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# A Python Package

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Enthought

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# What?

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- What?
  - Why?
  - How?
    - Organization
    - Using  
setuptools
    - Wheels and  
Eggs
    - PyPI

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# What?

A python package can be two things -

- A collection of python modules.
- A distributable.

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# Why?

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## Why?

- Because getting other people to use our work is difficult.
- Setting up the environment and installing dependencies is manual and error-prone.

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# How?

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## How? - Using Python packages

- Organize your code into a collection of modules.
- Create an egg or a wheel, using setuptools.

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## How? - Organize your code

- super\_dir
  - project\_dir
    - init file
    - sub\_dir\_1
      - init file
      - code
    - sub\_dir\_2
      - init file
      - code



Branch: master ▾

[pandas](#) / [pandas](#) /

**jreback** committed with **jorisvandenbossche** DEPR: add shims for util + TST: test that we work in downstream packa... [...](#)

..

📁 [\\_libs](#)

CLN: make submodules of pandas.util private (#16223)

📁 [api](#)

DEPR: deprecate is\_any\_int\_dtype and is\_floating\_dtype from pandas.ap...

📁 [compat](#)

CLN: make submodules of pandas.util private (#16223)

📁 [computation](#)

DEPR: allow options for using bottleneck/numexpr (#16157)

📁 [core](#)

DOC: some reviewing of the 0.20 whatsnew file (#16254)

📁 [errors](#)

REF: register custom DisplayFormatter for table schema (#16198)

📁 [formats](#)

DOC/API: Move Styler import (#16059)

📁 [io](#)

CLN: make submodules of pandas.util private (#16223)

📁 [plotting](#)

CLN: make submodules of pandas.util private (#16223)

📁 [stats](#)

CLN: make submodules of pandas.util private (#16223)

📁 [tests](#)

DEPR: add shims for util + TST: test that we work in downstream packa...

📁 [tools](#)

CLN: make submodules of pandas.util private (#16223)

📁 [tseries](#)

CLN: make submodules of pandas.util private (#16223)

📁 [types](#)

DEPR: add shims for util + TST: test that we work in downstream packa...

📁 [util](#)

DEPR: add shims for util + TST: test that we work in downstream packa...

📄 [\\_\\_init\\_\\_.py](#)

CLN: make submodules of pandas.util private (#16223)

📄 [\\_version.py](#)

CLN: Remove "flake8: noqa" from more files

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## How? - Use setuptools

- super\_dir
  - project\_dir
    - misc
  - setup.py

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## How? - A minimal setup.py

```
from setuptools import setup, find_packages

setup(

    name="project_name",

    package_data=find_packages()

)
```

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## How? - Using setuptools.setup

`setuptools.setup` accepts the following kwargs

- `version`
- `install_requires`
- `package_data`
- `license, url, author, author_email`
- `description` and `long_description`

See [PyPA's simple setup.py](#) for more.

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## How? - Creating an egg and a wheel

- `python setup.py bdist_wheel`
- `python setup.py bdist_egg`

Wheels are the future.

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## How? - Uploading to PyPI using Twine

```
twine upload dist/*
```