



Components

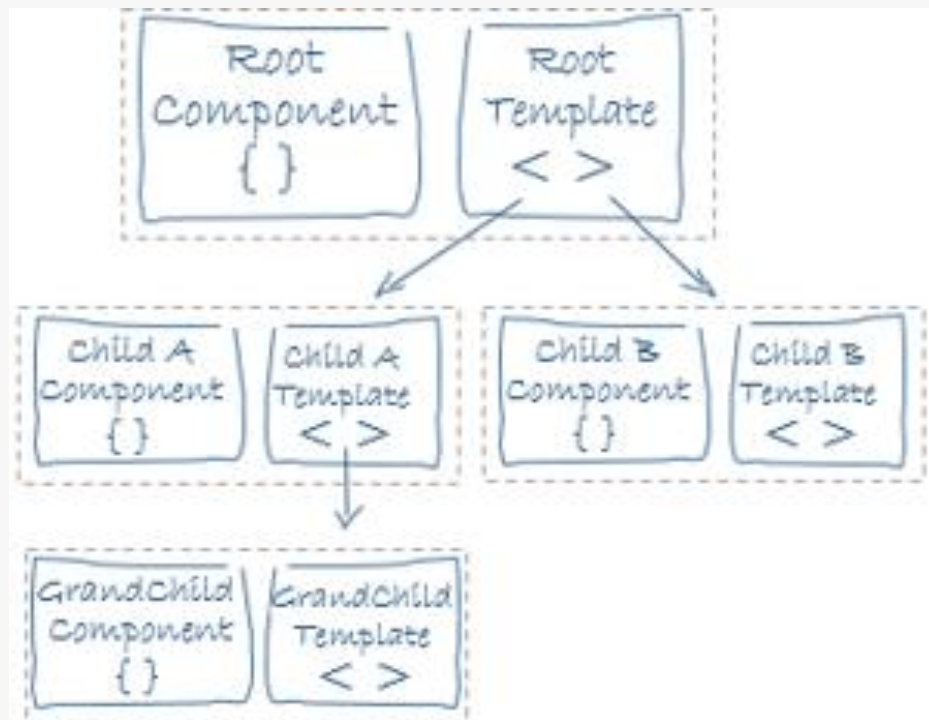
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Components

```
import { ChangeDetectionStrategy, Component } from '@angular/core';

@Component({
  selector: 'app-root',
  templateUrl: './app.component.html',
  template: '<h1>Hello World!</h1>',
  styleUrls: ['./app.component.scss'],
  styles: ['h1 { font-weight: normal; }'],
  changeDetection: ChangeDetectionStrategy.OnPush,
  providers: [],
  animations: []
})
export class AppComponent {
  title = 'my-app';
}
```

Templates and Views



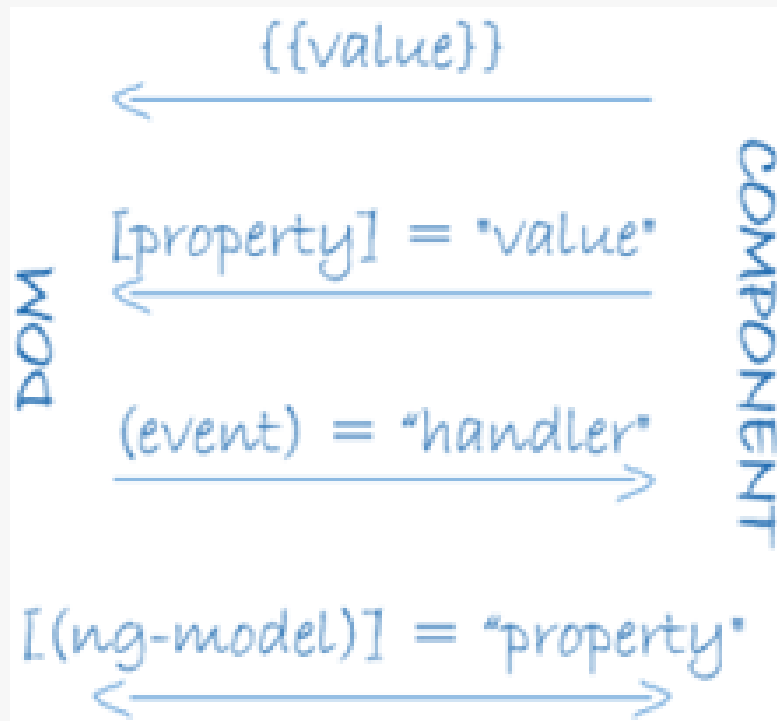
Angular Template syntax

```
<h2>Hero List</h2>

<p><i>Pick a hero from the list</i></p>
<ul>
  <li *ngFor="let hero of heroes" (click)="selectHero(hero)">
    {{hero.name}}
  </li>
</ul>

<app-hero-detail *ngIf="selectedHero" [hero]="selectedHero"></app-hero-detail>
```

Data binding



Events

```
<button (click)="doSomething()">
```

```
<input (key.enter)="submit()" [(ngModel)]="name">
```

```
<tab-bar [items]='countries' (tabClick)="doSomething()">
```

Directives

```
<mat-list-item *ngFor="let item of heroList; let i=index">
```

```
<button *ifAdmin>add user</button>
```

```
<div url="http://www.google.com"></div>
```

*ngFor

*ngIf

*ngSwitch

ngStyle

ngClass

Pipes

```
{{ birthday | date:'dd MM yyyy' }}
```

number

currency

date

async

json

Component interaction

```
export class ParentComponent {

    public item = new ItemDto();

    public onClick(id: number) {
        // doSomething
    }
}

<app-child
    [item]="item"
    (onClick)="onClick($event)">
</app-child>
```

```
export class ChildComponent {
    @Input()
    public item: ItemDto;

    @Output('iconClick')
    public iconClick = new EventEmitter<number>();

    public onClick() {
        this.iconClick.emit(this.item.id);
    }
}

<h1>{{ item.title }}</h1>
<mat-icon (click)="onClick()">
{{ item.icon }}</mat-icon>
```

LifeCycle hooks

- **ngOnChanges**: When an **input/output** binding value changes.
- **ngOnInit**: After the first **ngOnChanges**.
- **ngDoCheck**: Developer's custom change detection.
- **ngAfterContentInit**: After component content initialized.
- **ngAfterContentChecked**: After every check of component content.
- **ngAfterViewInit**: After a component's views are initialized.
- **ngAfterViewChecked**: After every check of a component's views.
- **ngOnDestroy**: Just before the directive is destroyed.



View Encapsulation

- **Emulated**: (default) Emula il comportamento dello ShadowDom
- **ShadowDom**: ShadowDom nativo del browser
- **None**: Non viene incapsulato ma usa globalmente css etc.

Emulated

```
<hero-details _ngghost-pmm-5>
  <h2 _ngcontent-pmm-5>Mister Fantastic</h2>
  <hero-team _ngcontent-pmm-5 _ngghost-pmm-6>
    <h3 _ngcontent-pmm-6>Team</h3>
  </hero-team>
</hero-detail>
```

```
[_ngghost-pmm-5] {
  display: block;
  border: 1px solid black;
}

h3[_ngcontent-pmm-6] {
  background-color: white;
  border: 1px solid #777;
}
```

ShadowDom

```
▼ <app-menu-item _ngcontent-msx-c59 class="menu-item" ng-  
  ▼ #shadow-root (open)  
    ▼ <style>  
      body[_ngcontent-msx-c60] {  
        padding: 0;  
        margin: 0;  
        background: #596778;  
        color: #EEEEEE;  
        text-align: center;  
        font-family: "Lato", sans-serif;  
      }
```

ChangeDetectionStrategy

- **OnPush**: Automatic change detection is deactivated
- **Default**: automatic

Third-party components

```
<nouislider
  [tooltips]="tooltips"
  [config]="config"
  [min]="min"
  [max]="max"
  [step]="step"
  [(ngModel)]="value">
</nouislider>
<div (click)="onSave()"></div>
```

```
@Component({
  selector: 'sem-slider',
  templateUrl: './slider.component.html',
  styleUrls: ['./slider.component.scss']
})
export class SliderComponent{
  @Input() tooltips: boolean;
  @Input() min: number;
  @Input() max: number;
  @Input() step: number;
  @Input() config: any;
  @Input() value: number;
  @Output() valueChange = new EventEmitter<number>();
  onSave() {
    this.valueChange.emit(this.value);
  }
}
```


DEMO



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Esercizio

