



ESCUELA SUPERIOR
PÓLITECNICA DEL LITORAL

WORKSHOP OF ACCEPTANCE TESTS

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1. Abstract

This document contains the technical report corresponding to the first group workshop called **"WORKSHOP OF ACCEPTANCE TEST"** of **GROUP#4** belonging to the **SOFTWARE II ENGINEERING** course of **2020-PAO I**.

The report contains a description of the workshop, the code, the JAVA implementation and the reports.

2. Description

BDD is a way for software teams to work that closes the gap between business-people and technical people by:

- Encouraging collaboration across roles to build shared understanding of the problem to be solved.
- Working in rapid, small iterations to increase feedback and the flow of value
- Producing system documentation that is automatically checked against the system's behavior[1].

ACCEPTANCE TESTING is a level of software testing where a system is tested for acceptability. It is formal testing with respect to user needs, requirements, and business processes conducted to determine whether or not a system satisfies the acceptance criteria and to enable the user, customers or other authorized entity to determine whether or not to accept the system, and if it is acceptable for delivery [2].

The framework to write the acceptance tests is Cucumber, what use "Gherkin" language. The 10 keywords of Gherkin are: [3]:

- Feature
- Scenario
- Given
- When
- Then
- And
- But
- Scenario Outline

- Examples
- Background

3. Source Code

3.1. Repository

Github was used as a collaboration tool for the development of the workshop, the link is:

- <https://github.com/leortyz/PruebasAceptacion>

3.2. Development Considerations

For the development of the activity and its implementation, the following points were considered:

- **Python >= 3.7.3**
- **Behave para Python >= 1.2.6**

4. Activity Screenshots

```
C:\Users\computador\Desktop\PruebasAceptacion>behave
Feature: Search games by study # features/filter_game_developed.feature:3

@gamesByRate
Scenario: Filter games by rate without finding result # features/filter_game_developed.feature:6
  Given a set of games # features/steps/filter_games.py:9
    | NAME | RELEASE DATE | DEVELOPER | RATE |
    | The Witcher 3: Wild Hunt | 2015 | CD Projekt | M |
    | Splatoon | 2016 | Nintendo | T |
    | Super Smash Bros. Ultimate | 2018 | Bandai Namco Studios | E |
    | The Last of Us | 2013 | Naughty Dog | M |
  Given the user enters the study: 'xyz' # features/steps/filter_games.py:31
  When the user search games by study # features/steps/filter_games.py:36
  Then 0 games will match # features/steps/filter_games.py:55
  And the following message is displayed: No game with the specified study was found. # features/steps/filter_games.py:96

@gamesByRate
Scenario: Filter games that contain the study 'Nintendo' # features/filter_game_developed.feature:19
  Given a set of games # features/steps/filter_games.py:9
    | NAME | RELEASE DATE | DEVELOPER | RATE |
    | The Witcher 3: Wild Hunt | 2015 | CD Projekt | M |
    | Splatoon | 2016 | Nintendo | T |
    | Super Smash Bros. Ultimate | 2018 | Bandai Namco Studios | E |
    | The Last of Us | 2013 | Naughty Dog | M |
  Given the user enters the study: Nintendo # features/steps/filter_games.py:31
  When the user search games by study # features/steps/filter_games.py:36
  Then 1 games will match # features/steps/filter_games.py:55
  And the names of these games are # features/steps/filter_games.py:60
    | NAME |
    | Splatoon |
  And the following message is displayed: 1 games were found containing the study: Nintendo # features/steps/filter_games.py:96

Feature: Search games by name # features/filter_game_name.feature:3

@gamesByName
Scenario: Filter games that contain the word 'The' in their name # features/filter_game_name.feature:6
```

Figure 1.- Run Behave

```
Simbolo del sistema
Given a set of games
| NAME | RELEASE DATE | DEVELOPER | RATE |
| The Witcher 3: Wild Hunt | 2015 | CD Projekt | M |
| Splatoon | 2016 | Nintendo | T |
| Super Smash Bros. Ultimate | 2018 | Bandai Namco Studios | E |
| The Last of Us | 2013 | Naughty Dog | M |
# features/steps/filter_games.py:9

Given the user enters the rate: M y E
When the user search games by rate
Then 3 games will match
And the names of these games are
| NAME |
| The Witcher 3: Wild Hunt |
| The Last of Us |
| Super Smash Bros. Ultimate |
And the following message is displayed: 3 games were found containing the rate: ['M','E'] # features/steps/filter_games.py:96

3 features passed, 0 failed, 0 skipped
6 scenarios passed, 0 failed, 0 skipped
33 steps passed, 0 failed, 0 skipped, 0 undefined
Took 0m0.037s

C:\Users\computador\Desktop\PruebasAceptacion>allure --version
allure 2.13.5

C:\Users\computador\Desktop\PruebasAceptacion>allure serve %allure_result_folder%
Generating report to temp directory...
Report successfully generated to C:\Users\COMPUT~1\AppData\Local\Temp\25653452173060061\allure-report
Starting web server...
2020-08-21 16:51:32.613:INFO:main: Logging initialized @6732ms to org.eclipse.jetty.util.log.StdErrLog
Server started at <http://169.254.200.60:49938/>. Press <Ctrl+C> to exit
```

Figure 2.- Generate Report Json

```
MINGW64/c/Users/computador/Desktop/PruebasAceptacion

computador@LAPTOP-SFE9D97K MINGW64 ~/Desktop
$ git clone https://github.com/leortyz/PruebasAceptacion
Cloning into 'PruebasAceptacion'...
remote: Enumerating objects: 30, done.
remote: Counting objects: 100% (30/30), done.
remote: Compressing objects: 100% (20/20), done.
remote: Total 30 (delta 5), reused 27 (delta 5), pack-reused 0
Unpacking objects: 100% (30/30), done.

computador@LAPTOP-SFE9D97K MINGW64 ~/Desktop
$ allure --version
2.13.5

computador@LAPTOP-SFE9D97K MINGW64 ~/Desktop
$ cd PruebasAceptacion

computador@LAPTOP-SFE9D97K MINGW64 ~/Desktop/PruebasAceptacion (master)
$ allure serve %allure_result_folder%
Generating report to temp directory...
Report successfully generated to C:\Users\COMPUT~1\AppData\Local\Temp\25653452173060061\allure-report
Starting web server...
2020-08-21 16:51:32.613:INFO:main: Logging initialized @6732ms to org.eclipse.jetty.util.log.StdErrLog
Server started at <http://169.254.200.60:49938/>. Press <Ctrl+C> to exit
```

Figure 3.- Run server allure to see report

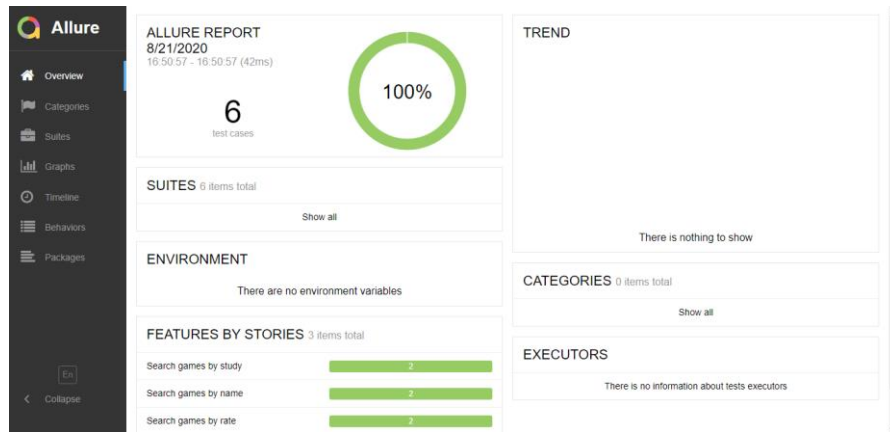


Figure 4.- Report Allure

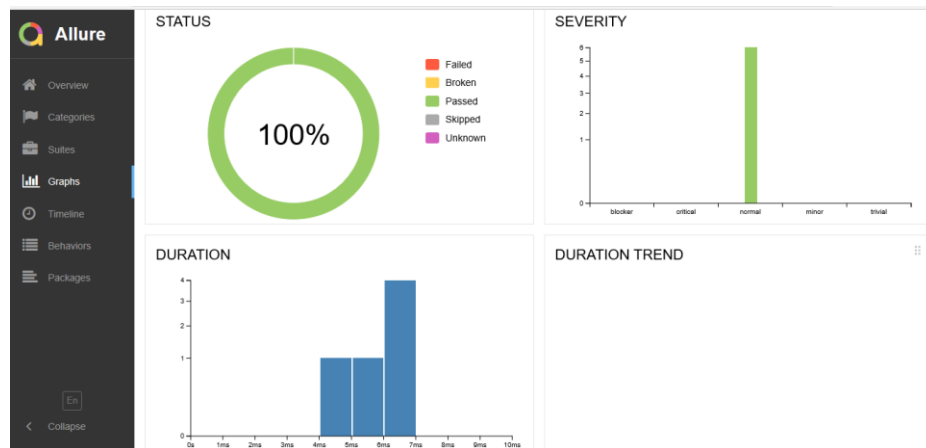


Figure 5.- Report Graph



Figure 6.- Report Timeline

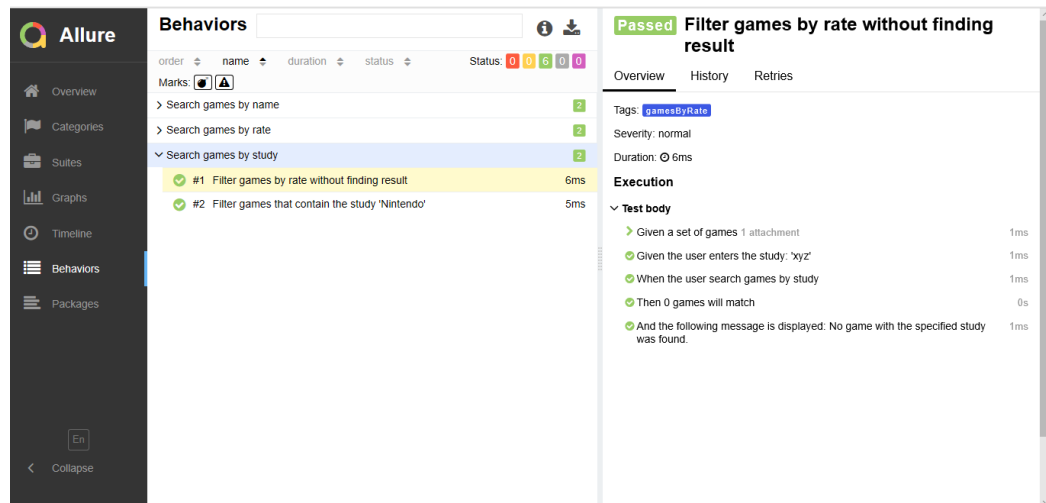


Figure 7.- Detail

5. Conclusions

- This plug-in is a useful tool to the acceptance test.
- The control and the facility to see the report is a good approach.
- Is easy to implent if you have a guide.
- Is complicated use cucumber, its easiest use allure



6. References

- [1] <https://cucumber.io/docs/bdd/> [Último acceso: june 2020].
- [2] Software Testing Fundamentals, «Acceptance Testing,» [En línea]. Available: <http://softwaretestingfundamentals.com/acceptance-testing/>.
- [3] R. Hewitt, «Gherkin for Business Analysts,» Modern analyst, 2017. [En línea]. Available: <https://www.modernanalyst.com/Resources/Articles/tabid/115/ID/3810/Gherkin-forBusiness-Analysts.aspx>. [Último acceso: 14 Marzo 2020].

[4] «Gherkin Reference,» [En línea]. Available: <https://cucumber.io/docs/gherkin/reference/>. [Último acceso: Marzo 2020].

[5] S. Vergara, «¿Qué es BDD (Behavior Driven Development)?,» ITDO, 18 Julio 2019. [En línea]. Available: <https://www.itdo.com/blog/que-es-bdd-behavior-driven-development/>. [Último acceso: 14 Marzo 2020].