Pipenv Python env and dependencies

CONCEPTS

Commit both Pipfile and Pipfile.lock; the lock file makes installs repeatable.

Pipfile what you want
↓ `pipenv lock`
Pipfile.lock exact pins + hashes
↓ `pipenv sync`
Virtualenv installed packages
↓ `pipenv run`
Your command runs in the env

INSTALL AND REMOVE

`pipenv install`
Install everything from Pipfile

`pipenv install <pkg>`
Add a package and lock

`pipenv install --dev <pkg>`
Add a development package

`pipenv install -r requirements.txt`
Import a requirements file

`pipenv uninstall <pkg>`
Remove a package

LOCK AND SYNC

`pipenv lock`
Resolve and write Pipfile.lock

`pipenv sync`
Install exactly what the lock says

`pipenv install --deploy`
Fail if the lock is out of date

RUN AND ACTIVATE

`pipenv run <cmd>`
Run a command in the env

`pipenv run python <file>`
Run a script with the env's Python

`pipenv run <script> [args]`
Run a Pipfile [scripts] shortcut

`pipenv shell`
Spawn a shell with the env active

INSPECT

`pipenv graph`
Show the dependency tree

`pipenv graph --reverse`
Who depends on each package?

`pipenv update`
Update and re-lock all packages

`pipenv update <pkg>`
Update one package and its deps

`pipenv update --outdated`
List what would change

`pipenv check`
Scan packages for known vulnerabilities

ENVIRONMENT

`pipenv --venv`
Print the virtualenv path

`pipenv --python <ver>`
Create the env with a Python version

`PIPENV_VENV_IN_PROJECT=1`
Keep the env in ./.venv

EXPORT

`pipenv requirements`
Print requirements.txt from the lock

`pipenv requirements --dev`
Include dev packages

PIPFILE

Minimal Pipfile

```
[[source]]
url = "https://pypi.org/simple"
verify_ssl = true
name = "pypi"

[packages]
requests = "*"

[dev-packages]
pytest = "*"

[requires]
python_version = "3.12"
```