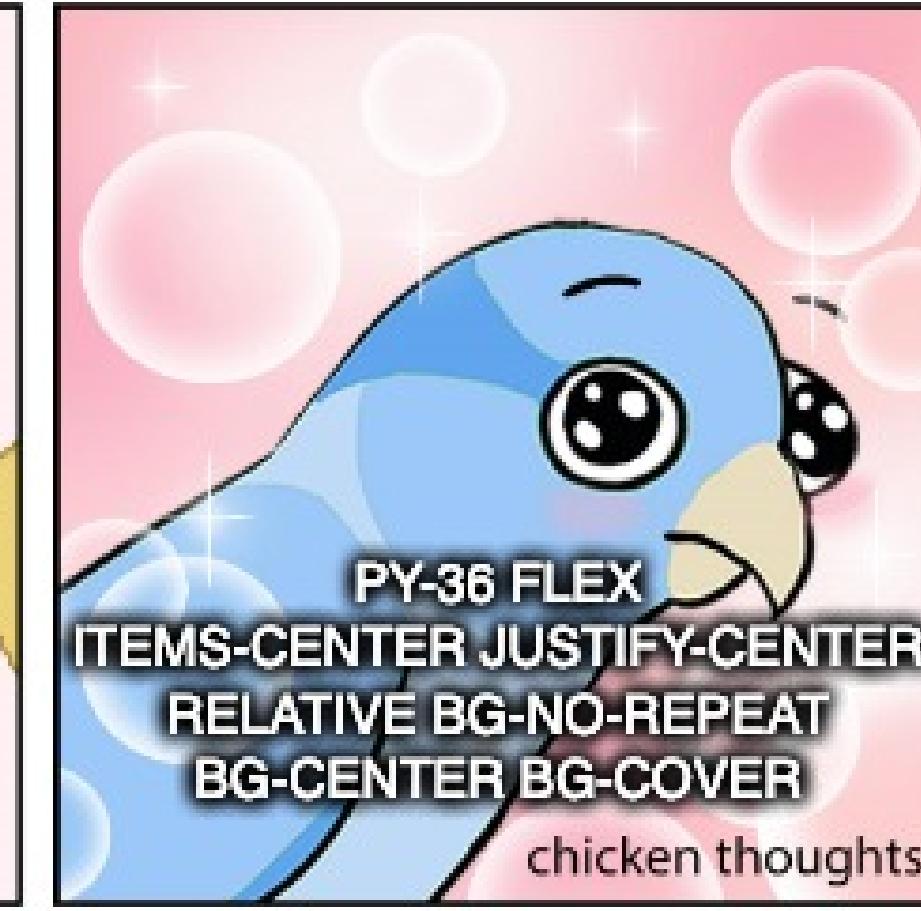
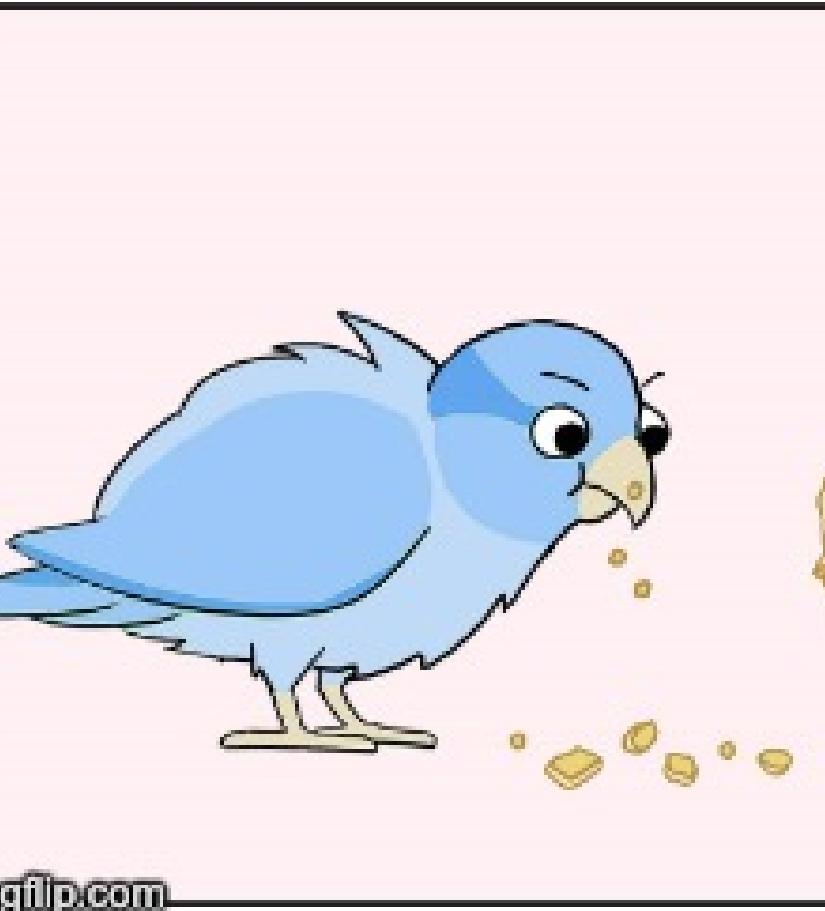
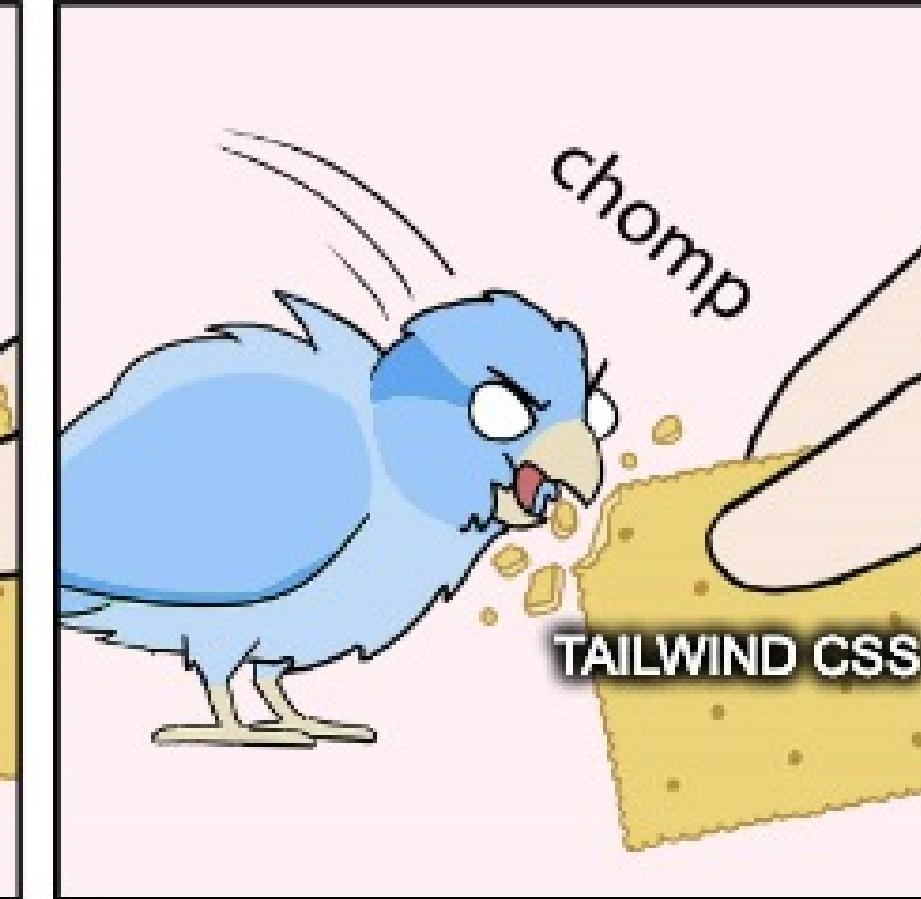


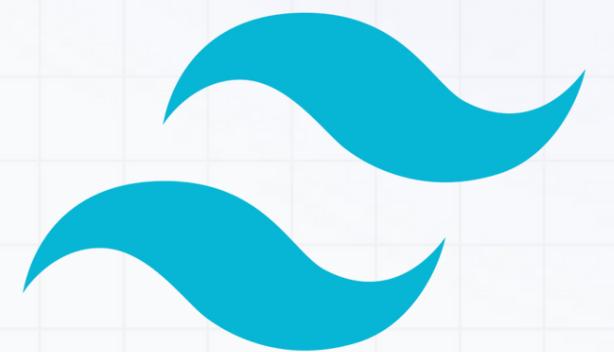
"Best practices" don't actually work.



Adam Wathan
Creator of Tailwind CSS



What can we learn from Tailwind?



Agenda

What

1. What is Tailwind CSS?

How

2. How does Tailwind work?

Why

3. Why is Tailwind good?

When

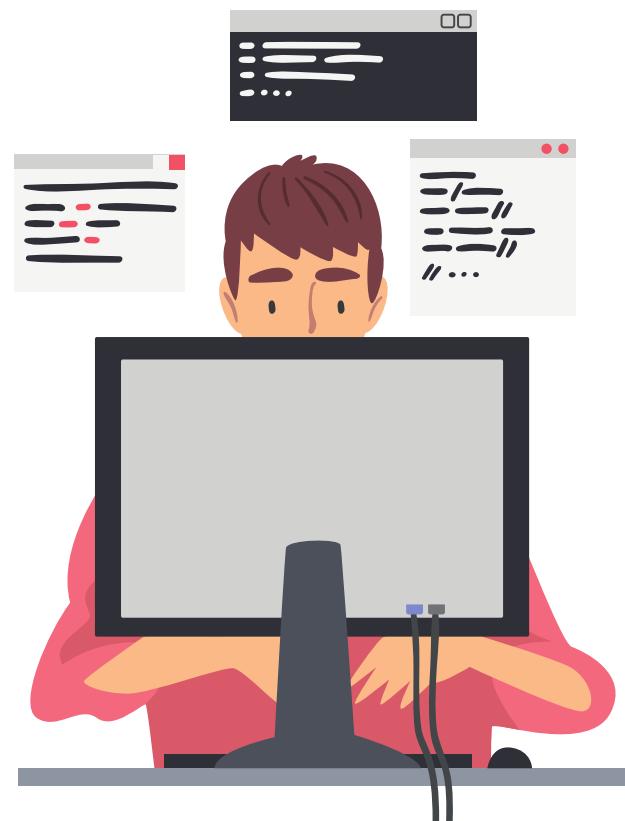
4. When to use Tailwind?

5

things we can learn
from **Tailwind CSS**

This matters to you because...

Faster & Prettier
UI Dev



+



SWE Best
Practices

Agenda

What

1. What is Tailwind CSS?

How

2. How does Tailwind work?

Why

3. Why is Tailwind good?

When

4. When to use Tailwind?

Tailwind CSS is a popular utility-first

CSS framework

- Faster development 
- Scalable for large codebases 
- Consistent look and feel across all pages 

Agenda

What

- Tailwind CSS is a popular utility-first CSS framework

How

2. How does Tailwind work?

Why

3. Why is Tailwind good?

When

4. When to use Tailwind?

Tailwind lets you build designs in markup

React + Tailwind CSS

```
navbar.tsx

<nav>

  <div className="sm:hidden pt-1.5">
    <CollapsingMenu />
  </div>

  <ul className="hidden sm:flex align-baseline gap-4 text-xl">
    <NavLinks />
  </ul>

</nav>
```

Pure CSS

```
navbar_styles.css
```

```
.mobile-menu {  
    padding-top: var(--spacing-1_5);  
}  
  
.main-menu {  
    display: none;  
    vertical-align: baseline;  
    column-gap: var(--spacing-4);  
    font-size: var(--font-size-xl);  
    line-height: var(--xl-font-line-height);  
}  
  
/* Adjust styles for when screen gets larger */  
@media (min-width: 640px) {  
    .mobile-menu {  
        display: none;  
    }  
  
    .main-menu {  
        display: flex;  
    }  
}
```

“Traditional way”

React/HTML

```
navbar.tsx
```

```
<nav>  
    <div className="mobile-menu">  
        <CollapsingMenu />  
    </div>  
    <ul className="main-menu">  
        <NavLinks />  
    </ul>  
</nav>
```

Tailwind Approach

```
navbar.tsx

<nav>
  <div className="sm:hidden pt-1.5">
    <CollapsingMenu />
  </div>
  <ul className="hidden sm:flex align-baseline gap-4 text-xl">
    <NavLinks />
  </ul>
</nav>
```

Key Point: Tailwind lets you design within markup, which reduces context-switching and makes development faster⚡

Lesson 1

**Challenge traditional
practices**

Tailwind defines clear naming conventions

Pure CSS



```
<button class="btn-color">Click Me</button>
<div class="custom-margin">This has margin!</div>
<section class="styled-section">Styled
Section</section>
```

Pure CSS



```
<button class="btn-color">Click Me</button>
<div class="custom-margin">This has margin!</div>
<section class="styled-section">Styled
Section</section>
```

Tailwind CSS



```
<button class="text-red-500 hover:text-red-700">Click Me</button>
<div class="my-4 px-8">This has margin and padding!</div>
<section class="bg-gray-200 rounded-lg p-4">Styled
Section</section>
```

Tailwind CSS



```
<button class="text-red-500 hover:text-red-700">Click Me</button>
<div class="my-4 px-8">This has margin and padding!</div>
<section class="bg-gray-200 rounded-lg p-4">Styled
Section</section>
```

**Key Point: Tailwind defines clear naming conventions
for self-documenting code** 

Lesson 2

**Use good naming
conventions**

Agenda

What

- Tailwind CSS is a popular utility-first CSS framework

How

- Allows designing within markup which reduces context-switching
- Defines clear naming conventions for self-documenting code

Why

3. Why is Tailwind good?

1 Challenge traditional practices

2 Use good naming conventions

When

4. When to use Tailwind?

Tailwind enables code reusability

Atomic classes

```
.border {  
    border: 1px solid #dee2e6;  
}  
  
.border-t-4 {  
    border-top-width: 4px;  
}  
  
.rounded-lg {  
    border-radius: 0.5rem;  
}
```

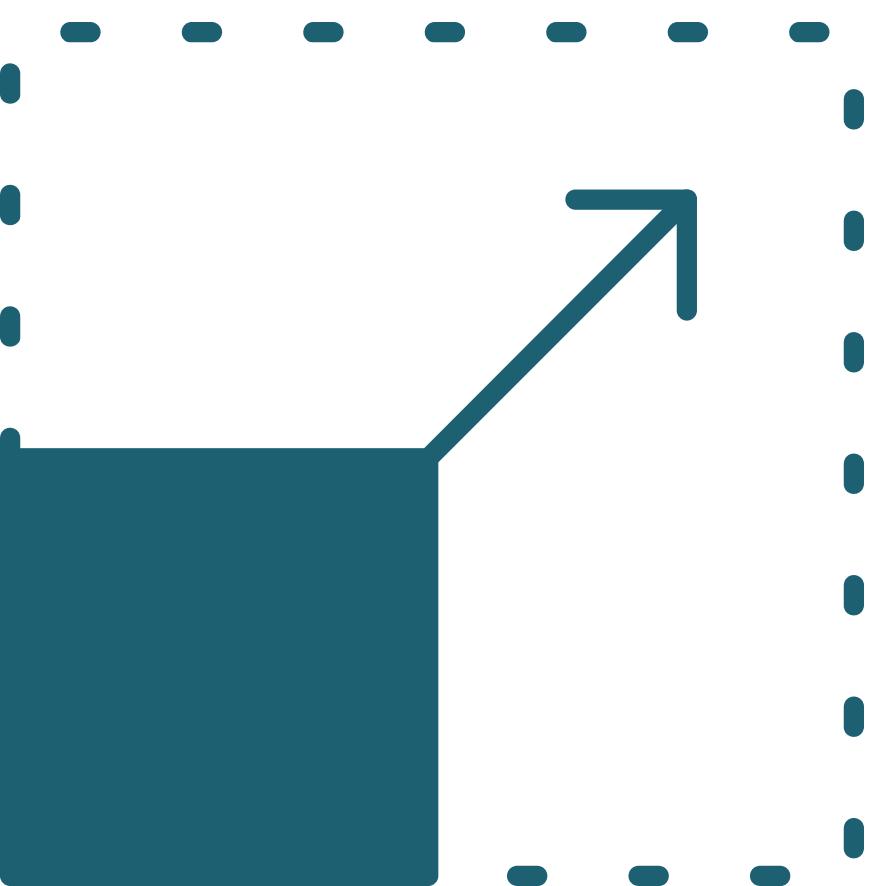
Tailwind enables code reusability

Key Point: Atomic classes
allow for code reusability
and design consistency

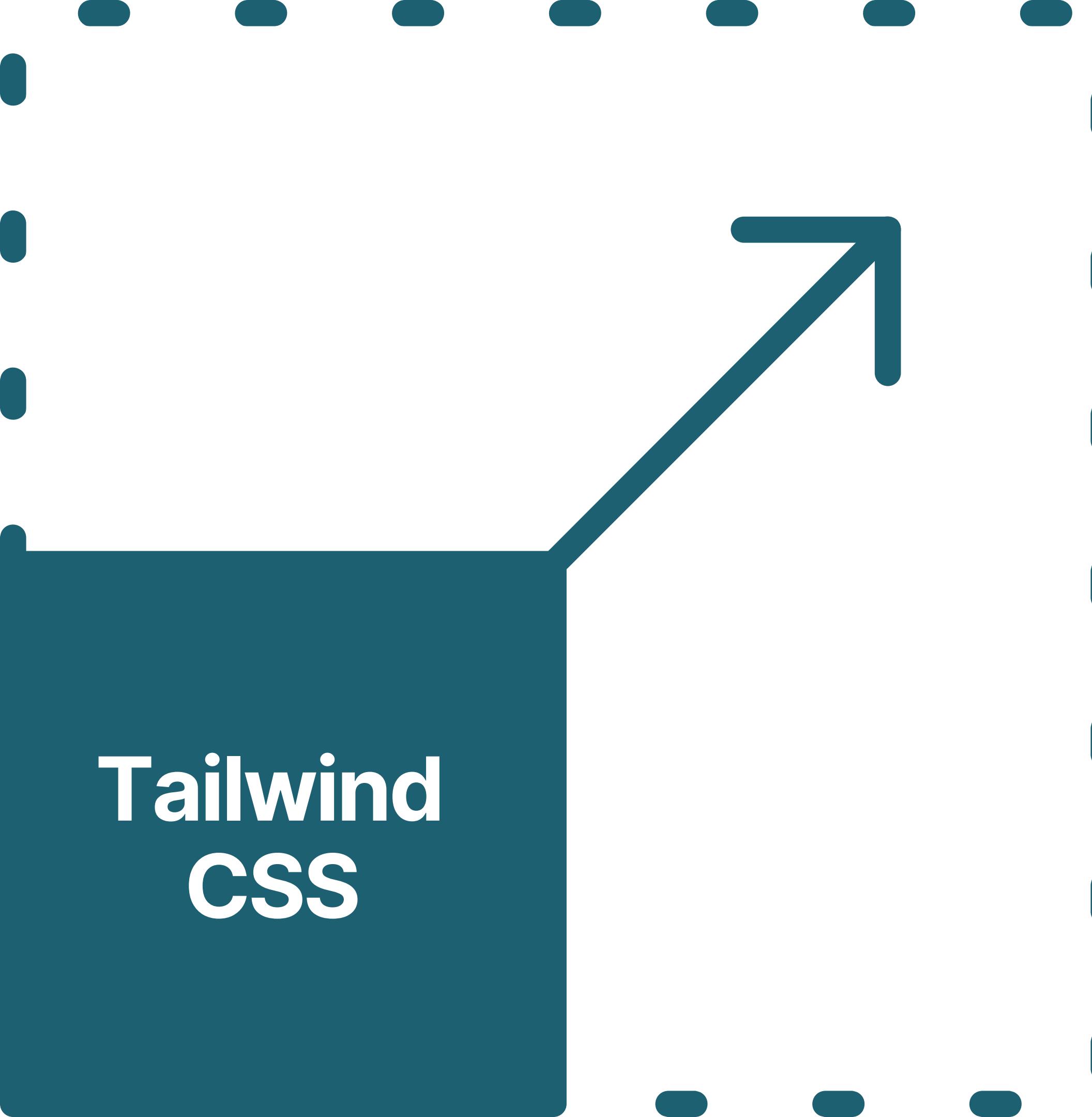
```
.border {  
  border: 1px solid #dee2e6;  
}  
  
.border-t-4 {  
  border-top-width: 4px;  
}  
  
.rounded-lg {  
  border-radius: 0.5rem;  
}
```

Lesson 3

**Strive for code
reusability**



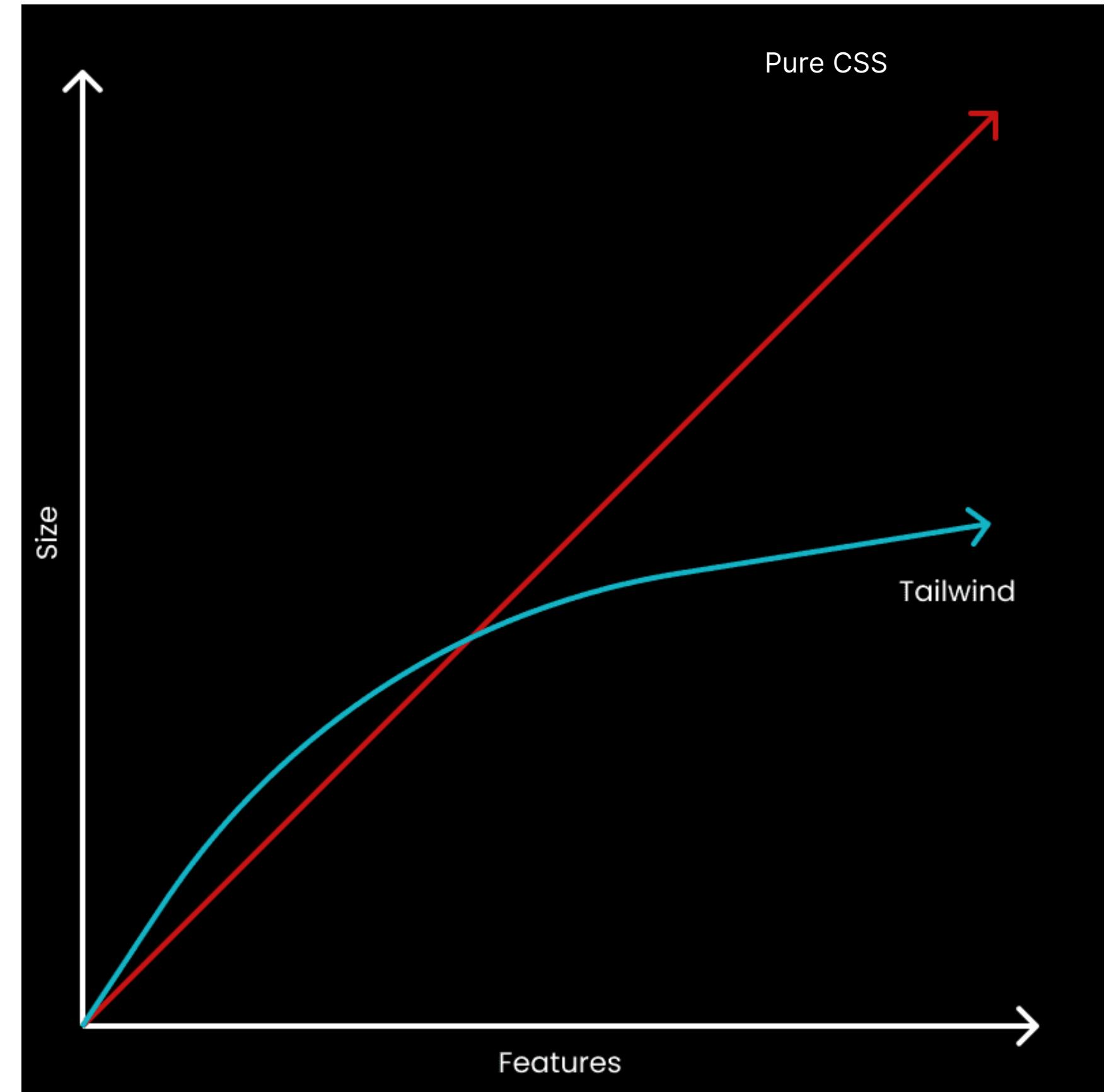
Tailwind CSS is...



**Tailwind
CSS**

Scalable!

Tailwind CSS is scalable



Tailwind CSS is scalable

Key Point: Tailwind +
PurgeCSS remove unused
styles and allow scalability



PurgeCSS

Lesson 4

**Ship less code,
do more**

Agenda

What

- Tailwind CSS is a popular utility-first CSS framework

How

- Allows designing within markup which reduces context-switching
- Defines clear naming conventions for self-documenting code

Why

- Atomic classes for code reusability and design consistency
- Tailwind + PurgeCSS to remove unused styles and for scalability

When

4. When to use Tailwind?

1 Challenge traditional practices

2 Use good naming conventions

3 Strive for code reusability

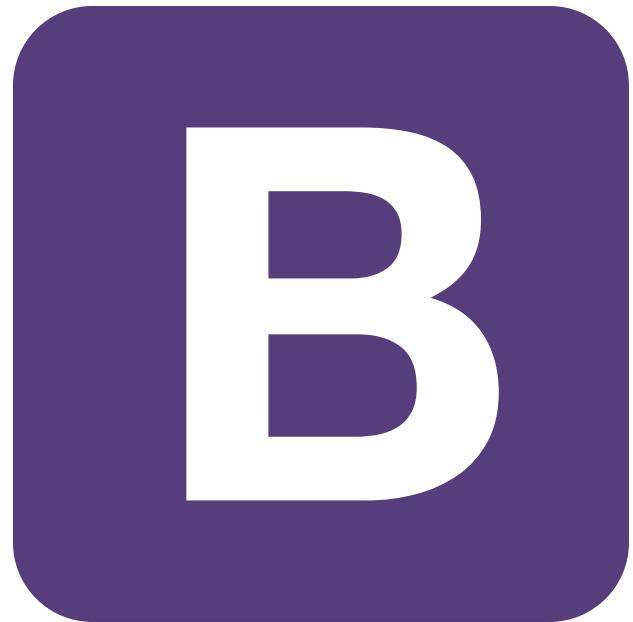
4 Ship less code, do more

Tailwind may or may not work for you

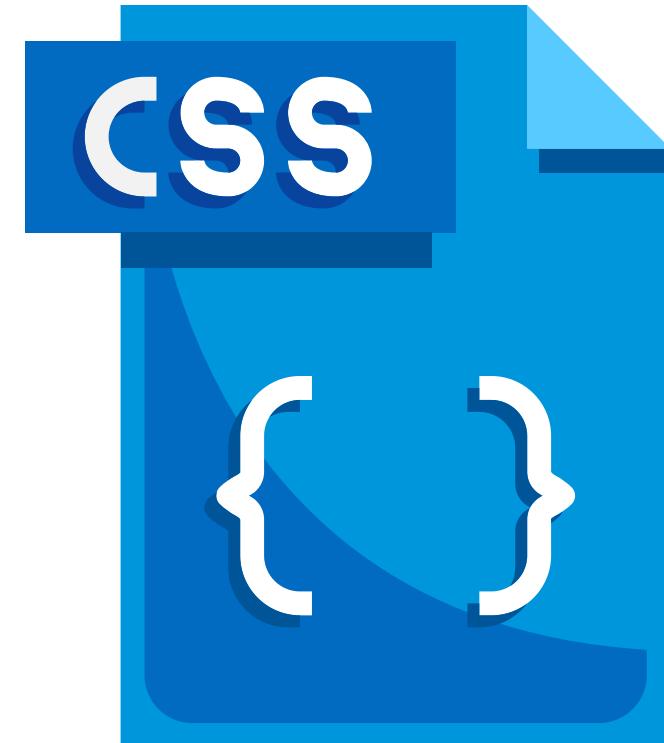


- Low context switching
- Reusability
- Scalability
- Verbose code
- Learning curve
- Animation difficulties

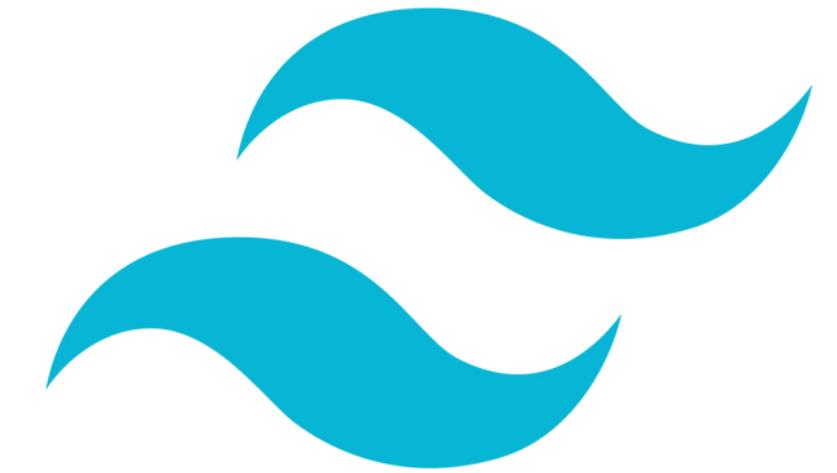
Which one to use?



Bootstrap

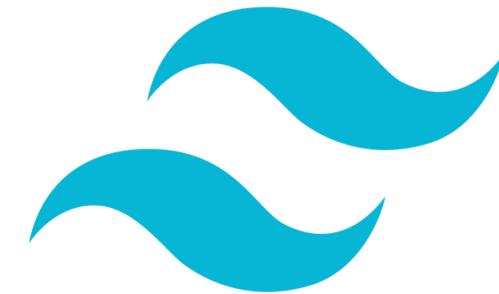
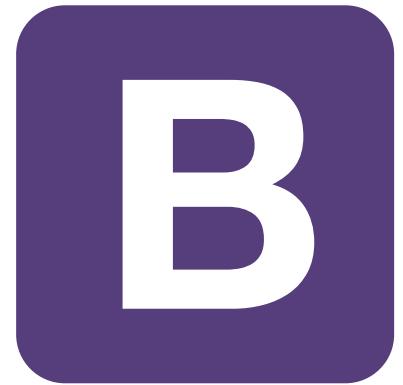


Pure CSS



Tailwind CSS

Which one to use?



Speed

Rapid Prototyping

Time-consuming

Quick

Flexibility

Pre-built
components only

Maximum control

Deep
customization

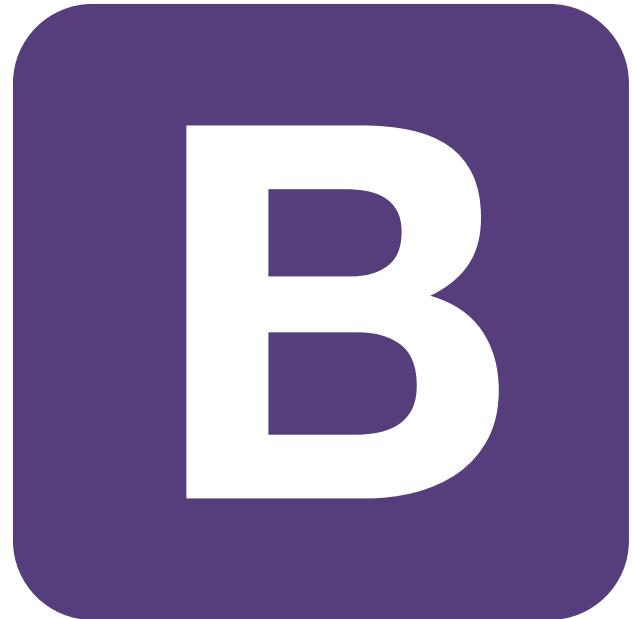
Maintenance

Easy until
customization
needed

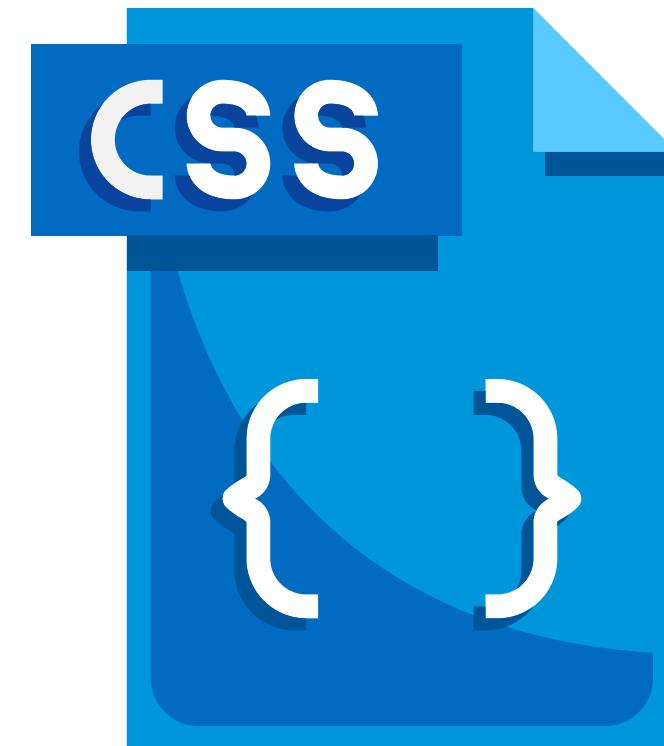
Manual
maintenance

Easy until heavy
customization
needed

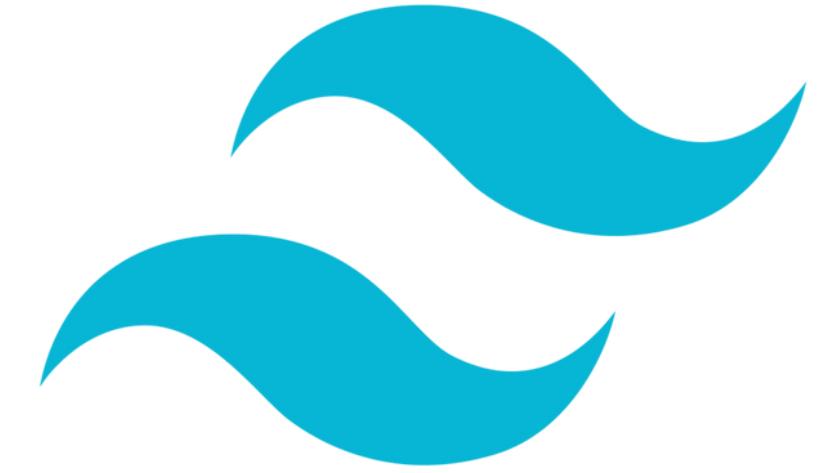
Which one to use?



Rapid prototyping



Maximum control



Balanced

Key Point: Tailwind restrains choices while providing enough flexibility to enable creativity

Lesson 5

**Always consider
trade-offs**

Challenge your assumptions and try Tailwind CSS!

Level up as a frontend engineer and get a fresh perspective on SWE best practices

Charisma Kausar

charisma.kausar@u.nus.edu

What

- Tailwind CSS is a popular utility-first CSS framework (Read more at tailwindcss.com)

How

- Allows designing within markup which reduces context-switching
- Defines clear naming conventions for self-documenting code

Why

- Atomic classes for code reusability and design consistency
- Tailwind + PurgeCSS to remove unused styles and for scalability

When

- Bootstrap for rapid prototyping
- CSS for maximum control
- Tailwind for a balance of both

1 Challenge traditional practices

2 Use good naming conventions

3 Strive for code reusability

4 Ship less code, do more

5 Always consider trade-offs