

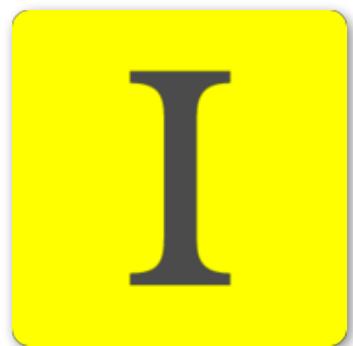
NETVÆRK: HOTSPOT

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ANGULAR

The grand introduction



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■ Google Developer Expert



Filip Bruun Bech-Larsen

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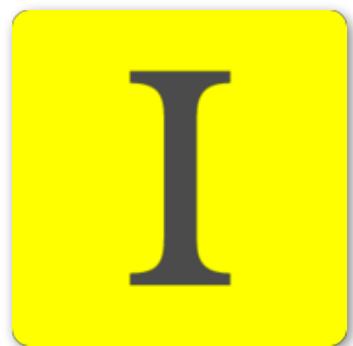
<https://developers.google.com/experts/people/filip-bruun-bech-larsen>





ANGULAR

The grand introduction



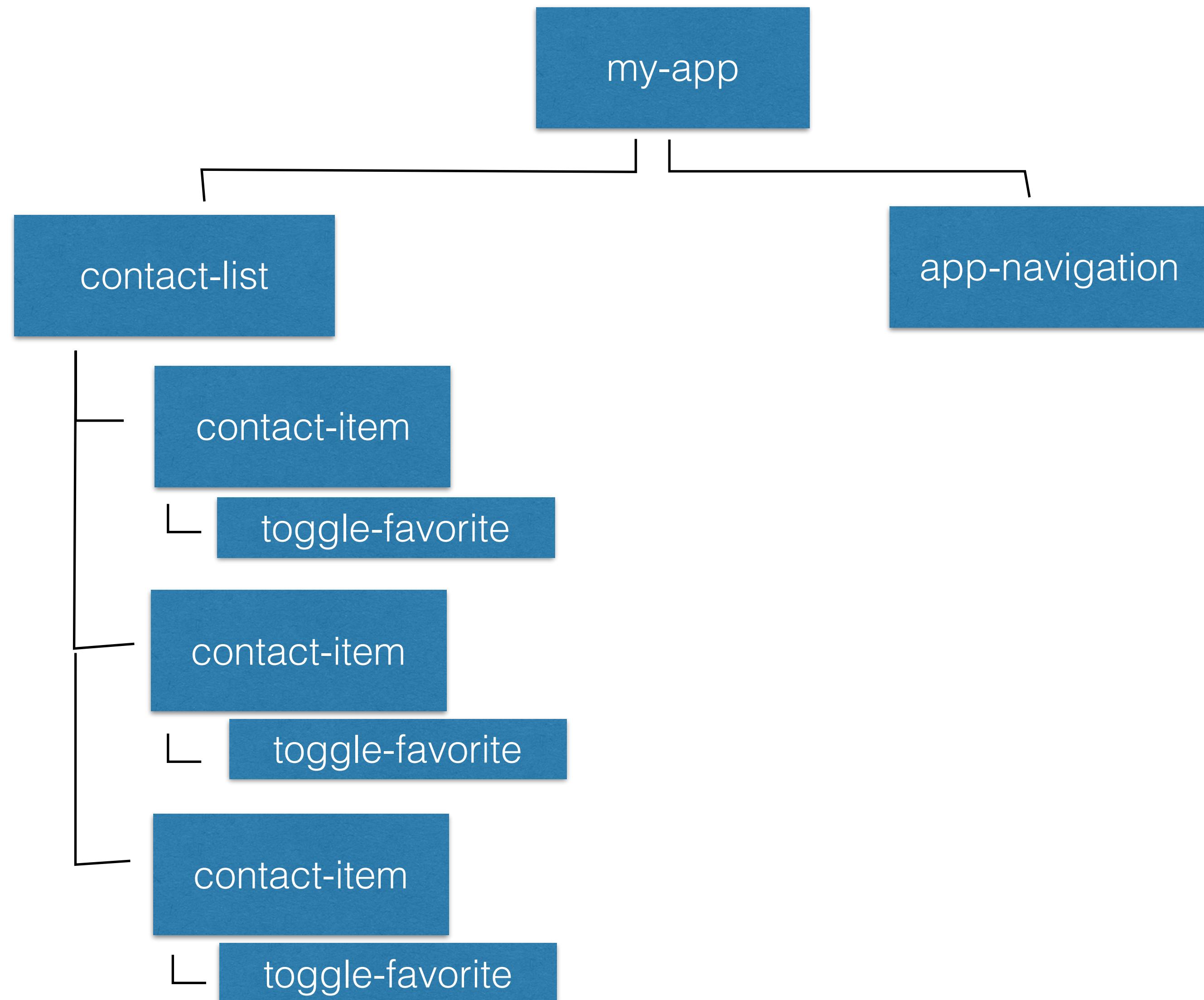
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MODERN APPS TODAY

- Components, components, components

TREE OF COMPONENTS



```
1 ▼ <my-app>
2 ▼   <contact-list>
3
4     <!-- repeats for each contact -->
5 ▼   <contact-item>
6     ...
7     <toggle-favorite>Click to toggle</toggle-favorite>
8   </contact-item>
9
10  </contact-list>
11  <app-navigation></app-navigation>
12 </my-app>
13
14
```

DUMB VS SMART

- ***Dumb*** (or stateless) components are context-independent. Receive data from parent, and communicate using events. Generally doesn't have dependencies.
- ***Smart*** (eller stateful) components are context-specific. Interacts with services, and listens for events from child-components.

```
1 import { Component } from '@angular/core';
2
3 @Component({
4   selector: 'app-root',
5   template: `
6     <h1>Hello {{ environment }}</h1>
7     <p>Lorem ipsum...</p>
8   `
9 })
10 export class AppComponent {
11   environment = 'world';
12 }
13
```

DATA-FLOW (COMMUNICATION)

- Data flows downwards
- Events goes up

```
1 import { Component, OnInit } from '@angular/core';
2 import { HttpClient } from '@angular/common/http';
3
4 @Component({
5   selector: 'app-root',
6   template: `
7     <h1>Hello {{ environment }}</h1>
8     <p>Lorem ipsum... </p>
9     <app-child-component
10       [environmentText]="environment"
11       (childEvent)="runThis($event)"></app-child-component>
12   `,
13 })
14 export class AppComponent implements OnInit {
15   environment: string;
16   constructor(private http: HttpClient) {}
17
18   runThis(data) {
19     console.log('from child: ', data);
20   }
21
22   ngOnInit() {
23     this.environment = 'world';
24   }
25 }
26
```

```
1 import { Component, Input, Output, EventEmitter } from '@angular/core';
2
3 @Component({
4   selector: 'app-child-component',
5   template: `
6     I'm getting an environment through an input: {{ environmentText }}
7     <br/><br/>
8     <button (click)="onClick()">Click to send event</button>
9   `
10 })
11 export class ChildComponent {
12   @Input() environmentText;
13
14   @Output() childEvent = new EventEmitter();
15
16   onClick() {
17     this.childEvent.emit('inside value');
18   }
19 }
20
```

STRUCTURAL TEMPLATING

```
  selector: 'app-root',
  template: `
    <h1>Hello {{ environment }}</h1>
    <ul *ngFor="list.length">
      <li *ngFor="let item of list">
        <child-component [item]="item"></child-component>
      </li>
    </ul>
  `

})
```

YOU MUST ADD TO NGMODULE

LETS TRY IT OUT

- install the cli (requires node + npm)
- create a new project
- create a dumb list-item-component
- create a smart list-component

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

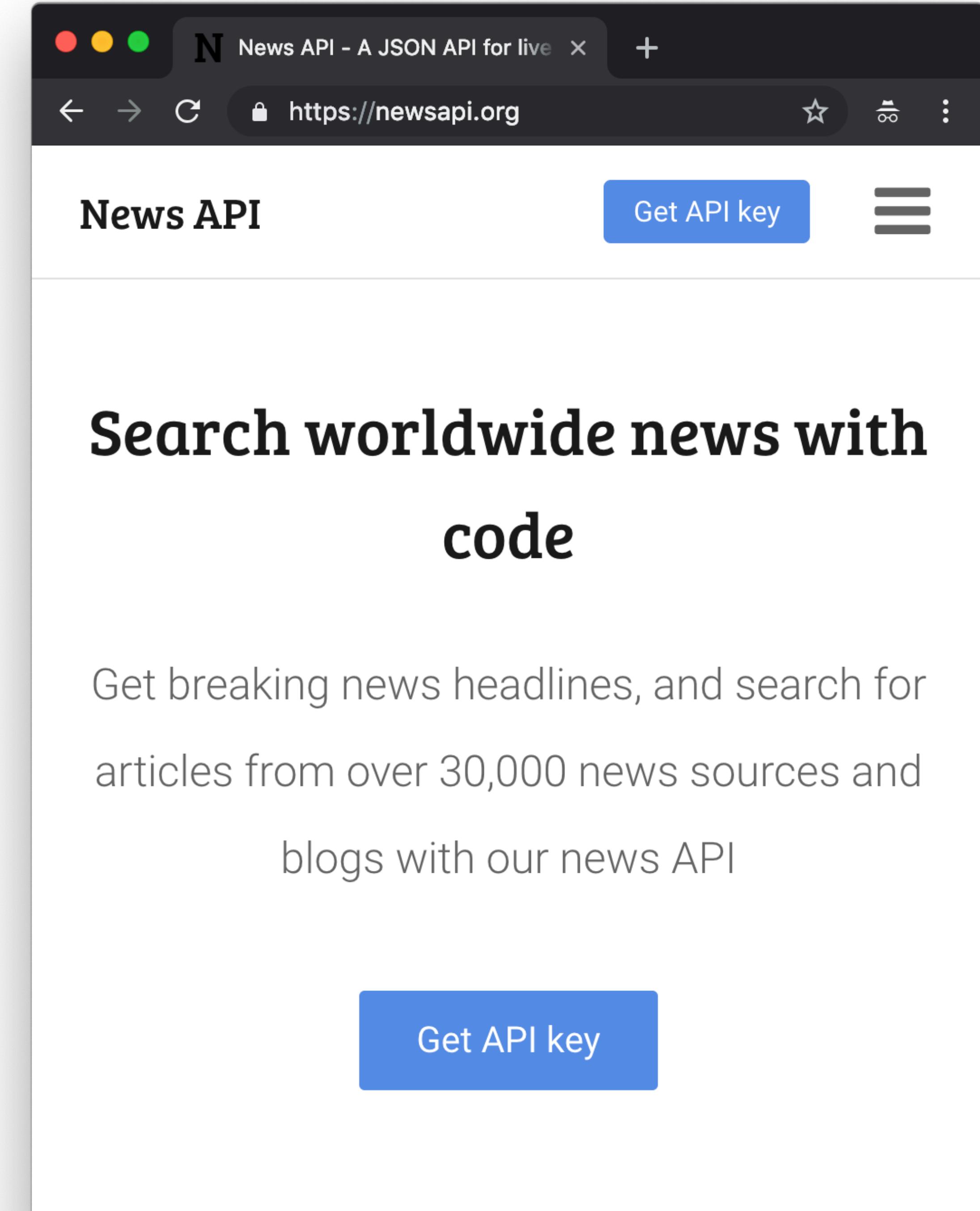
GO DO IT...

SERVICES

- Angular services + Build-your-own
- data and business logic should be placed in services
- regular javascript classes
- use `@Injectable()` decorator to active Dependency injection
- When you inject `httpClient` in a component you are ***probably*** doing it wrong.

```
1 import { Injectable } from '@angular/core';
2 import { HttpClient } from '@angular/common/http';
3
4 @Injectable()
5 export class BeerService {
6
7   getBeerList() {
8     return this.http.get('URL HERE');
9   }
10
11   constructor(private http: HttpClient) {}
12 }
13
```

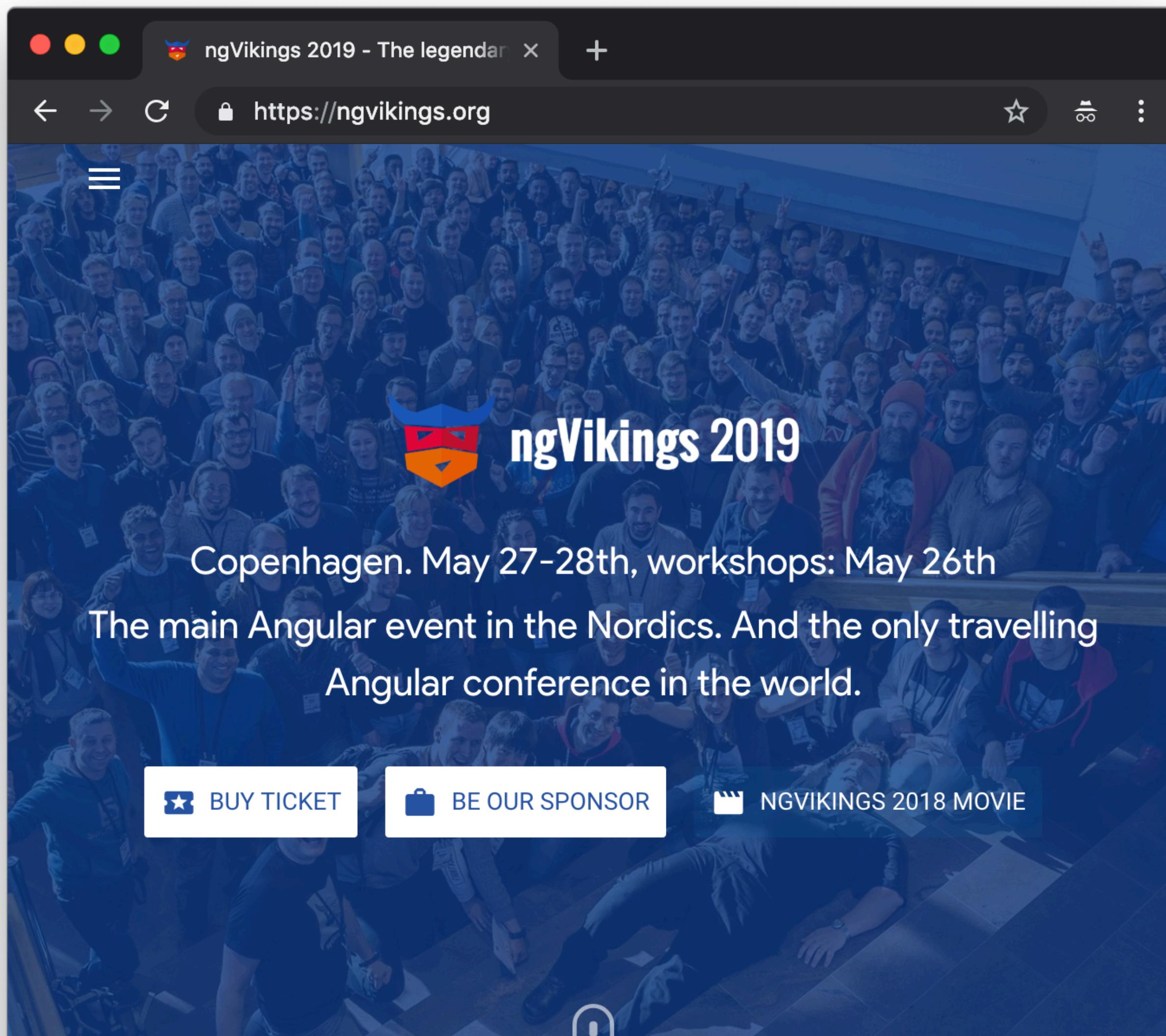
<http://bit.ly/newsapiexample>



NEXT STEPS

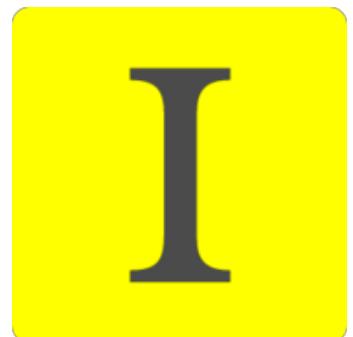
- routing
- observables
- forms
- directives
- builds, SSR, etc...

MEET ME AT NGVIKINGS



THATS IT

Thanks for having me, I'm @filipbech



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