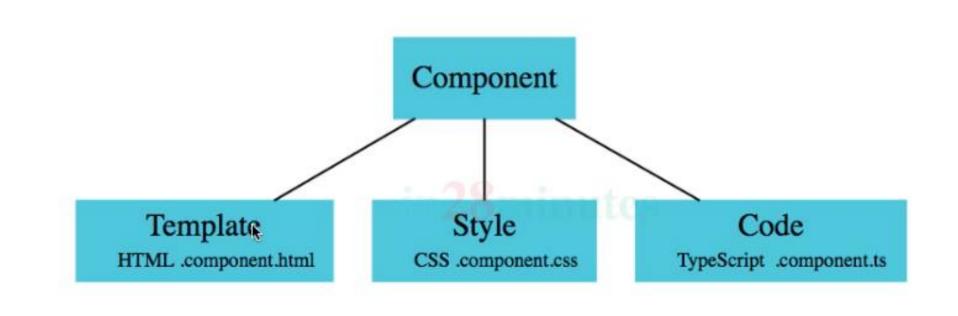# Part-3 Angular Component

By Santosh Turerao.

Component

Template ➕ Class ➕ Metadata

View
HTML

Code
TypeScript
Data &
Methods

Information
Decorator

Metadata

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

@Component({
  selector: 'app-root',
  templateUrl: './app.component.html',
  styleUrls: ['./app.component.css']
})
export class AppComponent {
  title = 'todo';
  message = 'Welcome to in28Minutes';
}
```

Selector : The **selector** attribute allows us to define how **Angular** is identified when the component is used in HTML.

- element-name: Select by element name.

<app-root></app-root>

- .class: Select by class name.

<div class = "app-root"> </div>

- [attribute]: Select by attribute name.
- **<div app-root> </div>**

@Component decorator functions Template

- @Component decorator functions take an object and this object contains many properties. So we will learn about the properties of the template & templateUrl in this article.

- The Inline templates are specified directly in the component decorator.

- The Inline templates are specified directly in the component decorator. In this, we will find the HTML inside the TypeScript file. This can be implemented using the "template" property.

```
APP.COMPONENT.TS

import { Component } from '@angular/core';

@Component({
  selector: 'app-root',
  template: `
        <H1>Template</H1>
        <hr>
        <div> Template inside typescript file </div>`
})
export class AppComponent {
  title = 'app';
}
```

External Template

The External templates define HTML in a separate file and refer to this file in templateUrl.means.

APP.COMPONENT.TS

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

@Component({
  selector: 'app-root',
  templateUrl: './app.component.html'
})
export class AppComponent {
  title = 'app';
}
```

APP.COMPONENT.HTML

```
<H1>templateUrl</H1>
<hr>
<div>
    Template outside typescript file. An implementation of templateUrl property.
</div>
```

Inline Styles

The Inline Style are specified directly in the component decorator. In this, you will find the CSS within the TypeScript file. This can be implemented using the "styles" property.

APP.COMPONENT.TS

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

@Component({
  selector: 'app-root',
  templateUrl: './app.component.html',
    styles: ['h1{color:#FF4500}', 'div{font-family: Arial; color:       #00bfff}']
})
export class AppComponent {
  title = 'app';
}
```

APP.COMPONENT.HTML

```html
<H1>styles</H1>
<hr>
<div>
    Styles inside typescript file. An implementation of
    <i>styles</i>
    property,this property takes an array of strings that contain CSS code.
</div>
```

The External styles define CSS in a separate file and refer to this file in styleUrl.means In this, we will find a separate CSS file instead of finding a CSS within the TypeScript file. Here, the TypeScript file contains the path to that style sheet file with the help of the "stylesUrls" property.

APP.COMPONENT.TS

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

@Component({
  selector: 'app-root',
  templateUrl: './app.component.html',
  styleUrls: ['./app.component.css']
})
export class AppComponent {
  title = 'app';
}
```

APP.COMPONENT.CSS

```css
h1{color:#FF4500}
div{font-family: Arial; color:#00bfff}
```

APP.COMPONENT.HTML

```html
<H1>styleUrls</H1>
<hr>
<div>
    Styles outside typescript file, called external styles. An implementation of
    <i>styleUrls</i>
    property,this property takes path of style sheet where css code is present
</div>
```

Configuring Component to App

- application Must Know to Every component .
- For the configuration purpose every component class name
- must to be add into the @ngModule declarations section.

```
@NgModule({
    declarations: [
        AppComponent,
        WelcomeComponent,
        StudentComponent,
        LoginComponent
    ],
```

Create New Component

```
D:\training_notes\bootAngularFullstack\code\frontend\todo-app>ng generate component student
CREATE src/app/student/student.component.html (26 bytes)
CREATE src/app/student/student.component.spec.ts (635 bytes)
CREATE src/app/student/student.component.ts (274 bytes)
CREATE src/app/student/student.component.scss (0 bytes)
UPDATE src/app/app.module.ts (536 bytes)
```

All The Best.

By Santosh Turerao.