





A conceptual illustration of a human head profile in blue outline. Inside the head, various objects and symbols are scattered and interconnected by a network of dashed red lines. The objects include a top hat, a bird, a hand holding a wand, a rat, a large red circle, a blue circle, a mortar and pestle, a bomb, playing cards, a bird in flight, and a spiral. The overall theme is the interconnectedness of ideas and the structure of a cognitive map.

KEEP • IT • SIMPLE

ค้นหา tasks (todos) ด้วย username

Give	When	Then
Go to main page	Input empty string and click submit button	display “User Not Found”
	Input “Bret” and click submit button	display “Leanne Graham” and task list (todo,done)

Welcome to testing-angular!

Todo

Done

Not Found

Welcome to testing-angular!

User Not Found

Todo

Done

Welcome to testing-angular!

Found

Leanne Graham

Todo

delectus aut autem

quis ut nam facilis et officia qui

fugiat veniam minus

laboriosam mollitia et enim quasi adipisci quia provident illum

qui ullam ratione quibusdam voluptatem quia omnis

illo expedita consequatur quia in

molestiae perspiciatis ipsa

et doloremque nulla

dolorum est consequatur ea mollitia in culpa

Done

et porro tempora

quo adipisci enim quam ut ab

illo est ratione doloremque quia maiores aut

vero rerum temporibus dolor

ipsa repellendus fugit nisi

repellendus sunt dolores architecto voluptatum

ab voluptatum amet voluptas

accusamus eos facilis sint et aut voluptatem

quo laboriosam deleniti aut qui

<http://jsonplaceholder.typicode.com/users>

```
1 [
2   {
3     "id": 1,
4     "name": "Leanne Graham",
5     "username": "Bret",
6     "email": "Sincere@april.biz",
7     "address": {
8       "street": "Kulas Light",
9       "suite": "Apt. 556",
10      "city": "Gwenborough",
11      "zipcode": "92998-3874",
12      "geo": {
13        "lat": "-37.3159",
14        "lng": "81.1496"
15      }
16    },
17    "phone": "1-770-736-8031 x56442",
18    "website": "hildegard.org",
19    "company": {
20      "name": "Romaguera-Crona",
21      "catchPhrase": "Multi-layered client-server neural-net",
22      "bs": "harness real-time e-markets"
23    }
24  },
25  {
26    "id": 2,
27    "name": "Ervin Howell",
28    "username": "Antonette",
29    "email": "Shanna@melissa.tv",
30    "address": {
31      "street": "Victor Plains",
32      "suite": "Suite 879",
33      "city": "Wisokvburah",
```

Ln: 1 Col: 1

array ▶ 0 ▶ address ▶

- array [10]
 - 0 {8}
 - name : Leanne Graham
 - id : 1
 - username : Bret
 - email : Sincere@april.biz
 - address {5}
 - phone : 1-770-736-8031 x56442
 - website : hildegard.org
 - company {3}
 - 1 {8}
 - 2 {8}
 - 3 {8}
 - 4 {8}
 - 5 {8}
 - 6 {8}
 - 7 {8}
 - 8 {8}
 - 9 {8}

<http://jsonplaceholder.typicode.com/todos>

```
1 [
2   {
3     "userId": 1,
4     "id": 1,
5     "title": "delectus aut autem",
6     "completed": false
7   },
8   {
9     "userId": 1,
10    "id": 2,
11    "title": "quis ut nam facilis et officia qui",
12    "completed": false
13  },
14  {
15    "userId": 1,
16    "id": 3,
17    "title": "fugiat veniam minus",
18    "completed": false
19  },
20  {
21    "userId": 1,
22    "id": 4,
23    "title": "et porro tempora",
24    "completed": true
25  },
26  {
27    "userId": 1,
28    "id": 5,
29    "title": "laboriosam mollitia et enim quasi adipisci quia
30    provident illum",
31    "completed": false
32  },
33 ]
```

Ln: 4 Col: 13

array ▶ 0 ▶ address ▶

- array [200]
 - 0 {4}
 - id : 1
 - userId : 1
 - title : delectus aut autem
 - completed : ☐ false
 - ▶ 1 {4}
 - ▶ 2 {4}
 - ▶ 3 {4}
 - ▶ 4 {4}
 - ▶ 5 {4}
 - ▶ 6 {4}
 - ▶ 7 {4}
 - ▶ 8 {4}
 - ▶ 9 {4}
 - ▶ 10 {4}
 - ▶ 11 {4}
 - ▶ 12 {4}
 - ▶ 13 {4}
 - ▶ 14 {4}

Tasks

- Build form
- Create service call api getUserByUsername
- Create service call api getTasksByUserId
- Create service filterTasksByStatus
 - Task list is empty should return empty list
 - Completed is true should return done list
 - Completed is false should return todo list
- Create function onSubmit
 - User not found should display `User Not Found`
 - User found should display name and task list(todo,done)

All files / src/app app.service.ts

77.78% Statements 7/9 100% Branches 0/0 80% Functions 4/5 71.43% Lines 5/7

Press *n* or *j* to go to the next uncovered block, *b*, *p* or *k* for the previous block.

```
1 import { Injectable } from '@angular/core';
2 import { HttpClient, HttpParams, HttpResponse } from '@angular/common/http';
3 import { Observable } from 'rxjs';
4 import { Task } from '../model/tasks';
5 import { User } from '../model/user';
6
7 @Injectable({
8   providedIn: 'root'
9 })
10 export class AppService {
11
12   constructor(private httpClient: HttpClient) { }
13
14   getTasksByUserId(userId: number): Observable<HttpResponse<Task[]>> {
15     const params = new HttpParams().set('userId', String(userId));
16     return this.httpClient.get<Task[]>('http://jsonplaceholder.typicode.com/todos', { params, observe: 'response' });
17   }
18
19   getUserByUsername(username: string): Observable<HttpResponse<User[]>> {
20     const params = new HttpParams().set('username', username);
21     return this.httpClient.get<User[]>('http://jsonplaceholder.typicode.com/users', { params, observe: 'response' });
22   }
23
24   filterTaskByStatus(taskList: Task[], completed: boolean): Task[] {
25     return taskList.filter((task: Task) => task.completed === completed);
26   }
27 }
28
```

```

37 onSubmit() {
38   3x   this.name = '';
39   3x   this.todoList = [];
40   3x   this.doneList = [];
41   3x   const request: FormSearch = this.form.getRawValue();
42   3x   this.service.getUserByUsername(request.username)
43       .pipe(
44       mergeMap((resp: HttpResponse<User[]>) => {
45   2x       if (resp.body.length === 1) {
46   1x           const user = resp.body[0];
47   1x           this.name = user.name;
48   1x           return this.service.getTasksById(user.id);
49       }
50   1x       this.name = 'User Not Found';
51   1x       return of();
52   })
53   ).subscribe(
54       (resp: HttpResponse<Task[]>) => {
55   1x           const taskList = resp.body;
56   1x           this.todoList = this.service.filterTaskByStatus(taskList, false);
57   1x           this.doneList = this.service.filterTaskByStatus(taskList, true);
58       },
59       (error: HttpResponse) => {
60   1x           alert(error.statusText);
61       },
62       () => { }
63   );
64 }
65
66 }
67

```

All files

95.35% Statements 41/43 100% Branches 2/2 93.75% Functions 15/16 94.87% Lines 37/39

Press *n* or *j* to go to the next uncovered block, *b*, *p* or *k* for the previous block.

File ▲		Statements ⇅		Branches ⇅		Functions ⇅		Lines ⇅	
src	<div></div>	100%	3/3	100%	0/0	100%	0/0	100%	3/3
src/app	<div></div>	93.33%	28/30	100%	2/2	91.67%	11/12	92.59%	25/27
src/app/board-todos	<div></div>	100%	4/4	100%	0/0	100%	2/2	100%	3/3
src/app/model	<div></div>	100%	6/6	100%	0/0	100%	2/2	100%	6/6

All files src/app

93.33% Statements 28/30 100% Branches 2/2 91.67% Functions 11/12 92.59% Lines 25/27

Press *n* or *j* to go to the next uncovered block, *b*, *p* or *k* for the previous block.

File ▲		Statements ⇅		Branches ⇅		Functions ⇅		Lines ⇅	
app.component.ts	<div></div>	100%	21/21	100%	2/2	100%	7/7	100%	20/20
app.service.ts	<div></div>	77.78%	7/9	100%	0/0	80%	4/5	71.43%	5/7





Example

- <https://github.com/kaweel/angular-meetup-unit-test-with-karma-jasmine>

Reference

- <https://cli.angular.io/>
- <http://jsonplaceholder.typicode.com/>
- <https://jasmine.github.io/>
- <http://karma-runner.github.io/latest/index.html>
- <https://github.com/mattlewis92/karma-coverage-istanbul-reporter#readme>
- <https://thestandard.co/opinion-tomorrow-science-of-superstitious-habits/>

Angular Meetup January 2020

Tuesday 21 January 2020 6.00 - 9.00

AIS D.C. @ The Emporium, 5th Floor

Hosted by



**Voravit Srikuruwal
(Wicky)**

FlowAccount

Build Full-Stack
Applications with
Mono-repo and
Serverless



Tanawat Tassana

Hotnow

What is Elm and
why it matters?



**Satheanpong
Jeungudomporn**

Seen Digital

UX x Front-end
(ionic angular)



**Kawee
Lertrungmongkol**

ODDS

มาเขียน unit test
กันเถอะ



**Somkiat
Puisungnoen**

Siam Chamnankit

มือใหม่หัดทำ
angular app เร็วขึ้น