3/21 - 4/10

TEAM: GIT CONFUSED SPRINT 5

PRODUCT OWNER – GIL LEIBOVICH

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DEV TEAM – CHRIS JOHNSON

USER STORIES

- 1) As a developer, I need to implement the printing of Strings because customers of a JVM expect to be able to print "Hello world!".
- 2) As a developer, I need to be able to read in integers so that customers can make simple calculator programs.

STORY POINTS

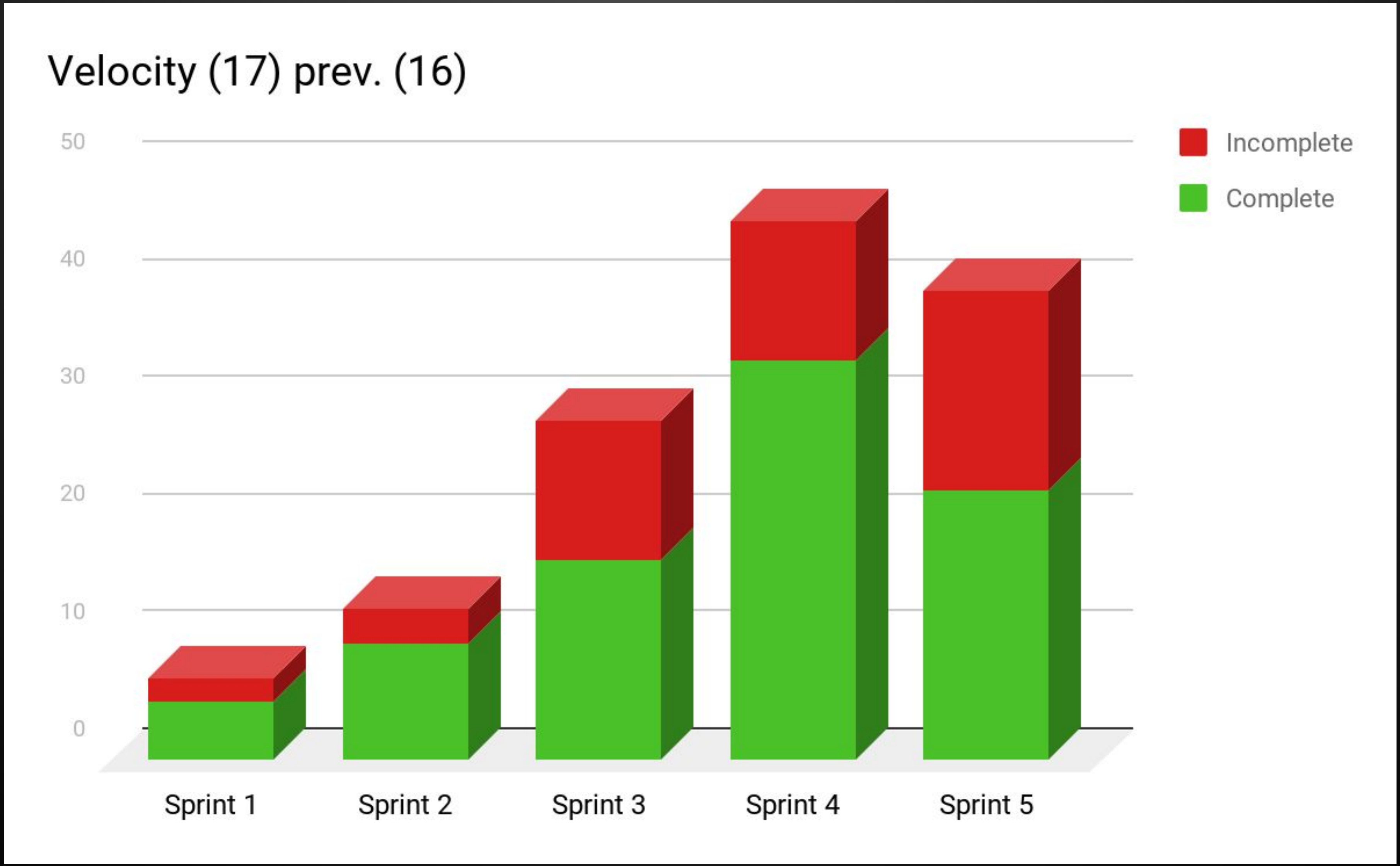
Complete:

- Implementing invokevirtual (8)
- Refactoring (10)
- Implement overflow (2)
- Jasmin test files (3)

Incomplete:

- Make tests for refactored code (7)
- Merge refactored code (1)
- invokespecial (printing character strings) (9)

DEMONSTRATION OF A RUNNING PROGRAM



Velocity (17) prev. (16)
50
40
30
20
10
0
🟥 Incomplete
🟩 Complete
Sprint 1
Sprint 2
Sprint 3
Sprint 4
Sprint 5

SYSTEM DEVELOPMENT LIFE CYCLE STATISTICS

SDLC STATISTICS

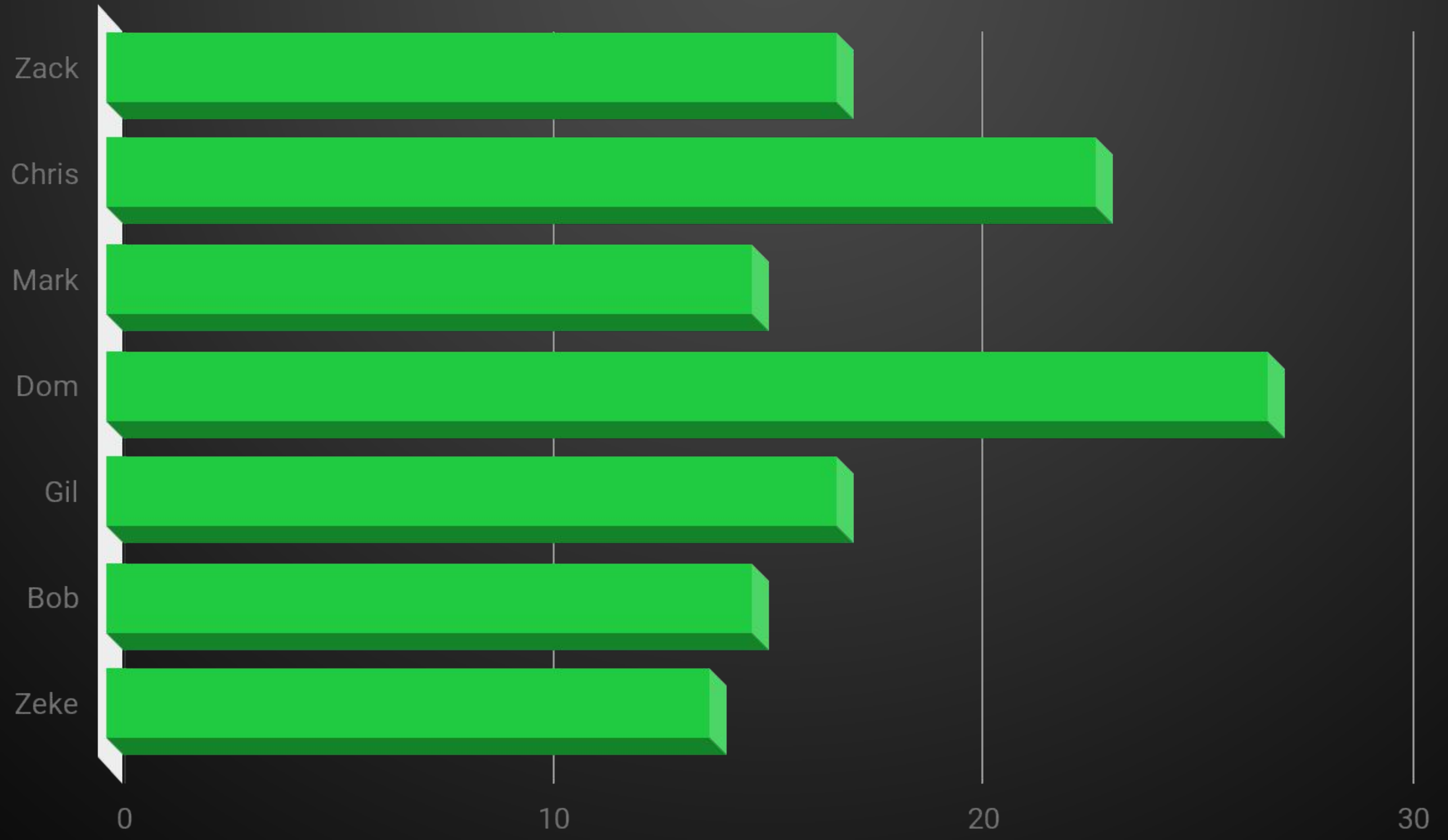
Sprint Backlog

- More opcode methods (new, getstatic, ldc, aload_0, aload_1)
- Break up larger classes

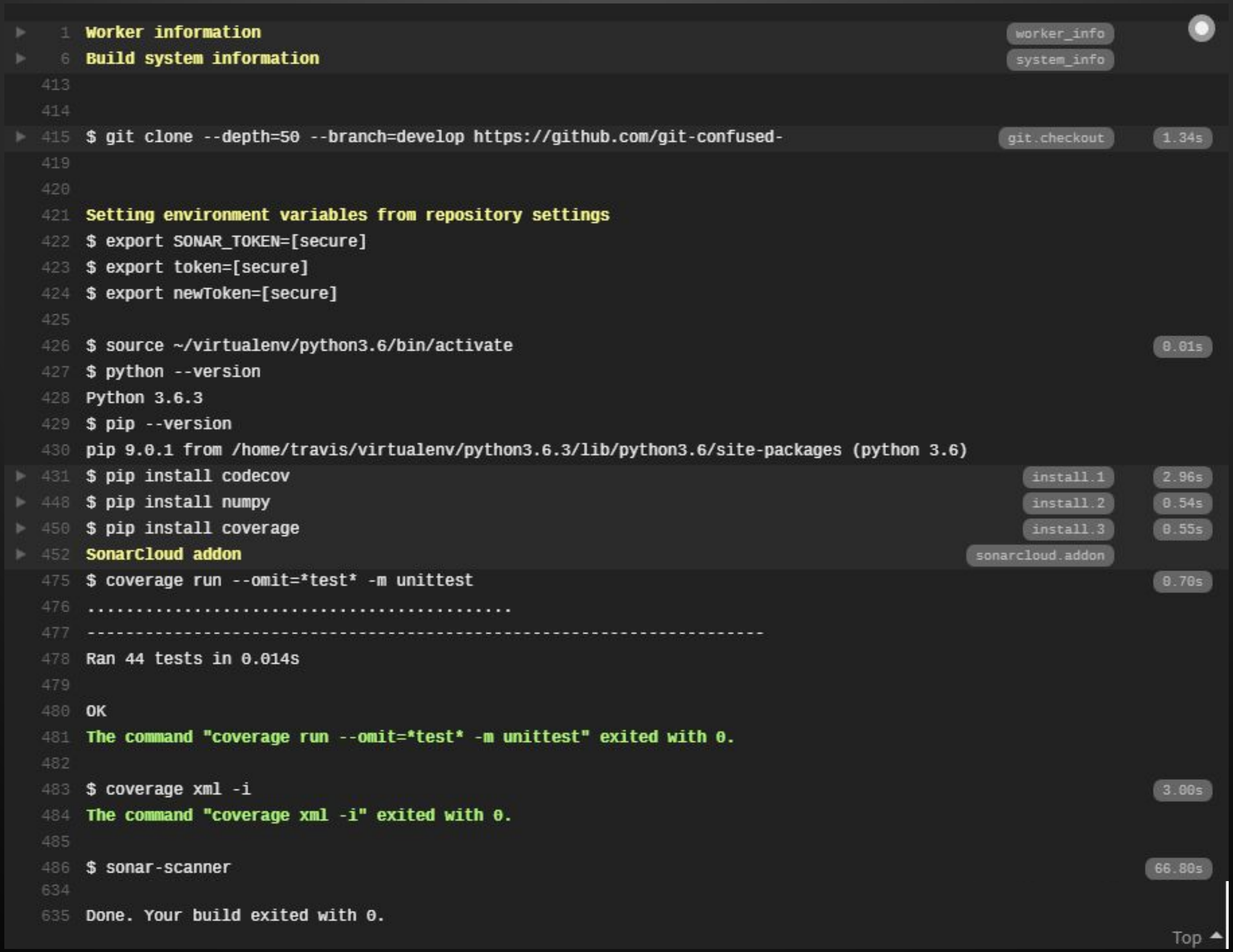
Project Backlog

- Opcode methods (istore[x], iload[x], ireturn, iastore, bipush, iaload)
- Write tests for refactored code
- Merge refactored code

Team Hours

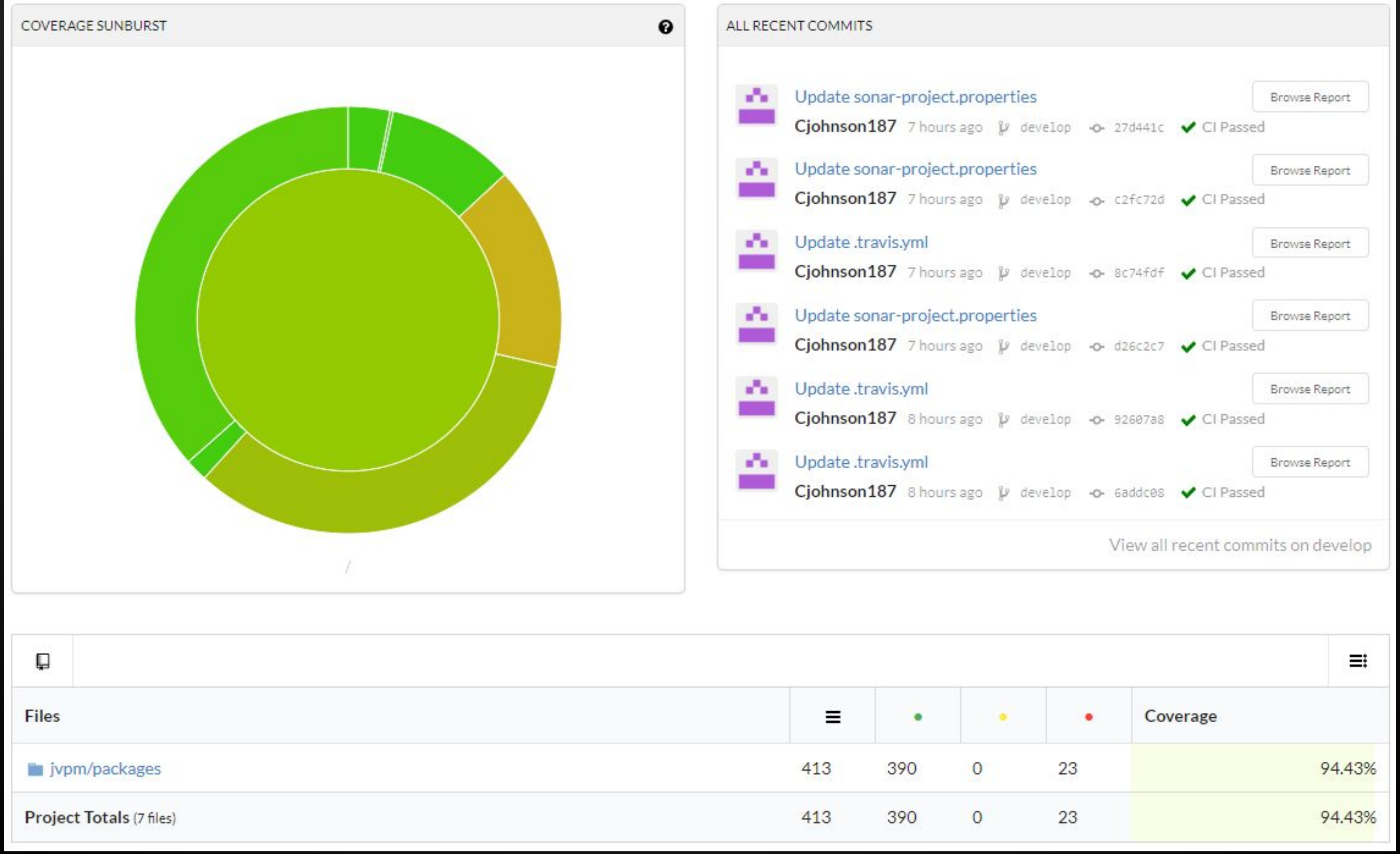


CODE STATISTICS (travis)



```
Worker information
Build system information


$ git clone --depth=50 --branch=develop https://github.com/git-confused-


Setting environment variables from repository settings
$ export SONAR_TOKEN=[secure]
$ export token=[secure]
$ export newToken=[secure]

$ source ~/virtualenv/python3.6/bin/activate
$ python --version
Python 3.6.3
$ pip --version
pip 9.0.1 from /home/travis/virtualenv/python3.6.3/lib/python3.6/site-packages (python 3.6)
$ pip install codecov
$ pip install numpy
$ pip install coverage
SonarCloud addon
$ coverage run --omit=*test* -m unittest
............................................
----------------------------------------------------------------------
Ran 44 tests in 0.014s

OK
The command "coverage run --omit=*test* -m unittest" exited with 0.

$ coverage xml -i
The command "coverage xml -i" exited with 0.

$ sonar-scanner

Done. Your build exited with 0.
```

CodeCov (static)



COVERAGE SUNBURST

ALL RECENT COMMITS

Update sonar-project.properties
Cjohnson187 7 hours ago develop 27d441c ✓ CI Passed
Browse Report

Update sonar-project.properties
Cjohnson187 7 hours ago develop c2fc72d ✓ CI Passed
Browse Report

Update .travis.yml
Cjohnson187 7 hours ago develop 8c74fdf ✓ CI Passed
Browse Report

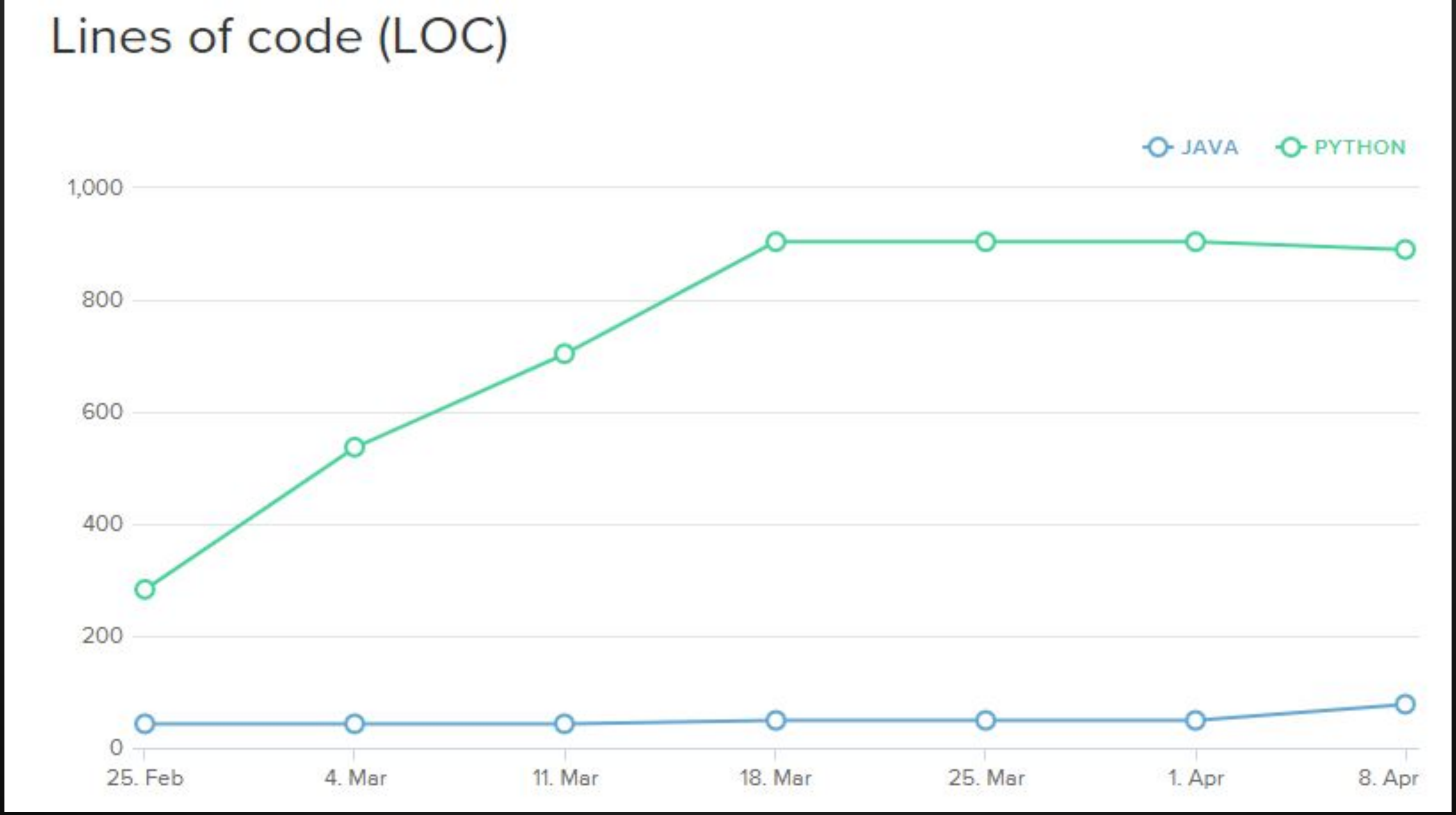
Update sonar-project.properties
Cjohnson187 7 hours ago develop d26c2c7 ✓ CI Passed
Browse Report

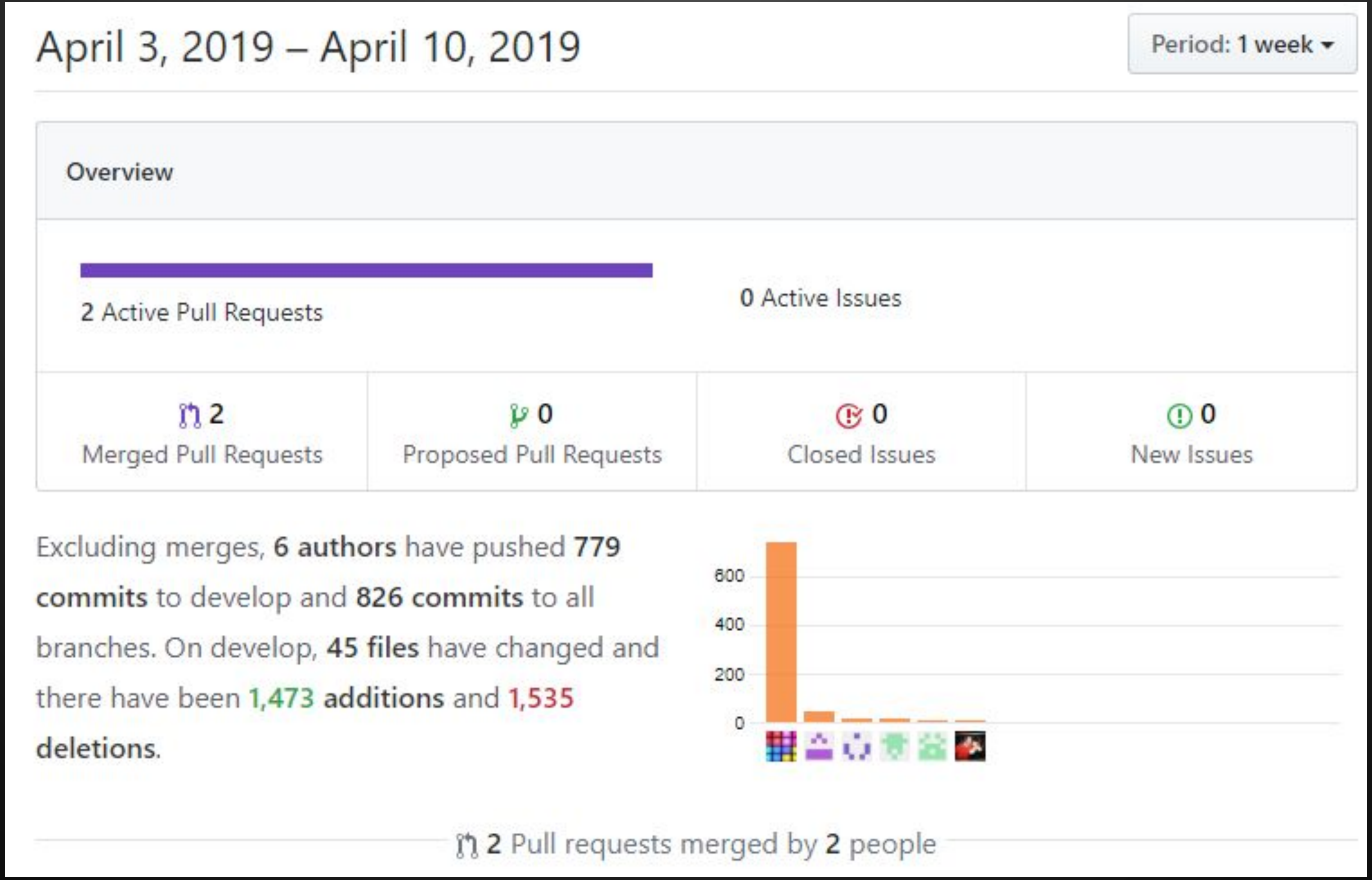
Update .travis.yml
Cjohnson187 8 hours ago develop 92607a8 ✓ CI Passed
Browse Report

Update .travis.yml
Cjohnson187 8 hours ago develop 6addc08 ✓ CI Passed
Browse Report

View all recent commits on develop

Files	≡	🟢	🟡	🔴	Coverage
jvpm/packages	413	390	0	23	94.43%
Project Totals (7 files)	413	390	0	23	94.43%


Lines of code (LOC)
JAVA
PYTHON
1,000
800
600
400
200
0
25. Feb
4. Mar
11. Mar
18. Mar
25. Mar
1. Apr
8. Apr



April 3, 2019 – April 10, 2019

Period: 1 week ▾

Overview

2 Active Pull Requests

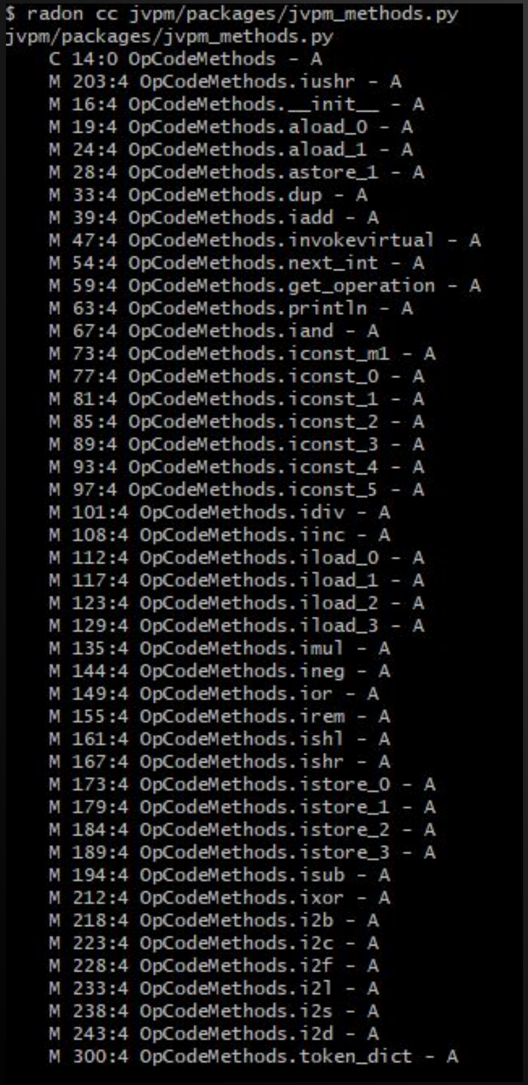
0 Active Issues

2	0	0	0
Merged Pull Requests	Proposed Pull Requests	Closed Issues	New Issues

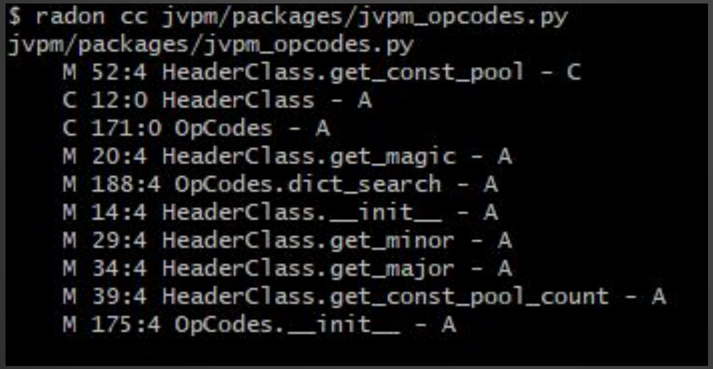
Excluding merges, **6 authors** have pushed **779 commits** to develop and **826 commits** to all branches. On develop, **45 files** have changed and there have been **1,473 additions** and **1,535 deletions**.

2 Pull requests merged by 2 people

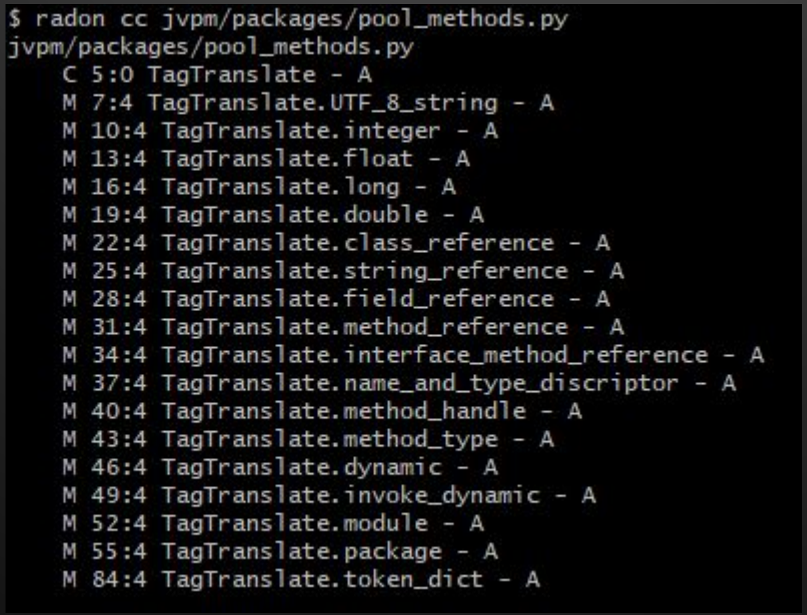
Radon (complexity)



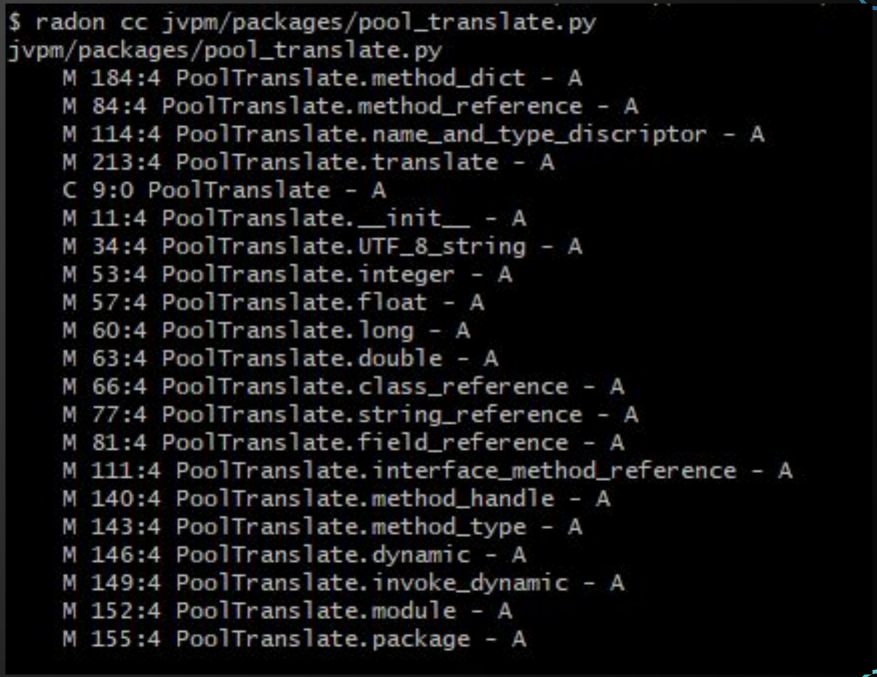
```
$ radon cc jvpm/packages/jvpm_methods.py
jvpm/packages/jvpm_methods.py
    C 14:0 OpCodeMethods - A
    M 203:4 OpCodeMethods.iushr - A
    M 16:4 OpCodeMethods.__init__ - A
    M 19:4 OpCodeMethods.aload_0 - A
    M 24:4 OpCodeMethods.aload_1 - A
    M 28:4 OpCodeMethods.astore_1 - A
    M 33:4 OpCodeMethods.dup - A
    M 39:4 OpCodeMethods.iadd - A
    M 47:4 OpCodeMethods.invokevirtual - A
    M 54:4 OpCodeMethods.next_int - A
    M 59:4 OpCodeMethods.get_operation - A
    M 63:4 OpCodeMethods.println - A
    M 67:4 OpCodeMethods.iand - A
    M 73:4 OpCodeMethods.iconst_m1 - A
    M 77:4 OpCodeMethods.iconst_0 - A
    M 81:4 OpCodeMethods.iconst_1 - A
    M 85:4 OpCodeMethods.iconst_2 - A
    M 89:4 OpCodeMethods.iconst_3 - A
    M 93:4 OpCodeMethods.iconst_4 - A
    M 97:4 OpCodeMethods.iconst_5 - A
    M 101:4 OpCodeMethods.idiv - A
    M 108:4 OpCodeMethods.iinc - A
    M 112:4 OpCodeMethods.iload_0 - A
    M 117:4 OpCodeMethods.iload_1 - A
    M 123:4 OpCodeMethods.iload_2 - A
    M 129:4 OpCodeMethods.iload_3 - A
    M 135:4 OpCodeMethods.imul - A
    M 144:4 OpCodeMethods.ineg - A
    M 149:4 OpCodeMethods.ior - A
    M 155:4 OpCodeMethods.irem - A
    M 161:4 OpCodeMethods.ishl - A
    M 167:4 OpCodeMethods.ishr - A
    M 173:4 OpCodeMethods.istore_0 - A
    M 179:4 OpCodeMethods.istore_1 - A
    M 184:4 OpCodeMethods.istore_2 - A
    M 189:4 OpCodeMethods.istore_3 - A
    M 194:4 OpCodeMethods.isub - A
    M 212:4 OpCodeMethods.ixor - A
    M 218:4 OpCodeMethods.i2b - A
    M 223:4 OpCodeMethods.i2c - A
    M 228:4 OpCodeMethods.i2f - A
    M 233:4 OpCodeMethods.i2l - A
    M 238:4 OpCodeMethods.i2s - A
    M 243:4 OpCodeMethods.i2d - A
    M 300:4 OpCodeMethods.token_dict - A
```



```
$ radon cc jvpm/packages/jvpm_opcodes.py
jvpm/packages/jvpm_opcodes.py
    M 52:4 HeaderClass.get_const_pool - C
    C 12:0 HeaderClass - A
    C 171:0 OpCodes - A
    M 20:4 HeaderClass.get_magic - A
    M 188:4 OpCodes.dict_search - A
    M 14:4 HeaderClass.__init__ - A
    M 29:4 HeaderClass.get_minor - A
    M 34:4 HeaderClass.get_major - A
    M 39:4 HeaderClass.get_const_pool_count - A
    M 175:4 OpCodes.__init__ - A
```

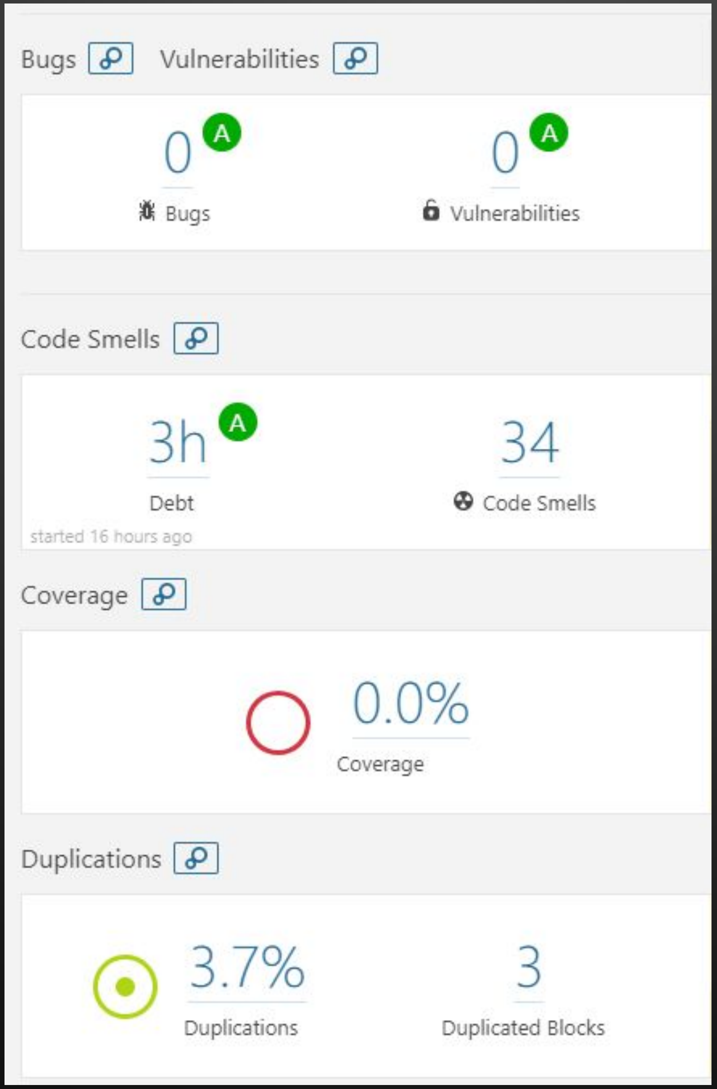


```
$ radon cc jvpm/packages/pool_methods.py
jvpm/packages/pool_methods.py
    C 5:0 TagTranslate - A
    M 7:4 TagTranslate.UTF_8_string - A
    M 10:4 TagTranslate.integer - A
    M 13:4 TagTranslate.float - A
    M 16:4 TagTranslate.long - A
    M 19:4 TagTranslate.double - A
    M 22:4 TagTranslate.class_reference - A
    M 25:4 TagTranslate.string_reference - A
    M 28:4 TagTranslate.field_reference - A
    M 31:4 TagTranslate.method_reference - A
    M 34:4 TagTranslate.interface_method_reference - A
    M 37:4 TagTranslate.name_and_type_descriptor - A
    M 40:4 TagTranslate.method_handle - A
    M 43:4 TagTranslate.method_type - A
    M 46:4 TagTranslate.dynamic - A
    M 49:4 TagTranslate.invoke_dynamic - A
    M 52:4 TagTranslate.module - A
    M 55:4 TagTranslate.package - A
    M 84:4 TagTranslate.token_dict - A
```



```
$ radon cc jvpm/packages/pool_translate.py
jvpm/packages/pool_translate.py
    M 184:4 PoolTranslate.method_dict - A
    M 84:4 PoolTranslate.method_reference - A
    M 114:4 PoolTranslate.name_and_type_descriptor - A
    M 213:4 PoolTranslate.translate - A
    C 9:0 PoolTranslate - A
    M 11:4 PoolTranslate.__init__ - A
    M 34:4 PoolTranslate.UTF_8_string - A
    M 53:4 PoolTranslate.integer - A
    M 57:4 PoolTranslate.float - A
    M 60:4 PoolTranslate.long - A
    M 63:4 PoolTranslate.double - A
    M 66:4 PoolTranslate.class_reference - A
    M 77:4 PoolTranslate.string_reference - A
    M 81:4 PoolTranslate.field_reference - A
    M 111:4 PoolTranslate.interface_method_reference - A
    M 140:4 PoolTranslate.method_handle - A
    M 143:4 PoolTranslate.method_type - A
    M 146:4 PoolTranslate.dynamic - A
    M 149:4 PoolTranslate.invoke_dynamic - A
    M 152:4 PoolTranslate.module - A
    M 155:4 PoolTranslate.package - A
```

SonarCloud (dynamic)



Bugs Vulnerabilities

0 A
Bugs

0 A
Vulnerabilities

Code Smells

3h A
Debt
started 16 hours ago

34
Code Smells

Coverage

0.0%
Coverage

Duplications

3.7%
Duplications

3
Duplicated Blocks

Sprint Retrospective Last Sprint

WHAT WENT POORLY

- Took us a while to figure out the tasks.
- Couple people did most of the coding.
- Breaking tasks down in a more efficient manner.

WHAT ARE WE GOING TO START/STOP/CONTINUE DOING

- More discipline trying to plan more efficiently.
- Break down the User Stories more evenly based on work needed to complete.
- Split workload more evenly between the Dev team.
- Implement TDD.
- Continue our bi-weekly meetups.

Sprint Retrospective

WHAT WENT WELL

- Assigning tasks at the beginning of the sprint and making sure everyone had an assignment they were comfortable with
- Sharing what we learned with each other and coordinating and working on tasks together
- Continued to have regular meetings

WHAT WENT POORLY

- Refactoring was a little uncoordinated
- Overlap of functionality
- Created too many backlog items in addition to product backlog and user stories
- Spent more time on “side tasks” than the main sprint objectives
- Still have a lot of items on the backlog

WHAT ARE WE GOING TO START/STOP/CONTINUE DOING

- Start: Implement TDD
- Start: Prioritize sprint backlog over product backlog
- Stop: Overlapping code
- Continue: our bi-weekly meetups
- Continue: Evenly distribute workload

Thank You