

Тестирование в JavaScript

Задача

```
export function MyCustomAbs (x: number) : number {  
    return x < 0 ? -x : x;  
}
```

Обложим тестами

```
describe('MyCustomAbs', () => {  
  for (let x = -3; x < 3; x++) {  
    let expected = Math.abs(x);  
  
    it(`should return ${expected} for ${x}`, () => {  
      expect(MyCustomAbs(x)).toBe(expected);  
    });  
  }  
});
```

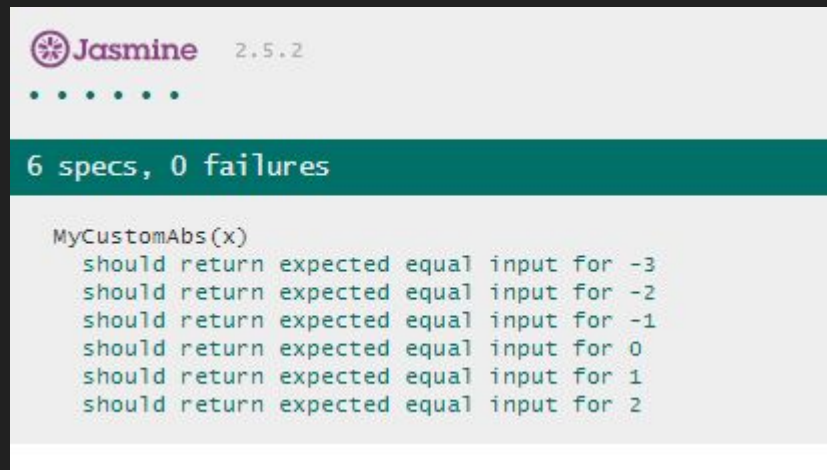
Результат

Started

.....

6 specs, 0 failures

Finished in 0.006 seconds



Вроде все хорошо... или нет?

Started

.....F..

Failures:

1) should return expected equal input for 0

Message:

Expected false to be true.

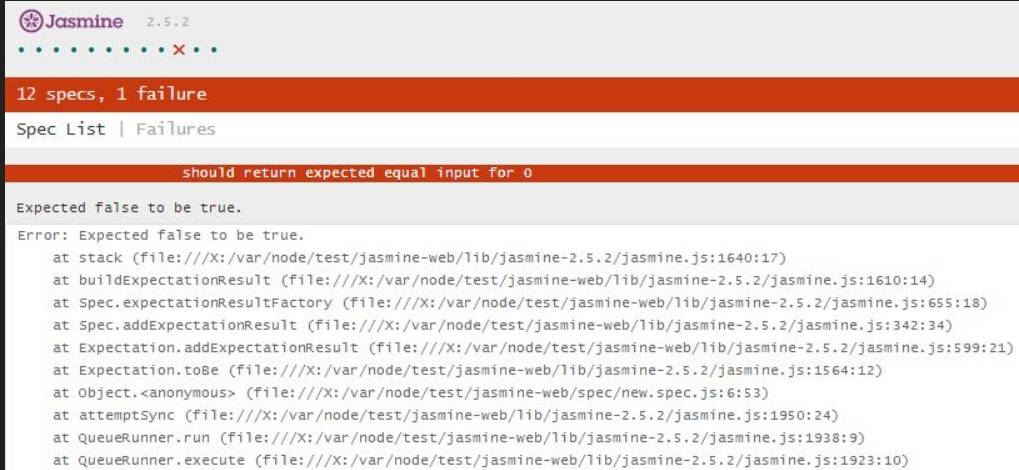
Stack:

Error: Expected false to be true.

at Object.<anonymous> (X:\var\node\test\math-tests\spec\index.spec.js:18:61)

12 specs, 1 failure

Finished in 0.006 seconds



The screenshot shows the Jasmine test runner interface. At the top, it displays the Jasmine logo and version 2.5.2. Below that, a progress bar shows 12 specs and 1 failure. The failure is highlighted in red and labeled "12 specs, 1 failure". Below this, there are links for "Spec List" and "Failures". The failure details are shown in a red box with the message "should return expected equal input for 0". Below this, the error message "Expected false to be true." is displayed. The stack trace follows, starting with "Error: Expected false to be true." and listing the call stack from the test file to the Jasmine core files.

```
Jasmine 2.5.2
.....x.....
12 specs, 1 failure
Spec List | Failures
should return expected equal input for 0
Expected false to be true.
Error: Expected false to be true.
  at stack (file:///X:/var/node/test/jasmine-web/lib/jasmine-2.5.2/jasmine.js:1640:17)
  at buildExpectationResult (file:///X:/var/node/test/jasmine-web/lib/jasmine-2.5.2/jasmine.js:1610:14)
  at Spec.expectationResultFactory (file:///X:/var/node/test/jasmine-web/lib/jasmine-2.5.2/jasmine.js:655:18)
  at Spec.addExpectationResult (file:///X:/var/node/test/jasmine-web/lib/jasmine-2.5.2/jasmine.js:342:34)
  at Expectation.addExpectationResult (file:///X:/var/node/test/jasmine-web/lib/jasmine-2.5.2/jasmine.js:599:21)
  at Expectation.toBe (file:///X:/var/node/test/jasmine-web/lib/jasmine-2.5.2/jasmine.js:1564:12)
  at Object.<anonymous> (file:///X:/var/node/test/jasmine-web/spec/new.spec.js:6:53)
  at attemptsSync (file:///X:/var/node/test/jasmine-web/lib/jasmine-2.5.2/jasmine.js:1950:24)
  at QueueRunner.run (file:///X:/var/node/test/jasmine-web/lib/jasmine-2.5.2/jasmine.js:1938:9)
  at QueueRunner.execute (file:///X:/var/node/test/jasmine-web/lib/jasmine-2.5.2/jasmine.js:1923:10)
```

Почему?

Ищем причины...

А зачем?

Инструменты

test framework

Jasmine, QUnit, ...

test runner

Karma, Wallaby, Chutzpah, ...

web-driver

v8, PhantomJS, Chrome, Firefox, Internet Explorer, ...

