



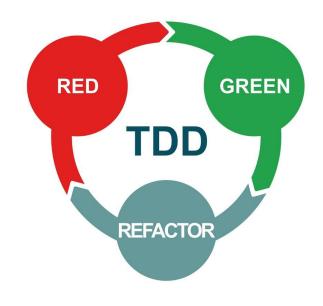






TDD steps

- Navigation map
- Test first
- Assert first
- Fail first







Istanbul isparta









Show me the source!

test_config.js

```
chai.should();
beforeEach(() => {
    window.env = sinon.sandbox.create();
});
afterEach(() => {
    window.env.restore();
} );
```

*Service.spec.js

```
describe('app::service MyService', () => {
    let sut, $q;
    beforeEach(module('app'));
    beforeEach(inject((MyService, _$q_) => {
        sut = MyService;
        \$q = \$q;
    }));
    context("some context", () => {
        it('should be here', () => {
            sut.context.should.have.been.called;
       });
    });
```

*Router.spec.js

```
describe('app: routes: MyRouter', () => {
    let $state;
    beforeEach(() => {
        module('app');
        inject(( $state ) => {
            $state = $state;
        });
    });
    describe('my menu', () => {
        it('should have url', () => {
            $state.get('my.menu').url.should.equal('/my menu');
        });
        it('should run my application', () => {
            $state.get('my.menu').views['menu@my'].controller.should.equal('MyController');
        });
    });
```

*Directive.spec.js

```
describe('directive: myDirective', () => {
   let $compile;
   let scope, element;
    beforeEach(() => {
        module('app');
        inject(function ( $rootScope , $compile ) {
            scope = $rootScope .$new();
            $compile = $compile;
        });
        element = $compile('<div my-directive></div>')(scope);
   });
    it('should blur if element was selected', () => {
        element.triggerHandler(focusInEvent);
        inputBlur.should.have.been.called;
   });
```

*Directive.spec.js

```
describe('directive: mySecondDirective', () => {
    let sut;
    beforeEach(() => {
        module('app', function ($provide) {
            $provide.constant('info', info);
        });
        inject(function (mySecondDirective) {
            sut = mySecondDirective[0];
        });
    });
    describe('scope', () => {
        var scope;
        beforeEach(() => {
            scope = {};
            sut.link(scope);
        });
        it('should has info on scope', () => {
            scope.info.should.equal(info);
        });
    });
    it('should be used as element', () => {
        sut.restrict.should.equal('E');
```

i18n

```
it('has matching keys for both french and english',
    inject((resourcesEN_CA, resourcesFR_CA) => {
        resourcesEN_CA.should.have.equalKeys(resourcesFR_CA);
```

Performance

INFO [karma]: Karma v0.12.37 server started at http://localhost:9876/ INFO [launcher]: Starting browser PhantomJS
INFO [PhantomJS 2.1.1 (Linux 0.0.0)]: Connected on socket OzY3MGHbstNJMXAeBar2 with id 44096908
PhantomJS 2.1.1 (Linux 0.0.0): Executed 3745 of 3746 (skipped 1) SUCCESS (1 min 20.57 secs / 0.735 secs

```
beforeEach(module('app'));
////
angular
    .module('app')
    .config(routeConfig);
/*@ngInject*/
function routeConfig($stateProvider) {
    $stateProvider.state('login', {
        url: '/login',
        abstract: true,
        templateUrl: 'login/login/login_base.html',
        onEnter: onEnterLoginState
    });
```

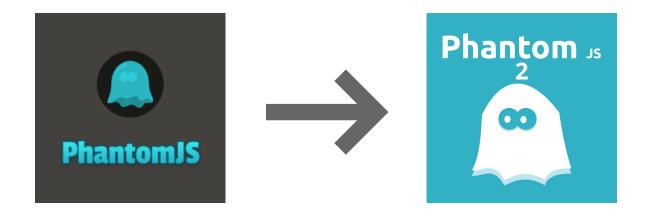
```
Started tests for module "routes"
INFO [karma]: Karma v0.12.37 server started at http://localhost:9876/
INFO [launcher]: Starting browser PhantomJS
INFO [PhantomJS 2.1.1 (Linux 0.0.0)]: Connected on socket 8oCckDjS8-mA0zJkDzgx with id 20266012
PhantomJS 2.1.1 (Linux 0.0.0): Executed 122 of 122 SUCCESS (2.687 secs / 0.043 secs)
_____
Started tests for module "no-routes"
_____
INFO [karma]: Karma v0.12.37 server started at http://localhost:9876/
INFO [launcher]: Starting browser PhantomJS
INFO [PhantomJS 2.1.1 (Linux 0.0.0)]: Connected on socket vW JeAVUD-YKRYnWD1cx with id 76928838
PhantomJS 2.1.1 (Linux 0.0.0): Executed 3623 of 3624 (skipped 1) SUCCESS (44.292 secs / 0.685 secs)
```



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istanbul-combine

- Combine JS files (remap-istanbul)
- Avoid memory leacks
- Less DOM manipulation (no \$compile)
- Don't use DI from Angular JS (webpack import or browserify)



"karma-phantomjs-launcher": "^1.0.0"

Tasks

- String calculator
- Game "Life"