# **What are Directives?**

* Directives are instructions in the DOM!
* Directive helps us to guide how, when and where to use multiple or single component and business logic in the angular app.
* Directive are js class and declared as @directive.

## **1.Directives types**

* There are 3 directives in angular
  1. Component Directive
  2. Structural Directive
  3. Attribute Directive

### **1.1 Component Directives**

* Component directive are used in main class.
* They contain the detail of how the component should be processes, instantiated and used at runtime.

### **1.2 Structural Directives**

* Structural directives start with a **\*** sign.
* These directives are used to manipulate and change the structure of the DOM element.
* For example: \*ngIf and \*ngFor

#### **1.2.1 \*ngIf:**

* \*ngIf is a structural directive which helps to display content according to condition in HTML.
* Syntax for \*ngIf:

<tag \*ngIf= “condition”> view\_content </tag>

* Syntax for \*ngIf with an Else condition:
* Type 1:

**<tag \*ngIf= “condition; else variable\_name”> view\_content </tag>**

**<ng-template #variable\_name>**

**<tag>View\_Content</tag>**

**</ng-template>**

* Example:

  <p \*ngIf="true;else else\_block">non-else Content</p>

  <ng-template #else\_block>

      <p>else\_block content</p>

  </ng-template>

* Type 2:

**<span \*ngIf= “condition; then variable\_name1 else variable\_name2”> </span>**

**<ng-template #variable\_name1>**

**<tag>View\_Content</tag>**

**</ng-template>**

**<ng-template #variable\_name2>**

**<tag>View\_Content</tag>**

**</ng-template>**

* Example:

  <span \*ngIf= "false;then then\_block else else\_block"></span>

  <ng-template #then\_block>

    <p>then\_block</p>

  </ng-template>

  <ng-template #else\_block>

    <p>else\_block</p>

  </ng-template>

#### **1.2.2 \*ngFor**

* The \*ngFor directive is used to repeat a portion of HTML template once per each item from an iterated list.
* Syntax for \*ngFor :

**<tag \*ngFor= “let variable of interated\_list\_variable”> …. </tag>**

* Example:

  arr = [

    {'firstname':'Salman', 'lastname': 'Yusuf'},

    {'firstname':'Mani', 'lastname': 'Kumar'},

    {'firstname':'Monica', 'lastname': 'Chowdary'},

    {'firstname':'Sanchit', 'lastname': 'Kapoor'},

    {'firstname':'Florina', 'lastname': 'Gogoi'}

  ];

* The above following array is written in .ts file.

<p \*ngFor="let item of arr">

  <b>FirstName:</b> {{item.firstname}}&nbsp; <b>LastName:</b> {{item.lastname}}

</p>

* The above code is written in template(HTML) file.

### **1.3 Attribute Directives**

* Attribute directives are used to change the look and behaviour of the DOM element.
* For example: ngClass, ngStyle etc.