



Angular

“formerly Angular 4”

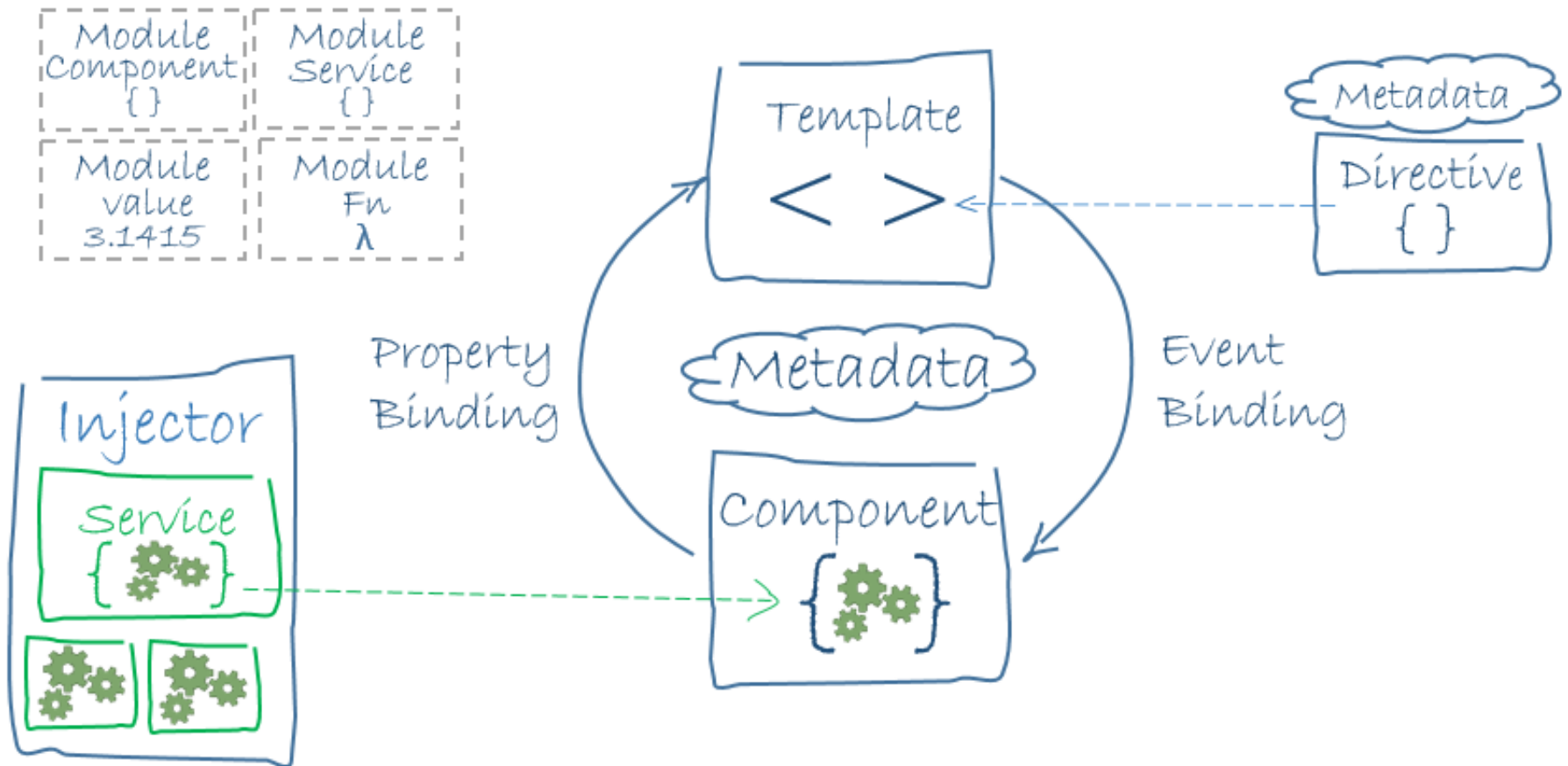
Benefits worth the cost

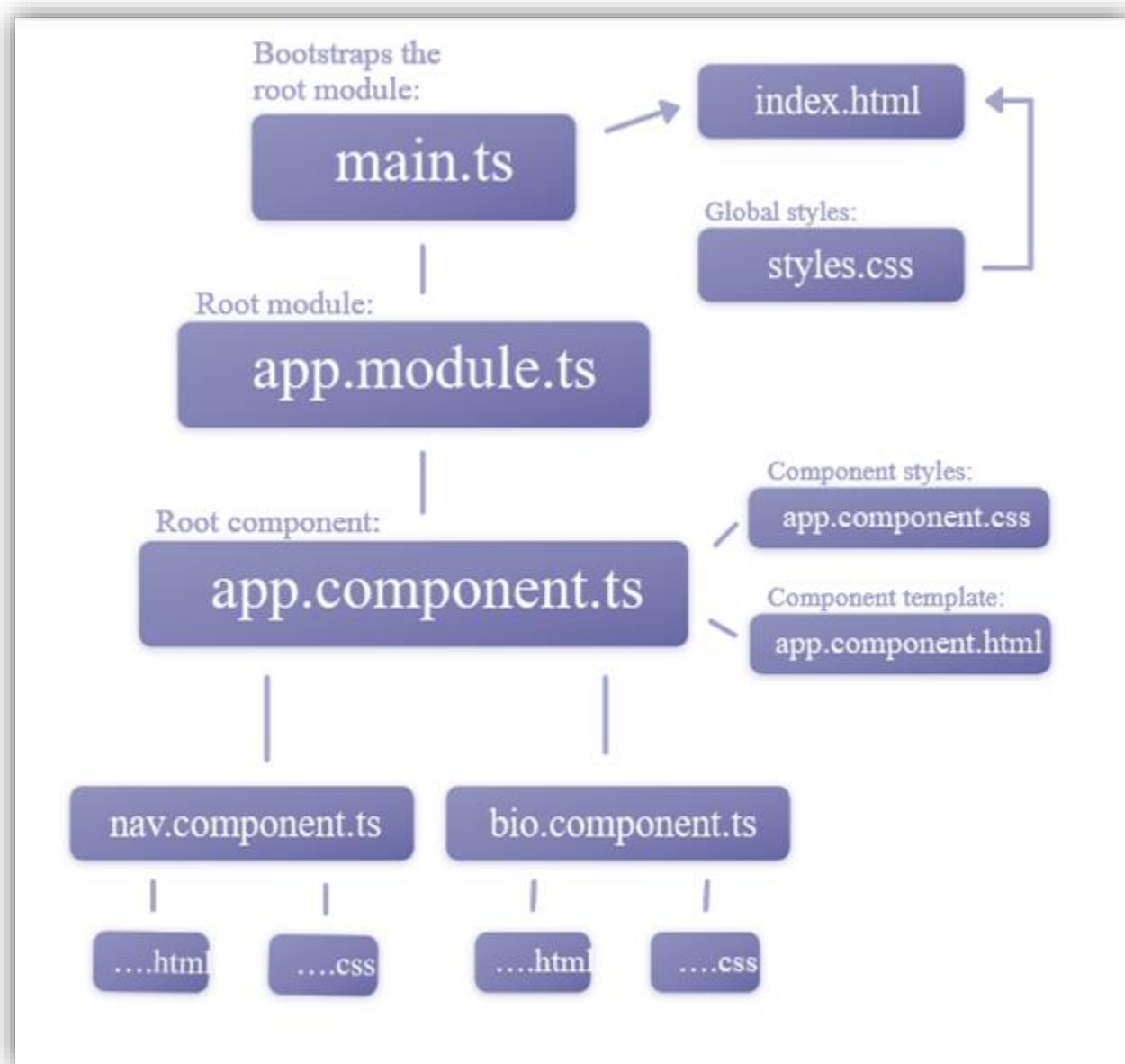
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Day 3

Big picture







The Main Building Elements

- Module
- Component
- Metadata
- Template
- Data Binding
- Directive
- Pipes
- Service

Directive

- A directive is a class decorated with **@Directive**
- Directives Types
 - structural directives
 - change (the structure of view) the DOM layout by adding and removing DOM elements. e.g. *ngIf, *ngFor
 - Asterisks indicate a directive that modifies the HTML
 - It is syntactic sugar to avoid having to use template elements directly
 - attribute directives
 - change the appearance or behavior of an element, component, or another directive; used as attributes of elements e.g. ngStyle, ngClass
 - Component directive
 - A component is just a directive with added template features

Template Variable

- AKA Hashtag Operator
- Defines a local variable inside template
- Refers to the element of its scope

```
<tag #varElem (click)='myFun(varElem)'></tag>
```

- Used with *ngIf then else in <ng-template>

```
<div>  
<span *ngIf="isavailable; then con1 else con2">  
    Condition is valid.  
</span>  
<ng-template #con1>Condition is valid from template</ng-template>  
<ng-template #con2>Condition is invalid from template</ng-template>  
</div>
```

Safe Traversal Operator

- AKA Elvis Operator
- Denoted by a question mark immediately followed by a period ?.
- Used as guard against null and undefined properties
- Example
`<div>{{std?.salary}}</div>`

Pipes

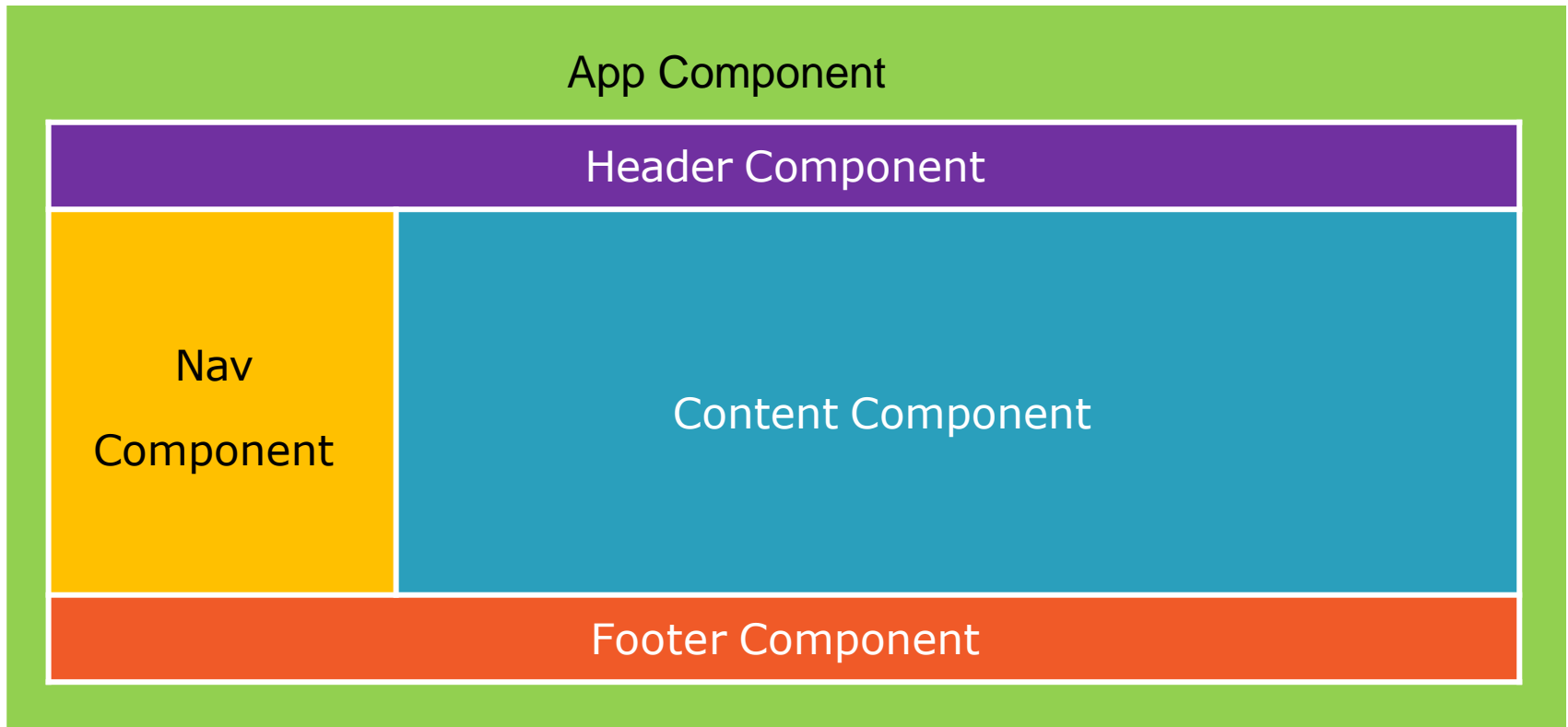
- Used for formatting expression's value to be displayed to used
- Used in view via bar notation

```
<div>  
    {{ "hello " + userNm | uppercase }} !!  
</div>
```

Angular Built-in Pipes

- lowercase
 - uppercase
 - json
 - number
 - date
 - currency
-
- Parameters to pass to the filter can be specified by using the colon.
 - additional pipes can be added.

Simple Example





SPA & Routing

- SPA stands for Single Page Application
- It's a web application that fits on a single page
- JavaScript values pass from page to another, content is shared between pages

Routing

■ In Module.ts

```
import { RouterModule } from "@angular/router";

imports: [
  RouterModule.forRoot([
    { path: "", component: AppComponent },
    { path: "home", component: HomeComponent },
    { path: "std", component: StdCompComponent },
    { path: "demo", component: DemoCompComponent },
    { path: "ang/:id", component: AngCompComponent },
    { path: "**", component: NotFoundCompComponent }
  ])
],
```

■ In app.component.html

```
<router-outlet></router-outlet>
```

■ Note:

- ☐ Use **routerLink** attr instead of **href**



Assignments