

# Attribute Directives

- The Attribute directive changes the appearance or behavior of an element.
- Angular has several built-in attribute directives, namely `NgClass` and `NgStyle`
- It is a good idea to prefix your directives with a prefix. You cannot use the `ng` prefix since it's already used by Angular.
- When you apply the attribute directive to an element, the element will be known as the **host**.
- For example, if you had a directive called `my-directive` and applied it in `<div class="hello"> <span my-directive> ... </span> </div>`, the `span` would be the **host**.

**TODO** (writing a custom attribute directive)

```
1  @Directive({
2    selector: '[simple-directive]',
3    host: {
4      '(mouseleave)': 'onMouseLeave()',
5      '(click)': 'onClick()',
6      '[hidden]': 'isHidden',
7      '[class.done]': 'isDone',
8      'role': 'button'
9    }
10 })
11 class SimpleDirective implements OnInit {
12   @Input() private color: string
13   @Output() myevent: EventEmitter<string>;
14   private isHidden: boolean = false;
15   private isDone: boolean = false;
16   private defaultColor:string = 'magenta';
17   private elm: any;
18
19   constructor(private elmRef: ElementRef, private renderer: Renderer) {
20     this.elm = elmRef.nativeElement;
21     this.myevent = new EventEmitter();
22     setInterval(() => {this.myevent.emit('myevename')}, 1000);
```

```
23     }
24     ngOnInit() {
25         this.defaultColor = this.color || this.defaultColor;
26         this.setColor(this.color || this.defaultColor);
27     }
28     private setColor(color: string) {
29         this.renderer.setStyle(this.elm, 'color', color);
30     }
31     set setIsHidden(state) { this.isHidden = state; }
32     set setIsDone(state) { this.isDone = state; }
33
34     onMouseLeave() { this.setColor(this.defaultColor); }
35     onClick() { this.setColor('orange') }
36 }
```

**selector** TODO: details

**host** TODO: details

**Input** TODO: details

**Output** TODO: details

**ElementRef** TODO: details\*\*

**Renderer** TODO: details\*\*