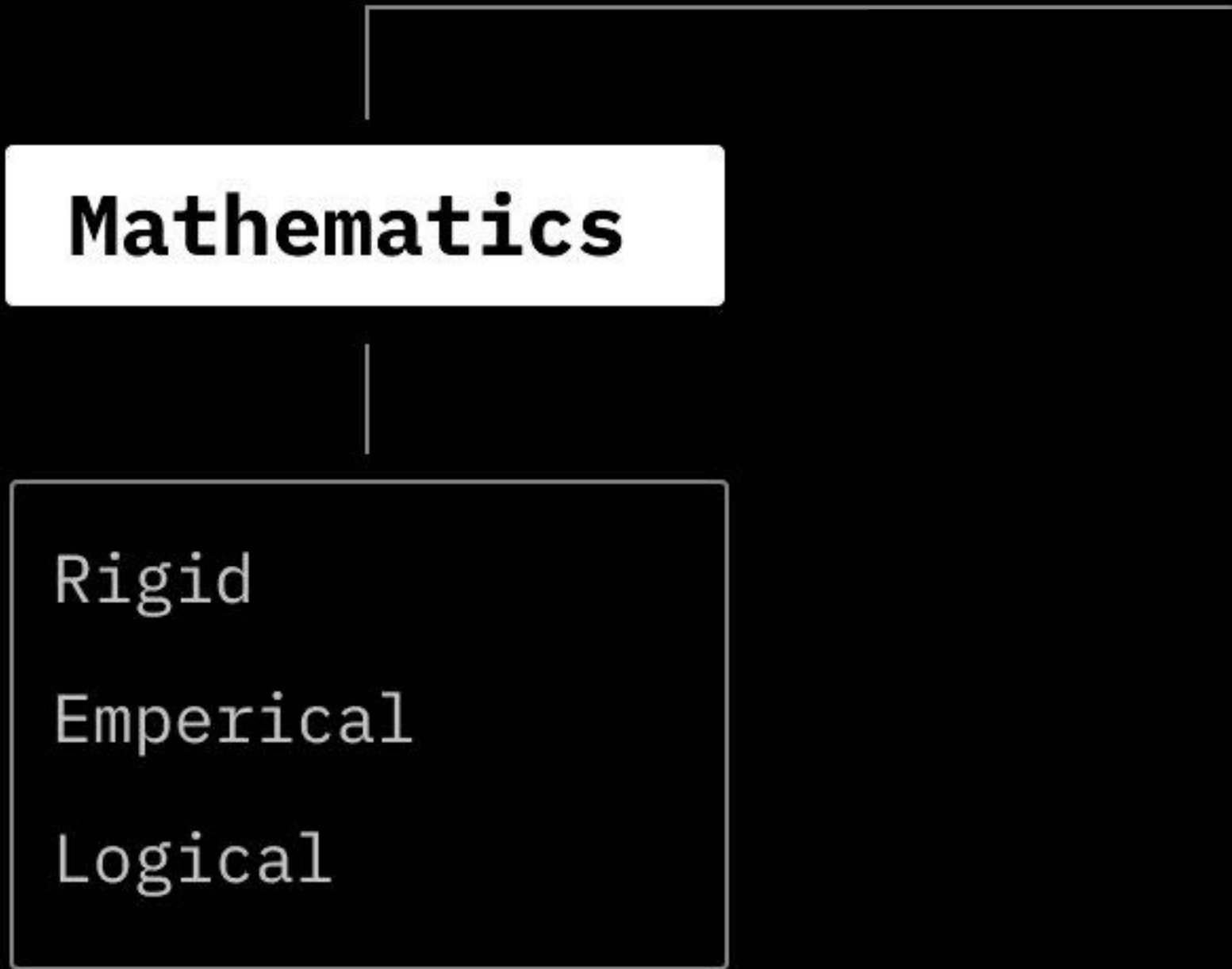


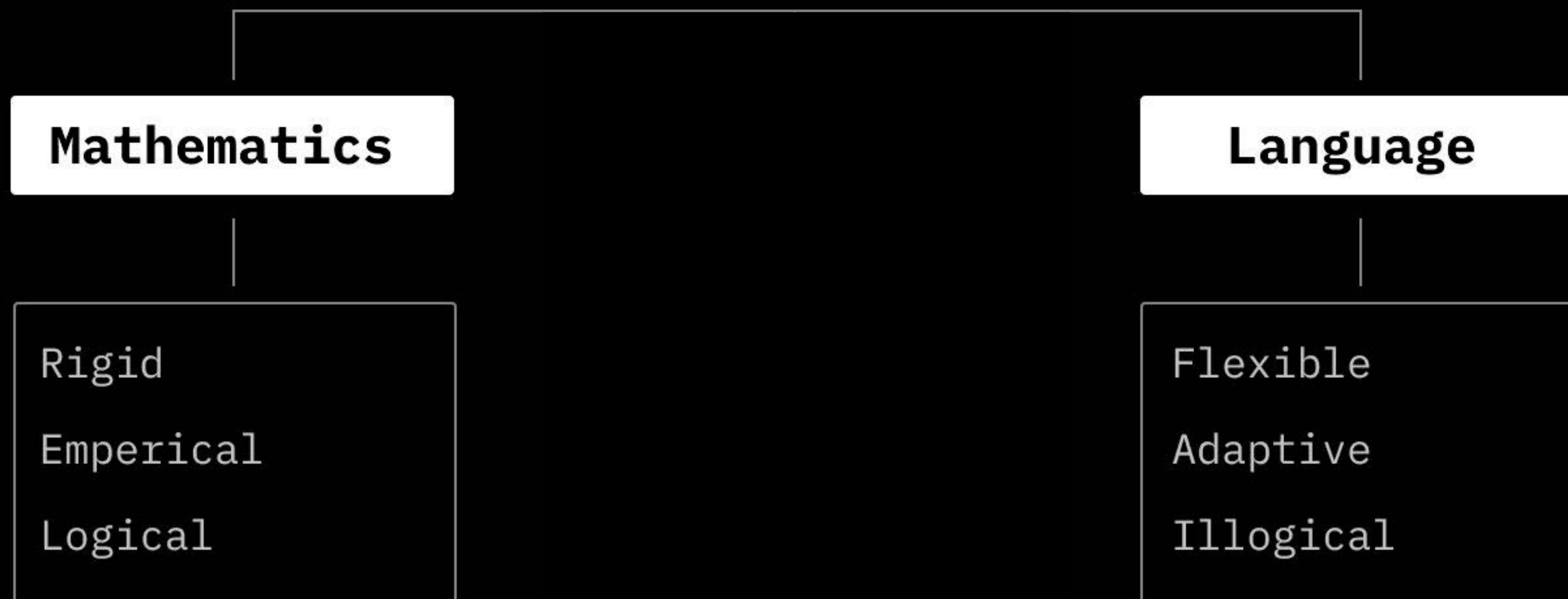
CSS

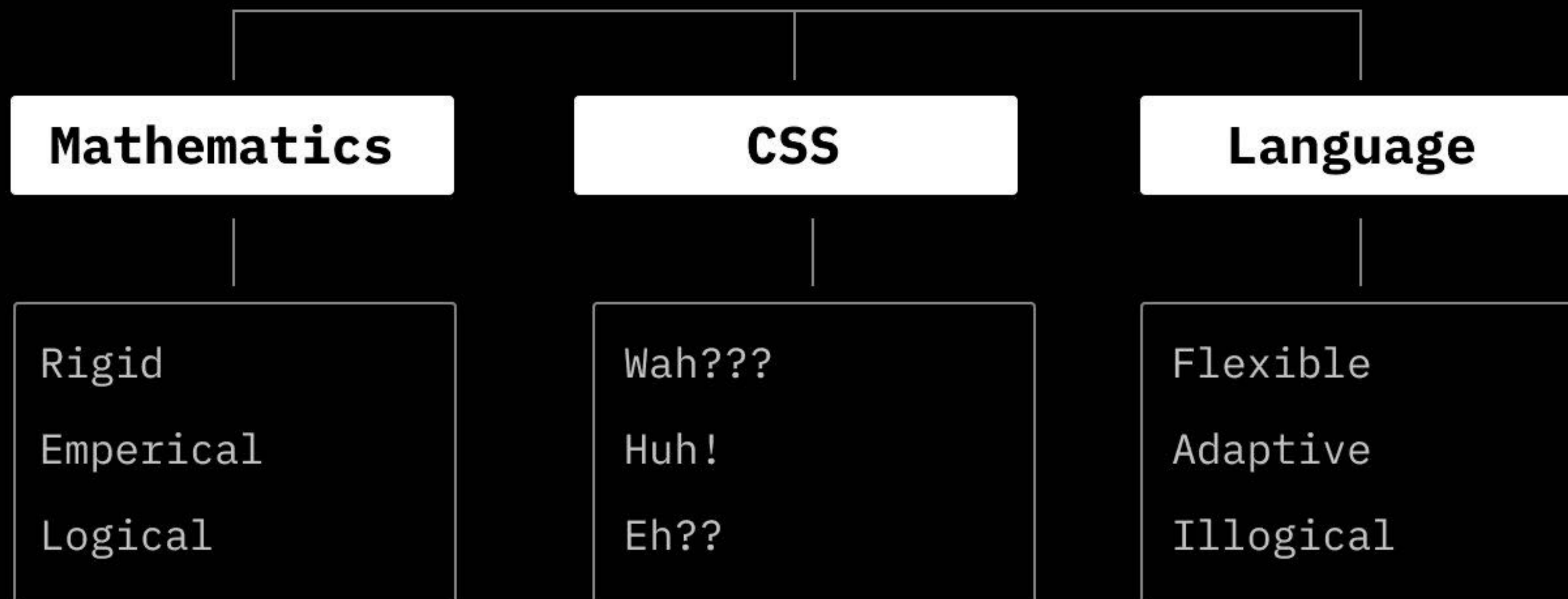
Global  
HD



Why is CSS such a **frustrating** language for many developers?







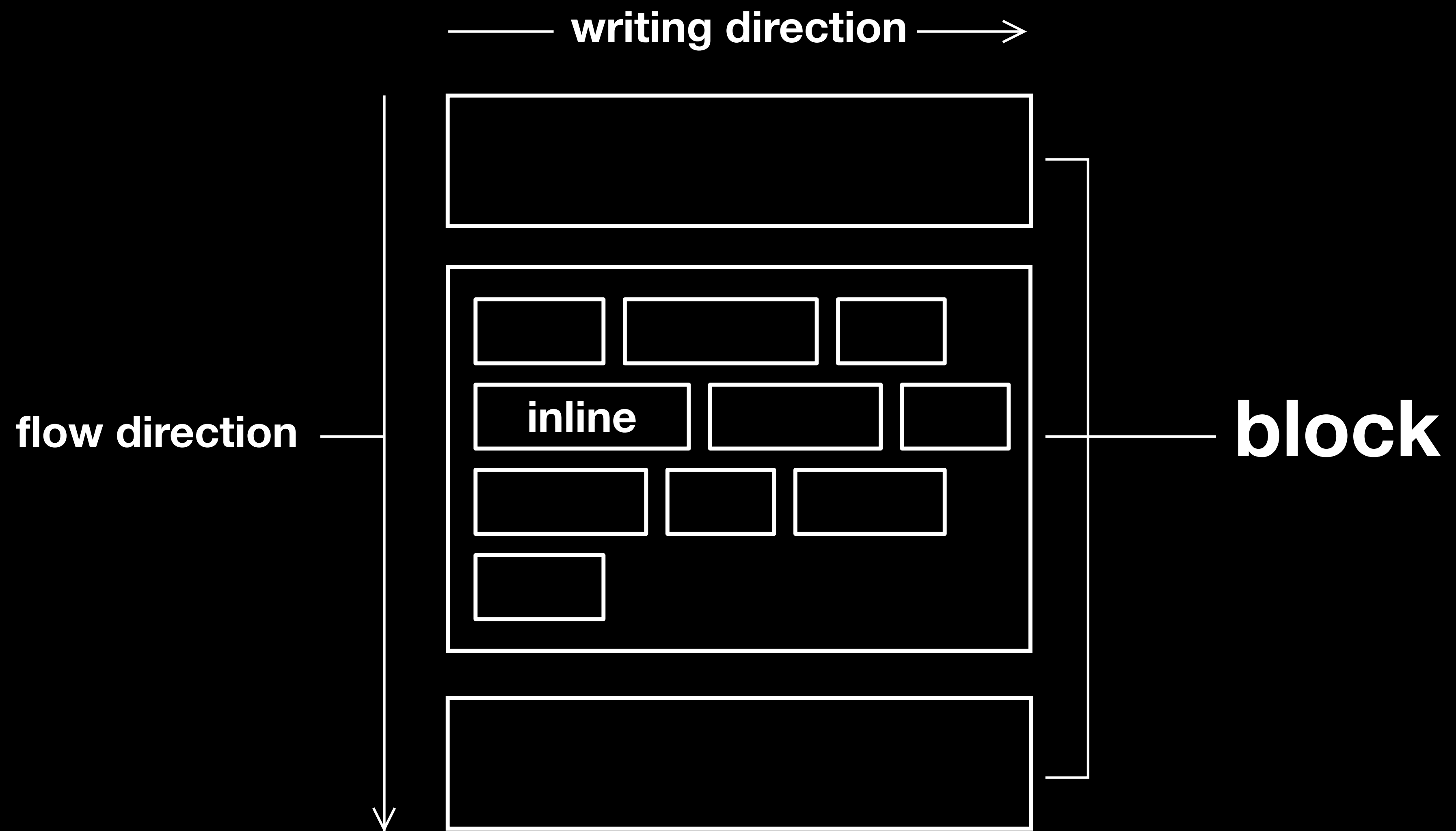


# THE CSS MINDSET



Aha-Moment #1

**Everything is a Box.**





h1.promo\_header 650 x 186.6 Grid-Element



THE FIRST  
ENGLISH SPEAKING FRONT-  
END CONFERENCE IN BELARUS

September 18-21, 2019

Victoria Olimp Hotel, Minsk

2

DAYS

4

WORKSHOPS

18

TALKS

500+

ATTENDEES

\* { outline: 2px solid hotpink; }



Search HTML

Filter Styles

```
<!DOCTYPE html>
<html>
  <head>
  </head>
  <body>
    <h1 class="w h">Hello</h1>
    <span class="w h">brave</span>
    <span class="w h block">new</span>
    <span class="w h inline-block">world</span>
```

**width** has no effect on this element since it has a display of **inline**.  
Try adding **display:inline-block** or **display:block**. [Learn more](#)

```
.w {
  width: 30px;
}
```

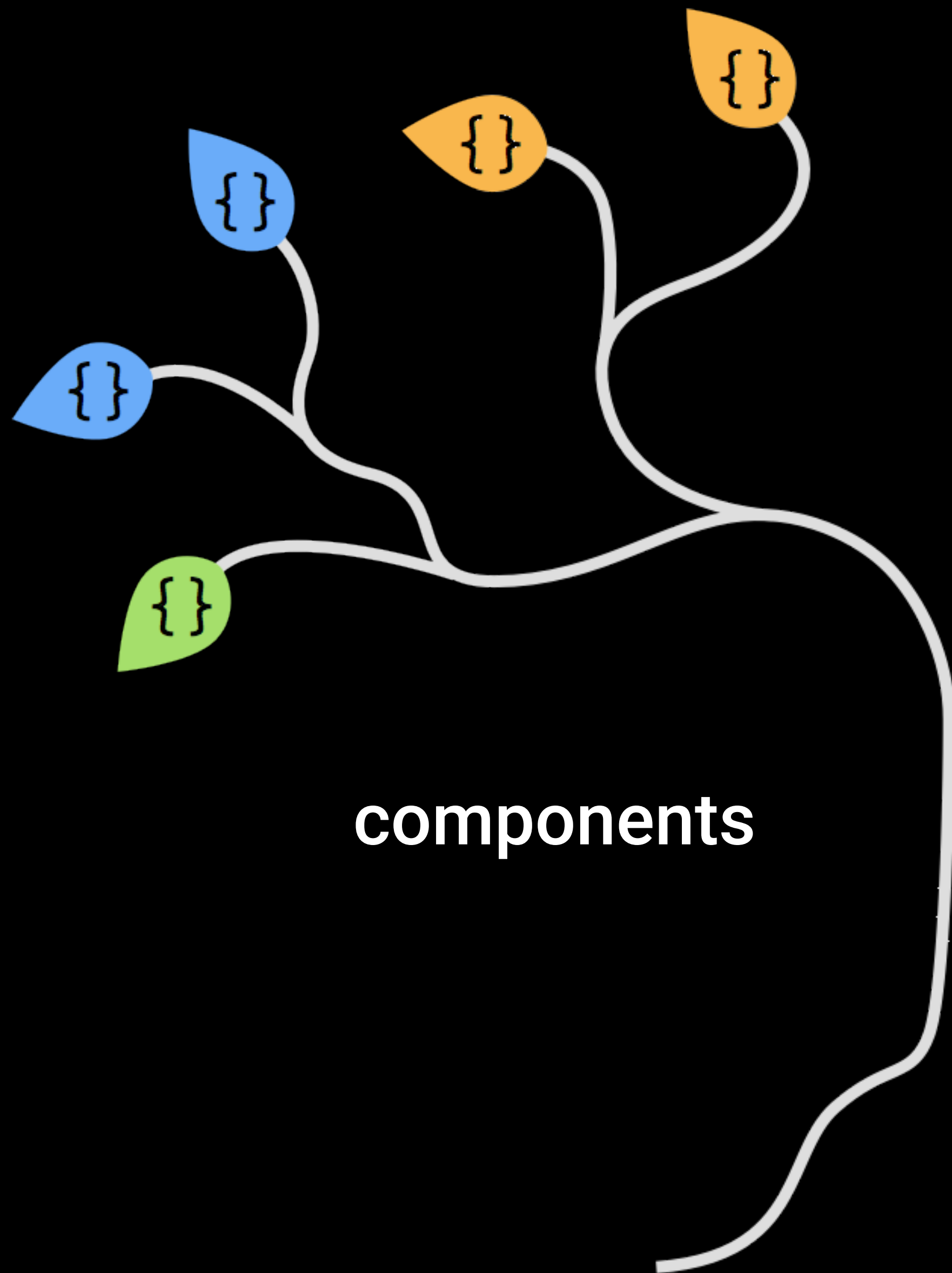


Aha-Moment #2

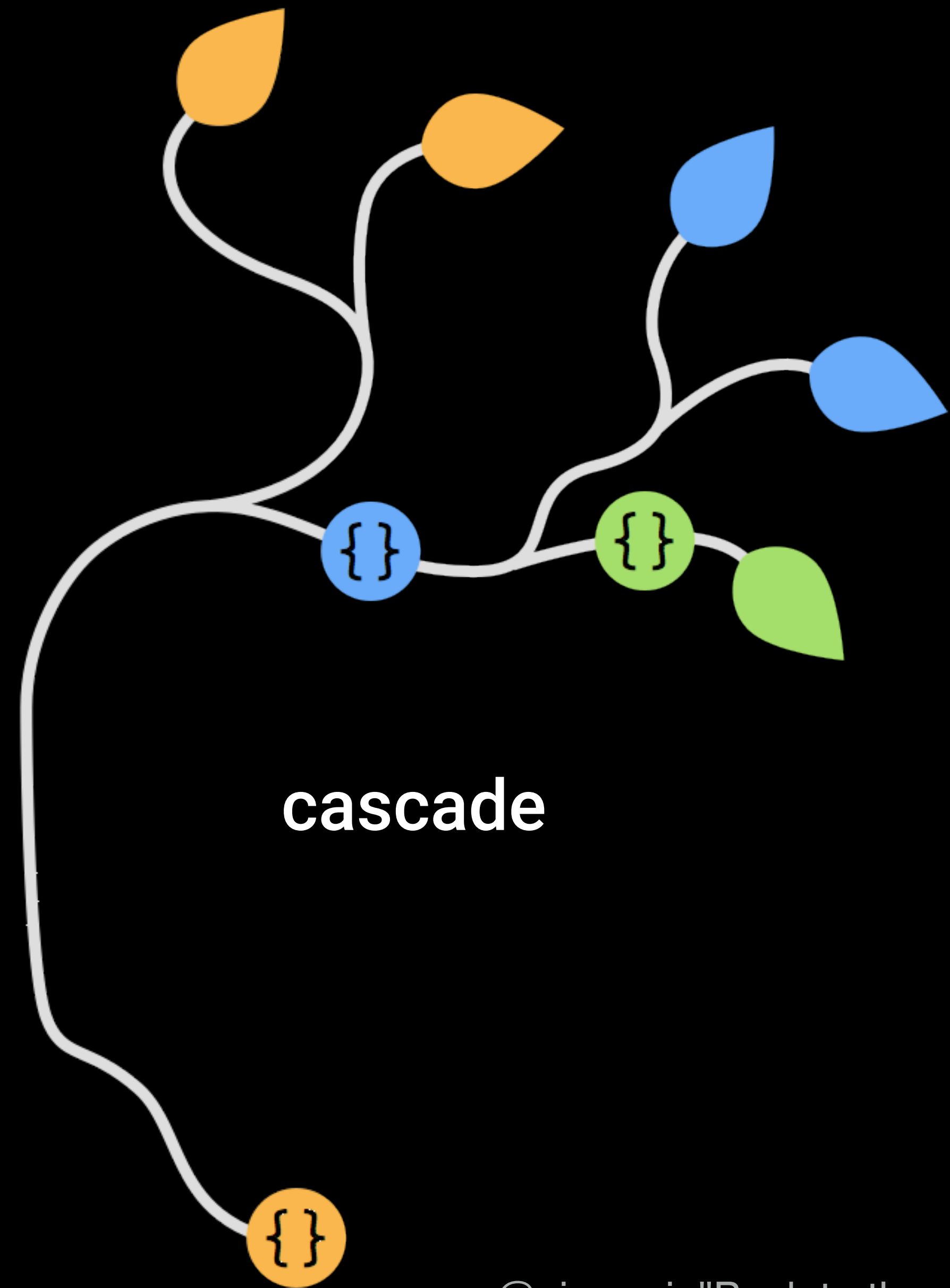
**The Cascade is your Friend.**



**THE  
CASCADE!**



components

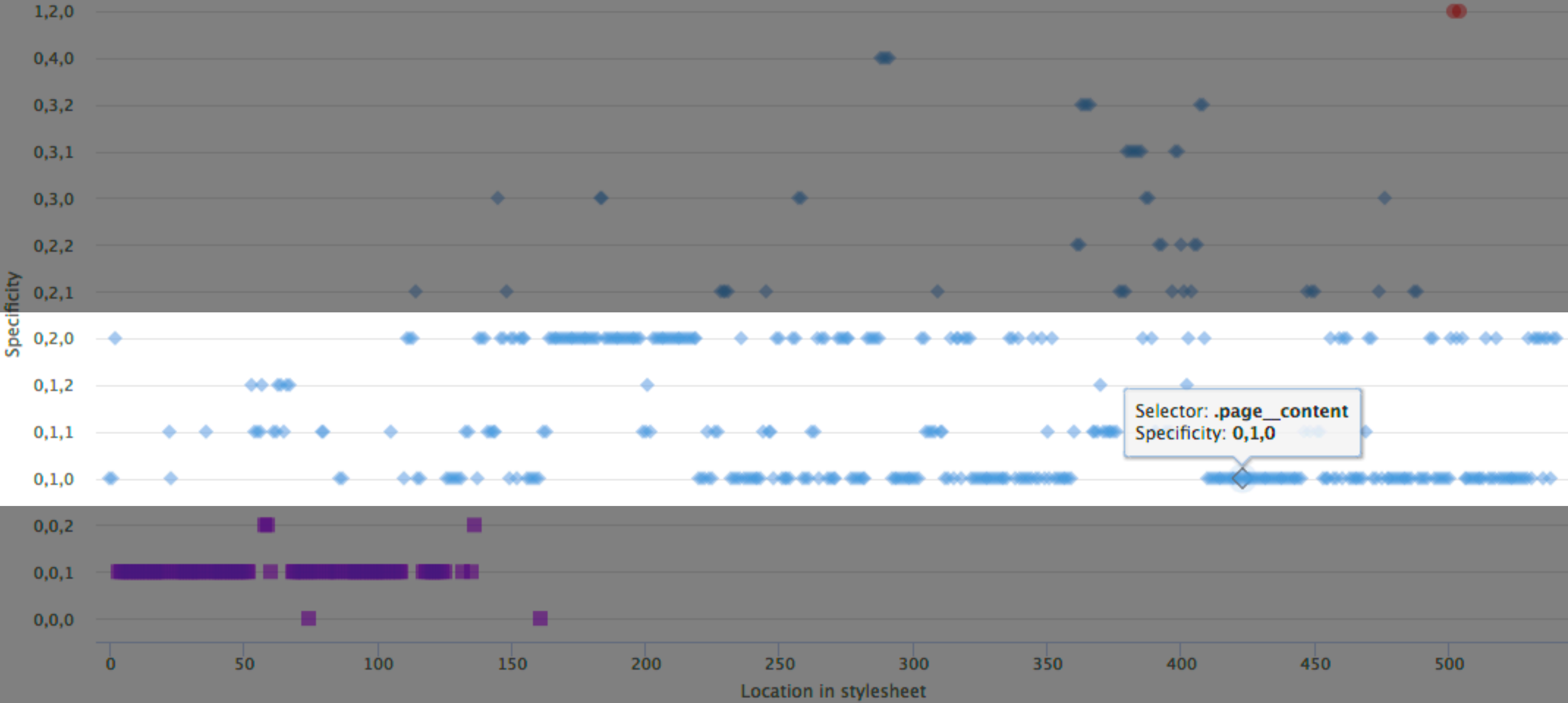


cascade





# Specificity graph



● ID selectors    ◆ Class, attribute & pseudo-class selectors    ■ Element & pseudo-element selectors







Aha-Moment #3

**As much as necessary,  
As little as possible.**

```
1  p {
2      display: block;
3      width: 100%;
4      font-size: 1em;
5      text-align: left;
6      color: □black;
7      position: relative;
8      margin-bottom: 2rem;
9  }
```

```
1  p {
2      display: block;           default
3      width: 100%;             default
4      font-size: 1em;          inherited
5      text-align: left;        inherited
6      color: □black;           inherited
7      position: relative;      necessary?
8      margin-bottom: 2rem;
9  }
```

```
1  .thing {
2      background: ■ white;
3  }
```

```
1  .thing {
2      background-color: ■ white;
3      background-image: none;
4      background-position: 0% 0%;
5      background-size: auto auto;
6      background-repeat: repeat;
7      background-origin: padding-box;
8      background-clip: border-box;
9      background-attachment: scroll;
10 }
```

Be precise and **explicit**.



Aha-Moment #4

**Establish Boundaries.**



CC-BY Ella Olsson via Unsplash





```
<ul class="bento">
  <li class="bento__item">
    <article class="broccoli">
  </li>
  <li class="bento__item">
    <article class="beans">
  </li>
  <li class="bento__item">
    <aside class="rice">
  </li>
</ul>
```



```
<ul class="bento">
  <li class="bento__item">
    <article class="broccoli">
  </li>
  <li class="bento__item">
    <article class="beans">
  </li>
  <li class="bento__item">
    <aside class="rice">
  </li>
</ul>
```

**Separate concerns** and  
avoid dependencies.



Aha-Moment #5

**Context is Key.**

# Block Formatting Context

Document Flow

Float

Table

Flexbox

Grid

Main / Cross Axis?

Filter Styles

:hov .cls +

► Pseudo-elements

This Element

```
element  {  
}
```

```
.outer-wrapper
```

```
 color: var(--color);  
 display: flex;  
 flex-grow: 1;   
 min-height: 100vh;  
 padding: 30px 32px 32px;  
}
```

```
*, ::before, ::after  {  
  box-sizing: inherit;  
}
```

inline

n.css:364

activity-stream.css:9

**flex-grow** has no effect on this element since it's not a flex item.

Try adding **display:flex** or **display:inline-flex** to the item's parent. [Learn more](#)

# Block Formatting Context

Document Flow

Float

Table

Flexbox

Grid

Main / Cross Axis?

# Stacking Context

`position / z-index`

# Block Formatting Context

Document Flow

Float

Table

Flexbox

Grid

Main / Cross Axis?

# Stacking Context

`position / z-index`

`opacity`

`transform`

`filter`

`mix-blend-mode`

`clip-path`

`-webkit-overflow-scrolling`



When in doubt,  
look at the **parents.**



Aha-Moment #6

**Content will change.**



Alex



Jane



Luke



Dana

## Mockup



**Luke Smith**

📍 San Francisco, CA


Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed eius tempor incididunt exat labore et dolore sin magna pariatur nulla.

## Reality



**Manuel D. Matuzovic**

📍 Null

I write about HTML and CSS on my personal site and I've also published articles on websites like 


<https://alistapart.com/article/my-accessibility-journey-what-ive-learned-so-far/>

**object-fit: cover;**



**Manuel D. Matuzovic**

 Null

I write about HTML and CSS on my personal site and I've also published articles on websites like 


<https://alistapart.com/article/my-accessibility-journey-what-ive-learned-so-far/>

```
object-fit: cover;
```

```
padding-right: $avatar-width;
```



**Manuel D.  
Matuzović**

I write about HTML and CSS on my personal site and I've also published articles on websites like 

<https://alistapart.com/article/my-accessibility-journey-what-ive-learned-so-far/>

```
object-fit: cover;
```

```
padding-right: $avatar-width;
```

```
word-wrap: break-word;
```



## Manuel D. Matuzović

I write about HTML and CSS on my personal site and I've also published articles on websites like [👉 https://alist-apart.com/article/my-access...](https://alist-apart.com/article/my-access...)

Build a "blueprint" first, then  
stress-test with **real content**.



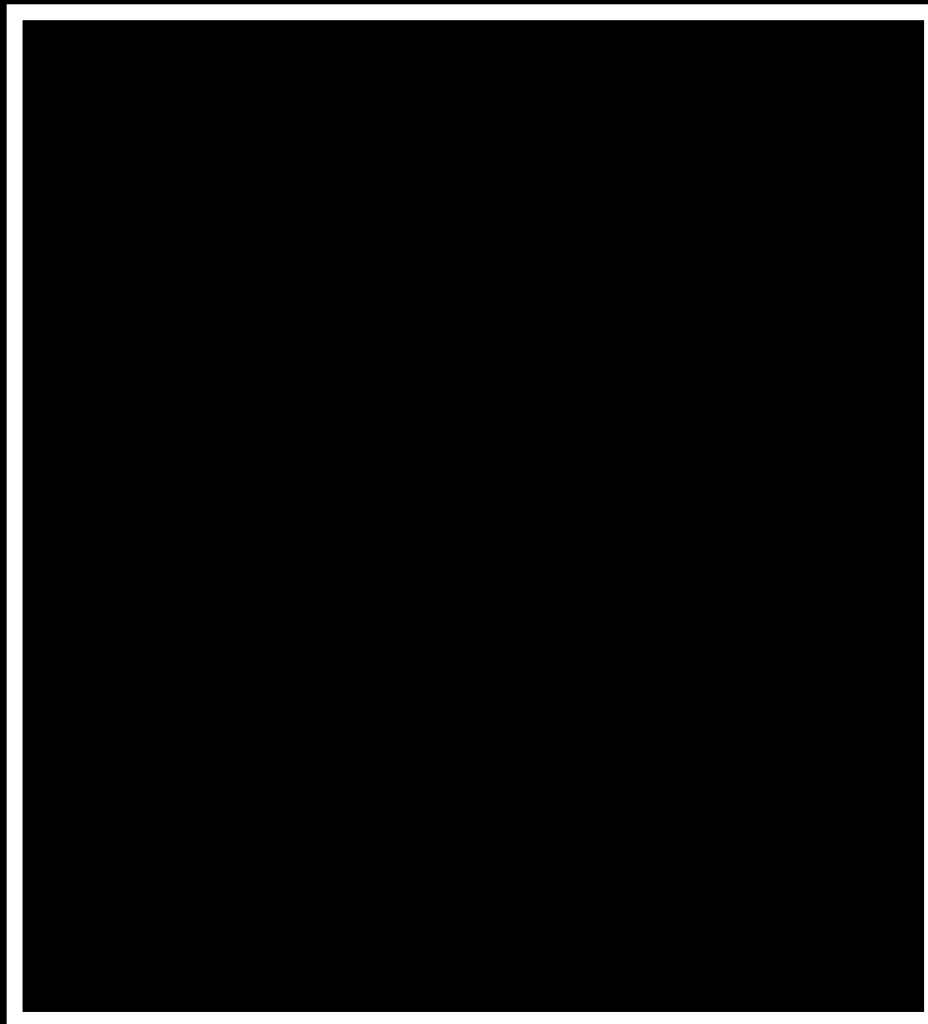


Aha-Moment #7

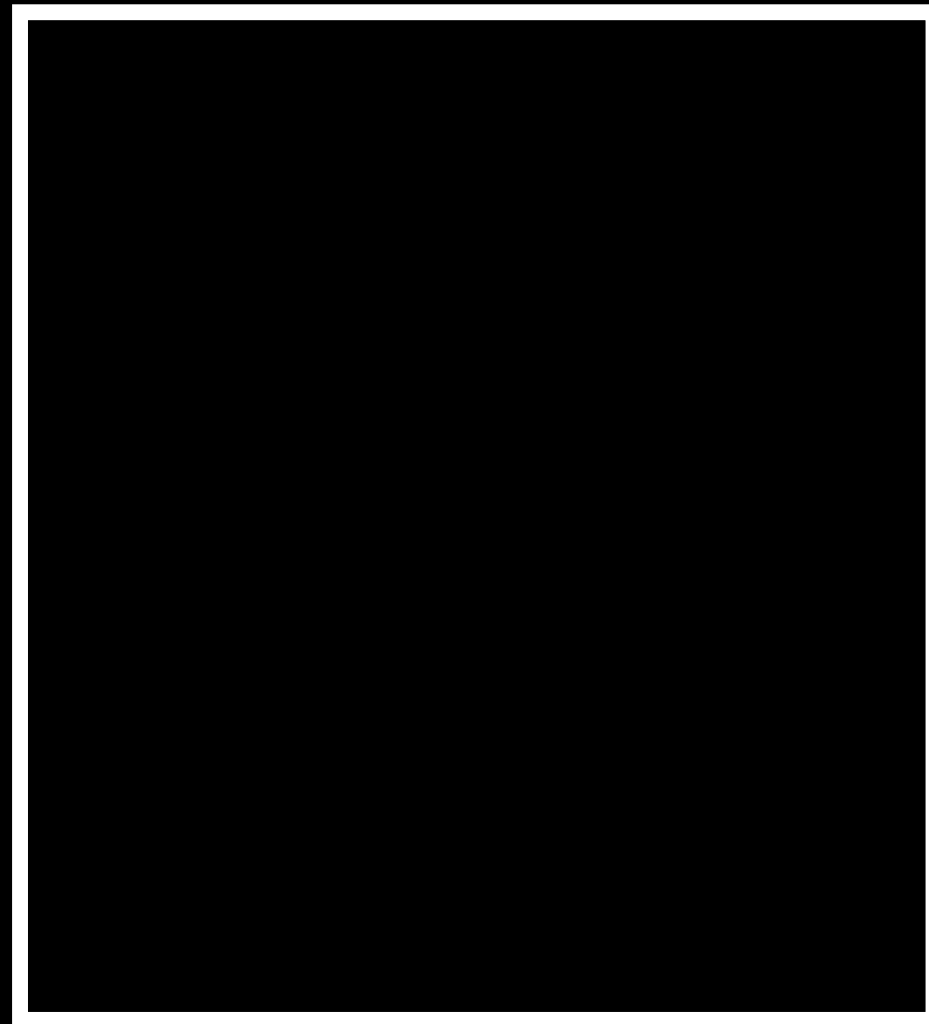
**Let the Browser  
do the work.**



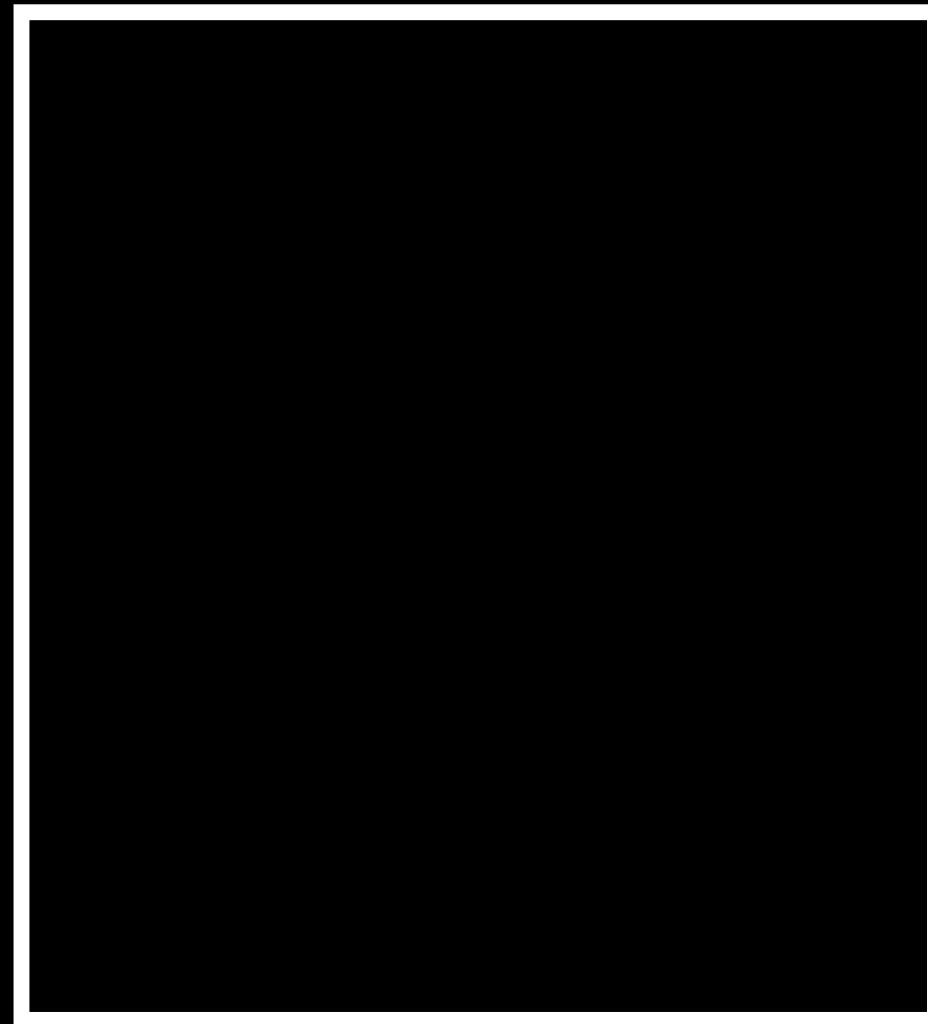
CC-BY Neal E. Johnson via Unsplash



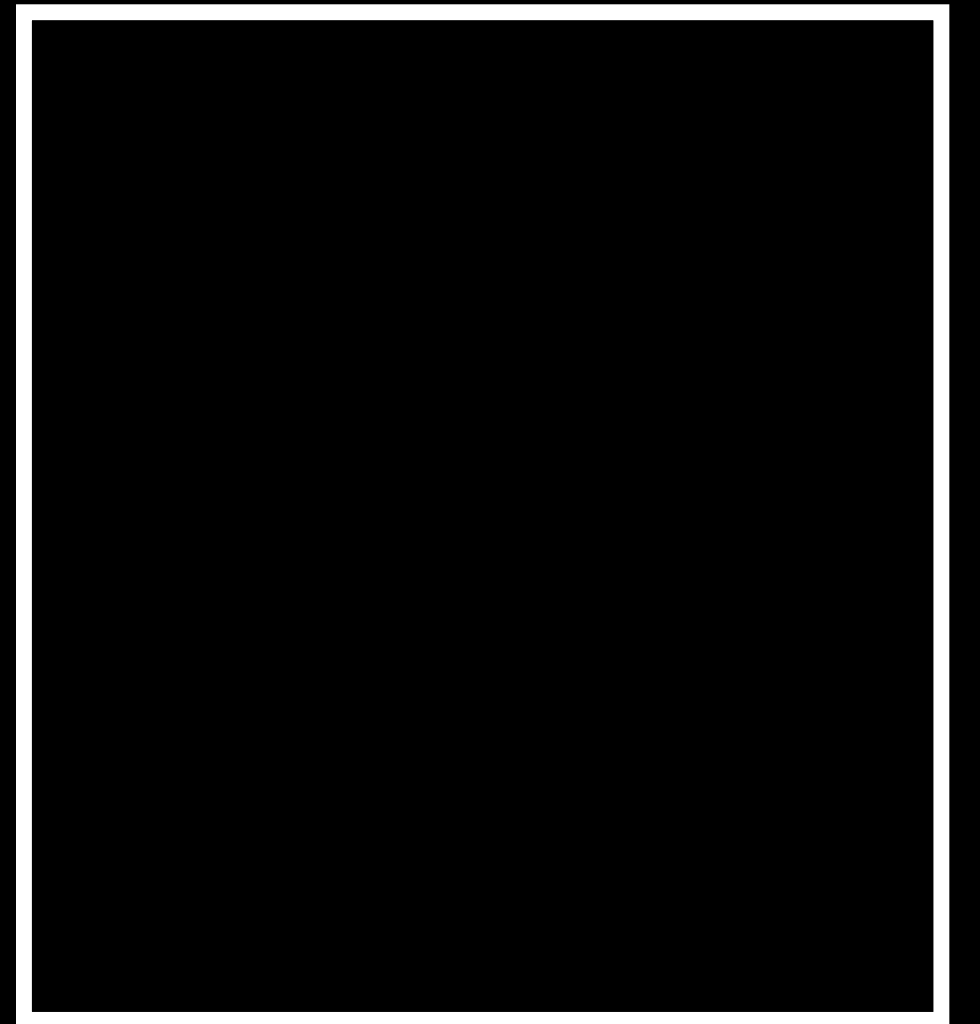
**270px**



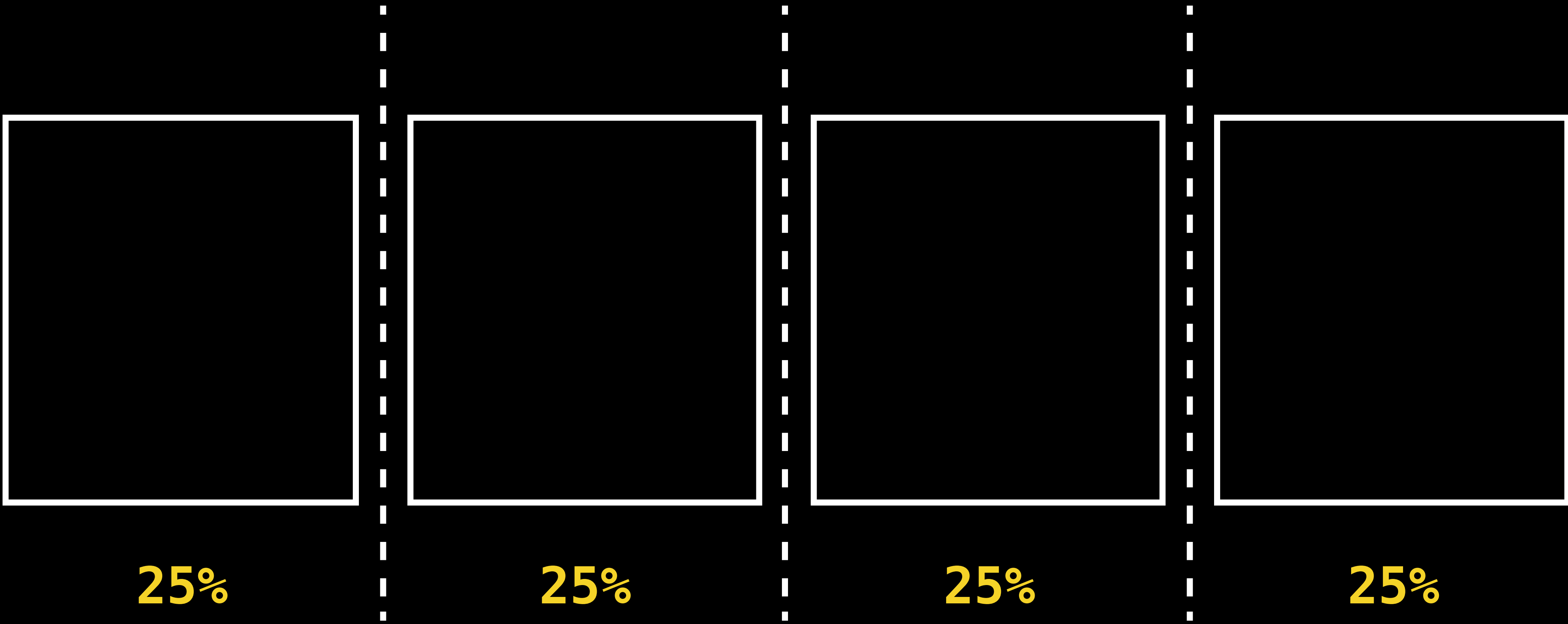
**270px**



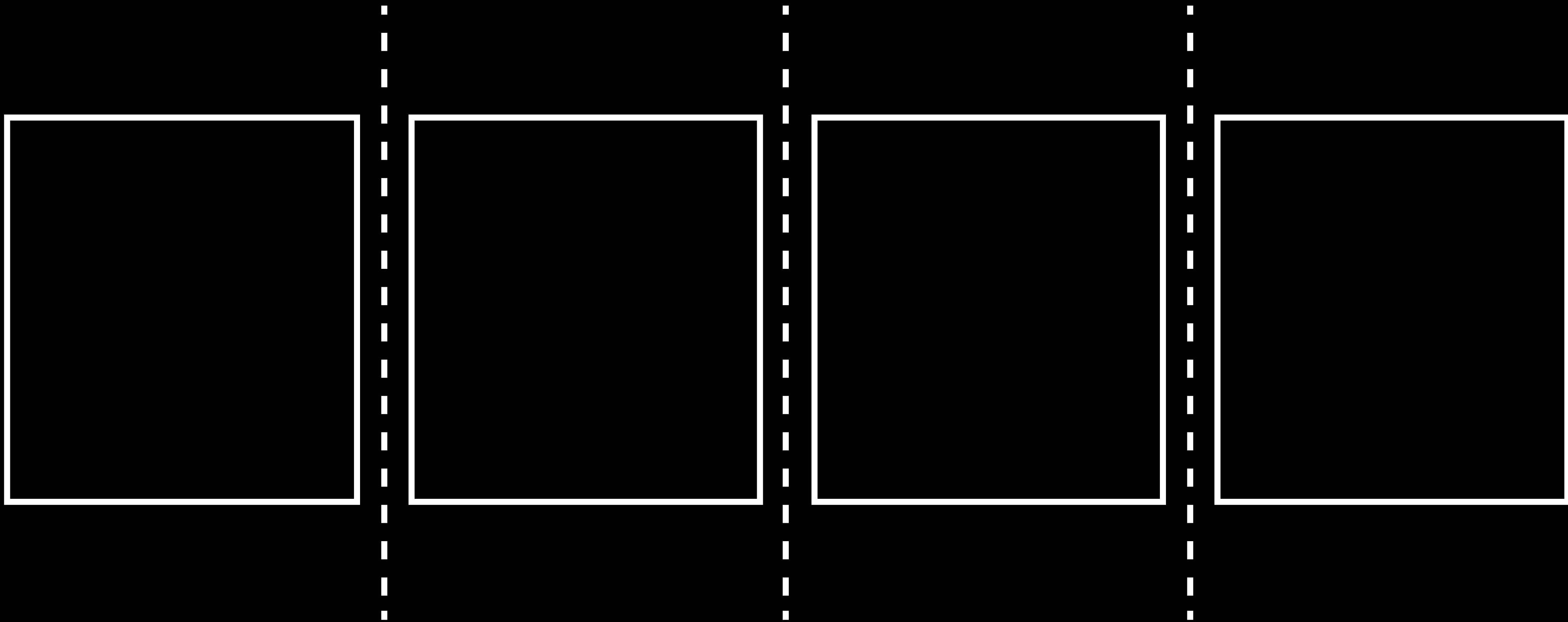
**270px**



**270px**



`grid-template-rows`



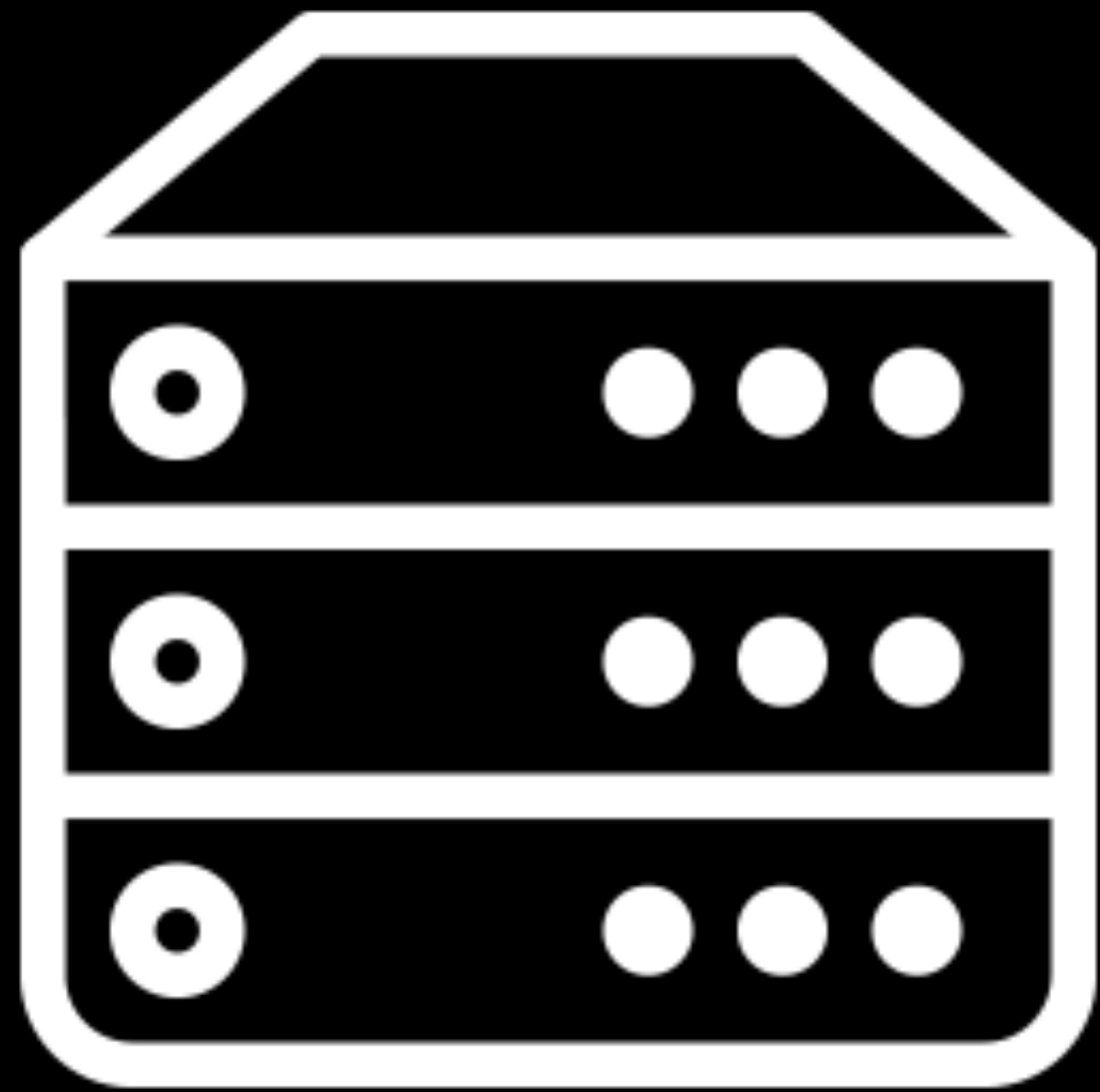
`repeat(auto-fill, minmax(250px, 1fr))`

Try to encode the **problem**, not  
the calculated solution.



Aha-Moment #8

**Embrace Flexibility.**



$1+1=2$



$x+y=z$



REGION 1 FORECAST

NORTHEAST



**SUMMARY:** Winter temperatures will be near normal across the north and a bit below normal, on average, in the south. Most of December and January will bring below-normal temperatures, with the coldest periods in early to mid- and late January. Precipitation will be slightly greater than normal, with snowfall below normal in the north but above normal elsewhere. The snowiest periods will be in early and mid-December, early to mid-January, late February, and early to mid-March. April and May will be slightly cooler and drier than normal. Summer will be slightly hotter and rainier than normal, with the hottest periods in mid- and late June, early July, early to mid-August, and late August. Watch for tropical storm threats from mid-August to mid-September. September and October will be much warmer and slightly drier than normal.

**NOV. 2015:** Temp. 40° (2° above avg.); precip. 8" (0.5" below avg.). 1-2 Sunny, cold. 3-8 Rainy periods, mild. 9-12 Rain and snow showers. 13-16 Rainy periods, mild. 17-25 Showers, mild. 26-30 Snowy periods, cold.

**DEC. 2015:** Temp. 24° (4° below avg.); precip. 4" (1" above avg.). 1-3 Snowstorm. 4-9 Snow south, sunny north; cold. 10-14 Snowstorm, then snow showers, cold. 15-17 Snow, cold. 18-24 Snow showers, cold. 25-31 Snowstorm, then rain and snow showers, mild.

**JAN. 2016:** Temp. 19° (4° below avg.); precip. 2" (1" below avg.). 1-6 Snow showers, cold. 7-14 Snow, then flurries, very cold. 15-20 Periods of rain and snow, mild. 21-28 Snow showers, turning very cold. 29-31 Snow, then rain, mild.

**FEB. 2016:** Temp. 27° (4° above avg.); precip. 4.5" (2" above avg.). 1-7 Snow, then periods of rain and snow, mild. 8-15 Rain and snow showers, seasonable. 16-23 Snow, then rainy periods, mild. 24-29 Blizzard, then flurries, cold.

**MAR. 2016:** Temp. 34.5° (2° above avg. north, 1° below south); precip. 2.5" (0.5" below avg.). 1-8 Snow showers, cold. 7-10 Showers, mild. 11-21 Snowstorm, then sunny, cold. 22-31 Showers, seasonable.

**APR. 2016:** Temp. 44° (2° below avg.); precip. 2.5" (0.5" below avg.). 1-6 Snow, then sunny, turning

warm. 7-10 Rain and snow showers, cold. 11-13 Sunny, nice. 14-27 Showers, cool. 28-30 Sunny, warm.

**MAY 2016:** Temp. 56° (1° above avg.); precip. 2.5" (1" below avg.). 1-5 Sunny, warm. 6-10 Showers, then sunny, cool. 11-14 Sunny, warm. 15-20 Showers, cool. 21-31 Sunny, then a few showers, cool.

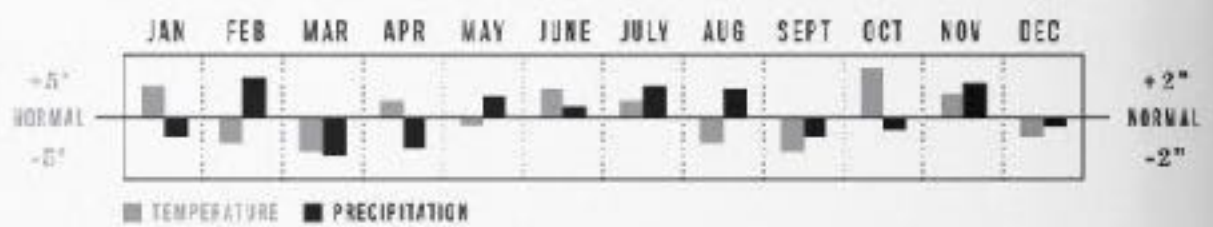
**JUNE 2016:** Temp. 69° (1° above avg.); precip. 3.5" (avg.). 1-7 Showers, then sunny, cool. 8-14 Scattered t-storms, turning hot. 15-22 Sunny, seasonable. 23-30 T-storms, hot, then sunny, cooler.

**JULY 2016:** Temp. 69° (1° below avg.); precip. 4.5" (0.5" above avg.). 1-5 Sunny, hot, then cool. 6-14 Scattered t-storms, cool. 15-27 Several t-storms, seasonable. 28-31 Sunny, cool.

**AUG. 2016:** Temp. 67° (1° above avg.); precip. 4.5" (0.5" above avg.). 1-4 A couple of t-storms, hot. 5-12 Sunny; cool, then hot. 13-19 T-storms, then sunny, cool. 20-22 Tropical storm threat. 23-28 Sunny, cool, then hot. 29-31 Showers, warm.

**SEPT. 2016:** Temp. 62° (3° above avg.); precip. 3.5" (0.5" below avg.). 1-5 Sunny, warm. 6-9 Tropical storm threat. 10-21 Showers, then sunny, chilly. 22-30 A few showers, mild.

**OCT. 2016:** Temp. 53° (5° above avg.); precip. 3.5" (avg.). 1-6 Heavy rain, then sunny, cool. 7-16 Sunny, nice. 17-25 Showers, then sunny, mild. 26-31 Showers, cool.



REGION 2 FORECAST

ATLANTIC CORRIDOR



**SUMMARY:** Winter temperatures will be near normal across the north and a bit below normal, on average, in the south. Most of December and January will bring below-normal temperatures, with the coldest periods in early to mid- and late January. Precipitation will be slightly greater than normal, with snowfall below normal in the north but above normal elsewhere. The snowiest periods will be in early and mid-December, early to mid-January, late February, and early to mid-March. April and May will be slightly cooler and drier than normal. Summer will be slightly hotter and rainier than normal, with the hottest periods in mid- and late June, early July, early to mid-August, and late August. Watch for tropical storm threats from mid-August to mid-September. September and October will be much warmer and slightly drier than normal.

**NOV. 2015:** Temp. 40° (2° above avg.); precip. 8" (0.5" below avg.). 1-2 Sunny, cold. 3-8 Rainy periods, mild. 9-12 Rain and snow showers. 13-16 Rainy periods, mild. 17-25 Showers, mild. 26-30 Snowy periods, cold.

**DEC. 2015:** Temp. 24° (4° below avg.); precip. 4" (1" above avg.). 1-3 Snowstorm. 4-9 Snow south, sunny north; cold. 10-14 Snowstorm, then snow showers, cold. 15-17 Snow, cold. 18-24 Snow showers, cold. 25-31 Snowstorm, then rain and snow showers, mild.

**JAN. 2016:** Temp. 19° (4° below avg.); precip. 2" (1" below avg.). 1-6 Snow showers, cold. 7-14 Snow, then flurries, very cold. 15-20 Periods of rain and snow, mild. 21-28 Snow showers, turning very cold. 29-31 Snow, then rain, mild.

**FEB. 2016:** Temp. 27° (4° above avg.); precip. 4.5" (2" above avg.). 1-7 Snow, then periods of rain and snow, mild. 8-15 Rain and snow showers, seasonable. 16-23 Snow, then rainy periods, mild. 24-29 Blizzard, then flurries, cold.

**MAR. 2016:** Temp. 34.5° (2° above avg. north, 1° below south); precip. 2.5" (0.5" below avg.). 1-6 Snow showers, cold. 7-10 Showers, mild. 11-21 Snowstorm, then sunny, cold. 22-31 Showers, seasonable.

**APR. 2016:** Temp. 44° (2° below avg.); precip. 2.5" (0.5" below avg.). 1-6 Snow, then sunny, turning

warm. 7-10 Rain and snow showers, cold. 11-13 Sunny, nice. 14-27 Showers, cool. 28-30 Sunny, warm.

**MAY 2016:** Temp. 56° (1° above avg.); precip. 2.5" (1" below avg.). 1-5 Sunny, warm. 6-10 Showers, then sunny, cool. 11-14 Sunny, warm. 15-20 Showers, cool. 21-31 Sunny, then a few showers, cool.

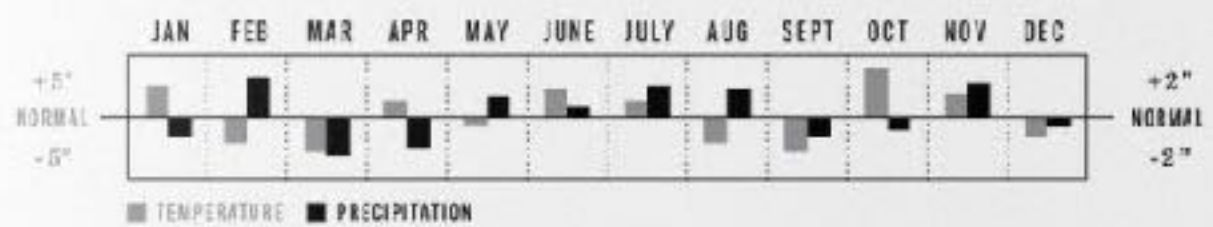
**JUNE 2016:** Temp. 69° (1° above avg.); precip. 3.5" (avg.). 1-7 Showers, then sunny, cool. 8-14 Scattered t-storms, turning hot. 15-22 Sunny, seasonable. 23-30 T-storms, hot, then sunny, cooler.

**JULY 2016:** Temp. 69° (1° below avg.); precip. 4.5" (0.5" above avg.). 1-5 Sunny, hot, then cool. 6-14 Scattered t-storms, cool. 15-27 Several t-storms, seasonable. 28-31 Sunny, cool.

**AUG. 2016:** Temp. 67° (1° above avg.); precip. 4.5" (0.5" above avg.). 1-4 A couple of t-storms, hot. 5-12 Sunny; cool, then hot. 13-19 T-storms, then sunny, cool. 20-22 Tropical storm threat. 23-28 Sunny, cool, then hot. 29-31 Showers, warm.

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**OCT. 2016:** Temp. 53° (5° above avg.); precip. 3.5" (avg.). 1-6 Heavy rain, then sunny, cool. 7-16 Sunny, nice. 17-25 Showers, then sunny, mild. 26-31 Showers, cool.



“

We should embrace the fact that the web doesn't have the same constraints, and design for this flexibility. But first, we must “accept the ebb and flow of things.”

— John Allsopp, "A Dao of Web Design"

”



You don't need  
absolute control.

**Mental models are personal.**  
**What are yours?**



**Дзякуй!**

**[bit.ly/css-mindset](https://bit.ly/css-mindset)**



**@mxbck**