

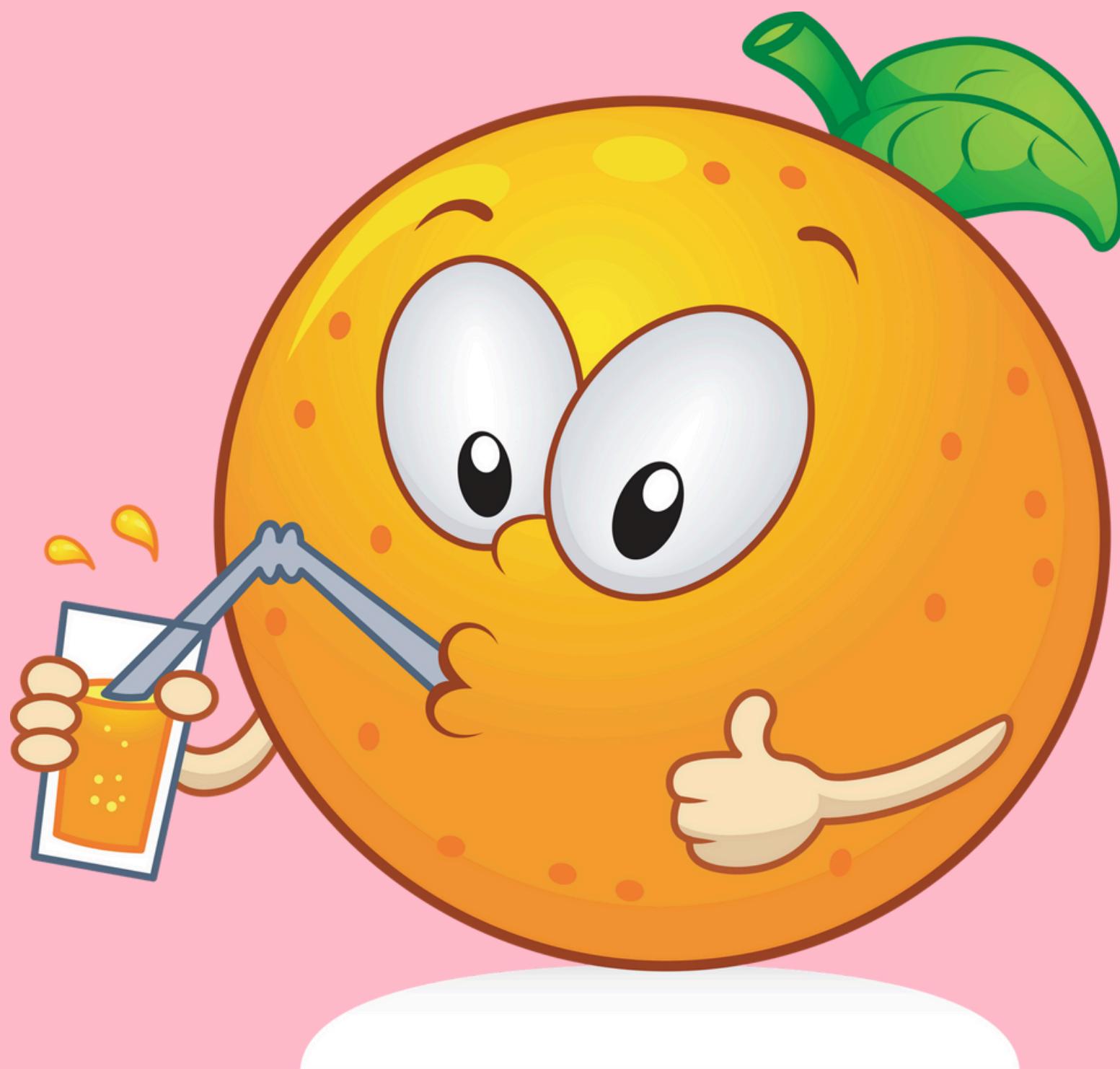


View Encapsulation

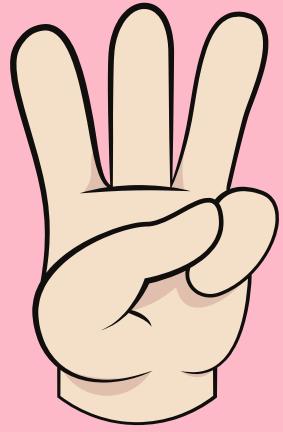


What is View Encapsulation?

- In Angular, View Encapsulation is a mechanism that allows each component's styles to be scoped to that component
- This ensures that styles defined in one component don't accidentally affect other parts of your app.



TYPES OF VIEW ENCAPSULATION



EMULATED (DEFAULT)

How It Works

Angular scopes the styles to the component by automatically adding a data- attribute to the HTML elements (like <div data-ng-content>) and the associated CSS.

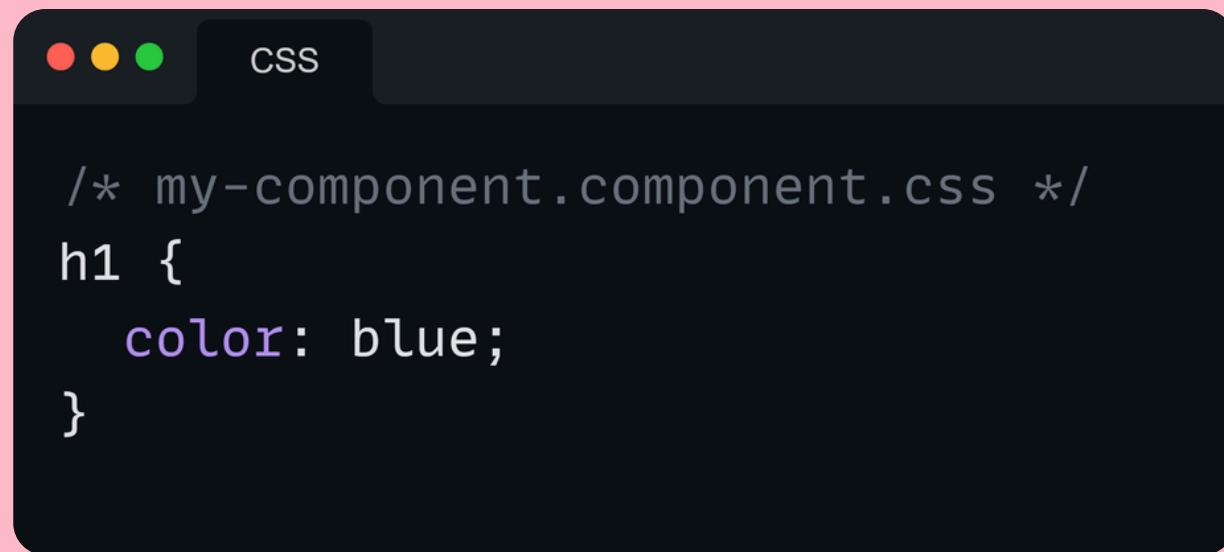
Benefits

It's a balance between encapsulation and support for older browsers (e.g., without native Shadow DOM)

```
  @Component({
    selector: 'app-my-component',
    templateUrl: './my-component.component.html',
    styleUrls: ['./my-component.component.css'],
  })
  export class MyComponent {}
```



Example



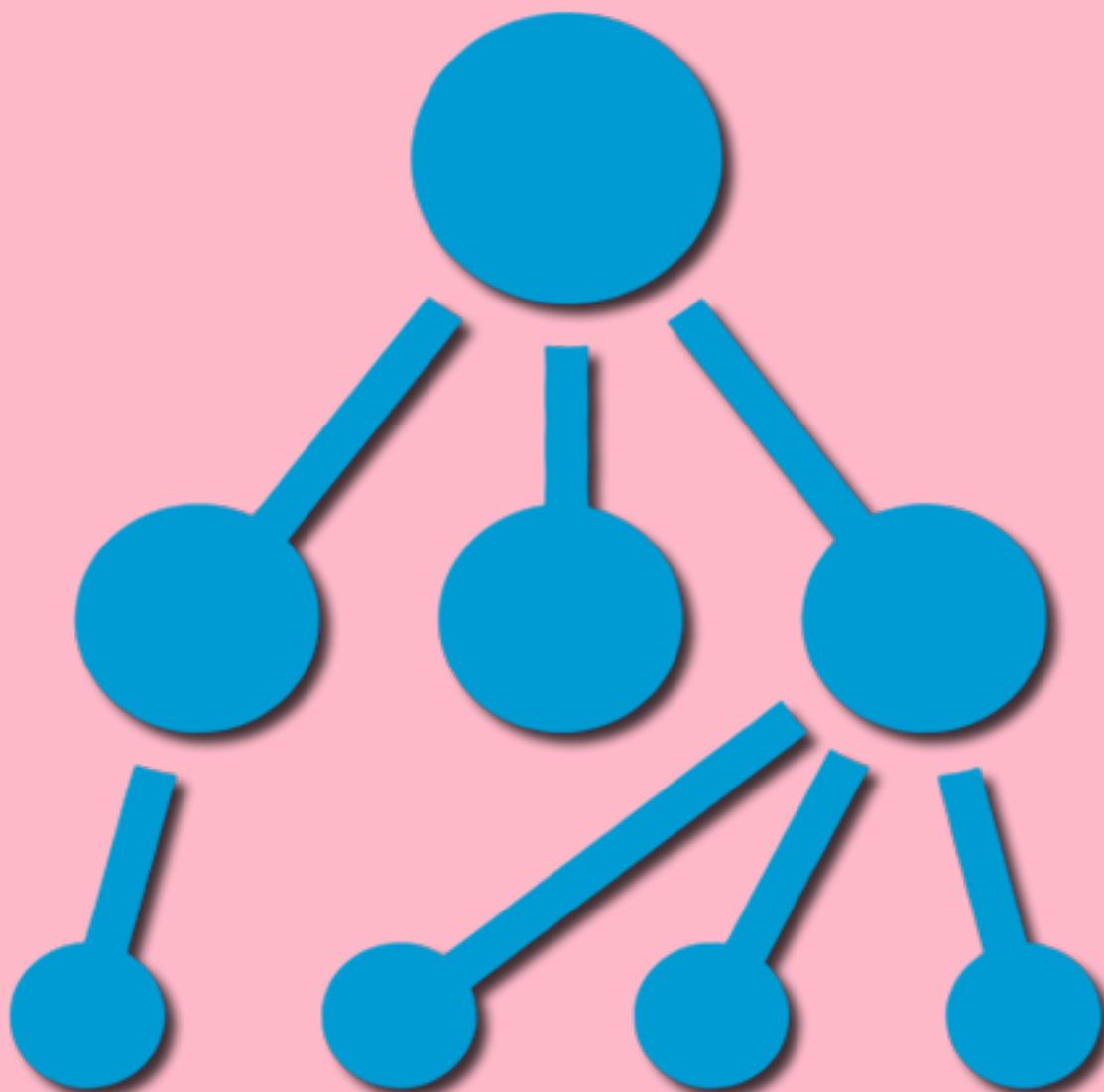
```
/* my-component.component.css */
h1 {
  color: blue;
}
```



VR

SHADOW DOM

- Shadow DOM encapsulates the styles using the browser's native Shadow DOM technology
- This provides complete encapsulation of styles and prevents any external styles from leaking into the component



How It Works

- Styles and templates are completely encapsulated in a shadow tree, and styles are scoped to that component



```
  ⚡ TS
  @Component({
    selector: 'app-my-component',
    templateUrl: './my-component.component.html',
    styleUrls: ['./my-component.component.css'],
    encapsulation: ViewEncapsulation.ShadowDom,
  })
  export class MyComponent {}
```



None

- With None view encapsulation, Angular does not scope the styles to the component
- Instead, the styles will affect the global document, similar to how traditional CSS works

How It Works

- The styles apply globally to any matching elements across your application

```
  @Component({
    selector: 'app-my-component',
    templateUrl: './my-component.component.html',
    styleUrls: ['./my-component.component.css'],
    encapsulation: ViewEncapsulation.None,
  })
  export class MyComponent {}
```



EXAMPLE

```
/* my-component.component.css */
h1 {
  color: green;
}
```



VR

WHY IS VIEW ENCAPSULATION IMPORTANT ?

1

Isolation

2

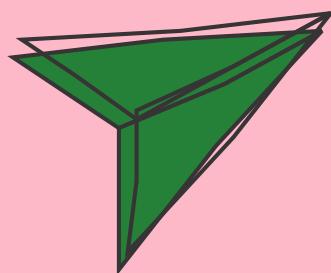
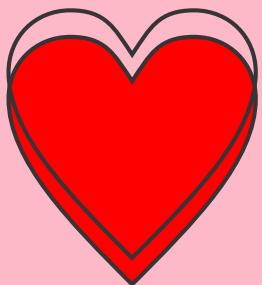
Maintainability

3

Component Reusability



DID
YOU FIND
IT
HELPFUL ?



Share this with a friend who needs it!



VINCENT RAJA
FULL STACK WEB DEVELOPER