

2/20 - 3/06

TEAM: GIT CONFUSED SPRINT 3

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The image features a dark gray background with a subtle gradient. In the four corners, there are decorative elements resembling circuit board traces or neural network connections. These elements consist of thin, light blue lines that branch out and terminate in small circles, creating a symmetrical, geometric pattern around the central text.

DEMONSTRATION OF A RUNNING PROGRAM

USER STORIES

- As a developer, I need to write methods for integer operations for our JVM.
- As a developer, I need to create the stack class that will be used by the operands.
- As a developer, I need to create simple Java files to test integer operations.

*all user stories are complete, but we are running the program on a mock object rather than the real opcodes from Java files.

STORY POINTS

Complete:

- Created the stack for operands (2)
- Write Unittests for Opcode Methods (5)
- Write Opcode Methods (5)
- Write a switcher to call methods based on the opcode (2)
- Created simple Java files to test integer operation (2)
- Code coverage over 90% (1)

Incomplete:

- Pull .class bytes properly (8)
- Clean up Constant Pool Method (1)
- Jasmin test file (3)

The image features a dark gray background with stylized, light blue circuit-like lines in the corners. These lines consist of straight segments and small circles, resembling a printed circuit board or a network diagram. The lines are positioned in the top-left, top-right, bottom-left, and bottom-right corners, framing the central text.

SYSTEM DEVELOPMENT LIFE CYCLE STATISTICS

SDLC STATISTICS

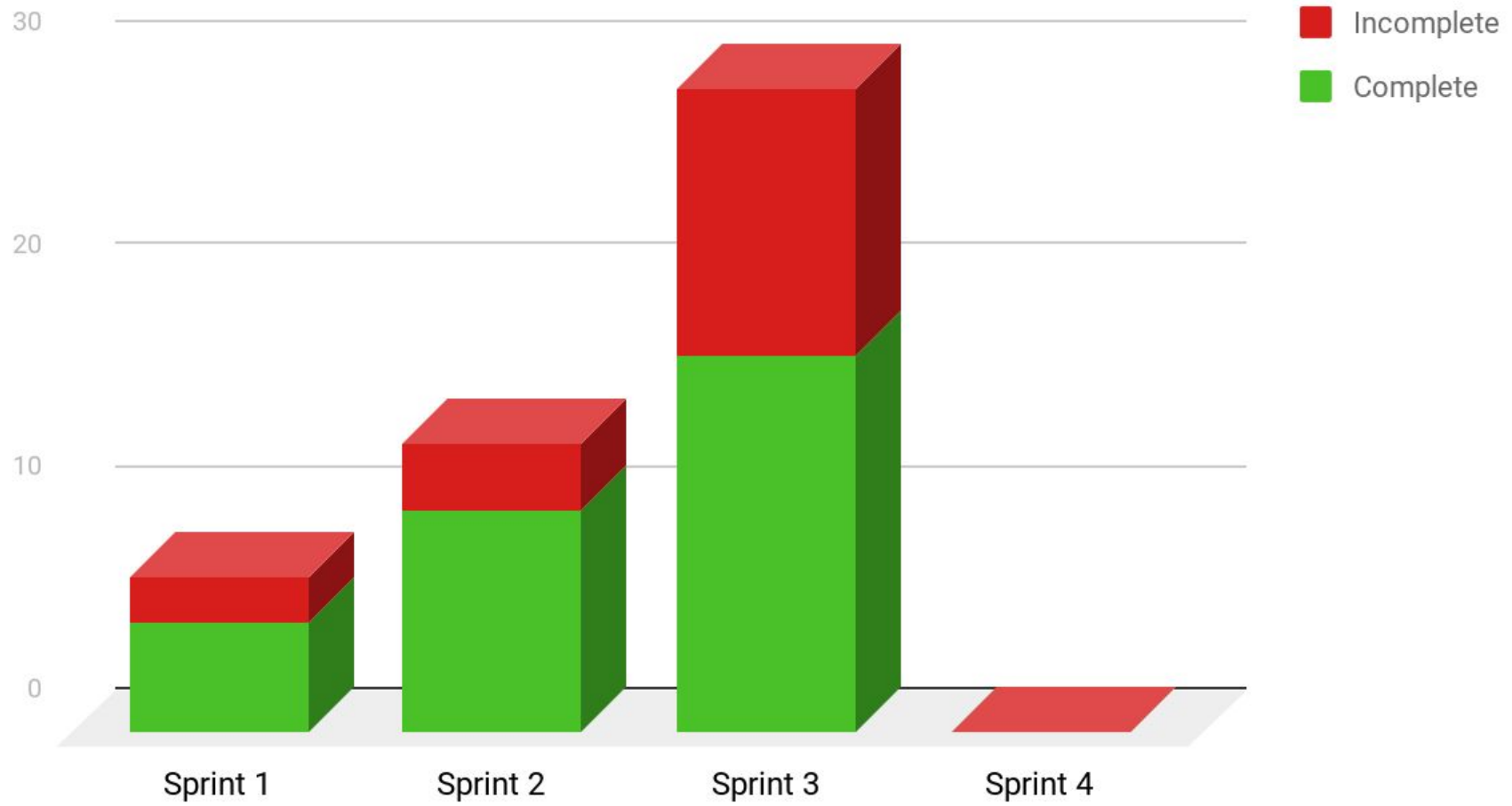
Sprint Backlog (36)

- Create stack for Operands.
- Create Unittests for Opcode methods.
- Implement some of the Integer Oper.
- Create simple Java files to test.

Project Backlog (11)

- Write the remaining Opcode methods.
- Pull Opcodes from .class file correctly.

Velocity (10) prev. (6)

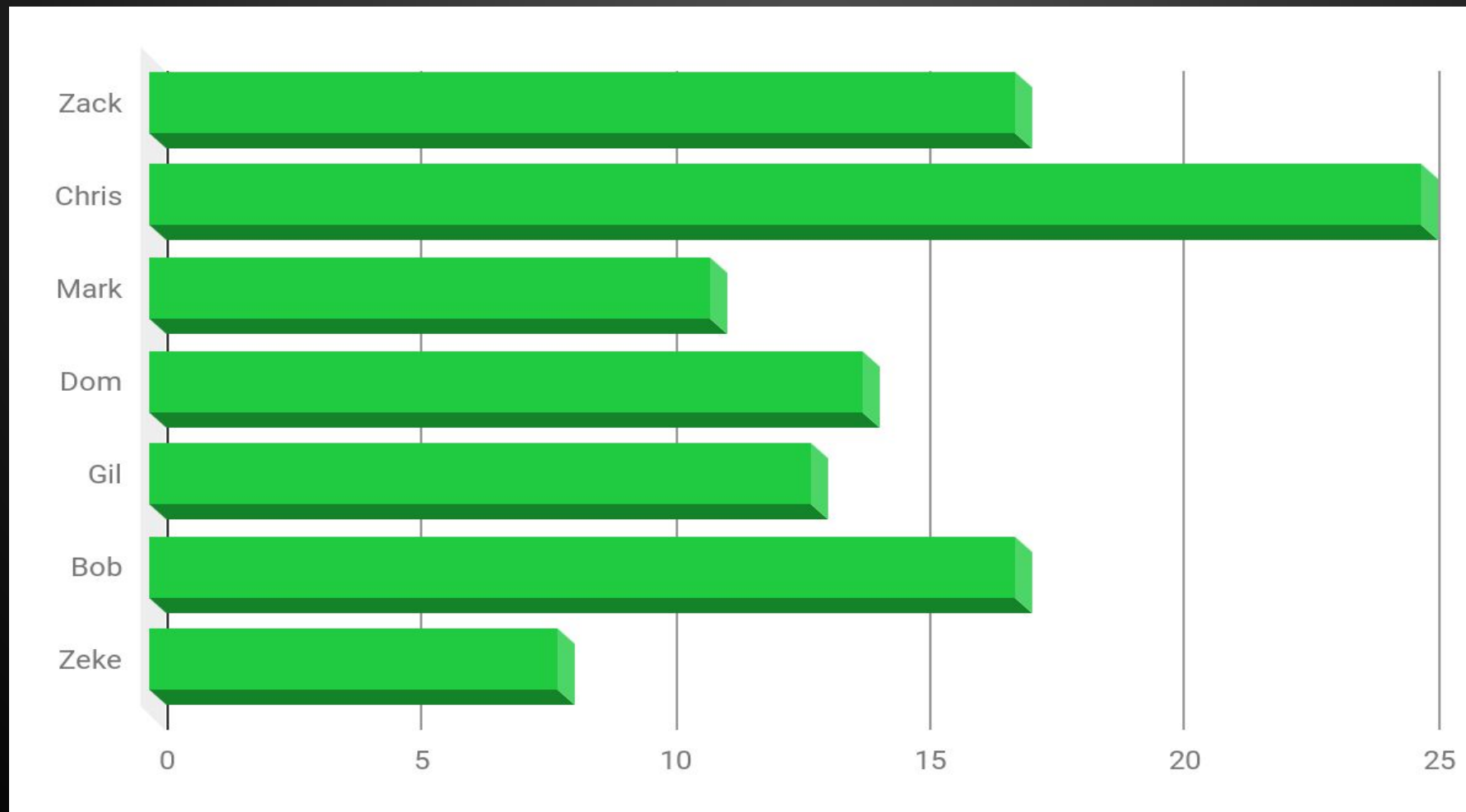


Team Contributions

Contributions to develop, excluding merge commits



Team Hours



*additional 8 hrs each for 2hr Mon & Wed team meetings.

CODE STATISTICS

```
▶ 1 Worker information worker_info
▶ 6 Build system information system_info
413
414
▶ 415 $ git clone --depth=50 --branch=develop https://github.com/git-confused-team3/GitConfused.git git.checkout 0.59s
419
420
421 Setting environment variables from repository settings
422 $ export SONAR_TOKEN=[secure]
423
424 $ source ~/virtualenv/python3.6/bin/activate 0.01s
425 $ python --version
426 Python 3.6.3
427 $ pip --version
428 pip 9.0.1 from /home/travis/virtualenv/python3.6.3/lib/python3.6/site-packages (python 3.6)
▶ 429 $ pip install codecov install 2.64s
▶ 446 SonarCloud addon sonarcloud.addon
469 $ coverage run -m unittest 0.22s
470 .....
471 -----
472 Ran 33 tests in 0.022s
473
474 OK
475 The command "coverage run -m unittest" exited with 0.
476
477 $ coverage xml -i 0.20s
478 The command "coverage xml -i" exited with 0.
479
480
▶ 481 $ codecov after_success 0.76s
507
508 Done. Your build exited with 0.
```

Trash Top

CodeClimate

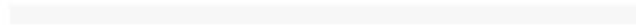
<https://codeclimate.com/github/git-confused-team3/GitConfused>

Breakdown

29 FILES



MAINTAINABILITY



TEST COVERAGE

Codebase summary

MAINTAINABILITY



1 day

TEST COVERAGE



Repository stats

CODE SMELLS

3

DUPLICATION

6

OTHER ISSUES

26

CodeCov

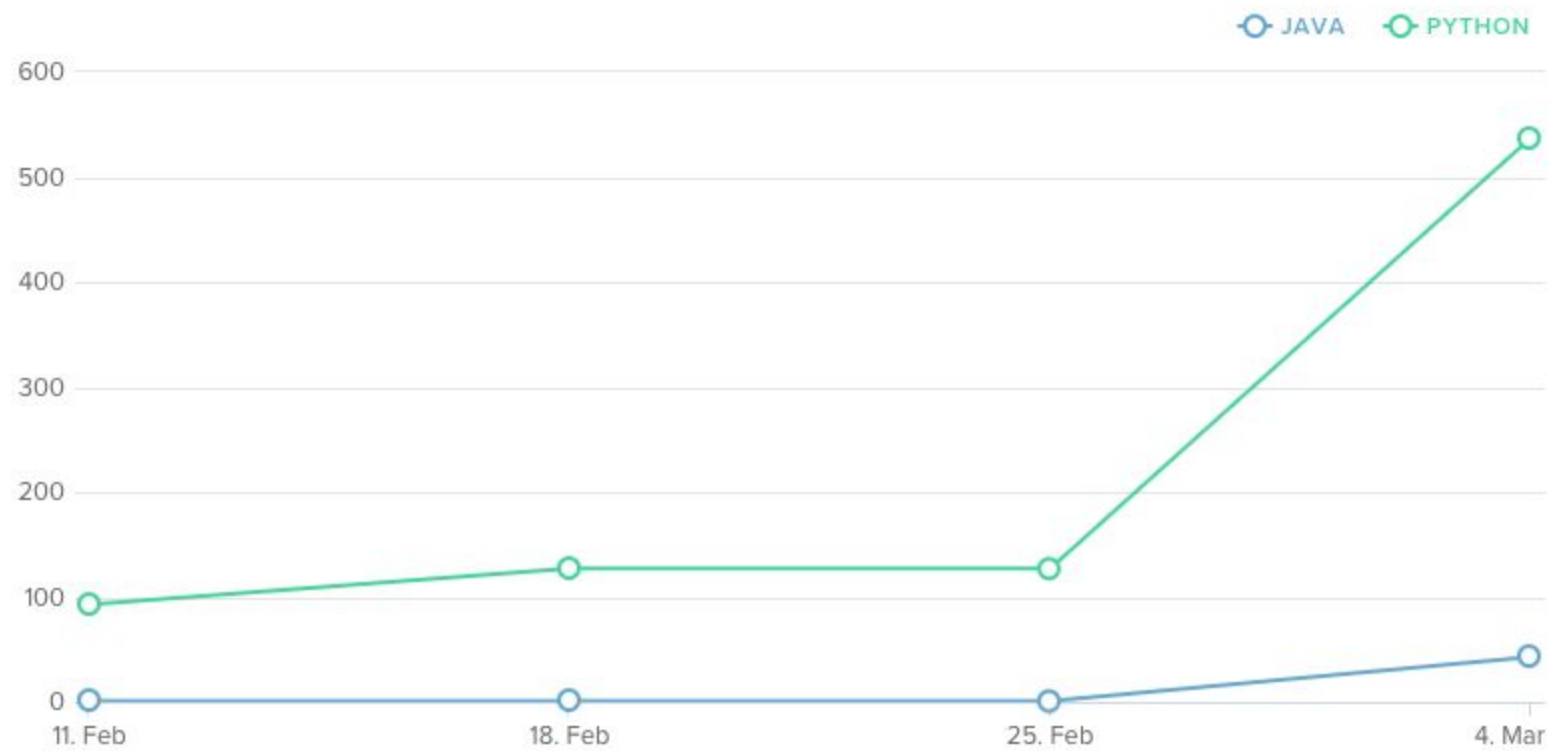
```
480
481 $ codecov
482
483
484
485
486
487
488
489
490
491 ==> Detecting CI provider
492   Travis Detected
493 ==> Preparing upload
494 ==> Processing gcov (disable by -X gcov)
495   Executing gcov (find /home/travis/build/git-confused-team3/GitConfused -not -path './bower_components/**' -not -
496   path './node_modules/**' -not -path './vendor/**' -type f -name '*.gcno' -exec gcov -pb {} +)
497 ==> Collecting reports
498   + /home/travis/build/git-confused-team3/GitConfused/coverage.xml bytes=20432
499 ==> Appending environment variables
500   + TRAVIS_OS_NAME
501   + TRAVIS_PYTHON_VERSION
502 ==> Uploading
503   .url https://codecov.io
504   .query
505     commit=b29e374374132a065d687ee3023db153c00b4cea&branch=develop&job=182218527&pr=false&service=travis&build=597.1&slug=
506     git-confused-team3%2FGitConfused&package=py2.0.15
507   Pinging Codecov...
508   Uploading to S3...
509   https://codecov.io/github/git-confused-team3/GitConfused/commit/b29e374374132a065d687ee3023db153c00b4cea
510
511 Done. Your build exited with 0.
```

Screenshot

Top

```
$ coverage report -m
Name                               Stmts  Miss  Cover   Missing
-----
jvpm\jvpm_dict.py                  7      0   100%
jvpm\jvpm_methods.py             107      2    98%   61, 144
jvpm\jvpm_opcodes.py              42      8    81%   79-92
jvpm\stack.py                     13      0   100%
-----
TOTAL                             169     10    94%
```

Lines of code (LOC)



Overview



2 Active Pull Requests

0 Active Issues

1

Merged Pull Request

1

Proposed Pull Request

0

Closed Issues

0

New Issues

Excluding merges, **7 authors** have pushed **348 commits** to develop and **529 commits** to all branches. On develop, **28 files** have changed and there have been **1,702 additions** and **88 deletions**.




```
class test_stack(unittest.TestCase):
    def test_is_empty(self):
        s = Stack()
        s.push(1)
        s.pop()
        self.assertTrue(s.is_empty())

    def test_push(self):
        s = Stack()
        s.push(2)
        s.push(3)
        v = s.pop()
        self.assertEqual(v, 3)

    def test_pop(self):
        s = Stack()
        s.push(3)
        s.push(2)
        s.push(4)
        s.push(0)
        a = s.pop()
        b = s.pop()

        self.assertEqual(a, 0)
        self.assertEqual(b, 4)

    def test_peek(self):
        s = Stack()
        s.push("hello")
        s.push("hi")
        self.assertEqual(s.peak(), "hi")
        s.pop()
```

```
class unittest_header(unittest.TestCase):
    def setUp(self):
        m = mock_open(read_data='CAFEBABE00000036000F')
        with patch('__name__ + '.open', m):
            self.cf = jvpm_opcodes.HeaderClass()

    def test_magic(self):
        self.assertEqual(self.cf.get_magic(), 'CAFEBABE')
        self.assertEqual(self.cf.get_minor(), 0)
        self.assertTrue(53 <= self.cf.get_major() <= 55)
        self.assertEqual(self.cf.get_const_pool_count(), 15)

class Test_Op_Methods(unittest.TestCase):
    def test_iadd(self):
        a = OpCodeMethods()

        a.stack.push(2)
        a.stack.push(1)
        a.iadd()
        b = a.stack.pop()
        self.assertEqual(b, 3)

    def test_iand(self):
        a = OpCodeMethods()

        a.stack.push(5)
        a.stack.push(3)
        a.iand()
        b = a.stack.pop()
        self.assertEqual(b, 1)

    def test_iconst_m1(self):
        a = OpCodeMethods()

        a.iconst_m1()
        b = a.stack.peak()
        self.assertEqual(b, -1)

        a.stack.push(5)
        self.assertEqual(a.stack.peak(), 5)
        self.assertNotEqual(a.stack.peak(), -1)
```

Sprint Retrospective

WHAT WENT WELL

- We got a lot of coding done early.
- Use of Trello board.
- Multiple people collaborating on single problem (resolving faster).
- Following SCRUM roles.

WHAT WENT POORLY

- Did not implement TDD.
- Couple people did most of the initial coding.
- Breaking tasks down.
- Initial understanding of what had to be done.
- Planning sprint timeline.

WHAT ARE WE GOING TO START/STOP/CONTINUE

- Begin the Sprint with research rather than coding.
- Break down the User Stories evenly based on work needed to complete.
- Split workload between the Dev team.
- Implement TDD.

Sprint Retrospective

SPRINT 2: WHAT ARE WE GOING TO START/STOP/CONTINUE

- Start using slack/trello more often so that we have a record of what the team has discussed
- Stop overlapping project duties.
- Continue twice weekly meet ups with team to keep up to date with sprint progress.

CONTINUED IN SPRINT 3.

- Used Trello board to track who is working on what.
- Resulted in minimum overlap of work.
- Met twice a week for 2hrs before class.