**COMPONENT**

* Consists of template,class,metadata
* Angular app has component tree. (nesting of components)

Data Binding

* Within component data binding should be there.
* Methods :
* Interpolation: {{Expression}}
* Property Binding/Attribute Binding : <button [disabled] = “value”> - when we want to change value dynamically.
* Event Binding/Event Handling: <button (click)=”onButtonClick()”> - Handle event – it is one way binding from UI to TS. It is data binding from an DOM element to component.
* Two way data binding – from UI to TS and vice versa. <input [(ngModel)] = ”model object”>
* @Input,@Output, EventEmitter

Directives

* Custom html element used to extend angular features to HTML.
* Types:
* Components – directives with a template
* Structural directives – ngfor, ngIf, ngSwitch – change the DOM layout by add and removing DOM elements.
* Attribute directives – ngStyle, ngClass – change the appearance of element.

Custom Attribute Directive

* ng generate directive <directive-name> OR ng g d <directive-name>.

@HostBinding

* allows to programmatically set a property value on the directive’s host element.

@HostListener

* are event listeners attached to any elements that hosts the directive.

**SERVICES**

* sharing data or functionality
* ng g s <service-name>

Dependency Injection

* @Injectable – marks a class available to be injected to an injector for instantiation.
* Providing dependency – 3 instances
* Components/directives/classes -> providers:[Service]
* Components/directives/other classes - 1 instance – app.module.ts -> providers:[Service]

Injecting services to services

PIPES

* Considered as formatter or filter.
* Used to transform data before displayed on DOM
* Data | pipe\_name: parameters
* Types: Inbuilt and custom
* Multiple pipes can be applied on a value, executed from left to right.
* **PIPES: String** > lowercase,uppercase,titlecase,slice
* **PIPES: Currency** > data | currency: ‘currency\_code’ [:parameters]
* **PIPES: Number or decimal pipe** > data | number:**’format’**
* **Format** = minIntDigit.minFractionDigit-maxFractionDigit
* **PIPES: Percentage Pipe** > data | percent
* **PIPES: Date Pipe >** data | date : ‘format’ > format can be any inbuilt format or custom format.

eg: data |date : ‘dd-MMM-yyyy’ => 16-Nov-2017

* **PIPES: JSON Pipe :** data | json

Custom pipe

* **Ng g p <pipe\_name>**
* @Pipe – decorator
* Only Imp function is transform() > overridden method.

**ROUTING**

* Redirect users to diff pages.
* Angular router is library used to manage the navigation inside an angular application.
* **Routes** : describes our app’s routes, it links path with components.
* **Router Outlet :** isa placeholder component that gets expanded to each router’s content.
* **RouterLink :** used to link to routes/paths with UI.

Routing : parameters: Query Parameters