



LATEST, FRESHEST TOOLS FOR MANAGING PYTHON CODEBASES

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CODEBASE MANAGEMENT?

Organize



Store

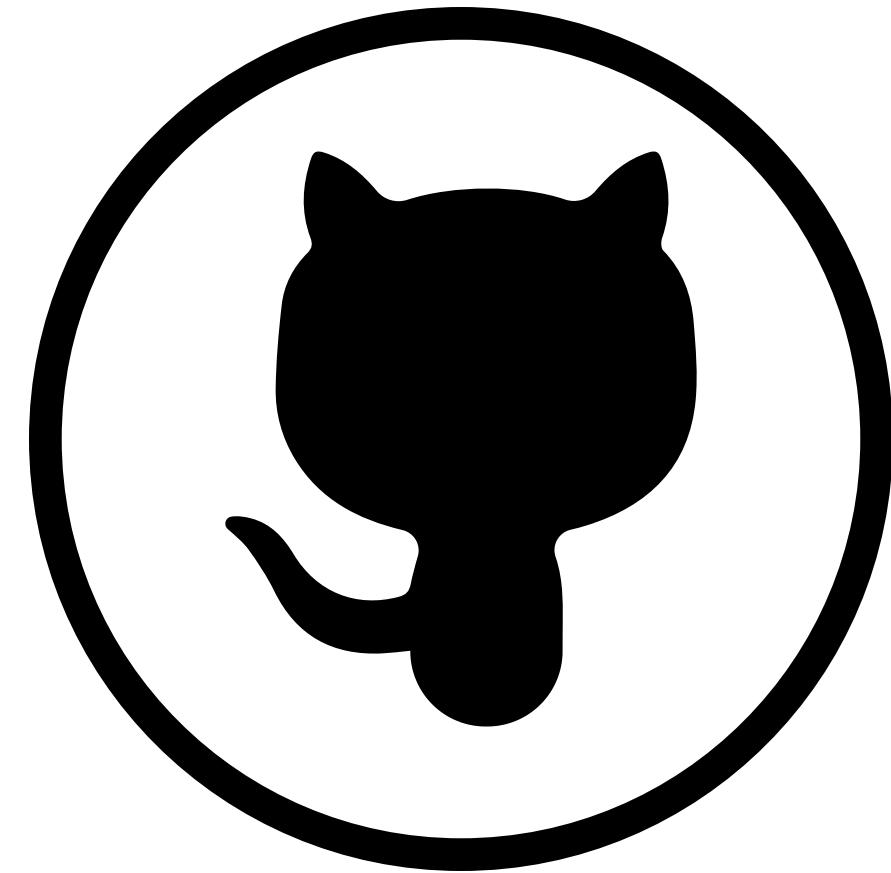
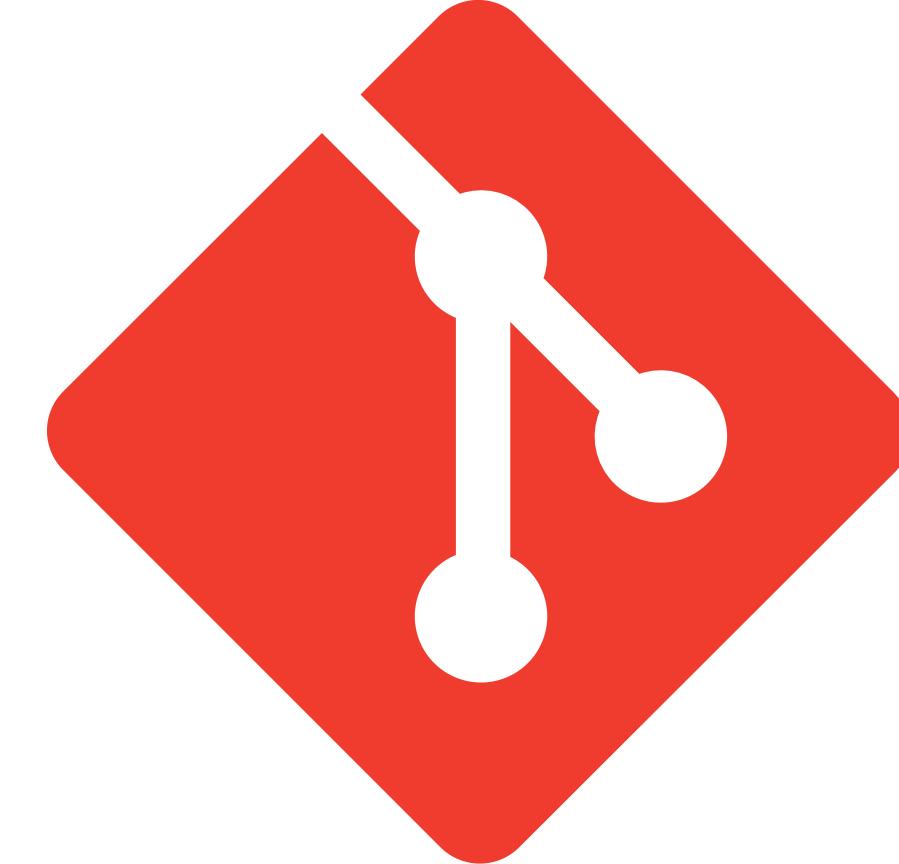


Maintain



SO... GIT?

Uhhhh... yes. Git,
GitHub/GitLab...
and the tools I'm gonna
discuss.



CONTENTS

- uv – THE Python Package Manager
- Static Code Checks
 - Linters
 - Formatters
 - Type Checker
 - Code Security Linter
- pre-commit
 - Static Code Check
 - Unit Tests
 - Conventional Commits
- Integrate all of them



DEMO TIME!

The OLD ways



UV

The ONLY Python
Package Manager you'll
ever need!

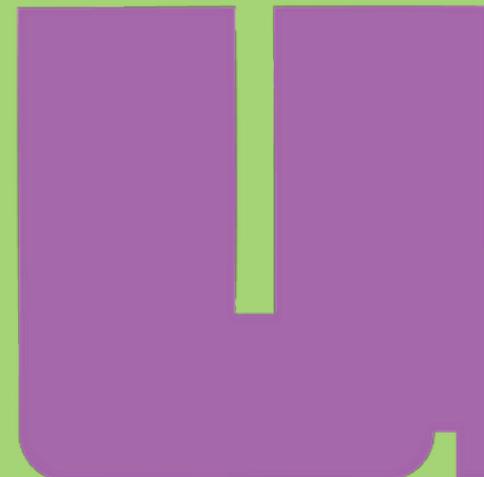


MANAGING DEPENDENCIES

- pip
- pipenv
- poetry
- conda

MANAGE VIRTUAL ENVIRONMENTS

- virtualenv/venv
- conda
- poetry



MANAGE PYTHON VERSIONS

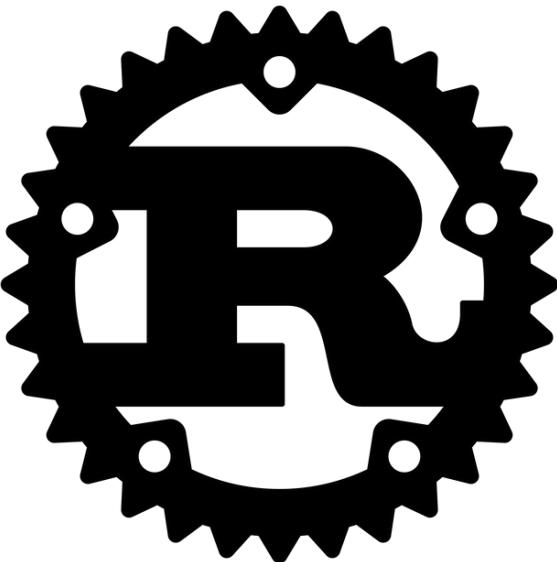
- pyenv

COMPILE AND PUBLISH PACKAGES

- twine
- hatch
- flit
- pdm
- poetry

UV

It's also **FAST**



DEMO TIME!

The NEW ways



STATIC CODE CHECKERS

Find issues just by reading the code...
but not executing it.



FORMATTERS

- pylint
- flake8
- **ruff**

LINTERS

- black
- **ruff-formatter**



TYPE CHECKERS

- `ty`
- `mypy`



CODE SECURITY LINTER

- **bandit**
- **talisman**



DEMO TIME!

For the Static Code Checkers



PRE-COMMIT

So you don't accidentally commit your
AI-generated slop of a code.

You add the following:

- Static Code Checker
- Commit Message Checker
- Unit Tests (if they're not too slow)
- Dependency Updates via uv



CONVENTIONAL COMMITS

FORMAT

type(scope): description

fix(api): This is a commit

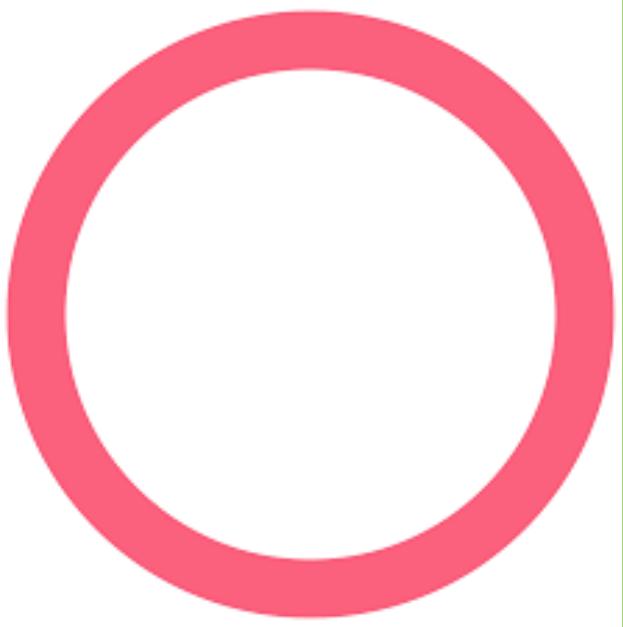
body

Body of a commit

footer(s)

Footers of a commit

<https://www.conventionalcommits.org/>



CONVENTIONAL COMMITS

TYPES

- **BREAKING CHANGE:** → • major
- **feat:** → • minor
- **fix:** → • patch

○ You can also use *build*,
chore, *ci*:, *docs*, *style*,
refactor, *perf*, *test*

SEMANTIC VERSIONING EQUIVALENT

<Major>.<Minor>.<Patch>
1.1.1

<https://www.conventionalcommits.org/>

DEMO TIME!

For Pre-Commit



DEMO TIME!

Then tying them all up
together...



QUESTIONS?

Pls. be gentle :(



THANK YOU!

Stay updated on the
latest, freshest tools
with...



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