# Tests Unitaires Front-end



Jasmine // Karma





# Introduction



Tests Unitaire? Pourquoi? Qui? Comment?

Définitions importantes

Personnages notables







Kent Beck





Erich Gamma

Gang Of Four













# La configuration Karma

```
// Karma configuration
module.exports = function(confiq) {
  config.set({
    // base path, that will be used to resolve files and exclude
   basePath: ''
   // testing framework to use (jasmine/mocha/qunit/...)
    frameworks: ['jasmine'],
   // list of files / patterns to load in the browser
   files: [
      'app/bower_components/angular/angular.js',
      'app/bower_components/angular-mocks/angular-mocks.js',
      'app/bower_components/angular-resource/angular-resource.js',
      'app/bower components/angular-cookies/angular-cookies.is',
      'app/bower components/angular-sanitize/angular-sanitize.js'.
      'app/bower_components/angular-route/angular-route.is',
      'app/scripts/*.js',
      'app/scripts/**/*.js',
      'test/mock/**/*.is',
      'test/spec/**/*.is'
   // list of files / patterns to exclude
   exclude: [].
   // web server port
    port: 8080,
```

```
// level of logging
// possible values: LOG DISABLE || LOG ERROR || LOG WARN || LOG INFO || LOG DEBUG
logLevel: config.LOG_INFO,
// enable / disable watching file and executing tests whenever any file changes
autoWatch: false.
// Start these browsers, currently available:
// - ChromeCanary
// - Opera
// - Safari (only Mac)
// - IE (only Windows)
browsers: ['Chrome'],
// Continuous Integration mode
// if true, it capture browsers, run tests and exit
singleRun: true,
plugins:
  'karma-chrome-launcher',
  'karma-jasmine'
```



#### Plus d'informations :

http://karma-runner.github.io/0.13/config/configuration-file.html



## Notions Générales

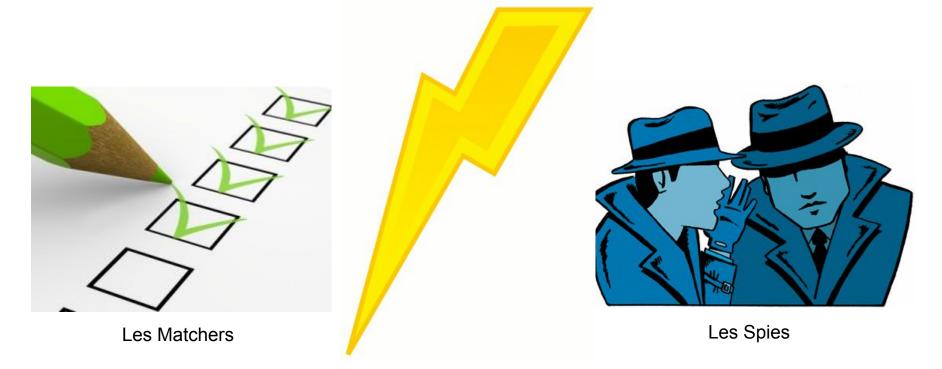
Structure des tests Mocking Setup & Tear-down Injection



```
beforeEach(inject(function($httpBackend, $rootScope, $controller) {
  httpBackend = $httpBackend;
  httpBackend.expectGET('phones/phones.json').
        respond([{name: 'Nexus S'}, {name: 'Motorola DROID'}]);
  scope = $rootScope.$new();
  ctrl = $controller(PhoneListCtrl, {$scope: scope});
}));
it('should create "phones" model with 2 phones fetched from xhr', function() {
  expect(scope.phones).toBeUndefined();
  httpBackend.flush();
  expect(scope.phones).toEqual([{name: 'Nexus S'},
                                {name: 'Motorola DROID'}]);
});
```



# Les tests





#### Les Matchers

toBe()	toEqual()	toBeTruthy()	toBeFalsy()
toBeDefined()	toBeUndefined()	toBeNull()	toMatch()
toBeCloseTo()	toBeGreaterThan()	toBeLessThan()	toContain()
toThrow()	toThrowError()		



## Les Spies

toHaveBeenCalled()	toHaveBeenCalledWith()	callThrough()*
returnValue()*	callFake()*	throwError()*

#### .calls

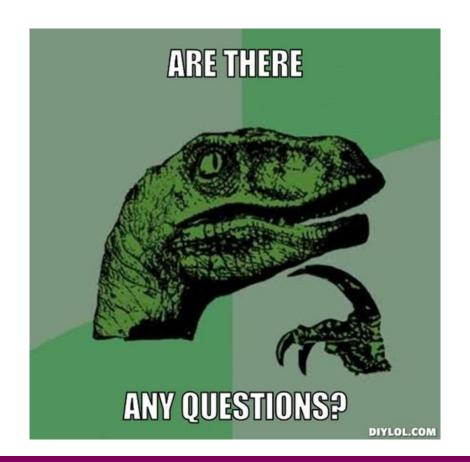
any()	count()	argsFor()	allArgs()
all()	mostRecent()	first()	reset()



#### Plus d'informations :

http://jasmine.github.io/2.4/introduction.html







# MISE EN PRATIQUE



#### Ressource:

https://github.com/meitneshi/unit-testing-workshop-v2

