Wollok: en el aula y más allá

Javier Fernandes^{1,2} Nicolás Passerini^{1,2,4}
Pablo Tesone^{3,1,2,4} Débora Fortini^{1,4}
Nahuel Palumbo⁴ Juan Contardo⁴ Carlos Raffellini⁴

¹Universidad Nacional de Quilmes
 ²Universidad Nacional de San Martin
 ³Universidad Nacional del Oeste
 ⁴Universidad Tecnológica Nacional - F.R. Buenos Aires.

Workshop de Ingeniería en Sistemas y Tecnologías de la Información 19/09/2015

Agenda

- Introduccion
- 2 Desarrollo de Wollok
- Features Avanzados
- Wollok Game
- 6 Experiencia en el Aula

¿Qué es Wollok?

// TODO introducir un toque wollok // seria bueno algún screenshot también

Desarrollo de Wollok

- OpenSource: LGPLv3
- Stack: Eclipse XText + Xtend Lang
- SCM:
 - Código: GitHub (uqbar-project/wollok)
 - **Build**: Maven + Tycho
 - Continuous Integration: Travis
 - Continuous Deployment
 - **Coverage**: coveralls + jacoco
- Testing & TDD

Desarrollo de Wollok

Continuous Integration & Deployment

GitFlow

- Feature Branches
- Pull-Requests
- dev → master ← hotfixes

Integration:

- Travis
- compile, test, coverage, deploy
- Deployment:
 - Productos (IDE): multiples pataformas
 - Update Sites
 - WDK
 - 2 Ambientes: Stable & Dev

Desarrollo de Wollok Testing & TDD

- 87% Cobertura
- Runtime
 - Testean ejecución
 - Interprete
 - JUnit + iDSL
- Estáticos
 - Checkeos: XPect
 - Type System: JUnit + iDSL
 - Autocomplete: XPect
 - Formateo: JUnit + iDSL
- Pendientes
 - Quick-Fixes
 - Refactors



Features Avanzados

- Debugger
- Tests
- Sublime Plugins
- I18N

Sublime Support

- WDK
 - No IDE
 - \bullet \sim 70MB (vs \sim 140)
 - Headless: wchecker, winterpreter, wtest
- Syntax highlight
- Templates
- Linter

Sublime Support

```
3_polymorphism.wpgm - wollok-tests
OPEN FILES
                              1.1 booleans.wpgm ×
                                                   3 polymorphism.wpgm 

                                                                          2 object literals.wpgm ×
× 1.1_booleans.wpgm
                              program polymorphism {

    3_polymorphism.wpgm

× 2 object literals.wpgm
                          3
                                   // golondrina pepona con energia
FOLDERS
                          4
                                   val pepona = object {
5
                                        var energia = 100
  ▶ 🗀 .settings
                          6
                                        method comer(comida) {
  ▶ ( bin
                          7
                                             energia = energia + comida.energia()
  ▶ \(\Gamma\) META-INF
                          8
  ▼ P→ src
                          9
                                        method energia() { return energia }
   ▶ 🗀 bugs
                         10
   ▶ Mora
                         11
   ▶ 🗀 wollok
                        12
                                   /* el alpiste tambien tiene energia */
      1.1_booleans.wpgm
                         13
                                   val alpiste = object {
     [9 1.2 console.wpgm
                                        method energia() {
                         14
     (A) 10 collection literals
                        15
                                             return 5
     1_variables_and_num 16
     (A) 2 object literals.wpg 17
                        18
     3_polymorphism.wp
                        19
                                   pepona.comer(alpiste)
     4_objectliteral_as_par
                        20
     IA 5 var ref vs method
                                   tester.assert(pepona.energia() == 105)
     6 custom toString.w
                        22
      7_operator_overloadi
                        23
     (3 9 closures.wpgm
      CancoleObject.wpgm
Line 12, Column 44
                                                                                 Tab Size: 4
                                                                                              Wollok
```

Sublime Support

```
3 polymorphism.wpgm - wollok-tests
                                                                                                 UNREGISTERED
OPEN FILES
                                  1.1 booleans.wpgm ×
                                                         3 polymorphism.wpgm ×
                                                                                   2 object literals.wpgm ×
× 1.1_booleans.wpgm
                                 progr
                                                                                                         Total ...
                                                                                                         1000
× 2 object literals.wpgm
                                         12 Couldn't resolve reference to WReferenciable 'algo'
FOLDERS
                                         pepe.comer(algo)→
12 Couldn't resolve reference to WReferenciable 'pepe'
  ▶ 🗀 .settings
                                         pepe.comer(algo)→
  ▶ ( bin
                                         23 Couldn't resolve reference to WReferenciable 'tester'
  ▶ \(\Gamma\) META-INF
                                         tester.assert(pepona.energia() == 105)→
  ▼ 🗁 src
                            9
    ▶ 🗀 bugs
                           10
    ▶ Morg
                           11
                         •12
                                       pepe.comer(algo)
    ▶ Mollok
      [9 1.1 booleans.wpgm
                           14
                                       /* el alpiste tambien tiene energia */
      1.2_console.wpgm
                          15
                                       val alpiste = object {
      10_collection_literals
                                            method energia() {
                           16
      In 1 variables and num
                           17
                                                  return 5
      2_object_literals.wpg
                           18
      3_polymorphism.wp
      3 4 objectliteral as par
                           20
      5_var_ref_vs_method
                                       pepona.comer(alpiste)
      IA 6 custom toString.w
      7_operator_overloadi
                         •23
                                       tester.assert(pepona.energia() == 105)
      ₽ 9 closures.wpgm
      A consoleObject.wpgm
1-2 of 3 errors: Couldn't resolve reference to WReferenciable 'pepe'; Couldn't resolve reference to WReferenciable 'algo', 2 lines, 1 characters sele
```

Wollok Game

- S
- a
- b
- O

Experiencia en el Aula

- S
- a
- S

Introduccion Desarrollo de Wollok Features Avanzados Wollok Game Experiencia en el Aula

Muchas gracias