

Angular

# Elements of Angular



## Modules

- Angular has some prebuilt modules, Angular calls these NgModules. NgModules are always marked with the @NgModule annotation in Angular.
- The idea of modules comes from the **single responsibility principle**. While a module can do many things, at a higher level its focus is on one thing such as forms or routing.
- Every Angular app will have a root module, named the AppModule.

# Angular module has five properties:



1. Declarations.
2. Imports.
3. Exports.
4. Providers.
5. Bootstrap.

# Components



An Angular component is a Typescript class, it must have a @Component decorator. Every Angular project has at least one component, the root component .

Each component defines the class that contains application data and logic, and it is associated with the HTML template to be displayed in a target app.

## ➤ Creating Angular Component

- To create an Angular Component, Angular CLI is used. In the terminal, type in the command,
- `ng g c component-name`

## Three important fields :



1. Selector: It is the CSS selector that identifies this component in a template
2. templateUrl: It is the URL for the external file containing the template
3. styleUrls : List of URLs to stylesheets to be applied

# Templates



The angular template combines the HTML with Angular markup that can modify HTML elements before they are displayed.

- A **template** is an **HTML snippet** that tells Angular how to render the component in angular application.
- The template is immediately associated with a component defines that component's **view**.
- Templates can be defined in two ways.
  - 1. Inline Template
  - 2. External Template

## **Angular Metadata:**



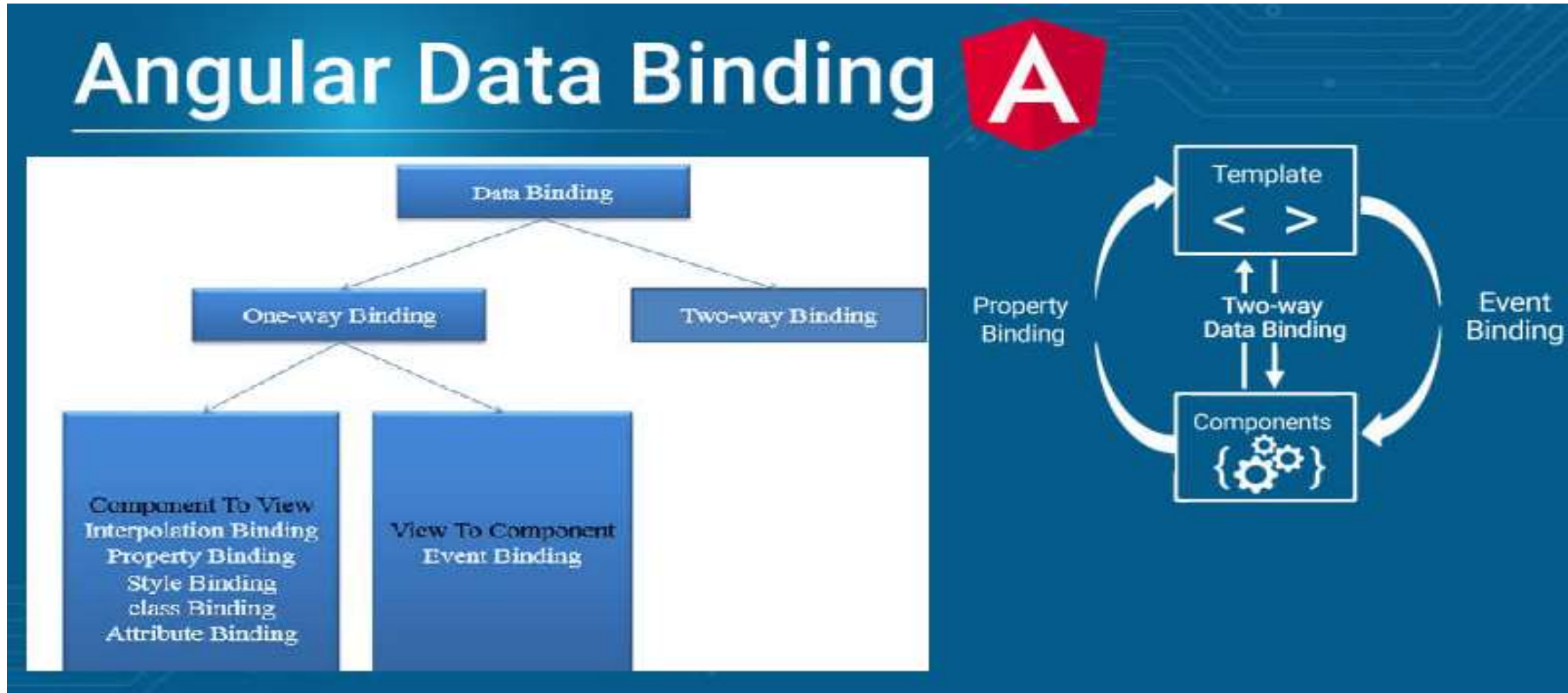
Metadata is used to decorate the class so that it can configure the expected behavior of a class.

Metadata tells Angular how to process a class. It is used to decorate the class so that it can configure the expected behavior of a class.

Annotations – These are decorators.

# Data Binding

Data binding allows data to flow between component and template.





# Data Binding



## One-way data binding

### String interpolation

*Interpolation (**String interpolation**): displayed as `{{value}}` and inserts data from the component into the template.*

### Event binding

*Event binding: Allows events in the HTML/document object model to trigger functions from the component.*

### Property binding

Property binding is used to bind the data from property of a component to DOM elements. It is denoted by `[]`.

### Attribute binding

**Attribute binding** is used to bind the data from component to HTML attributes. The syntax is as follows –

## ➤ **Two way data binding**



- Two-way data binding is a two-way interaction, data flows in both ways (from component to views and views to component). example is **ngModel**.