**Unit testing in angular**

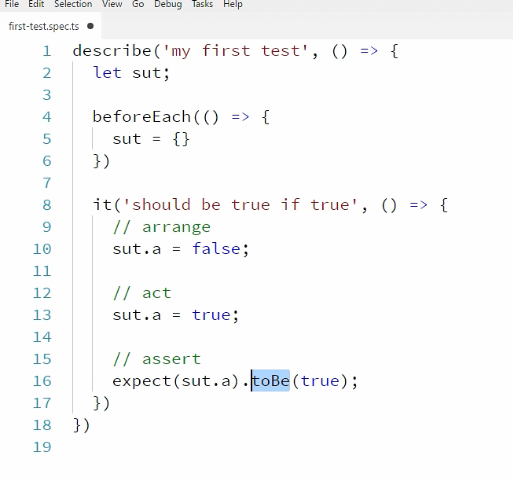
**Course Introduction:**

Download the project from below

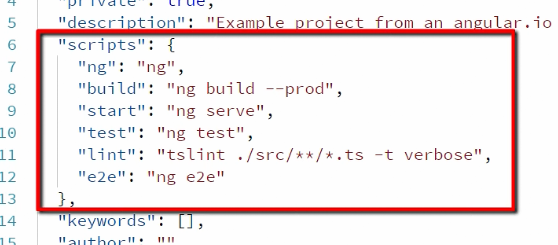


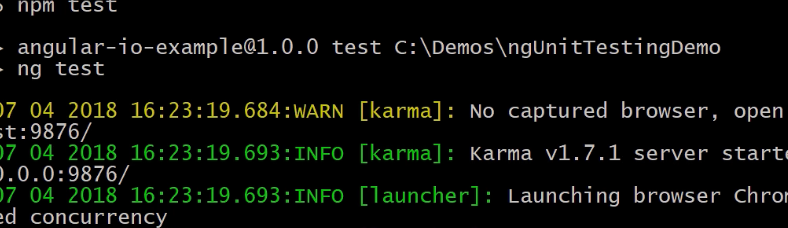
**First Unit Test :**

Create any spec.ts file in your project

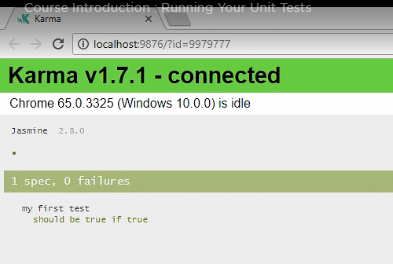


How karma picks .spec files?

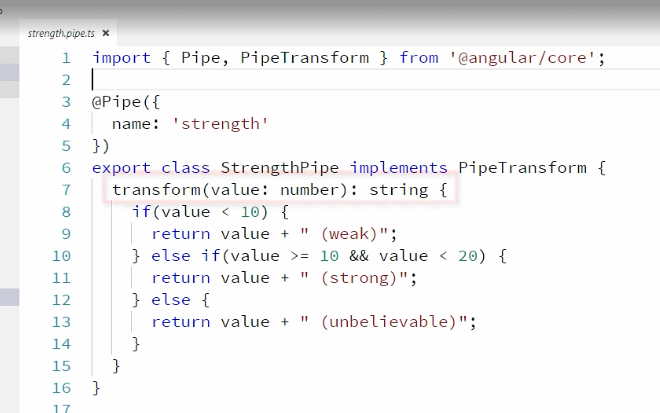


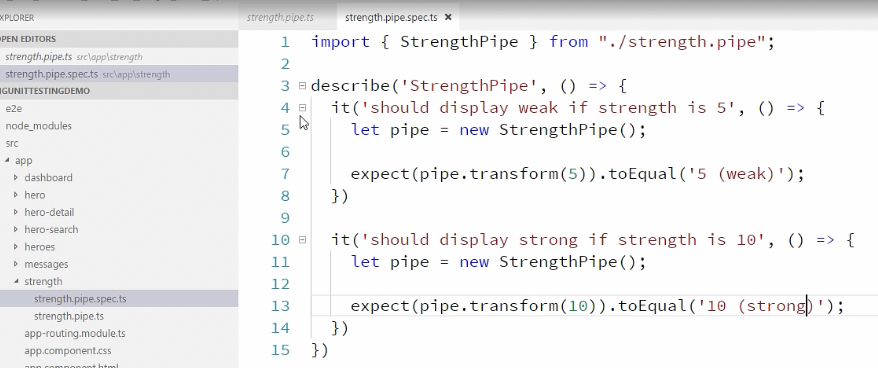


Output

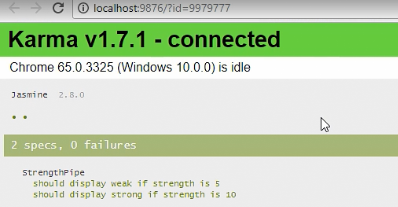


**Testing a pipe**

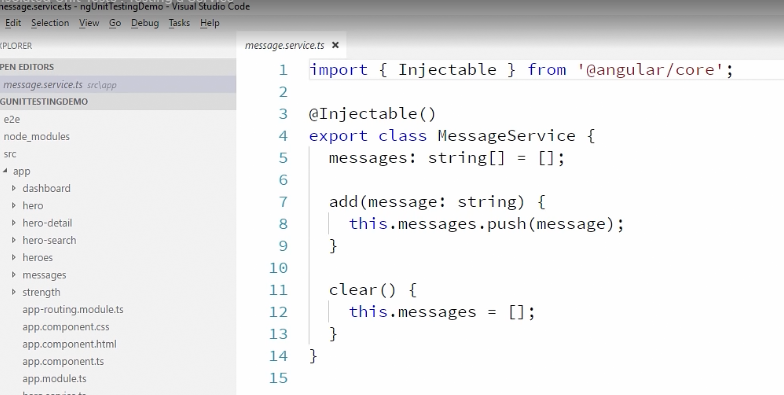


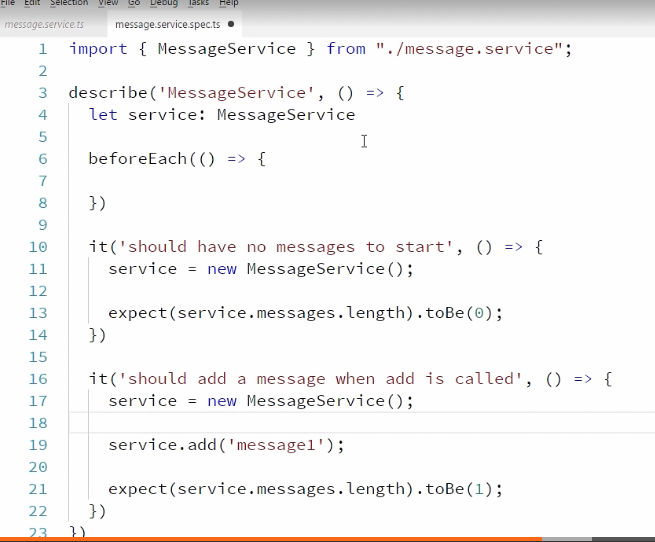


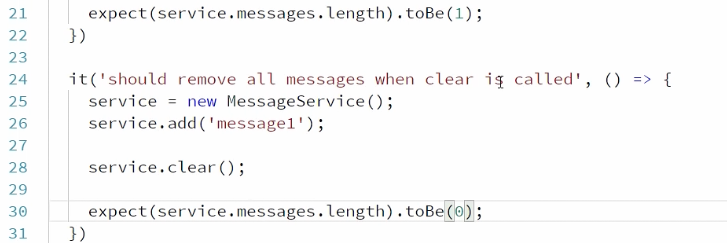
Run ng test



Testing a simple service:

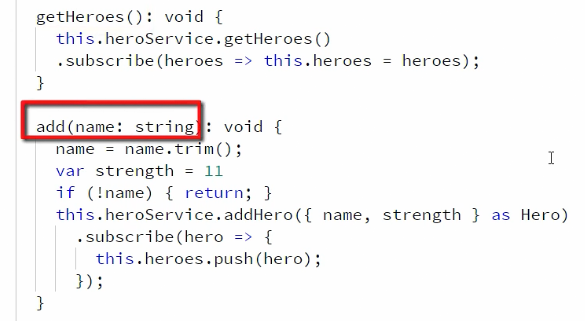


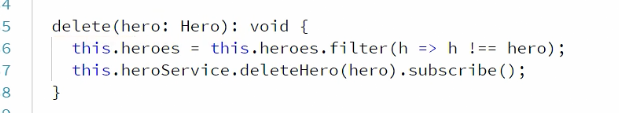




Testing a component :

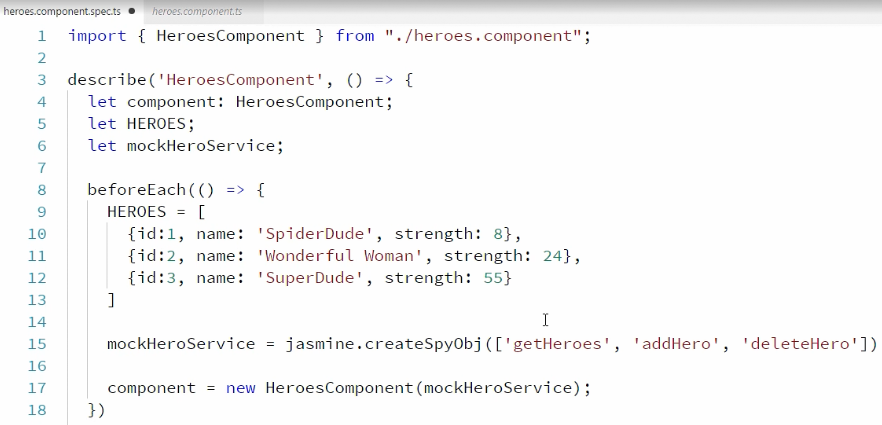


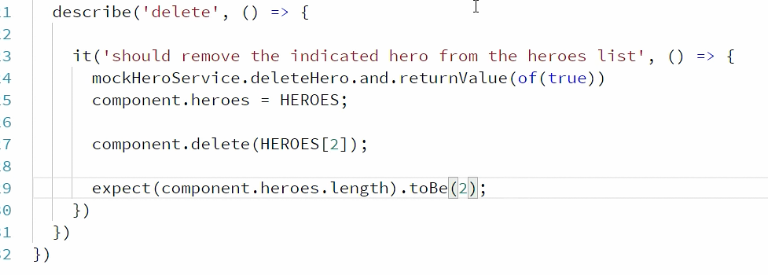




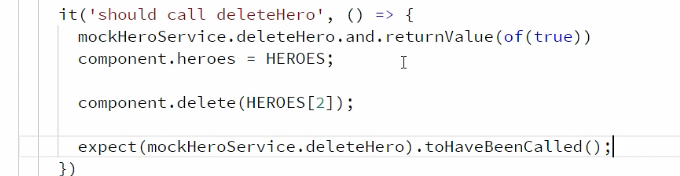
And now the test file

Import { of } from ‘rxjs/observable’ ;



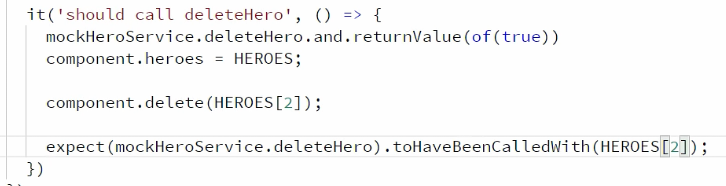


Another scenario is that if we want to check if heroService.deleteHero method is called in the component’s delete method. Below is the test case



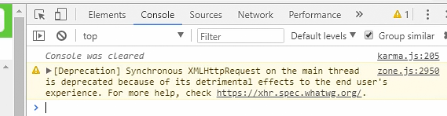
But in the component , delete Service method is called with parameter of type hero

So in this case,



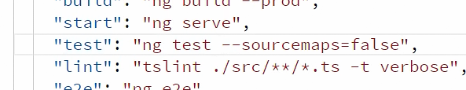
**Shallow integration tests:**

In console, we see following sourcemaps in console often

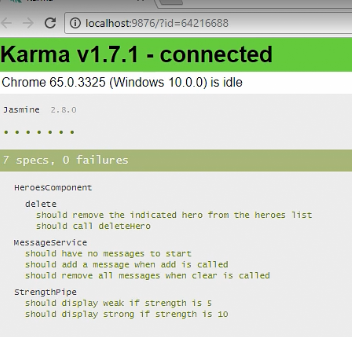


To remove those

Go to package.json and add



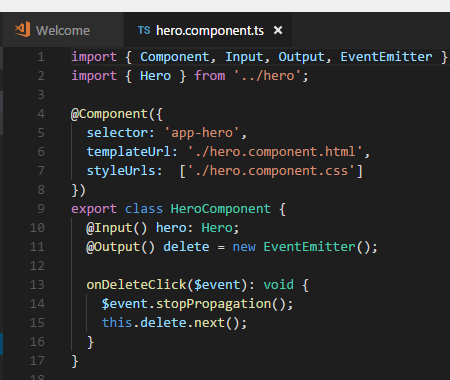
Output of ng test



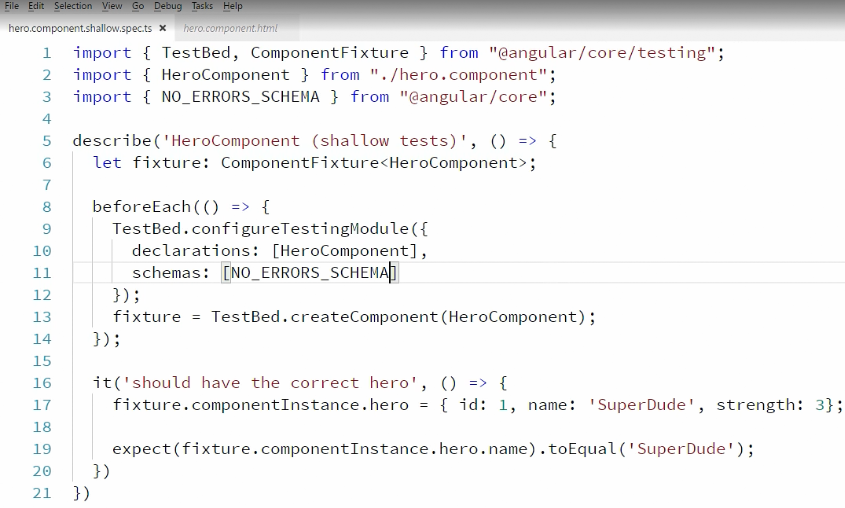
**For shallow integration tests, we use TestBed**

It allows us test the component along with its template.

Hero component



It has input hero which we need to set



You can notice we have added schemas : NO\_ERROR\_SCHEMA (from @angular/core) to ignore hero.html file.

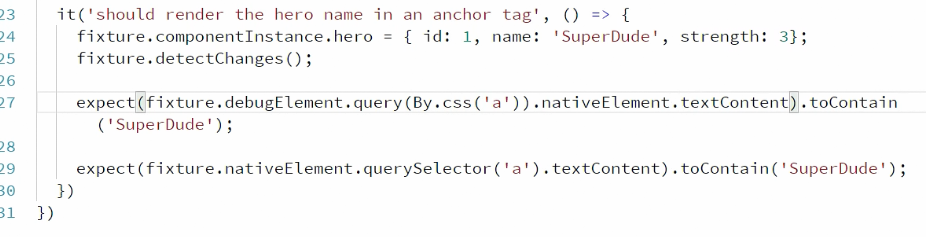
But it is not a good practice. Ignore html code scan is incorrect.

For example: User can type <za instead of anchor tag <a

To check a particular template, we can use the below 2 way

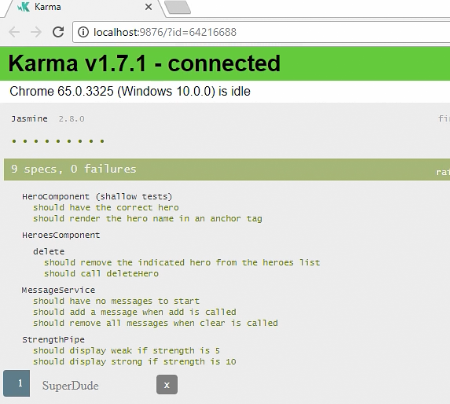
1: native element

2: debug element



‘By’ is from angular/ platform-browser

Karma status:

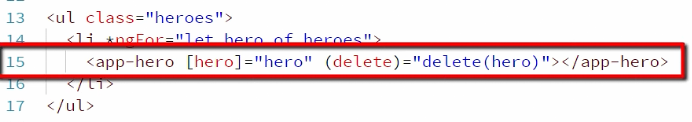


For hero component , there was no provider in the td constructor . Html didn’t have any child component

But in case of Heros.component

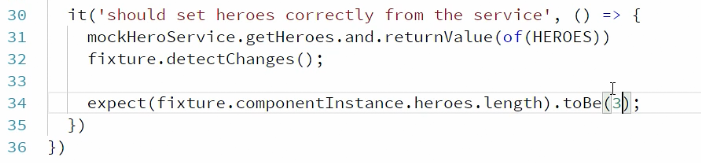
We have hero service registered in the constructor

And in heroes.html we have



Lets do the test file:





In above example , we have used NO\_ERRORS\_SCHEMA and avoided html scan.

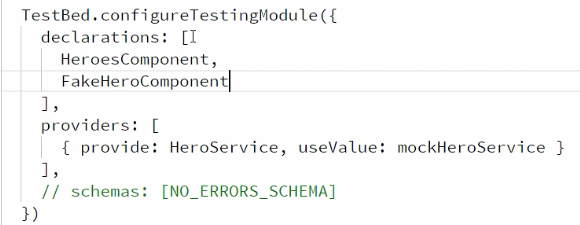
But inorder to scan, we need to comment this line.

Now in this case , heroes html has app-hero selector tag. That means it has child component .

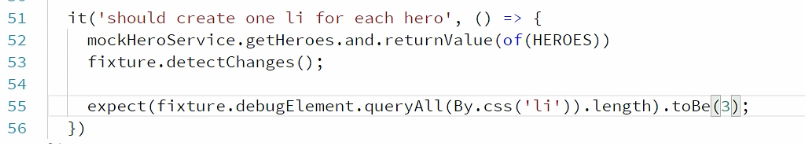
So we need to mock this component in our case.



And register in



A test case



Counts number of li tags in html