# TESTING IN SAILS.JS USING MOCHA

**REQUIRE('LX')** 

# **CONSOLE.LOG('HOWDY!')**

Software Engineer at Opensoft Experimenting with Sails.js

#### **GOALS**

Concepts of testing in web applications Apply these concepts using

- Sails.js
- Mocha
- Chai.js
- Testium

#### **TYPICAL EXCUSES**

I only made a small change no need to test

Today I am lazy, I'll test tomorrow

I am in a hurry, I'll test next time

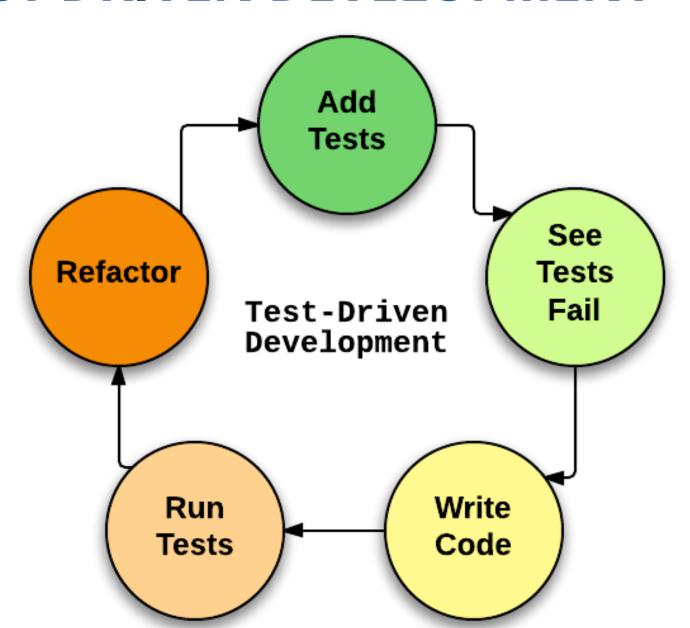
#### WHY TESTING?

Verify modules correctness in isolation

Regression errors

Documentation

#### **TEST DRIVEN DEVELOPMENT**



#### **BENEFITS**

Modularized, extensible and flexible code

Test covering all code paths

Productivity

# BEHAVIOR DRIVEN DEVELOPMENT

Feature/Specification driven approach to TDD

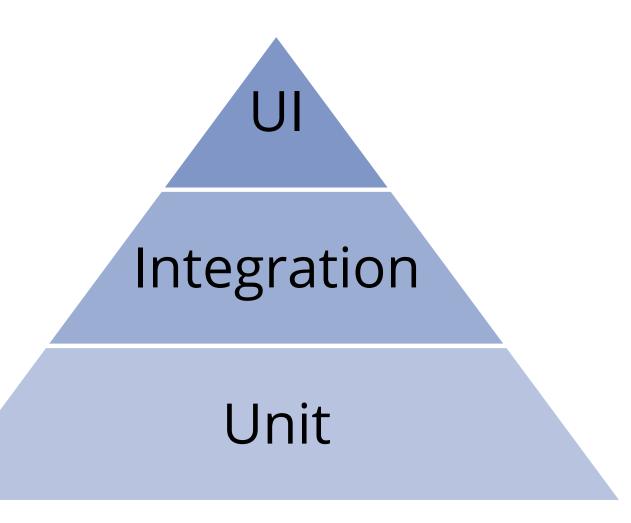
Uses an ubiquitous language

Focus on behavior rather than implementation

More of a team methodology

Extension to TDD

### **TESTING IN WEB APPLICATIONS**



#### SAMPLE APPLICATION

User registration form

- Shows an error message if the form is not completely filled
- Creates a user and redirects to a new page if the form is filled correctly

#### **UNIT TESTING**

Testing form validation (Client Side)
Spec:

- Display an error message if the form is not completely filled
- •Submit the form in case it is validateForm(name, email, password, form, error

#### INTEGRATION TESTING

Testing UserController.create

#### Spec:

- Redirect to the form page if there is an error
- Redirect to the success page if everything is OK

Create(req, res, next)

#### **UI TESTING**

- Testing the system end-to-end
- Often done manually
- Can also be automated specially in:
  - Error prone tasks
  - Time consuming tasks

#### **TESTIUM**

Test the code in different browsers (via Selenium) or headlessly (via PhatomJS)

Uses Mocha to run tests

Has a synchronous API

Console

Tests

#### **WRAP UP**

Testing is easy and it rocks software dev Methodologies that enforce testing: TDD & BDD Testing in web applications:

- Mocha <a href="http://visionmedia.github.io/mocha">http://visionmedia.github.io/mocha</a>
- Sinon <a href="http://sinonjs.org">http://sinonjs.org</a>
- Chai <a href="http://chaijs.com">http://chaijs.com</a>
- Barrels <a href="https://github.com/bredikhin/barrels">https://github.com/bredikhin/barrels</a>
- Supertest https://github.com/visionmedia/supertest
- Testium <a href="https://github.com/groupon/testium">https://github.com/groupon/testium</a>

#### **WRAP UP**

Today's code:

https://github.com/marionzualo/demo-sails-app-testing

## **THANK YOU!**