From Pylama to Pylava

Building a Community Maintained Fork of Pylama

Susam Pal

PyCon UK 2018, Cardiff City Hall, Cardiff, UK

15 Sep 2018

About Me

- Security software developer working at Walmart Labs.
- Developing security microservices in Python and Go.
- Maintainer of Pylava on Fridays.

What is Pylama?

- Pylama is a code audit tool for Python and JavaScript.
- Wraps around other popular linters and code quality tools.
- Uses pycodestyle, pydocstyle, PyFlakes, McCabe, etc.
- Supports Pylint and Gjslint via extension packages.
- Written and maintained by Kirill Klenov since 2012.
- Maintained until 2017.

Why Fork Pylama?

- Need for maintenance updates.
- Python 3.6 warned that async would become a keyword.
- In Python 3.7, async did become a reserved keyword.
- Pylama broke!

SyntaxError!

Forking Pylama to Pylava

- Pull requests to fix issues were already available from contributors.
- Forked Pylama to Pylava.
- Pull requests sent to Pylama were merged into Pylava.
- Pylava is now maintained as a community project.
- Forked Pylama_pylint to Pylava_pylint.
- Pylava_pylint is also maintained as a community project.
- Pylama_gjslint is not available with Pylava yet.

Use Pylava

- Pylava is now available via its own PyPI entry at https://pypi.org/project/pylava/.
- Install it with pip and enter the command pylava to run it.
 - \$ pip install pylava
 - \$ pylava
- No output is good.

Example Report

```
~/git/pylava$ pylava
config.py:24:80: E501 line too long (89 > 79 characters) [pycodestyle]
config.pv:123:80: E501 line too long (81 > 79 characters) [pvcodestvle]
config.py:151:80: E501 line too long (88 > 79 characters) [pycodestyle]
core.py:14:1: C901 'run' is too complex (17) [mccabe]
core.pv:92:5: E731 do not assign a lambda expression, use a def [pvcodestvle]
core.py:95:9: E731 do not assign a lambda expression, use a def [pycodestyle]
main.py:13:1: C901 'check_path' is too complex (11) [mccabe]
main.py:28:80: E501 line too long (87 > 79 characters) [pycodestyle]
main.pv:38:80: E501 line too long (84 > 79 characters) [pvcodestvle]
lint/pylava_radon.py:27:80: E501 line too long (90 > 79 characters) [pycodestyle]
lint/pylava_radon.py:28:80: E501 line too long (83 > 79 characters) [pycodestyle]
lint/pylava radon.py:31:1: W391 blank line at end of file [pycodestyle]
lint/pylava_pyflakes.py:26:1: E303 too many blank lines (3) [pycodestyle]
lint/pylava_mccabe.py:22:80: E501 line too long (89 > 79 characters) [pycodestyle]
lint/extensions.pv:38:1: E402 module level import not at top of file [pvcodestvle]
lint/pylaya pydocstyle.py:12:1: E402 module level import not at top of file [pycodestyle]
lint/pylava_pydocstyle.py:29:80: E501 line too long (90 > 79 characters) [pycodestyle]
lint/pylava_pycodestyle.py:2:80: E501 line too long (80 > 79 characters) [pycodestyle]
libs/inirama.py:29:1: C901 'TryExcept 29' is too complex (12) [mccabe]
libs/importlib.py:6:1: E302 expected 2 blank lines, found 1 [pycodestyle]
libs/importlib.py:11:1: E0602 undefined name 'xrange' [pyflakes]
libs/importlib.py:16:31: E127 continuation line over-indented for visual indent [pycodestyle]
```

Project URLs

GitHub: https://github.com/pylava/pylava

Documentation: https://pylavadocs.readthedocs.io/

PyPI: https://pypi.org/project/pylava/

Thank You!