

# **Keeping it simple with CSS that scales**

**Andy Bell**  
**@andybelldesign**

# CSS SUCKS!



# CSS Rules!

*Learn it better, fools*



```
import CSS from 'css';
```

~~import css from 'css';~~

**Let's talk  
about “scale”**



*“Scale” is*  
**BOLLOCKS**  
*most of the time*



**Serverless**



**JAMstack**



**Performant**



**Serverless**



**JAMstack**



**Performant**




*large project*

*large team*

# Scale

*complex*

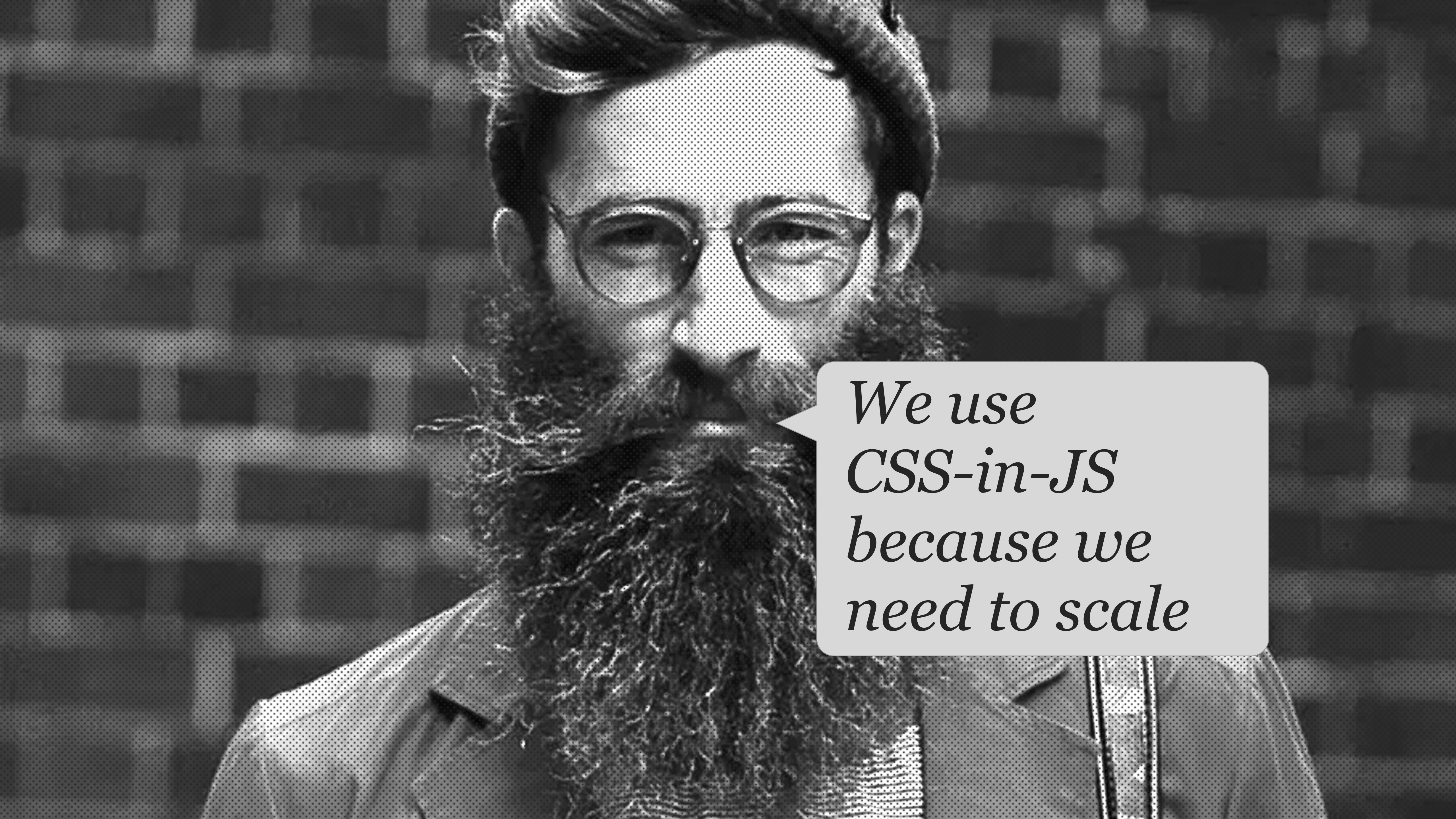
*lots of users*



*“ We use a CSS-in-JS  
library because our  
product needs to scale ”*

**Chad Chetson**





*We use  
CSS-in-JS  
because we  
need to scale*



**Four key things**

1

**Don't panic**

2

**Communicate**

3

**Consistency**

4

**Simplification**

1

**Don't panic**

2

**Communicate**

3

**Consistency**

4

**Simplification**








DON'T  
PANIC





*“I like the cover...“Don’t  
Panic.” It’s the first helpful  
or intelligible thing any-  
body’s said to me all day.”*

**Arthur Dent**



**Fool**







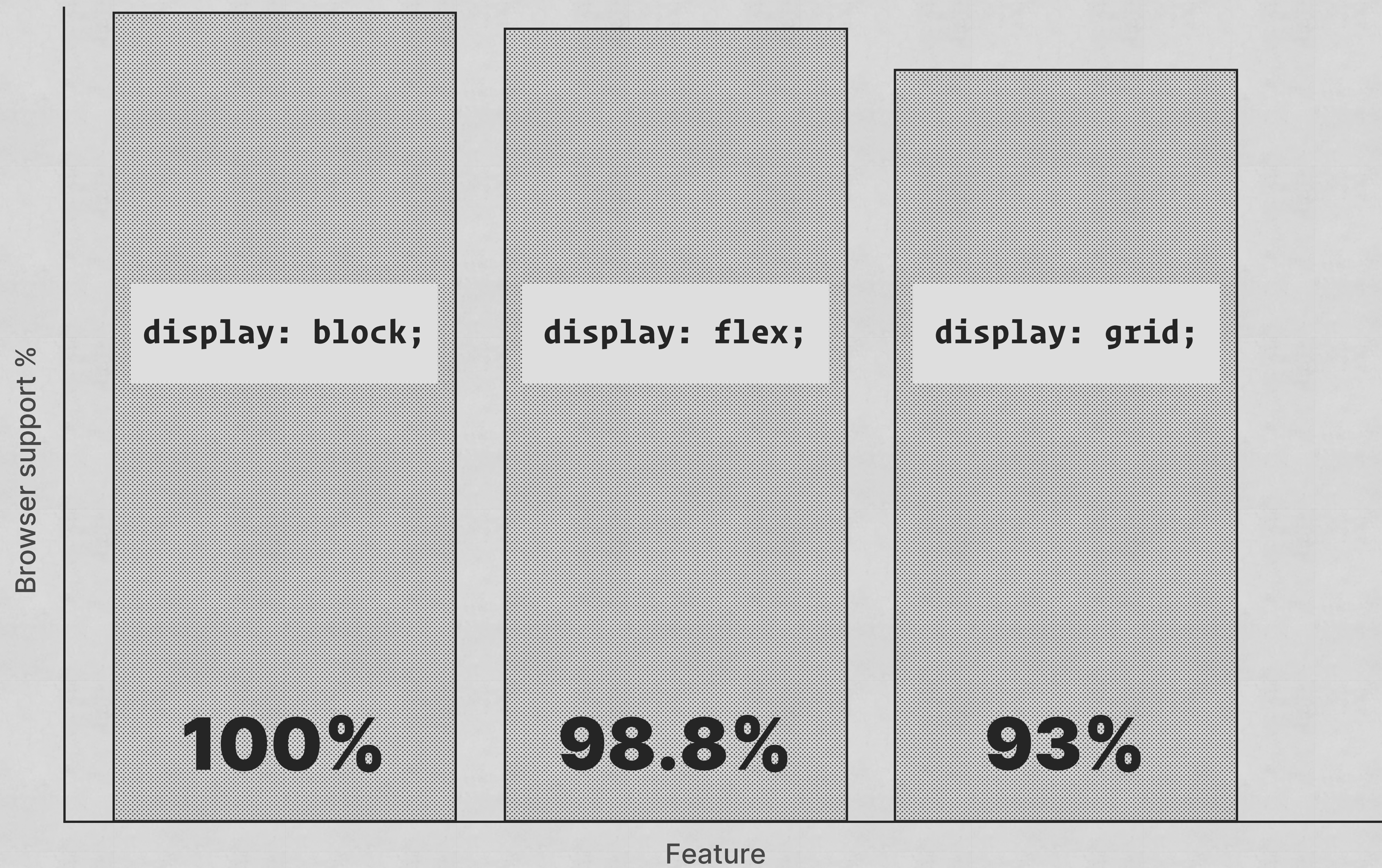
Image from [thisismoney.co.uk](http://thisismoney.co.uk)



**! important**



# **The current state of CSS**



# CSS

```
:root {  
  --primary: #8e8e8e;  
}  
  
.box {  
  background: var(--primary);  
}  
  
.badge {  
  color: var(--primary);  
}
```

**Box**

**Badge**

# CSS

```
.about-page {  
  --primary: #ff00ff;  
}
```



**Box**

**Badge**



**Sass FTW**

# CSS

```
.my-cool-component {  
  .my-cool-element {  
    padding: 2rem;  
  }  
  
  p {  
    span {  
      font-weight: bold;  
    }  
  }  
}
```







Image from commons.wikimedia.org



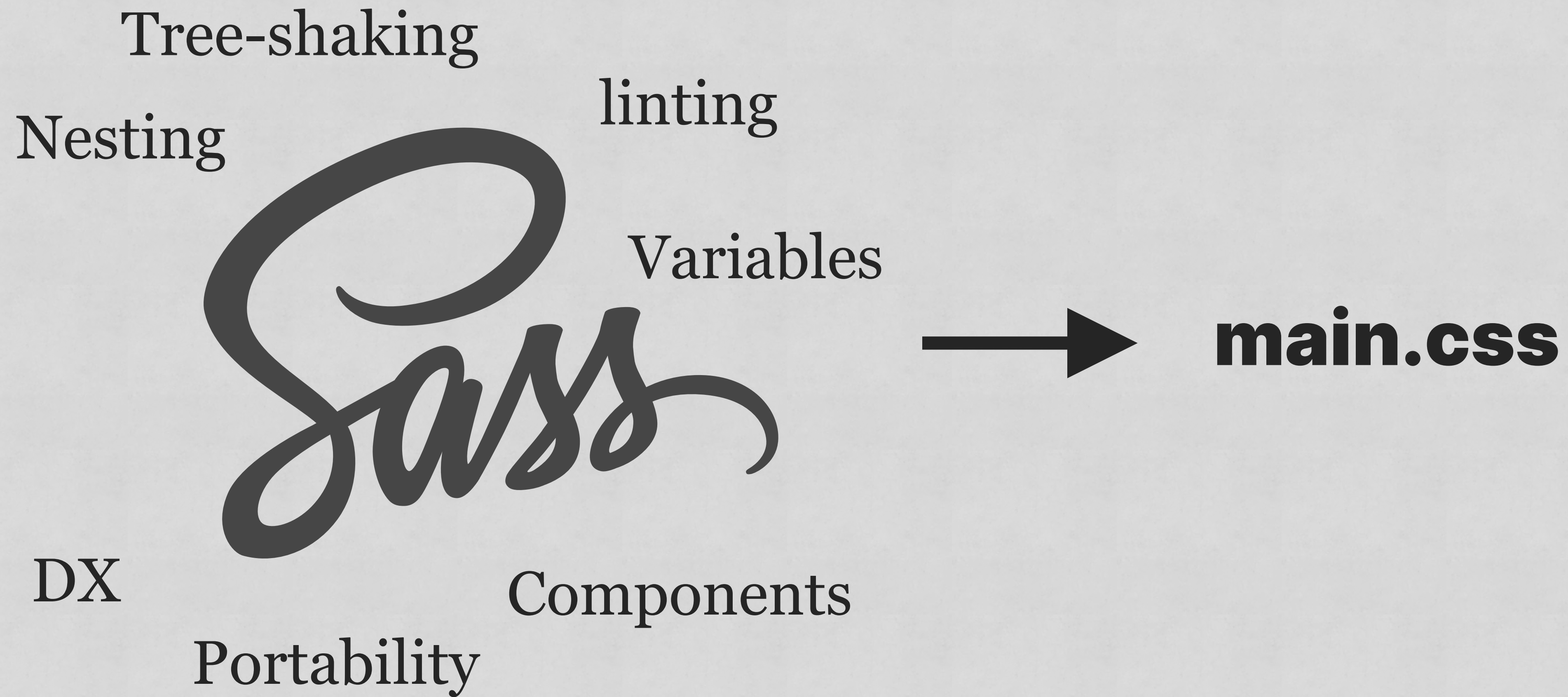


Image from [iwradio.co.uk](http://iwradio.co.uk)











“*The “S” in SCSS stands  
for “Spicy”.*”

**@The\_C\_In\_CSS**

**[https://twitter.com/The\\_C\\_In\\_CSS/status/1165990844882653184](https://twitter.com/The_C_In_CSS/status/1165990844882653184)**

1

**Don't panic**

2

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3

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**Simplification**

**Naming is  
hard\***


*\* When you don't talk  
to each other*



“


*This component I came up with already exists. Let me have a quick look in git and see who created it... Ah, it was Isabella ”*

**Developer #1 - Lucrecia**




*“Hey, Isabella, is there a reason why this component is called “block”?”*

**Developer #1 - Lucrecia**



*“ Ah yeh, this very important reason. How about you call that component “box” instead? ”*

**Developer #2 - Isabella**



*“That’s a great idea.  
Thanks!”*

**Developer #1 - Lucrecia**



~~**Soft Skills**~~

**Core Skills**


**Document  
everything**



- Panel
- Payments
- Progress tracker
- Promos
- Publication
- Radio Buttons
- Section
- Spinner
- Spotlight
- Stamp
- Stepper
- Steps to complete
- Table
- Text
- Text Area
- Text Input
- Typeahead
- Vspace

## Default states

[open in own window](#)

 [edit example code](#)

Primary

Submit

Secondary


Cancel

Plain

Cancel

Destructive

Delete

 **Research insight:** Members can sign up to the Bulb Feed-In Tariff using an online form. When testing this form, users were confused when the microcopy on the secondary button was not clearly differentiated from the main CTA. Ensure that microcopy on different buttons are clearly separate actions.

CTA link



“

*One of my favourite details in @bulbenergy's new pattern library – research insights that explain rationale behind some of the patterns, based on user research.*”

**Alla Kholmatova - @craftui**



# CSS

```
.card {  
  background-color: #ffffff !important;  
}
```

# CSS

```
.card {  
    /* When this card is used in the legacy app,  
       there is a collision between existing styles,  
       so unfortunately we had to go nuclear. It's  
       certainly a refactor target. */  
    background-color: #ffffff !important;  
}
```



*Good written communication can  
prevent unnecessary collisions*

**BETWEEN PEOPLE**

*which can in turn, prevent  
expensive tech debt created by tools*

1

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**Simplification**



**Cascade  
Block  
Element  
Utility  
Token**

**C-BEUT**

*what a shit name, I know*



*The “C” in CSS  
stands for “Cascading”.*

# CSS

```
body {  
    font-family: Georgia;  
    color: goldenrod;  
}
```



# CSS

```
body {  
    font-family: Georgia;  
    color: goldenrod;  
}
```

```
button {  
    font: inherit;  
    color: currentColor;  
}
```

# CSS

```
body {  
  font-family: Georgia;  
  color: goldenrod;  
}
```

```
button {  
  font: inherit;  
  color: currentColor;  
}
```







## I'm a card m8s

I appear in every design system that ever existed.

I'm a button

# Block

## .card



## I'm a card m8s

I appear in every design system that ever existed.

I'm a button

# Elements

- `.card__image`
- `.card__body`





**I'm a card m8**

↕ **1rem**

I appear in every design  
that ever existed.

↕ **1rem**

**I'm a button**

```
.card__body > * + * {  
  margin-top: 1rem;  
}
```



## **I'm a card m8s**

I appear in every design system that ever existed.

**I'm a button**

# Utility

**.weight-bold**





## I'm a card m8s


I appear in every design system that ever existed.

I'm a button

# Token

**.font-brand**

**.text-600**



“

*Design Tokens are the visual atoms of the design system – specifically, they are named entities that store visual design attributes. We use them in place of hard-coded values in order to maintain a scalable and consistent visual system.*

”

**Jina Anne - @jina**





## I'm a card m8s

I appear in every design system  
that ever existed.

I'm a button

# Token

**.font-brand**

**.text-600**

## Serif — Lora

The quick brown fox jumps over the lazy fox

`.font-serif`

## Text sizes

Text sizes are available as standard classes or media query prefixed, such as `lg:text-500`.

0.8rem - `text-300`

1rem - `text-base`

1.25rem - `text-500`

1.56rem - `text-600`

1.95rem - `text-700`

2.44rem - `text-800`

3.05rem - `text-900`

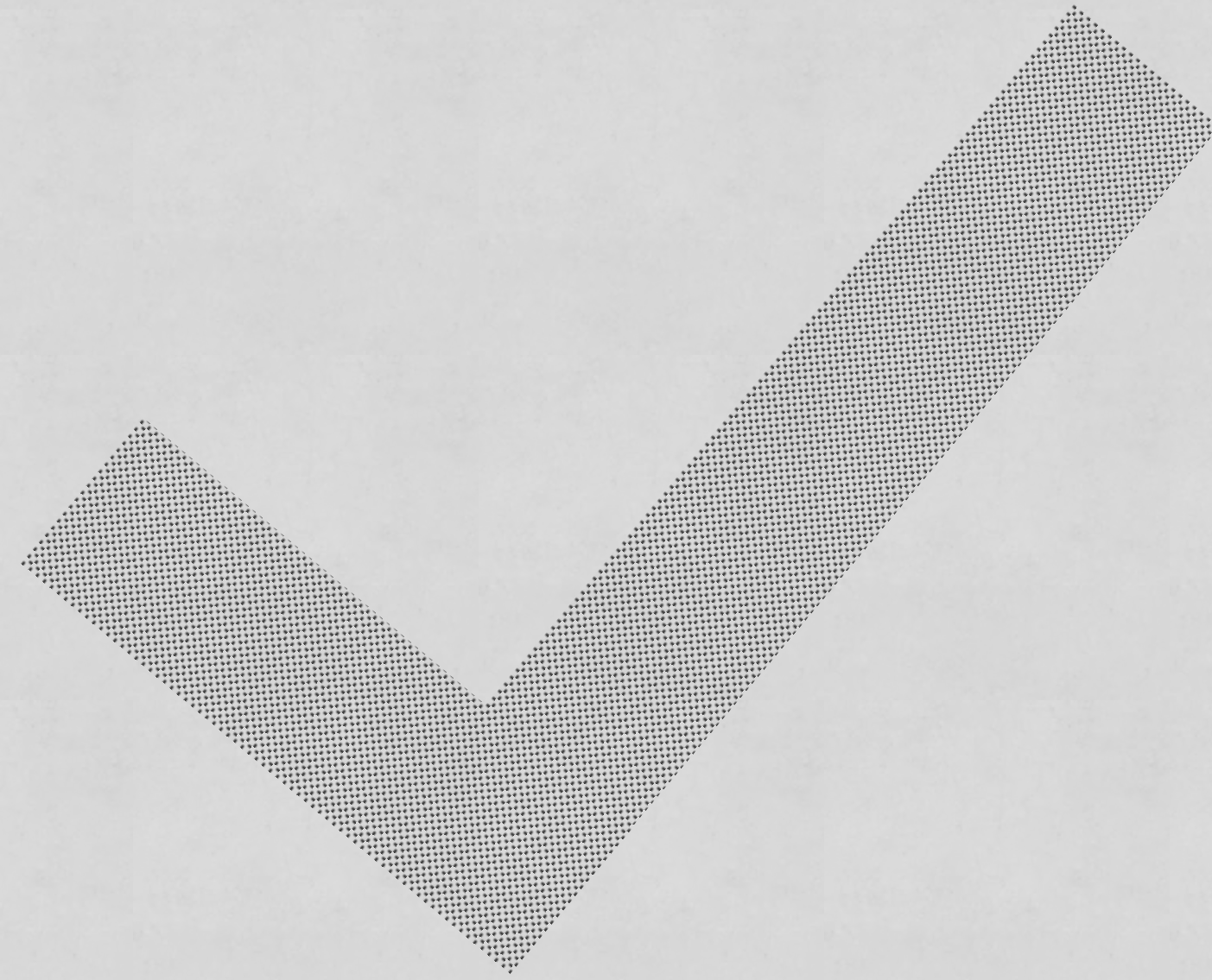
4rem - `text-max`

<https://andy-bell.design/styleguide/>

## Spacing



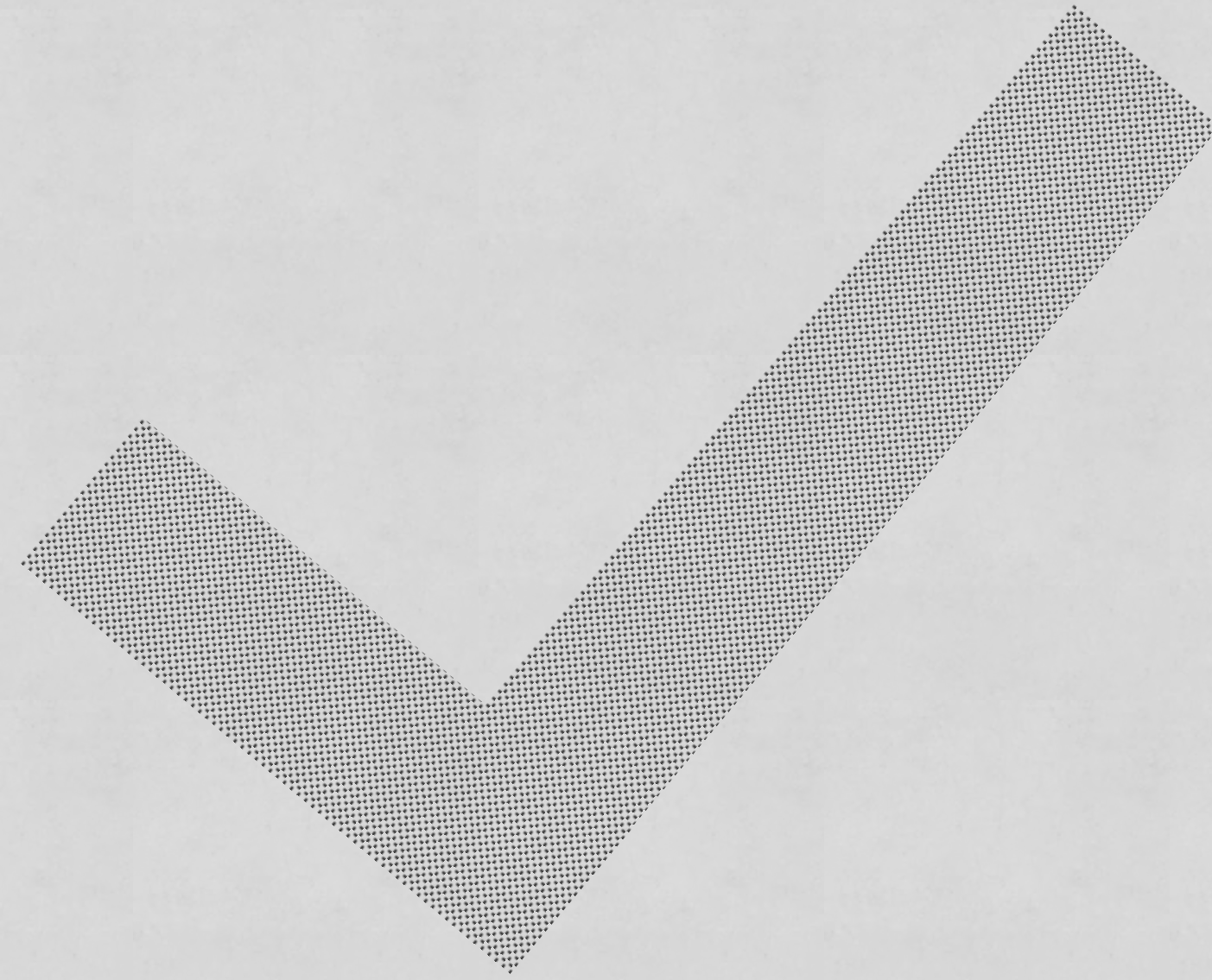
**Cascade  
Block  
Element  
Utility  
Token**



**Enable people in  
your team to make  
consistent decisions  
without slowing  
them down**



**Cascade  
Block  
Element  
Utility  
Token**



**If you stick to your guns too tightly, you're probably going to end up causing more problems not just for yourself, but everyone else, in the future.**



1

**Don't panic**

2

**Communicate**

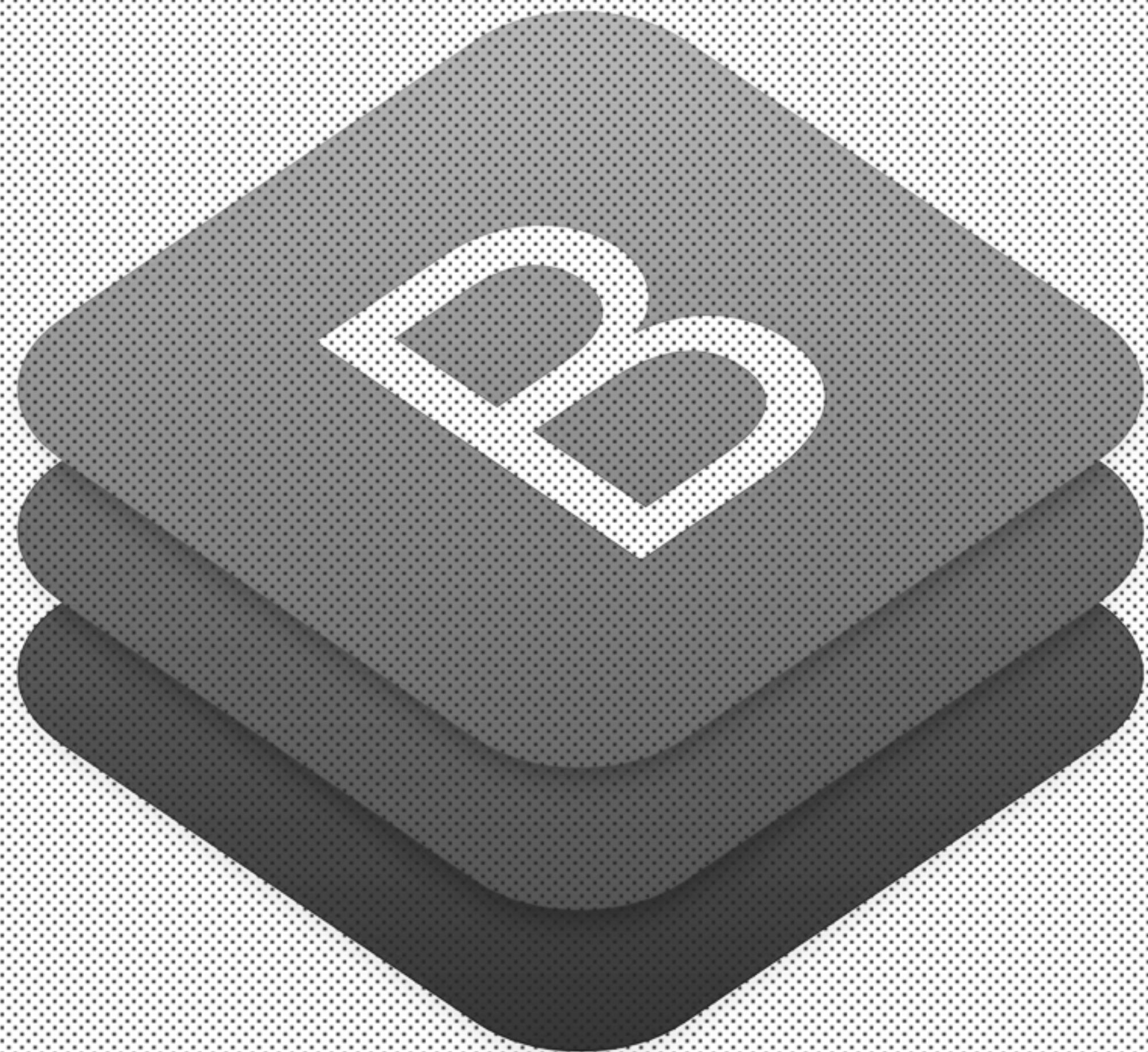
3

**Consistency**

4

**Simplification**







**By accident,  
Bootstrap is one of  
the best design  
systems ever created**





Image from [alaindelorme.com](http://alaindelorme.com)



# CSS

```
.card {  
  background-color: #ffffff !important;  
}
```

# **Tailwind.css default output is 46,860 lines**

**Source: <https://unpkg.com/tailwindcss@1.1.2/dist/tailwind.css>**



# Frameworks



# Methodology

*BEM, SMACSS, ITCSS, C-BEUT*



*Featuring Heydon Pickering*





**EVERY  
LAYOUT**



**Simplify and  
distill layout**



# EVERY LAYOUT

- ✓ **Simplify and distill layout**
- ✓ **Hint & rules, rather than micromanage**





# **EVERY LAYOUT**

- ✓ **Simplify and distill layout**
- ✓ **Hint & rules, rather than micromanage**
- ✓ **Achieves solid, resilient layouts**



**EVERY  
LAYOUT**

**40% Discount  
SOTB**

*As the coupon on  
<https://every-layout.dev>*



*On the subject of  
progressive enhancement...*

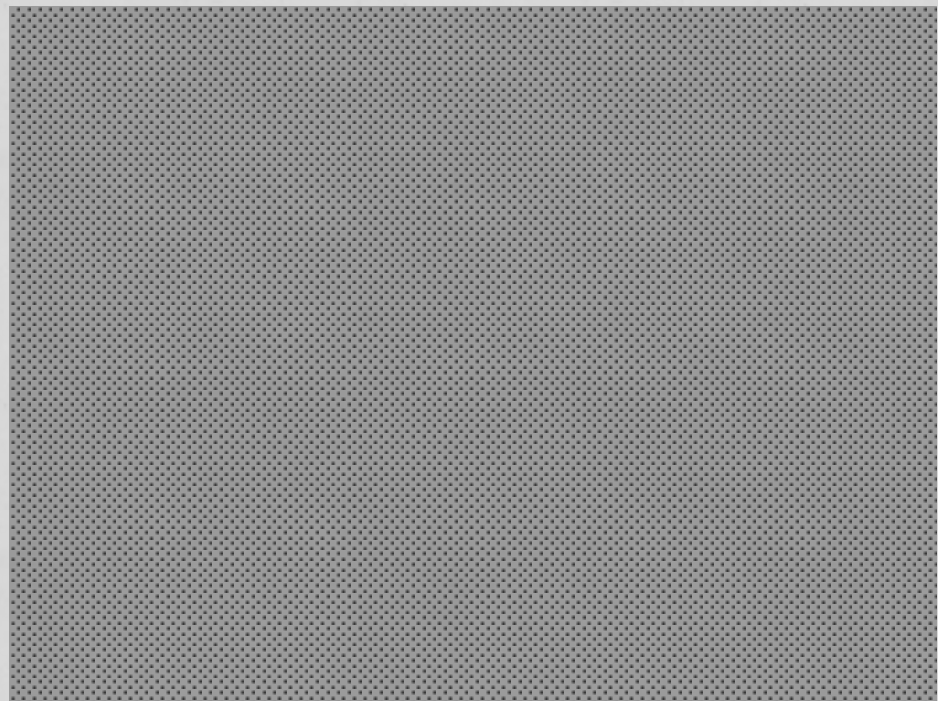
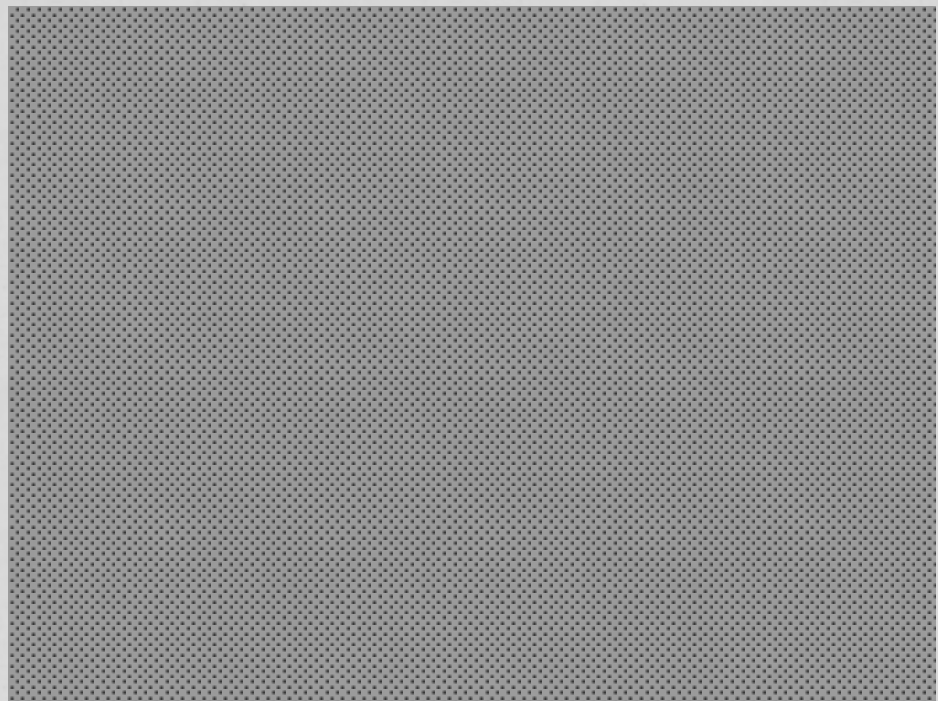
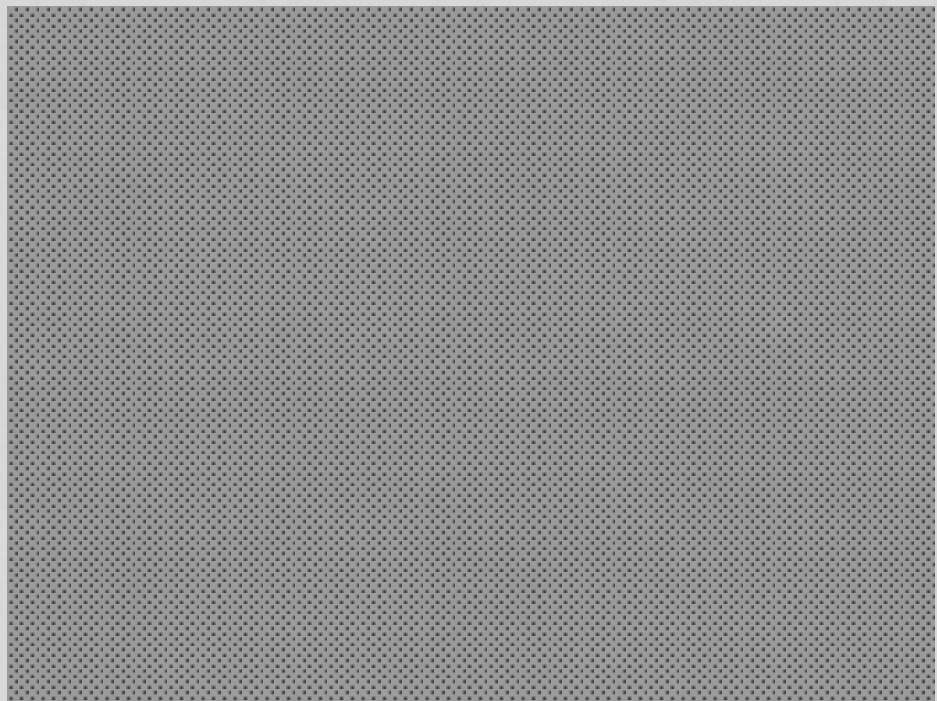
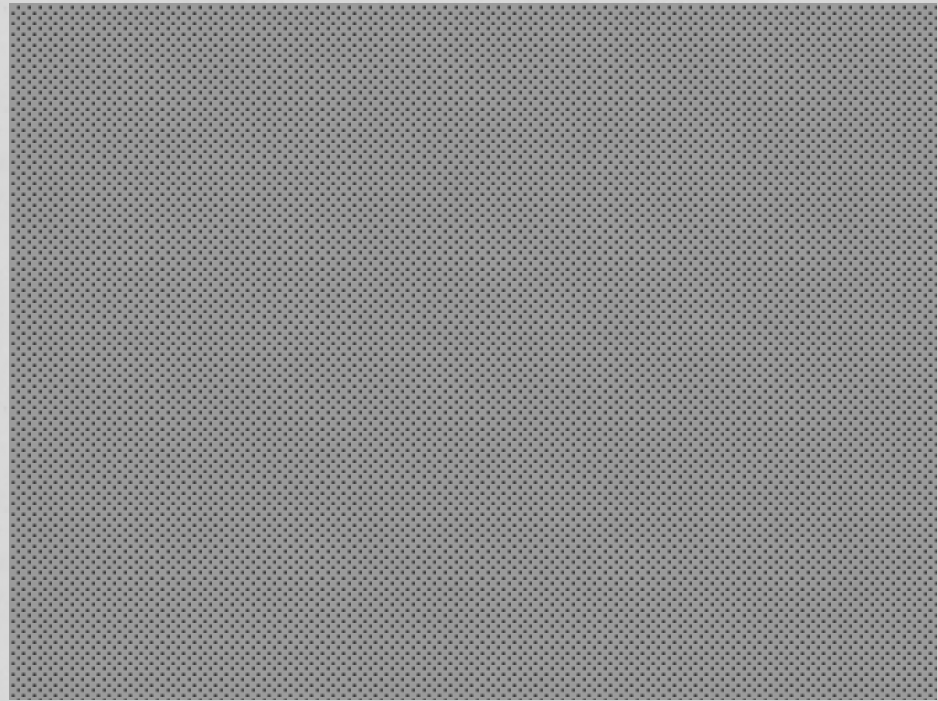
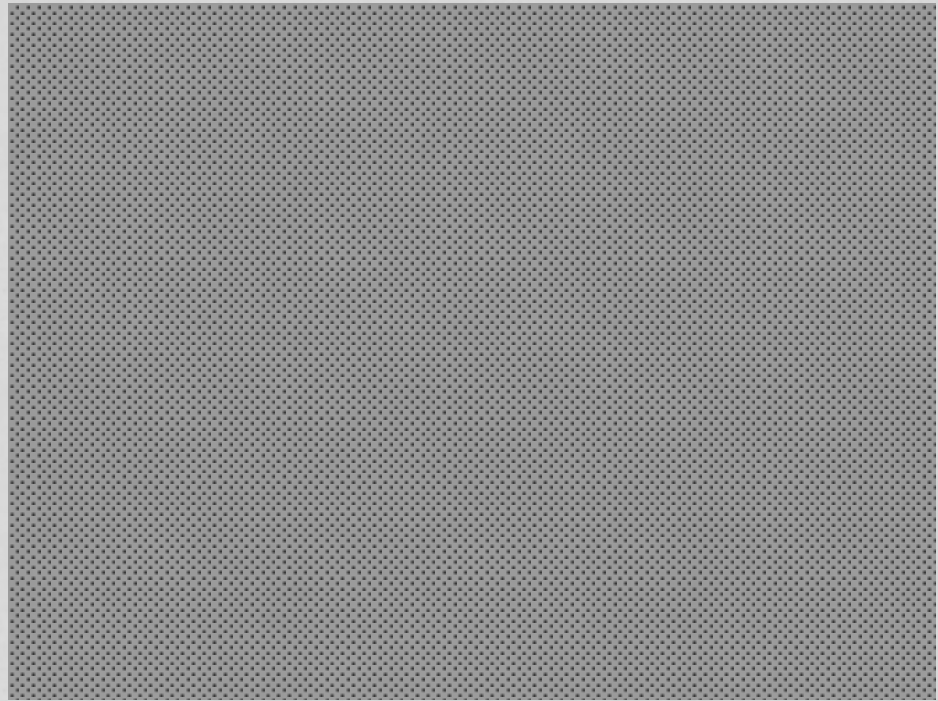
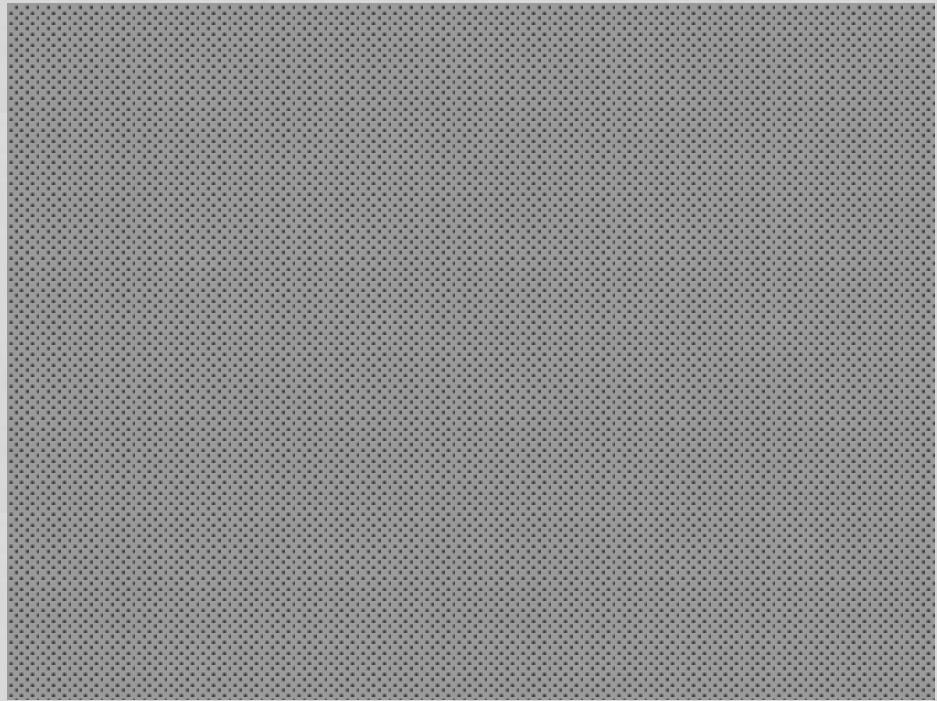
**DON'T DISMISS  
MODERN CSS  
BECAUSE YOU  
HAVE TO SUPPORT IE11**



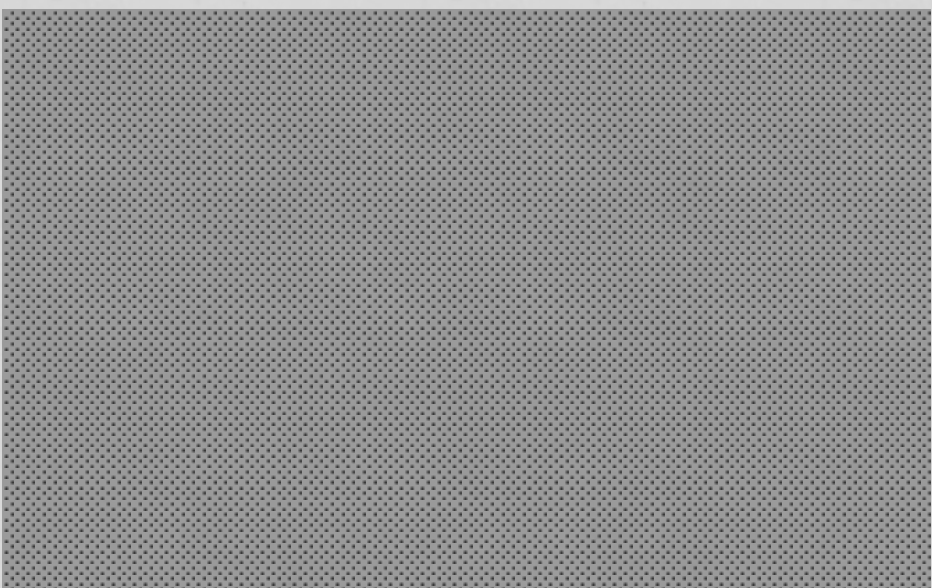
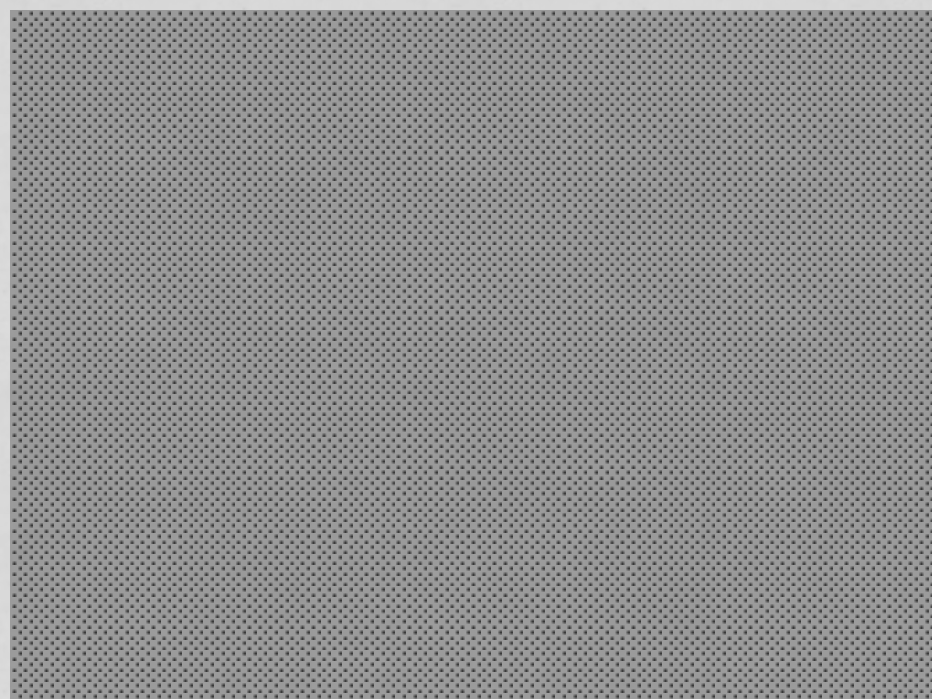
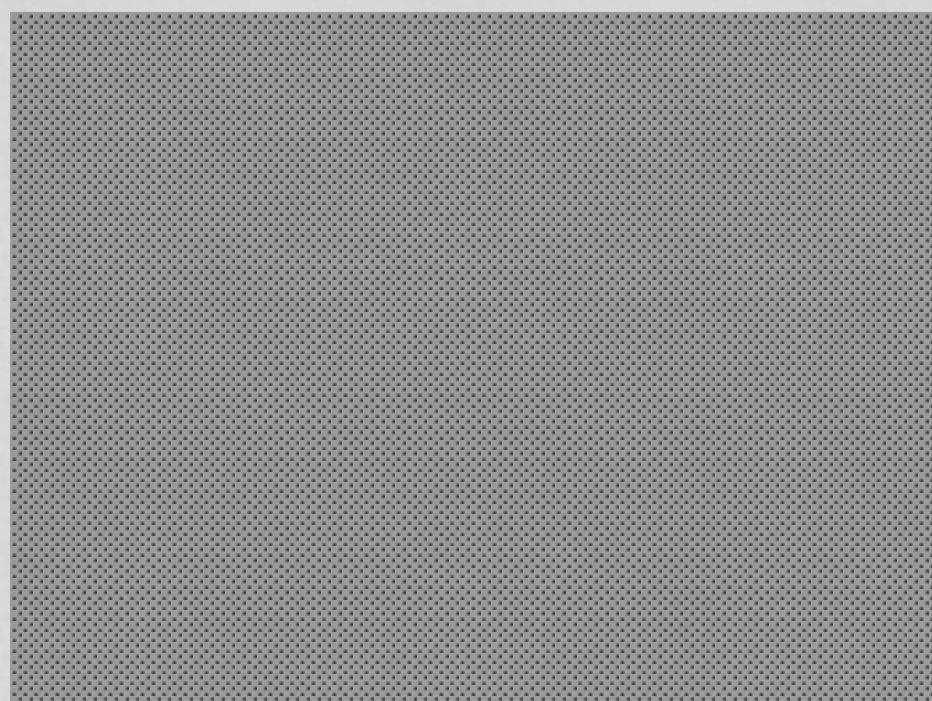
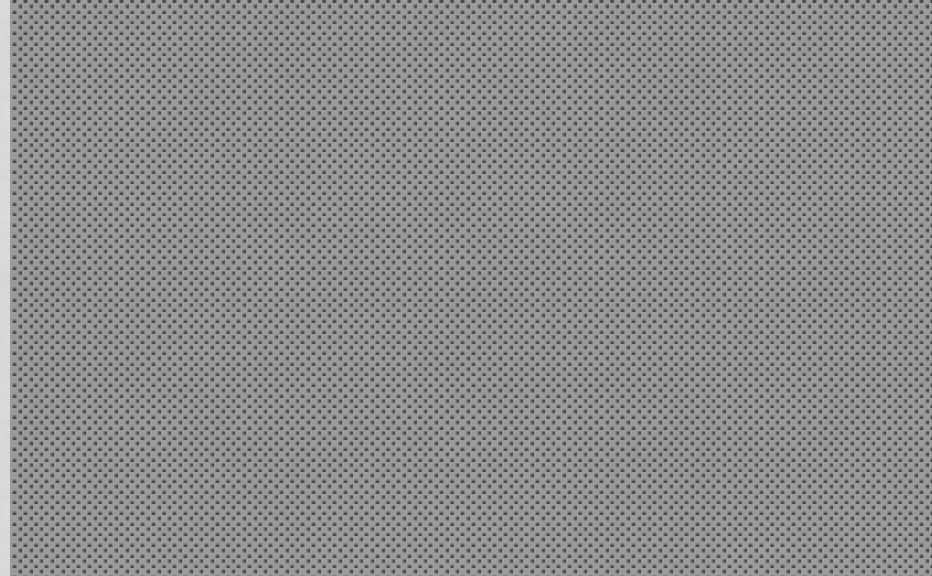


*WhAt aboUt  
IE 11 tHOuGh*









# CSS

<https://codepen.io/andybelldesign/pen/xxKdvwy>

```
.auto-grid {  
  display: grid;  
  grid-template-columns: repeat(auto-fill,  
                                minmax(16rem, 1fr));  
  grid-gap: 1rem;  
}
```



# CSS

<https://codepen.io/andybelldesign/pen/xxKdvwy>

```
.auto-grid > * {  
  max-width: 25rem;  
  margin-left: auto;  
  margin-right: auto;  
}
```

```
.auto-grid > * + * {  
  margin-top: 1rem;  
}
```

# CSS

<https://codepen.io/andybelldesign/pen/xxKdvwy>

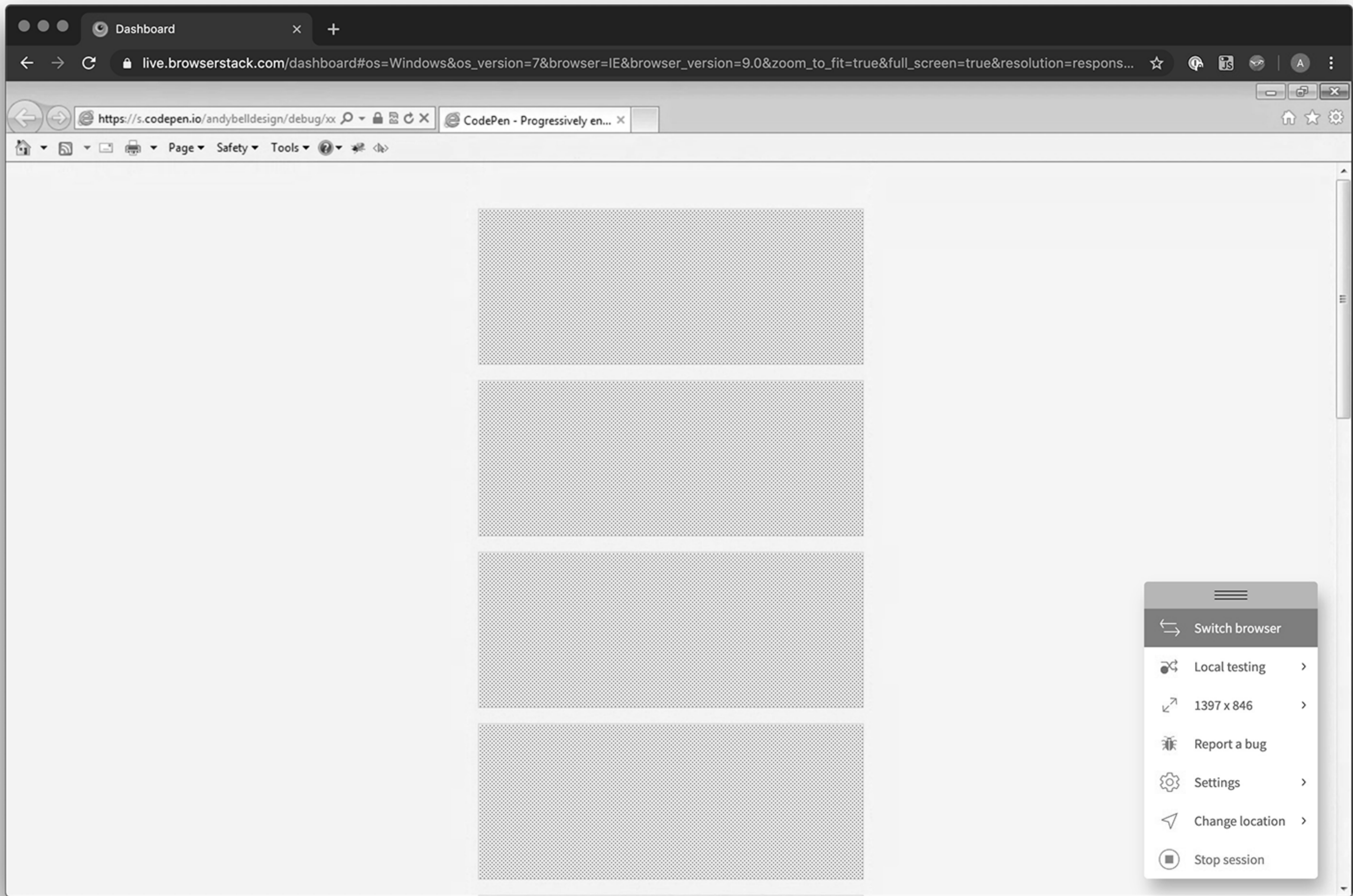
```
@supports (display: grid) {  
  .auto-grid > * {  
    max-width: unset;  
    margin: 0;  
  }  
}
```



✓ **22 lines of CSS**

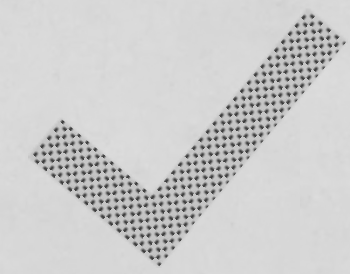
✓ **No hacks**

✓ **Works back to IE9**

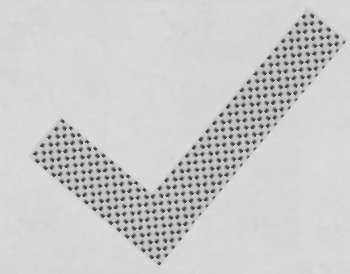




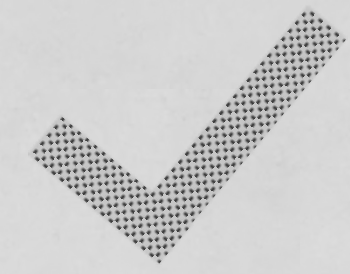
**Slow down**



**Stop**



**Step back**



**Think**



**Instead of moving fast  
and breaking things,  
move slowly and  
deliberately instead.**

**Thank you**

**Andy Bell**  
**@andybelldesign**  
**<https://andy-bell.design>**