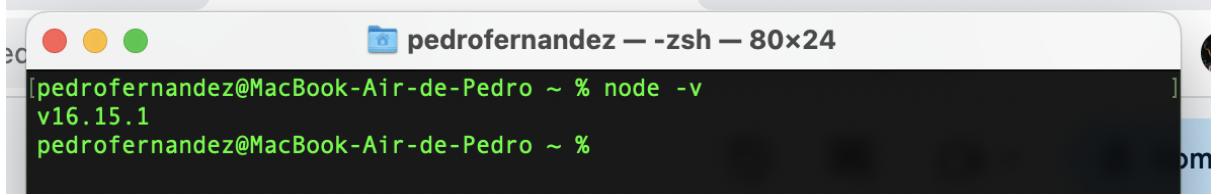


Trabajo Práctico 10 - Pruebas de Integración

Desarrollo:

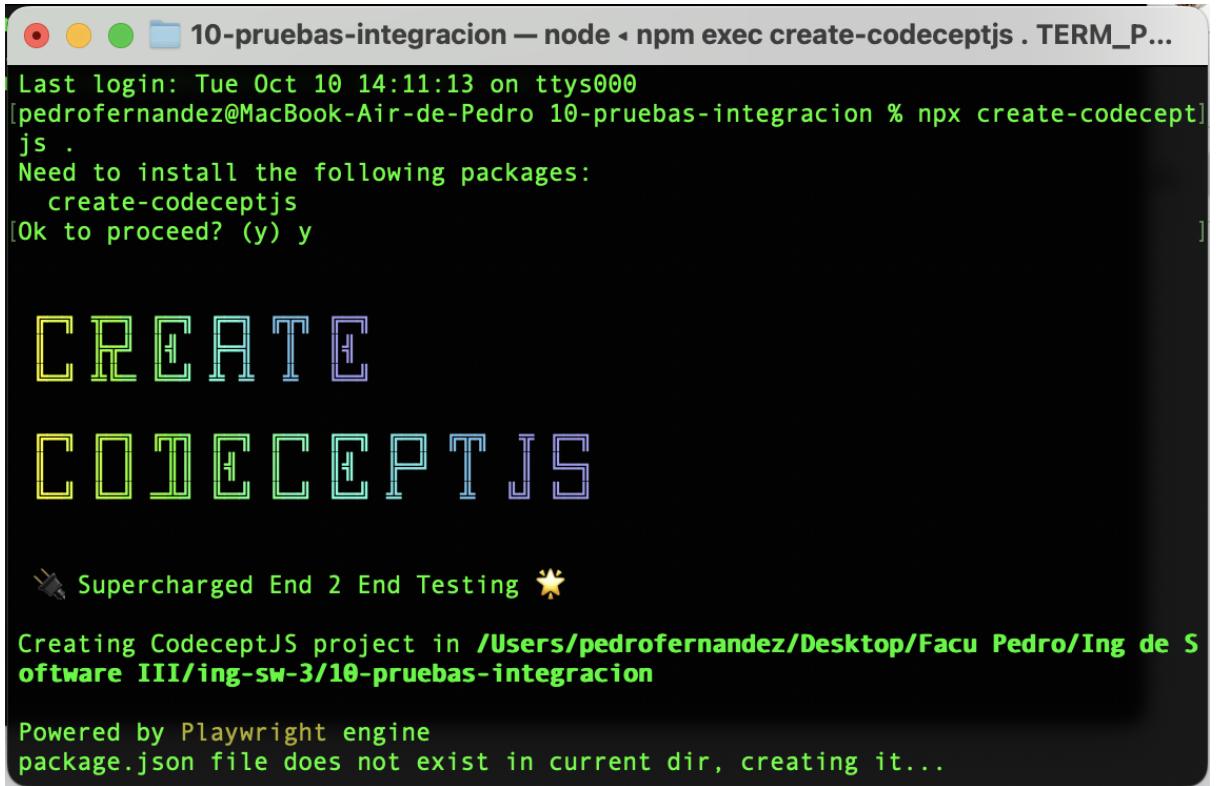
2- Testeando la página de GitHub

- Instalar NodeJs v12 o superior: <https://nodejs.org/en/download/>



```
pedrofernandez — zsh — 80x24
[pedrofernandez@MacBook-Air-de-Pedro ~ % node -v
v16.15.1
pedrofernandez@MacBook-Air-de-Pedro ~ %
```

- En un directorio, por ejemplo .\proyectos\tp10 ejecutar:



```
10-pruebas-integracion — node < npm exec create-codeceptjs . TERM_P...
Last login: Tue Oct 10 14:11:13 on ttys000
[pedrofernandez@MacBook-Air-de-Pedro 10-pruebas-integracion % npx create-codeceptjs .
Need to install the following packages:
  create-codeceptjs
[Ok to proceed? (y) y

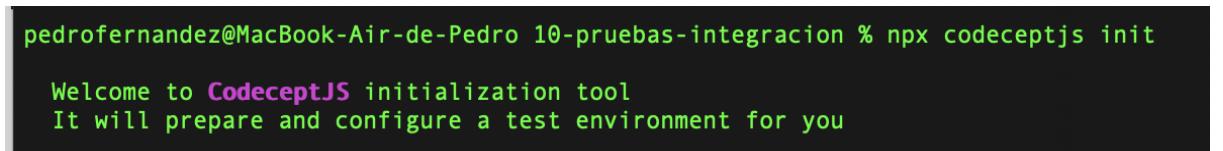
CREATE
CODECEPTJS

🌟 Supercharged End 2 End Testing 🌟

Creating CodeceptJS project in /Users/pedrofernandez/Desktop/Facu Pedro/Ing de Software III/ing-sw-3/10-pruebas-integracion

Powered by Playwright engine
package.json file does not exist in current dir, creating it...
```

- Inicializar un nuevo proyecto CodeceptJS:



```
pedrofernandez@MacBook-Air-de-Pedro 10-pruebas-integracion % npx codeceptjs init
Welcome to CodeceptJS initialization tool
It will prepare and configure a test environment for you
```

- Elegimos las opciones por defecto, ponemos sample cuando se nos pregunte por el nombre del primer test:

```

Installing to /Users/pedrofernandez/Desktop/Facu Pedro/Ing de Software III/ing-sw-3/10-pruebas-integracion
? Do you plan to write tests in TypeScript? No
? Where are your tests located? ./test.js
? What helpers do you want to use? Playwright
? Where should logs, screenshots, and reports to be stored? ./output
? Do you want to enable localization for tests? http://bit.ly/3GNUBbh English (n
o localization)
Configure helpers...
? [Playwright] Browser in which testing will be performed. Possible options: chrome,
chromium, firefox, webkit or electron chromium
? [Playwright] Base url of site to be tested https://github.com
? [Playwright] Show browser window Yes
[
Steps file created at ./steps_file.js
Config created at /Users/pedrofernandez/Desktop/Facu Pedro/Ing de Software III/ing-sw-3/10-pruebas-integracion/codecept.conf.js
Directory for temporary output files created at './output'
Intellisense enabled in /Users/pedrofernandez/Desktop/Facu Pedro/Ing de Software III/ing-sw-3/10-pruebas-integracion/jsconfig.json
[Installing packages:
[up to date, audited 436 packages in 6s

63 packages are looking for funding
  run `npm fund` for details

8 vulnerabilities (7 moderate, 1 high)

To address all issues (including breaking changes), run:
  npm audit fix --force

Run `npm audit` for details.
TypeScript Definitions provide autocompletion in Visual Studio Code and other IDEs
Definitions were generated in steps.d.ts

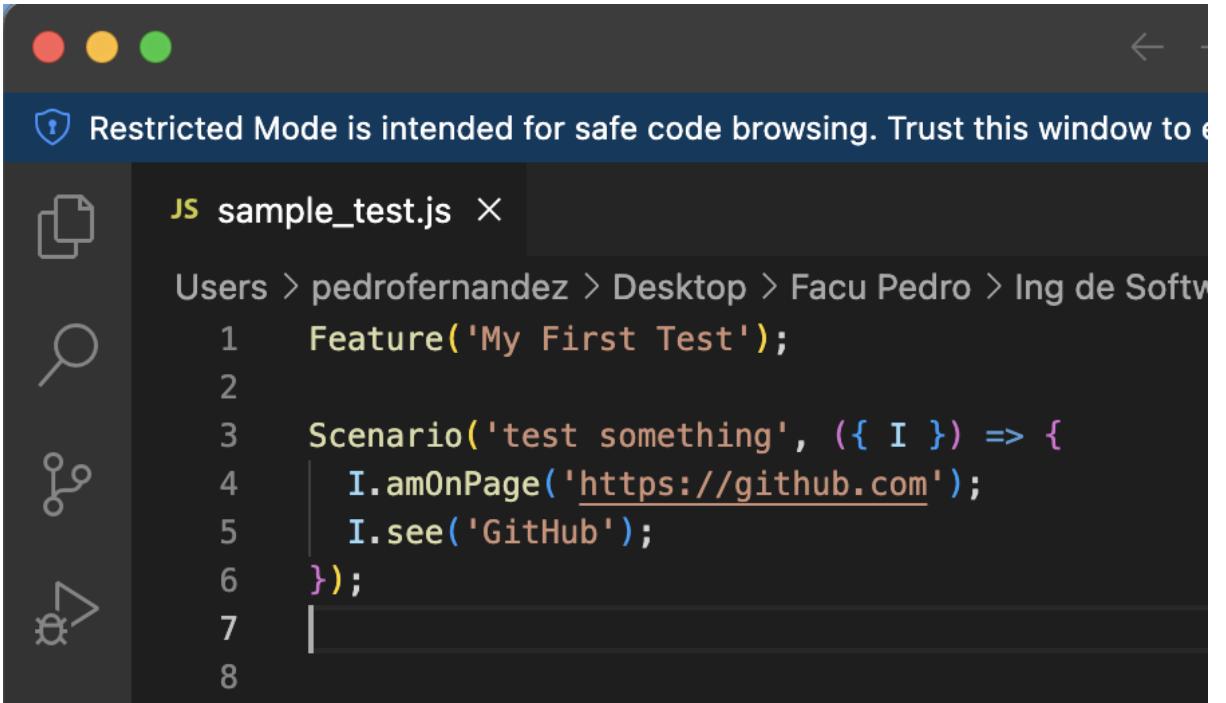
Almost ready... Next step:
Creating a new test...
-----
? Feature which is being tested (ex: account, login, etc) sample
? Filename of a test sample_test.js

Test for sample_test.js was created in /Users/pedrofernandez/Desktop/Facu Pedro/Ing de Software III/ing-sw-3/10-pruebas-integracion

--
CodeceptJS Installed! Enjoy supercharged testing! 😊
Find more information at https://codecept.io

```

- Editar el archivo sample_test.js generado:



```

JS sample_test.js ×

Users > pedrofernandez > Desktop > Facu Pedro > Ing de Software III > ing-sw-3 > 10-pruebas-integracion

1 Feature('My First Test');
2
3 Scenario('test something', ({ I }) => {
4   I.amOnPage('https://github.com');
5   I.see('GitHub');
6 });
7
8

```

- Finalmente correr el test: `npx codeceptjs run`

```
[pedrofernandez@MacBook-Air-de-Pedro 10-pruebas-integracion % npx codeceptjs run
CodeceptJS v3.5.6 #StandWithUkraine
Using test root "/Users/pedrofernandez/Desktop/Facu Pedro/Ing de Software III/ing-sw-3/10-pruebas-integracion"

My First Test --
  ✓ test something in 1374ms

  OK | 1 passed // 5s
pedrofernandez@MacBook-Air-de-Pedro 10-pruebas-integracion % ]
```

- Agregamos otras validaciones

```
JS sample_test.js ×

JS sample_test.js > ...

1  Feature('My First Test');
2
3  Scenario('test something', ({ I }) => {
4    I.amOnPage('https://github.com');
5    I.see('GitHub');
6    I.see('The home for all developers')
7    I.scrollPageToBottom()
8    I.seeElement("//li[contains(.,'© 2022 GitHub, Inc.')]")
9  });
10 |
11 |
```

- En el resultado vemos que falla, dado que la página de github ha cambiado.

```
Scenario Steps:
- I.see("The home for all developers") at Test.<anonymous> (./sample_test.js:6:5)
- I.see("GitHub") at Test.<anonymous> (./sample_test.js:5:5)
- I.amOnPage("https://github.com") at Test.<anonymous> (./sample_test.js:4:5)

Artifacts:
- screenshot: /Users/pedrofernandez/Desktop/Facu Pedro/Ing de Software III/ing-sw-3/10-pruebas-integracion/output/test_something.failed.png

FAIL | 0 passed, 1 failed // 7s
Run with --verbose flag to see complete NodeJS stacktrace
```

- Actualizamos nuestro escenario:

```

JS sample_test.js ×

JS sample_test.js > ...
1 Feature('My First Test');
2
3 Scenario('test something', ({ I }) => {
4   I.amOnPage('https://github.com');
5   I.see('GitHub');
6   I.see('Let's build from here')
7   I.scrollPageToBottom()
8   I.seeElement("//li[contains(.,'© 2023 GitHub, Inc.')]")
9 };
10

```

- Volvemos a correr el test: npx codeceptjs run

```
[pedrofernandez@MacBook-Air-de-Pedro 10-pruebas-integracion % npx codeceptjs run
CodeceptJS v3.5.6 #StandWithUkraine
Using test root "/Users/pedrofernandez/Desktop/Facu Pedro/Ing de Software III/ing-sw-3/10-pruebas-integracion"
```

- Verificamos que el test haya sido exitoso

```

My First Test --
✓ test something in 1368ms

OK | 1 passed // 2s
pedrofernandez@MacBook-Air-de-Pedro 10-pruebas-integracion %

```

3- Testeando una aplicación Angular

- Clonar repo

```

Last login: Tue Oct 10 14:14:41 on ttys001
[pedrofernandez@MacBook-Air-de-Pedro 10-pruebas-integracion % git clone https://github.com/ingsoft3ucc/angular-sample.git
Cloning into 'angular-sample'...
remote: Enumerating objects: 81, done.
remote: Counting objects: 100% (36/36), done.
remote: Compressing objects: 100% (31/31), done.
remote: Total 81 (delta 11), reused 5 (delta 5), pack-reused 45
Receiving objects: 100% (81/81), 221.51 KiB | 918.00 KiB/s, done.
Resolving deltas: 100% (14/14), done.
pedrofernandez@MacBook-Air-de-Pedro 10-pruebas-integracion %

```

- Instalamos dependencias con npm

```
[pedrofernandez@MacBook-Air-de-Pedro 10-pruebas-integracion % cd angular-sample
[pedrofernandez@MacBook-Air-de-Pedro angular-sample % npm install
  npm WARN deprecated @npmcli/move-file@2.0.1: This functionality has been moved to @npmcli/fs

  added 912 packages, and audited 913 packages in 50s

  121 packages are looking for funding
    run `npm fund` for details

  12 vulnerabilities (6 moderate, 6 high)

  To address all issues, run:
    npm audit fix

  Run `npm audit` for details.
  pedrofernandez@MacBook-Air-de-Pedro angular-sample %
```

- Corremos el proyecto

```
pedrofernandez@MacBook-Air-de-Pedro angular-sample % ng serve
? Would you like to enable autocompletion? This will set up your terminal so
pressing TAB while typing Angular CLI commands will show possible options and
autocomplete arguments. (Enabling autocompletion will modify configuration files
in your home directory.) Yes
Appended `source <(ng completion script)` to `/Users/pedrofernandez/.zshrc`. Restart your terminal or run the foll
  source <(ng completion script)
? Would you like to share pseudonymous usage data about this project with the
Angular Team
at Google under Google's Privacy Policy at https://policies.google.com/privacy.
For more
details and how to change this setting, see https://angular.io/analytics. No
Global setting: not set
Local setting: disabled
Effective status: disabled
✓ Browser application bundle generation complete.

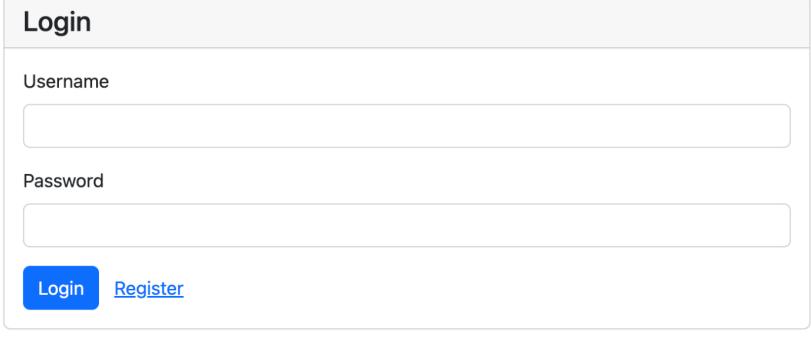
Initial Chunk Files
[vendor.js
polyfills.js
styles.css, styles.js
main.js
[runtime.js
| Names
| vendor
| polyfills
| styles
| main
| runtime
| Initial Total
| Raw Size
| 2.50 MB
| 318.06 kB
| 210.51 kB
| 47.74 kB
| 12.70 kB
| 3.07 MB

Lazy Chunk Files
src_app_users_users_module_ts.js
src_app_account_account_module_ts.js
| Names
| users-users-module
| account-account-module
| Raw Size
| 32.95 kB
| 32.45 kB

Build at: 2023-10-10T17:52:12.289Z - Hash: ea0c514e371e2d17 - Time: 6079ms
** Angular Live Development Server is listening on localhost:4200, open your browser on http://localhost:4200/ **

✓ Compiled successfully.
```

- Navegamos a <http://localhost:4200>



localhost:4200/account/login?returnUrl=%2F

Login

Username

Password

Login Register

[Angular 14 - User Registration and Login Example & Tutorial](#)

[JasonWatmore.com](#)

- Creamos el proyecto de codeceptjs

```
[pedrofernandez@MacBook-Air-de-Pedro angular-sample % npx create-codeceptjs .]

CREATE
CODECEPTJS

🔧 Supercharged End 2 End Testing ⭐

Creating CodeceptJS project in /Users/pedrofernandez/Desktop/Facu Pedro/Ing de Software III/ing-sw-3/10-pruebas-integracion/angular-sample

Powered by Playwright engine
package.json found, adding codeceptjs dependencies & scripts into it
Installing packages: codeceptjs@3, @codeceptjs/ui, @codeceptjs/examples, @codeceptjs/configure, playwright@1
```

- Inicializar CodeceptJS:

```
[pedrofernandez@MacBook-Air-de-Pedro angular-sample % npx codeceptjs init

Welcome to CodeceptJS initialization tool
It will prepare and configure a test environment for you

Useful links:
  ↗ How to start testing ASAP: https://codecept.io/quickstart/#init
  ↗ How to select helper: https://codecept.io/basics/#architecture
  ↗ TypeScript setup: https://codecept.io/typescript/#getting-started

Installing to /Users/pedrofernandez/Desktop/Facu Pedro/Ing de Software III/ing-sw-3/10-pruebas-integracion/angular-sample
? Do you plan to write tests in TypeScript? (y/N) █
```

- Responder las preguntas. Aceptar valores por defecto. Cuando pregunte por url colocar `http://localhost:4200` y el nombre de los tests poner `angular-sample`

```

Installing to /Users/pedrofernandez/Desktop/Facu Pedro/Ing de Software III/ing-sw-3/
? Do you plan to write tests in TypeScript? No
? Where are your tests located? ./*_test.js
? What helpers do you want to use? Playwright
? Where should logs, screenshots, and reports to be stored? ./output
? Do you want to enable localization for tests? http://bit.ly/3GNUBbh English (n
o localization)
Configure helpers...
[?] [Playwright] Browser in which testing will be performed. Possible options: chr
omium, firefox, webkit or electron chromium
[?] [Playwright] Base url of site to be tested http://localhost:4200
[?] [Playwright] Show browser window Yes

Steps file created at ./steps_file.js
Config created at /Users/pedrofernandez/Desktop/Facu Pedro/Ing de Software III/ing-s
Directory for temporary output files created at './output'
[Intellisense enabled in /Users/pedrofernandez/Desktop/Facu Pedro/Ing de Software III
[Installing packages:
[
  up to date, audited 1191 packages in 2s

  156 packages are looking for funding
    run `npm fund` for details

  17 vulnerabilities (10 moderate, 7 high)

  To address issues that do not require attention, run:
    npm audit fix

  To address all issues (including breaking changes), run:
    npm audit fix --force

  Run `npm audit` for details.
  TypeScript Definitions provide autocompletion in Visual Studio Code and other IDEs
  Definitions were generated in steps.d.ts

  Almost ready... Next step:
  Creating a new test...
  -----
  ? Feature which is being tested (ex: account, login, etc) angular-sample
  ? Filename of a test angular-sample_test.js

  Test for angular-sample_test.js was created in /Users/pedrofernandez/Desktop/Facu Pe
  --
  CodeceptJS Installed! Enjoy supercharged testing! 😎
  Find more information at https://codecept.io

pedrofernandez@MacBook-Air-de-Pedro angular-sample %

```

- Editar el archivo generado `angular-sample_tests.js` de manera tal que se pruebe la funcionalidad de login en los escenarios login correcto y login incorrecto

```

JS angular-sample_test.js U X JS codecept.conf.js U

JS angular-sample_test.js > ...
1 Feature('angular-sample');
2
3 Scenario('Login correcto', ({ I }) => {
4     I.amOnPage('/login');
5     I.fillField('[formcontrolname="username"]', 'piter123');
6     I.fillField('[formcontrolname="password"]', 'piter123');
7     I.click('Login');
8     I.see("You're logged in with Angular 14!!!");
9 );
10
11 Scenario('Login incorrecto', ({ I }) => {
12     I.amOnPage('/login');
13
14     I.fillField('[formcontrolname="username"]', 'usuarioIncorrecto');
15     I.fillField('[formcontrolname="password"]', 'contraseñaIncorrecta');
16
17     I.click('Login');
18
19     I.see('Username or password is incorrect');
20 });

```

- Levantar la aplicación en otra consola :

```

angular-sample — ng serve TERM_PROGRAM=Apple_Terminal SHELL=/bi...
[pedrofernandez@MacBook-Air-de-Pedro angular-sample % ng serve
✓ Browser application bundle generation complete.

Initial Chunk Files | Names | Raw Size
vendor.js | vendor | 2.50 MB |
polyfills.js | polyfills | 318.06 kB |
styles.css, styles.js | styles | 210.51 kB |
main.js | main | 47.74 kB |
runtime.js | runtime | 12.70 kB |

| Initial Total | 3.07 MB

Lazy Chunk Files | Names | Raw Size
src_app_users_users_module_ts.js | users-users-module | 32.95 kB |
src_app_account_account_module_ts.js | account-account-module | 32.45 kB |

Build at: 2023-10-10T18:14:40.036Z - Hash: cc81ebe7fe5c193c - Time: 4750ms

** Angular Live Development Server is listening on localhost:4200, open your browser on http://localhost:4200/ **

✓ Compiled successfully.

```

- Ejecutar los tests

```

  Scenario Steps:
    - I.see("You're logged in with Angular 14!!!") at Test.<anonymous> (.angular-sample_test.js:8:7)
      - I.click("Login") at Test.<anonymous> (.angular-sample_test.js:7:7)
      - I.fillField("[formcontrolname='password']", "piter123") at Test.<anonymous> (.angular-sample_test.js:6:7)
        - I.fillField("[formcontrolname='username']", "piter123") at Test.<anonymous> (.angular-sample_test.js:5:7)
          - I.amOnPage("/login") at Test.<anonymous> (.angular-sample_test.js:4:7)

  Artifacts:
    - screenshot: /Users/pedrofernandez/Desktop/Facu Pedro/Ing de Software III/ing-sw-3/10-pruebas-integracion/angular-sample/output/Login_correcto.failed.png

  FAIL | 1 passed, 1 failed // 9s
Run with --verbose flag to see complete NodeJS stacktrace
pedrofernandez@MacBook-Air-de-Pedro angular-sample %

```

ACA EL TEST DE LOGIN NO SE PUEDE EJECUTAR POR QUE EL MODO INCOGNITO BORRA EL USUARIO Y CONTRASEÑA...

TEST DE USUARIO INCORRECTO FUNCIONA BIEN...

4- Habilitar reportes

- Instalar el módulo para reporting

```

Last login: Mon Oct 16 18:56:26 on ttys000
/dev/fd/12:18: command not found: compdef
[pedrofernandez@MacBook-Air-de-Pedro angular-sample % npm i mocha-junit-reporter mocha-multi --save
up to date, audited 1202 packages in 14s

159 packages are looking for funding
  run `npm fund` for details

18 vulnerabilities (10 moderate, 7 high, 1 critical)

To address issues that do not require attention, run:
  npm audit fix

To address all issues (including breaking changes), run:
  npm audit fix --force

Run `npm audit` for details.
[pedrofernandez@MacBook-Air-de-Pedro angular-sample % npm i mochawesome
[
  added 30 packages, and audited 1232 packages in 6s

159 packages are looking for funding
  run `npm fund` for details

```

```

18 vulnerabilities (10 moderate, 7 high, 1 critical)

To address issues that do not require attention, run:
  npm audit fix

To address all issues (including breaking changes), run:
  npm audit fix --force

Run `npm audit` for details.
pedrofernandez@MacBook-Air-de-Pedro angular-sample % npm i mochawesome-report-generator
[
  up to date, audited 1232 packages in 2s

  159 packages are looking for funding
    run `npm fund` for details

18 vulnerabilities (10 moderate, 7 high, 1 critical)

To address issues that do not require attention, run:
  npm audit fix

To address all issues (including breaking changes), run:
  npm audit fix --force

Run `npm audit` for details.
pedrofernandez@MacBook-Air-de-Pedro angular-sample %

```

- Reemplazar la key mocha en el archivo codecept.conf.js por:

```

JS angular-sample_test.js U JS codecept.conf.js U X

JS codecept.conf.js > [o] config
1  const { setHeadlessWhen, setCommonPlugins } = require('@codeceptjs/configure');
2  // turn on headless mode when running with HEADLESS=true environment variable
3  // export HEADLESS=true && npx codeceptjs run
4  setHeadlessWhen(process.env.HEADLESS);
5
6  // enable all common plugins https://github.com/codeceptjs/configure#setcommonplugins
7  setCommonPlugins();
8
9  /** @type {CodeceptJS.MainConfig} */
10 exports.config = [
11   tests: './*_test.js',
12   output: './output',
13   helpers: {
14     Playwright: {
15       browser: 'chromium',
16       url: 'http://localhost:4200',
17       show: false
18     }
19   },
20   include: {
21     I: './steps_file.js'
22   },
23
24   mocha: {
25     reporter: 'mochawesome',
26     reporterOptions: {
27       reportDir: './output',
28       reportFilename: 'mochawesome-report',
29     },
30   },
31
32   name: 'angular-sample'
33 ]

```

- Ejecutar los tests nuevamente

```
[pedrofernandez@MacBook-Air-de-Pedro angular-sample % npx codeceptjs run --steps --reporter mochawesome

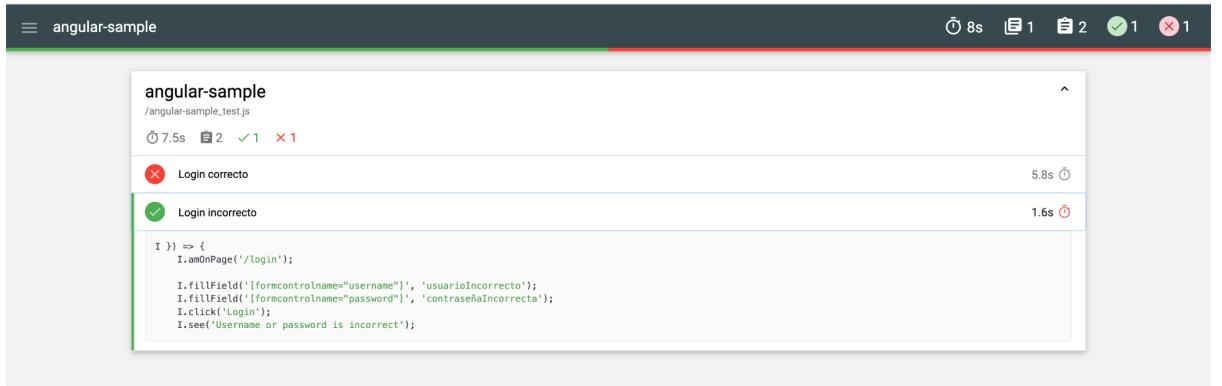
angular-sample
  1) Login correcto
  ✓ Login incorrecto (1678ms)

  1 passing (8s)
  1 failing

  1) angular-sample
    Login correcto:
      expected web application to include "You're logged in with Angular 14!!"
      + expected - actual
      -Username or password is incorrect Login Username Password LoginRegister Angular 14 - User Registration and Login Example & Tutorial Jaso
      +You're logged in with Angular 14!!

[mochawesome] Report JSON saved to /Users/pedrofernandez/Desktop/Facu Pedro/Ing de Software III/ing-sw-3/10-pruebas-integracion/angular-sample/
[mochawesome] Report HTML saved to /Users/pedrofernandez/Desktop/Facu Pedro/Ing de Software III/ing-sw-3/10-pruebas-integracion/angular-sample/
pedrofernandez@MacBook-Air-de-Pedro angular-sample %
```

- Verificamos en el directorio output el html generado como reporte:



LOGIN SIGUE SIN FUNCIONAR PERO SE GENERA EL REPORTE CORRECTAMENTE EN EL ARCHIVO HTML DEL LOGIN INCORRECTO, SE PODRÍA HACER QUE SE GENERE EL USUARIO CON CODECEPTJS Y AHÍ SÍ SE PASARÍA EL TEST

- Hacemos un push hacia nuestro repo