



the company behind



Established in 2001, Oasis Digital offers:

Public **Angular Boot Camp** and other classes, both online and in person. Purchase a ticket at our website, perfect for one or a handful of developers.

**Private classes**, suitable for a team, also online or in person. A private class can also include additional days for specific additional topics or consulting assistance.

**Consulting services**, including project review, planning and strategy assistance, co-development, and deployment guidance.

**Project launch**, in which we start a project rapidly with a good foundation and critical features, then transition to an internal team.

**Full project** development with Angular, React, Node, Java, and other technologies.

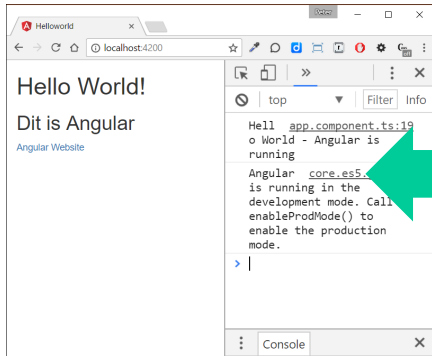
Learn more at **[oasisdigital.com](https://oasisdigital.com)**

# **Fire alarm test**

# **10:30**

# Short recap - Yesterday

- Application structure and architecture
  - Modules
  - Components
    - View / Template
    - Class / controller
- TypeScript Decorators
  - `@Component()`
  - `@NgModule()`



**main.ts / bootstrapper**

**ngModule / root module**

**AppComponent**

**Services**

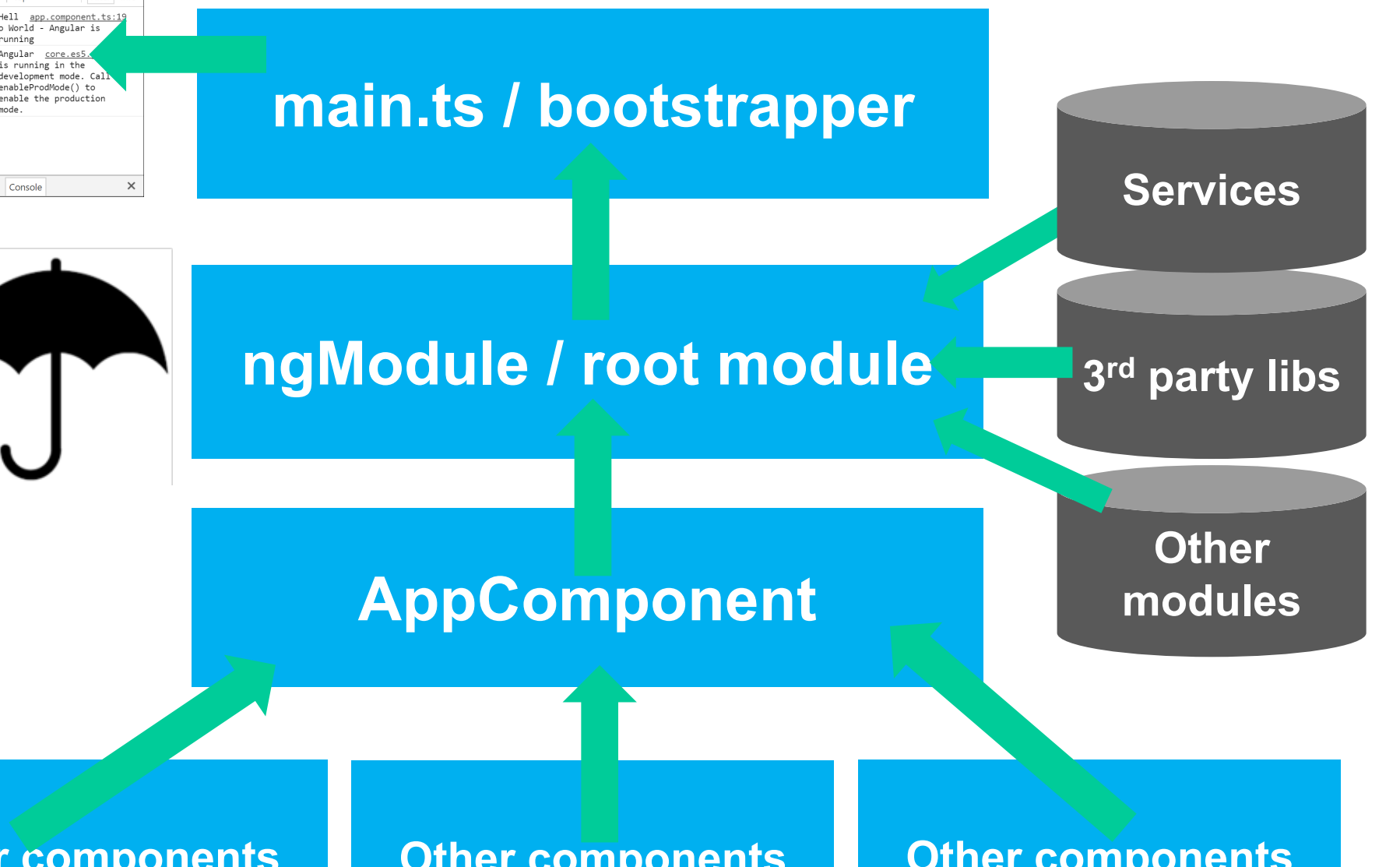
**3<sup>rd</sup> party libs**

**Other modules**

**Other components**

**Other components**

**Other components**



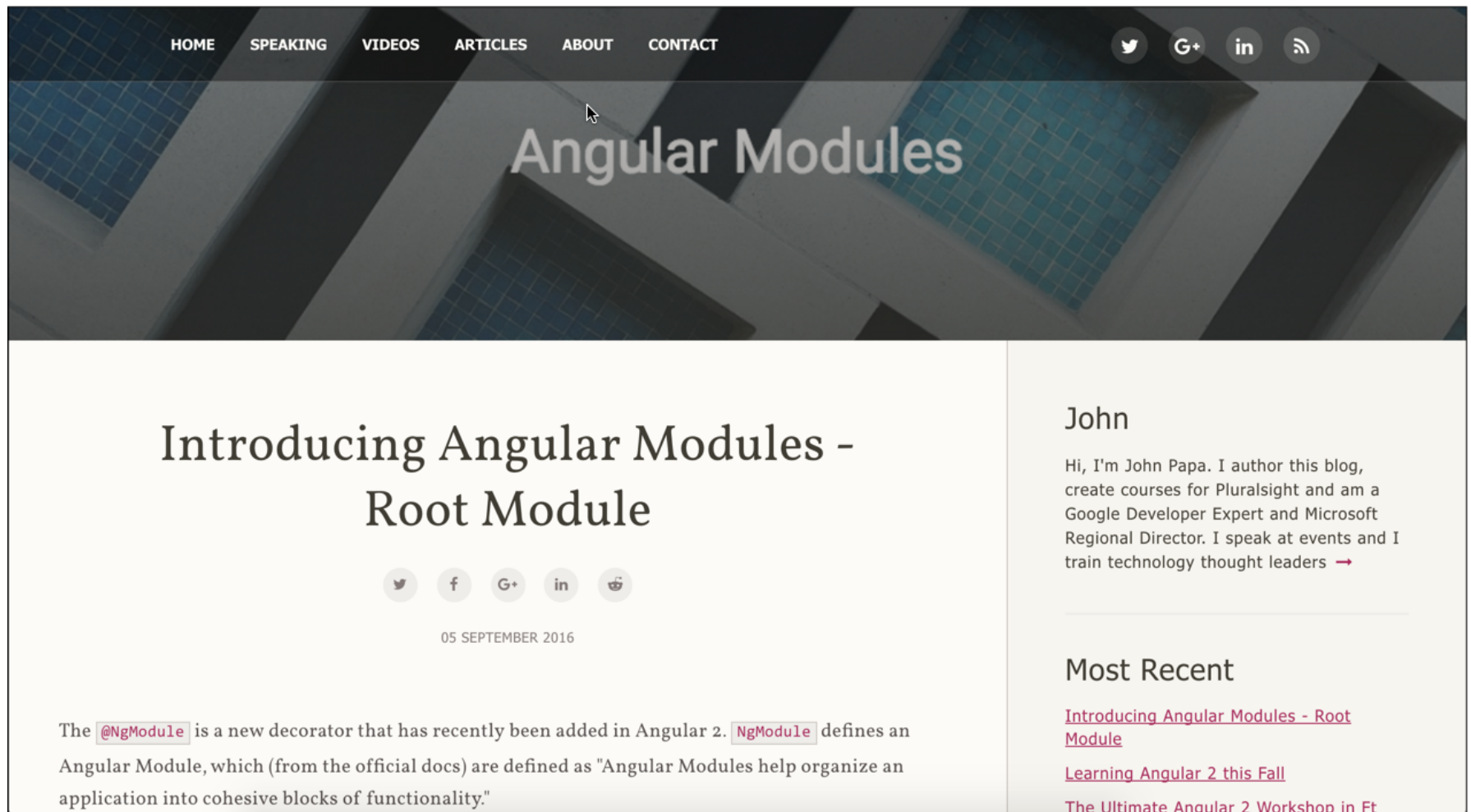
- Data binding

- Simple data binding `{{ ... }}`
- Attribute binding, or One-way data binding `[...]`
- Event binding, `(...)`
- Binding to the window object using `@HostListener()`

- Multiple Components

- Best practice - bundle in multiple modules
- Identify *feature areas* in your application, create a module for each feature

# Some background info on Root Module



<https://johnpapa.net/introducing-angular-modules-root-module/>



## Angular Augury

A Google Chrome Dev Tools extension  
for debugging Angular 2 applications.

INSTALL

### What is Augury

Augury is the most used Google Chrome Developer Tool extension for debugging and profiling Angular 2 applications.

- Routing basics and Lazy loading – multiple steps
  - Add `RouterModule` to `AppModule`
  - Add a routing table, use `loadChildren:...` to load the modules
  - Enhance: `RouterModule.forRoot(myRoutes)`
  - Inside child modules – create specific routes
  - Use `RouterModule.forChild(childRoutes)`
- In the template
  - Use `<a routerLink>` to create hyperlinks
  - Use `<router-outlet></router-outlet>` to tell Angular where routes should be projected.



```
> npm install -g @angular/cli  
> ng new my-dream-app  
> cd my-dream-app  
> ng serve
```

## Angular CLI

A command line interface for Angular

GET STARTED

### ng new

The Angular CLI makes it easy to create an application that already works, right out of the box. It already follows our best practices!

### ng generate

Generate components, routes, services and pipes with a simple command. The CLI will also create simple test shells for all of these.

# ***Learn the CLI-commands***

- `ng new`
- `ng generate component | module | service | class | ...`
- Options / flags per blueprint `--module`, `--dry-run`, `--export`, etc.
- Local serving and running your app
  - `npm start` OR
  - `ng serve`
- Learn and use `.angular-cli.json`!
  - Third party libraries, other settings
- Deploy
  - `ng build`

# Angular CLI (continued)

- Start your application with routing?
  - `ng new myRoutingApp --routing`
- Start a minimal application?
  - `ng new myMinimalApp --minimal`

Before running the tests make sure you are serving the app via `ng serve`. End-to-end tests are run via [Protractor](#).

## Additional Commands

- [ng new](#)
- [ng serve](#)
- [ng generate](#)
- [ng lint](#)
- [ng test](#)
- [ng e2e](#)
- [ng build](#)
- [ng get/ng set](#)
- [ng doc](#)
- [ng eject](#)
- [ng xi18n](#)

## Angular CLI Config Schema

- [Config Schema](#)

<https://github.com/angular/angular-cli/wiki>

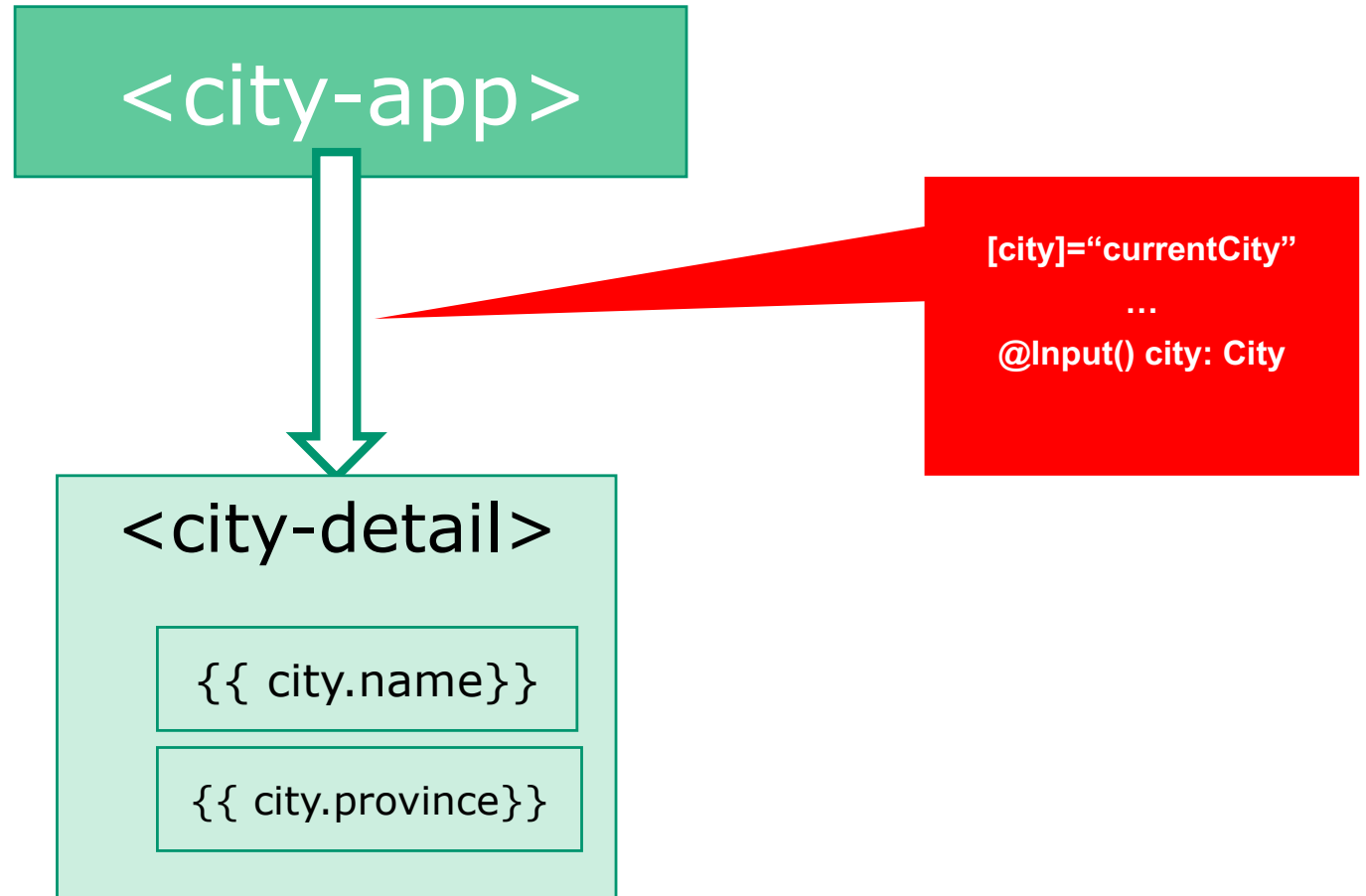
# Today

- Review & Repeat what we learned --> Start with Workshop 201!
- Built-in structural directives
  - `*ngIf`
  - `*ngFor`
  - Some other templating stuff
- Data flow between components
  - `@Input()`
  - `@Output()`
- Dependency Injection
  - Using `HTTP` – Talking to external API's
  - Angular Services

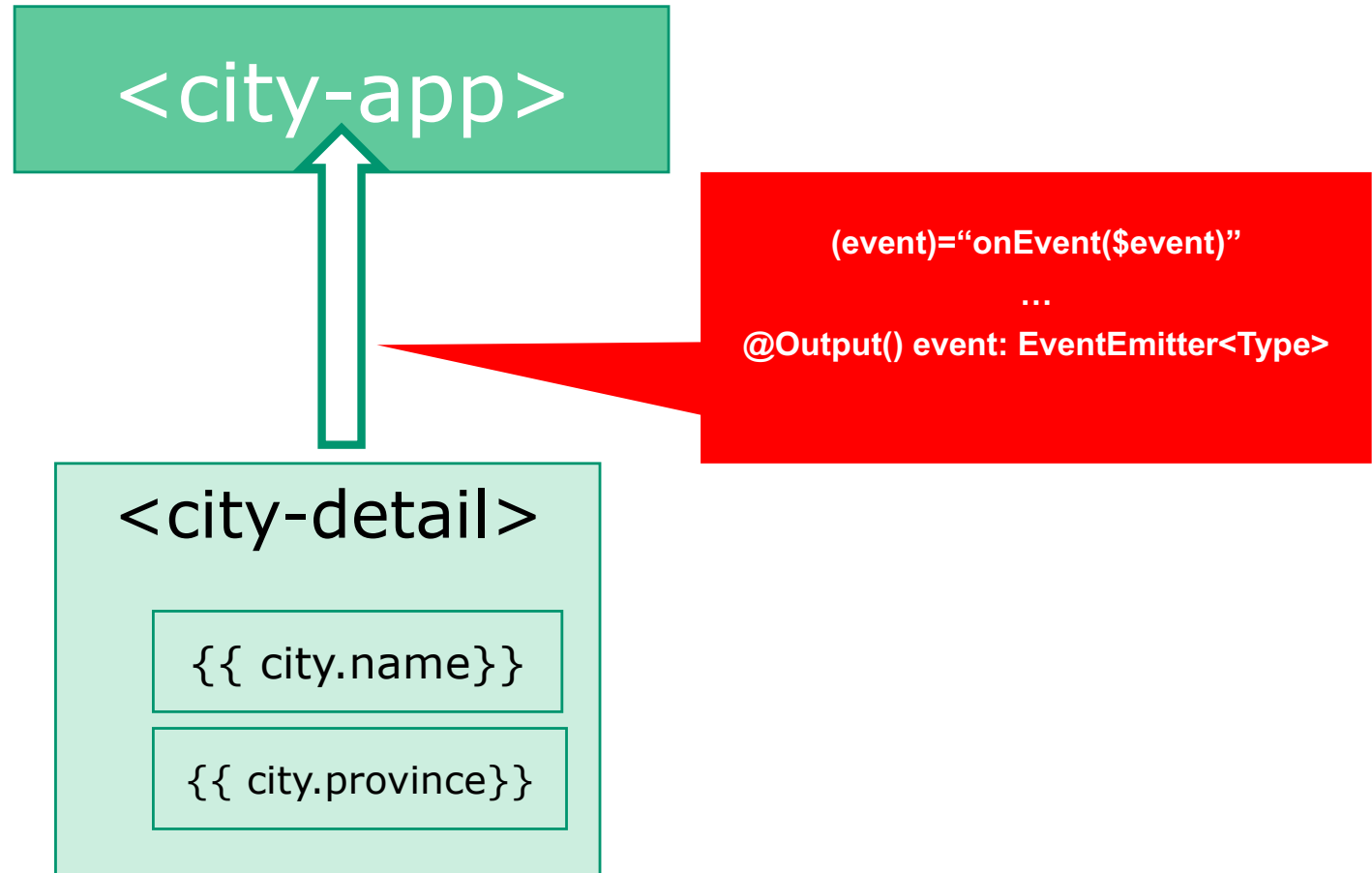
# Today (continued)

- RxJS, Observables and the `Async` pipe
- (Reactive Forms)

# Parent-Child flow: decorator @Input()

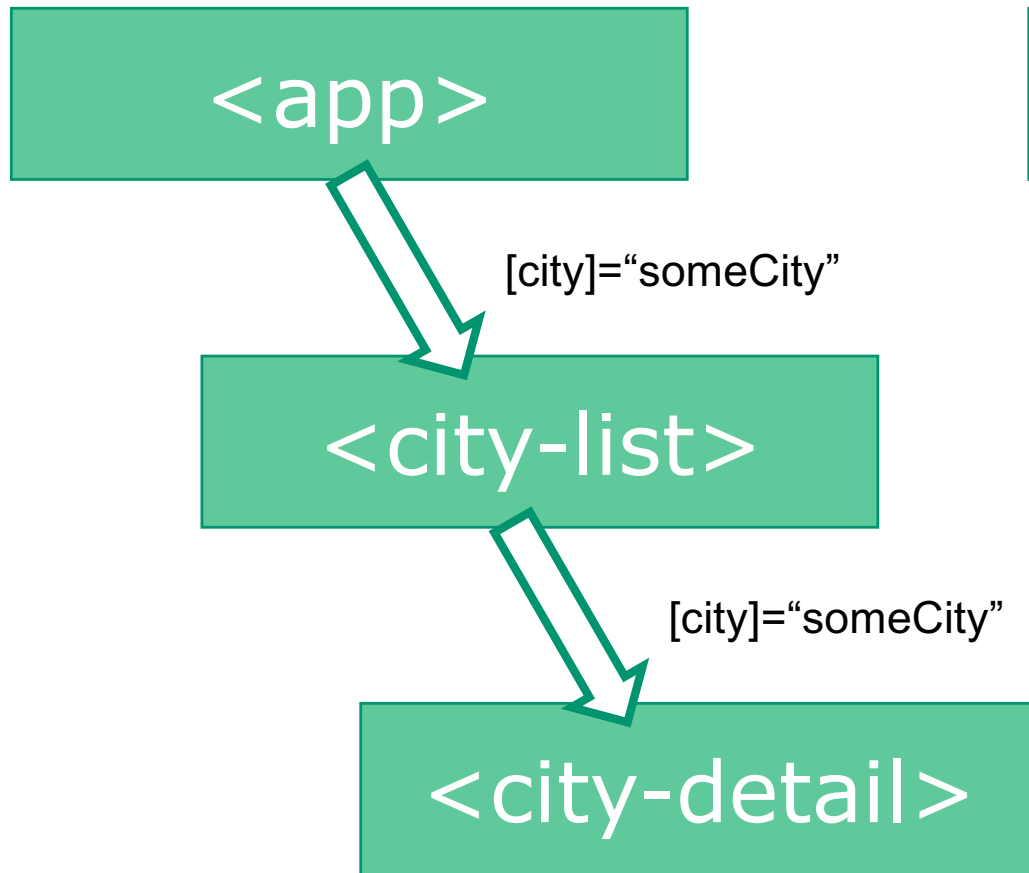


# Child-Parent flow: decorator @Output()



# Summary : Data down, events up (!)

Parent → Child



Child → Parent

