

Angular by team Luigi

Intro & History

- ❖ Officially called AngularJS
- ❖ Released in 2016 by Google, LLC
- ❖ A Typescript-based frontend framework for model web development

Key Features

- ❖ Employs coherent MVC design architecture
 - Modules define AngularJS applications
 - Controllers control AngularJS applications.
 - Define each w/ ng directives
 - HTML - view
- ❖ 2-way data binding
 - Changes in the UI affect the data and changes in the data affect the UI
 - Decreases amount of manual code needed to interact with the data model
- ❖ Complete built-in test tools
 - Dependency injection allows for injecting mock data for tests
 - HTTP mocking
- ❖ HTML based interfaces
- ❖ Plain Old JavaScript Objects (POJO)
- ❖ Class-Based Object-Oriented Design

Specifics

- ❖ Initialization, terminal command: `ng new my-app`
- ❖ **Angular 2** uses components — the following example (left) renders “This is my app” :
 - `app.component.ts`— the component class code, written in TypeScript.
 - `app.component.html`— the component template, written in HTML.

```
1 <h1>{{title}}</h1>
```

The View (as in Angular 1)

- `app.component.css`— the component's private CSS styles

- ❖ Angular uses directives — directives bind specific behaviors to DOM elements, the following example (right) binds `<input>` to scope object `{{name}}`
 - Common derivatives: `ng-app`, `ng-init`, `ng-model`, `ng-controller`, `ng-disabled`..

```
1 import { Component } from '@angular/core';
2 @Component({
3   selector: 'app-root',
4   templateUrl: './app.component.html',
5   styleUrls: ['./app.component.css']
6 })
7 export class AppComponent {
8   title = 'This is my app';
9 }
```

The Controller (as in Angular 1)

```
1 <!DOCTYPE html>
2 <html>
3 <body ng-app>
4   <input type="text" ng-model="name" />
5   <div>
6     Hello {{name}}
7   </div>
8 </body>
9 </html>
```

The `ng-model` directive

Resources

- ❖ Official documentation: <https://angular.io/docs>
- ❖ Directives: <https://www.tutorialsteacher.com/angularjs/angularjs-directives>
- ❖ Development ideas and examples: <https://angular.io/guide/example-apps-list>