



Angular: Components & Data Binding

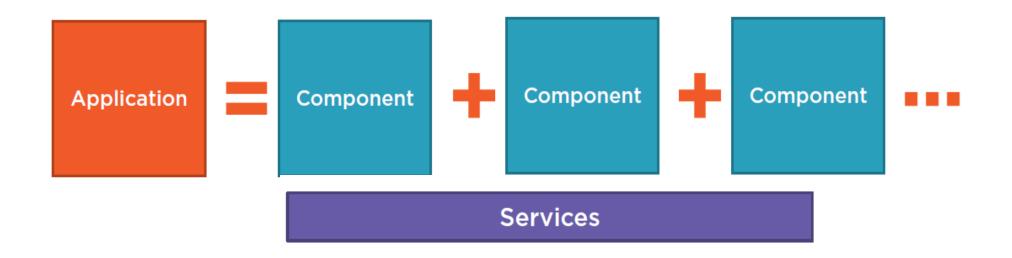
# Agenda



- ☐ Able to define Components
- ☐ Able to apply Templates
- ☐ Able to apply Data Binding

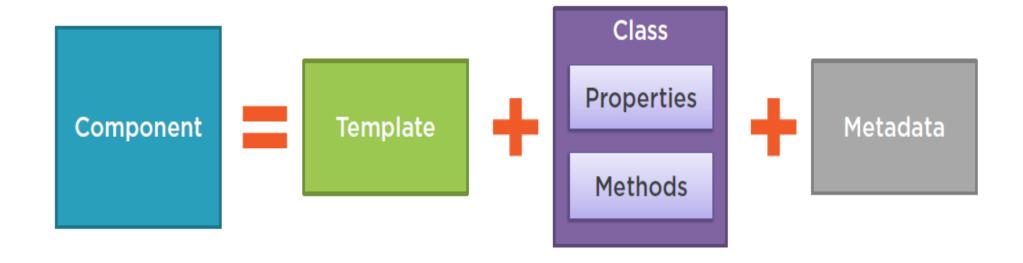
# Big picture of Angular App





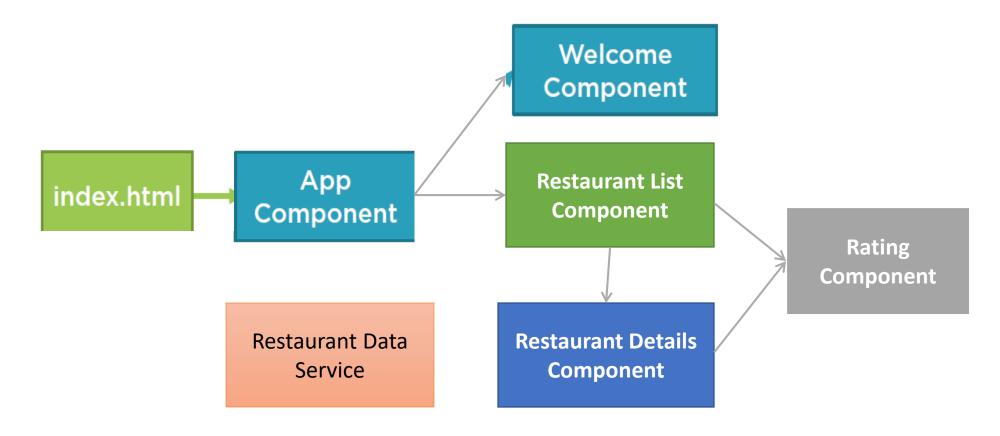
# Component





# Sample Application Architecture

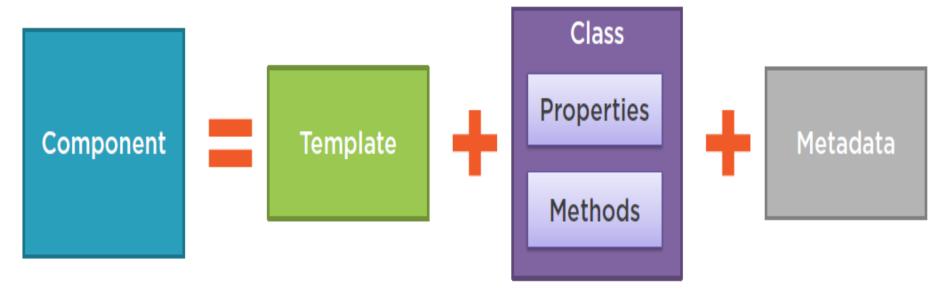






# What is Component?





- View layout
- Created with HTML
- Includes binding and directives
- Code supporting the view
- Created with TypeScript
- Properties: data
- Methods: logic

- Extra data for Angular
- Defined with a decorator

# What is Component?



```
import { Component } from '@angular/core';
                                                                                Import
@Component({
                                                                            Directive Name
   selector: 'rms-app', "
                                                                             used in HTML
   template: `____
   <div>
                                                                              View Layout
       <h1> {{pageTitle}} </h1>
       <div> My first Compoent </div>
                                                                                Binding
                                                                              Metadata &
export class AppComponent (
   pageTitle: string= 'Restaur.
                               + Management System
                                                                              Component
                                                                                 Class
                                                   Back Ticks NOT
                                                      Quotes
```

## Decorator





☐A function that adds metadata to a class, its members, or its method arguments.

☐ Prefixed with an @.

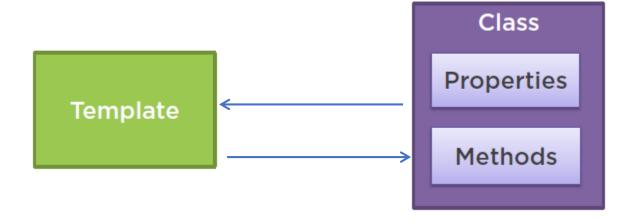
☐ Angular provides built-in decorators.

□@Component()

# Binding



☐ Coordinates communication between the component's class and its template and often involves passing data.



# Interpolation



## Template

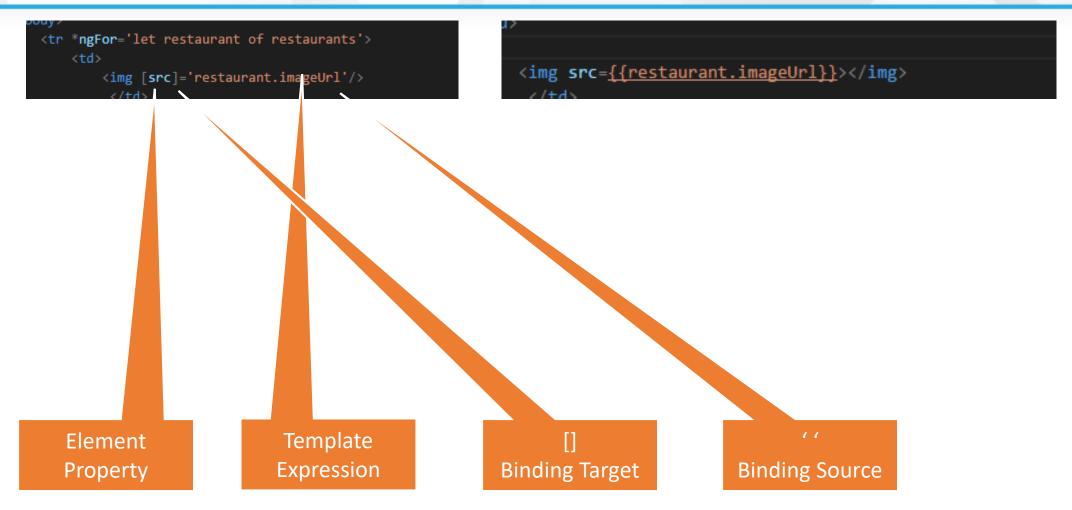
```
<h1> {{ pageTitle }} </h1>
   {{ 'title' + pageTitle }}
   {{ 2*20 +1 }}
   {{ 'Title :' + getTitle() }}
   <h1 innerText={{pageTitle}}>
   <rms-restaurants></rms-restaurants></div>
```

### Class

```
export class AppComponent{
pageTitle: string= "Restaurant Management System App"
}
```

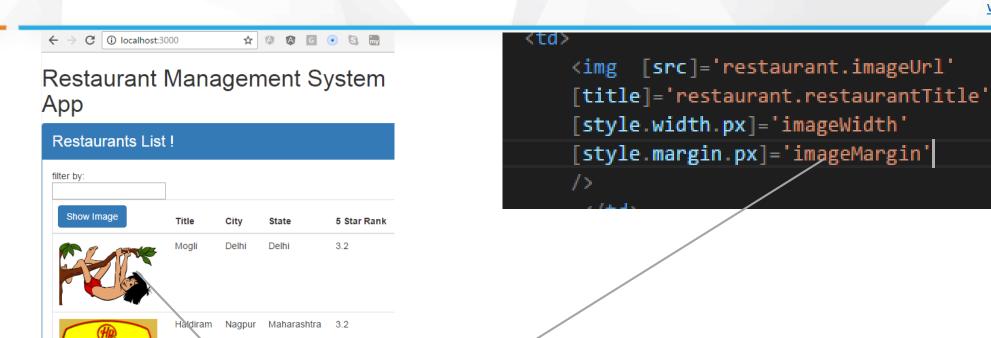
# **Property Binding**





# **Property Binding**





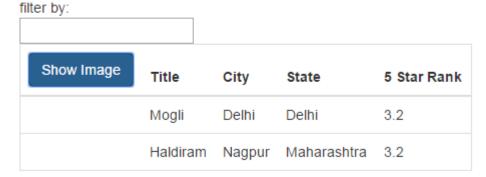
# **Event Binding**



## Template

https://developer.mozilla.org/en-US/docs/web/events

### Restaurants List!



### Class

```
export class RestaurantListComponent{
  pageTitle:string ="Restaurants List !";
  imageWidth:number=150;
  imageMargin:number=2;
  showImage: boolean = false;

  restaurants: any[] = [...
];

toggleImage() : void{
    this.showImage= !this.showImage;
}
```

### Restaurants List!

filter by:

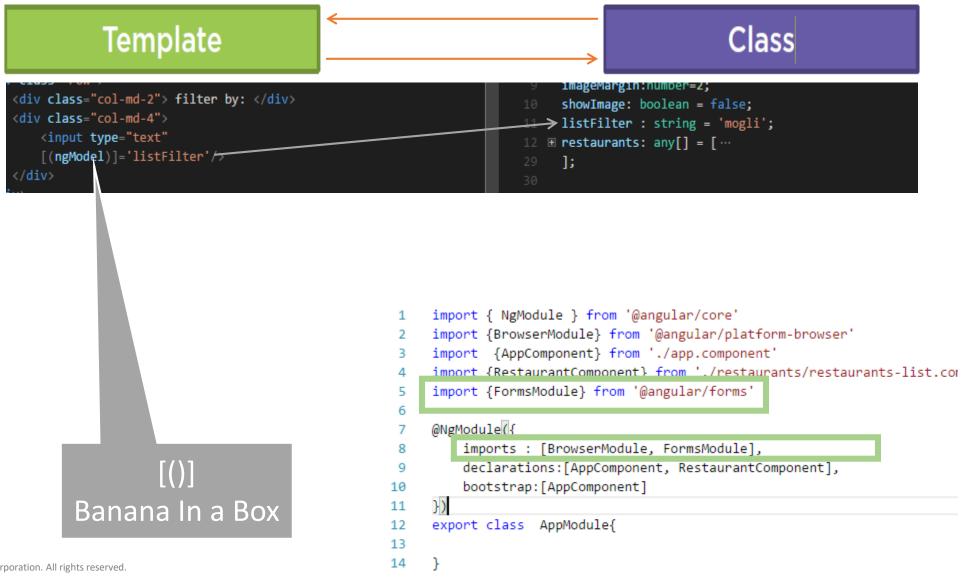
Hide Image	Title	City	State	5 Star
	Mogli	Delhi	Delhi	3.2



Haldiram Nagpur Maharashtra 3.2

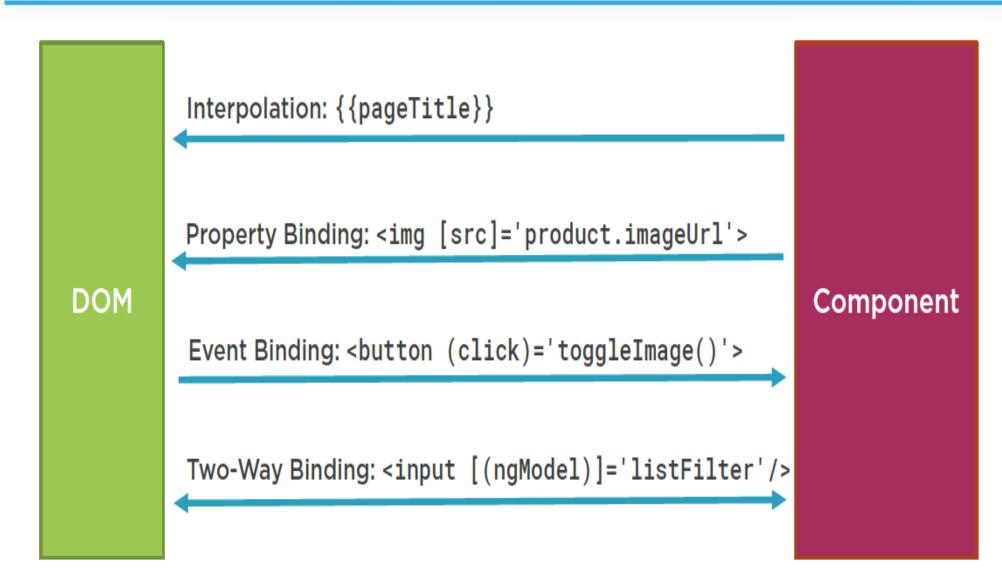
# Two —way Binding





# Data Binding







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