Math 802: Intro to Course Tools

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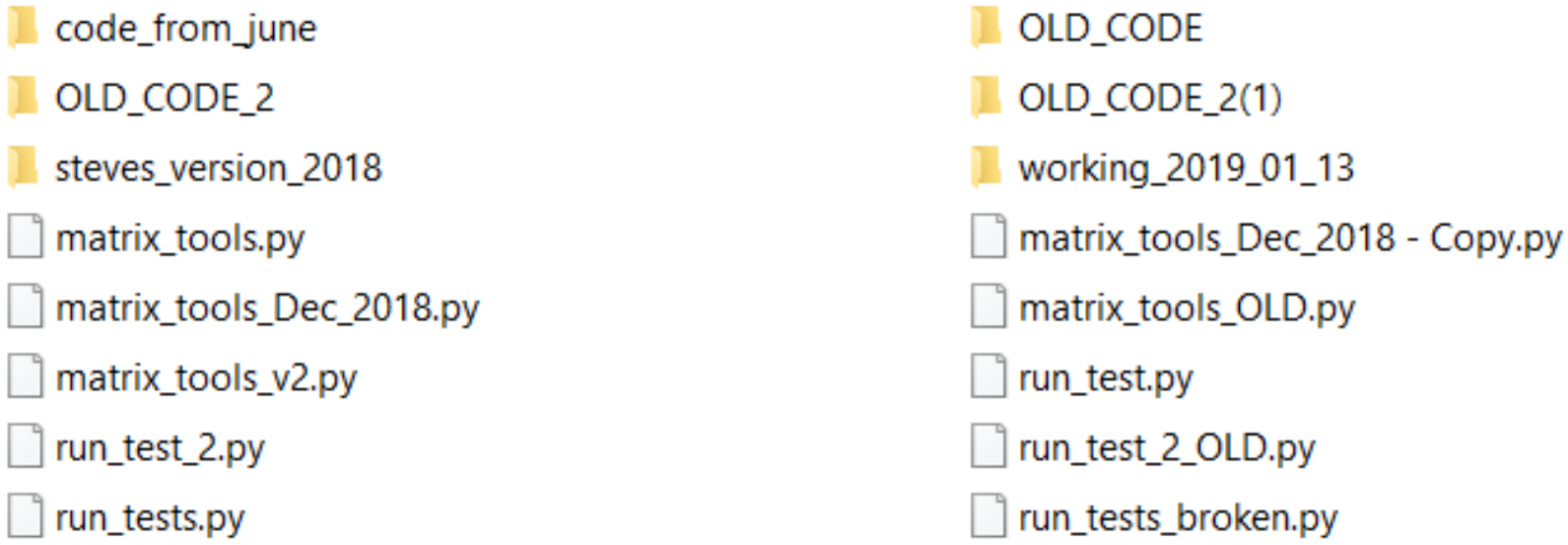
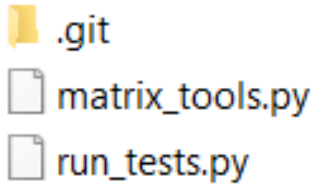
Before git

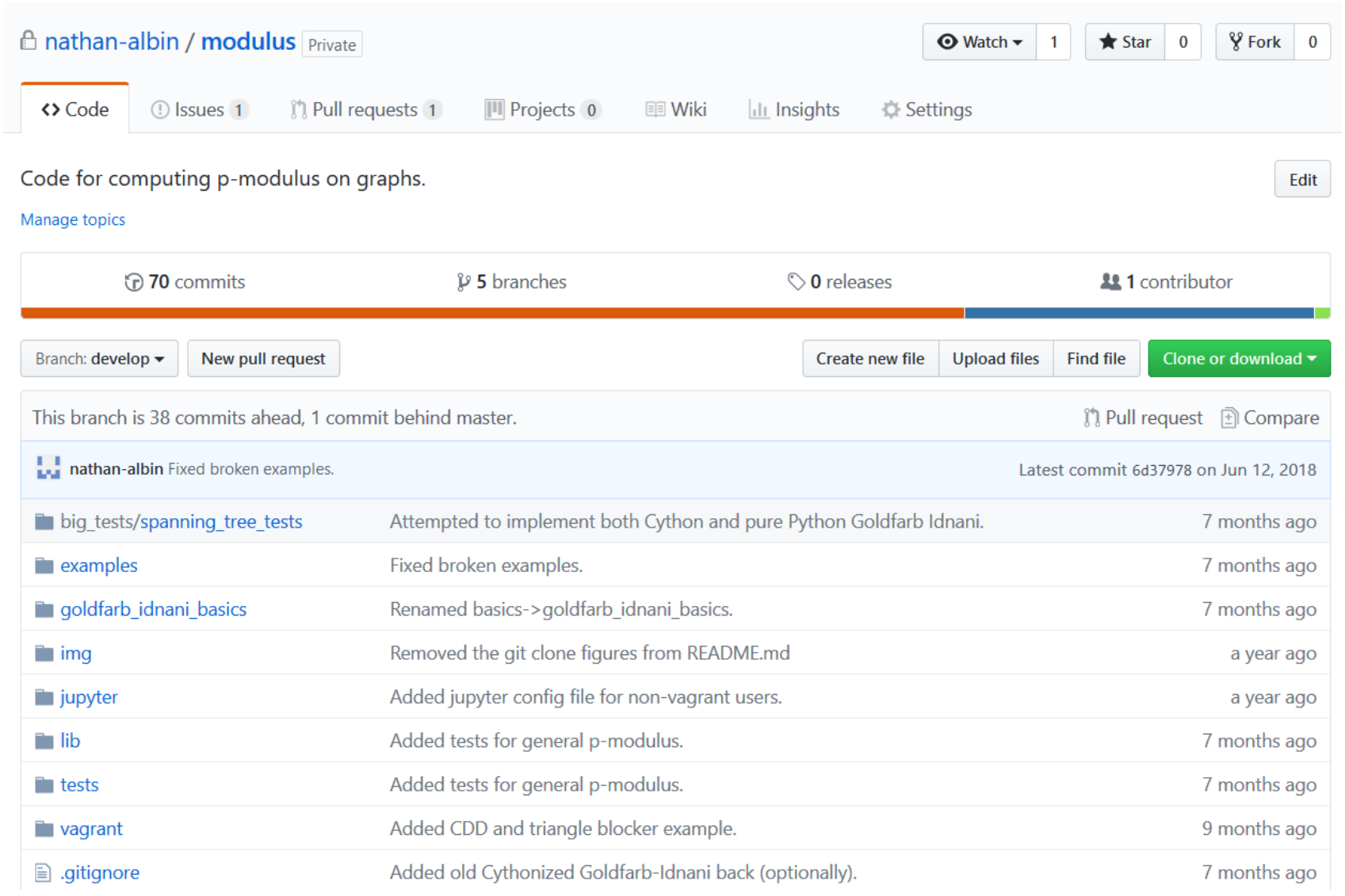

code_from_june
OLD_CODE_2
steves_version_2018
matrix_tools.py
matrix_tools_Dec_2018.py
matrix_tools_v2.py
run_test_2.py
run_tests.py
OLD_CODE
OLD_CODE_2(1)
working_2019_01_13
matrix_tools_Dec_2018 - Copy.py
matrix_tools_OLD.py
run_test.py
run_test_2_OLD.py
run_tests_broken.py

After git




```
$ git log
commit 83a257c9bc8e7ac48a520bd51a073c61dfbff556 (HEAD -> master)
Author: Nathan Albin <albin@math.ksu.edu>
Date:   Thu Jan 17 09:02:48 2019 -0600

    Fixed bug in 2x2 matrices.

commit 799572d76d146664294c85574171335b82b1715c
Author: Nathan Albin <albin@math.ksu.edu>
Date:   Thu Jan 17 09:01:57 2019 -0600

    Changed the way tridiagonal matrices are stored.

commit b37ecb85e04fde0de158453446bc6bf49630b488
Author: Nathan Albin <albin@math.ksu.edu>
Date:   Thu Jan 17 09:01:22 2019 -0600

    Added 2 more tests.

commit 4d9a294e3fb8bca22949fc761a893bf9b6fbf981
Author: Nathan Albin <albin@math.ksu.edu>
Date:   Thu Jan 17 09:00:41 2019 -0600

    Initial version.
```

Managing repositories on GitHub



Static code analysis with pylint

```
(math802) C:\Users\natha\Desktop\tmp>pylint -f colorized my_code.py
************* Module my_code
my_code.py:1:25: C0326: No space allowed before bracket
def blah(x_value, _value ):
                         ^ (bad-whitespace)
my_code.py:4:17: C0326: Exactly one space required after comma
    print(x_value,x_value)
                ^ (bad-whitespace)
my_code.py:6:0: C0304: Final newline missing (missing-final-newline)
my_code.py:1:0: C0111: Missing module docstring (missing-docstring)
my_code.py:1:0: C0111: Missing function docstring (missing-docstring)

--------------------------------------------------------------------
Your code has been rated at -2.50/10 (previous run: -2.50/10, +0.00)
```

Testing with pytest

```
(math802) C:\Users\natha\Dropbox\wrk\teaching\MATH802\MATH802S19\assignments\release>pytest -v --tb=n
o 01-1d-elliptic-fd
====================================== test session starts ======================================
platform win32 -- Python 3.7.1, pytest-4.1.0, py-1.7.0, pluggy-0.8.1 -- C:\Users\natha\Miniconda3\env
s\math802\python.exe
cachedir: .pytest_cache
rootdir: C:\Users\natha\Dropbox\wrk\teaching\MATH802\MATH802S19\assignments\release, inifile:
collected 13 items

01-1d-elliptic-fd/test_elliptic_tools.py::test_poisson_system_2[D-D] FAILED                  [  7%]
01-1d-elliptic-fd/test_elliptic_tools.py::test_poisson_system_2[D-N] FAILED                  [ 15%]
01-1d-elliptic-fd/test_elliptic_tools.py::test_poisson_system_2[N-D] FAILED                  [ 23%]
01-1d-elliptic-fd/test_elliptic_tools.py::test_poisson_system_4[D-D] PASSED                  [ 30%]
01-1d-elliptic-fd/test_elliptic_tools.py::test_poisson_system_4[D-N] PASSED                  [ 38%]
01-1d-elliptic-fd/test_elliptic_tools.py::test_poisson_system_4[N-D] PASSED                  [ 46%]
01-1d-elliptic-fd/test_elliptic_tools.py::test_poisson_solver_2[D-D] FAILED                  [ 53%]
01-1d-elliptic-fd/test_elliptic_tools.py::test_poisson_solver_2[D-N] FAILED                  [ 61%]
01-1d-elliptic-fd/test_elliptic_tools.py::test_poisson_solver_2[N-D] FAILED                  [ 69%]
01-1d-elliptic-fd/test_elliptic_tools.py::test_poisson_solver_4[D-D] FAILED                  [ 76%]
01-1d-elliptic-fd/test_elliptic_tools.py::test_poisson_solver_4[D-N] FAILED                  [ 84%]
01-1d-elliptic-fd/test_elliptic_tools.py::test_poisson_solver_4[N-D] FAILED                  [ 92%]
01-1d-elliptic-fd/test_fd_tools.py::test_fd_vandermonde PASSED                               [100%]

================================== 9 failed, 4 passed in 0.35 seconds ===================================
```