

**I am new to**

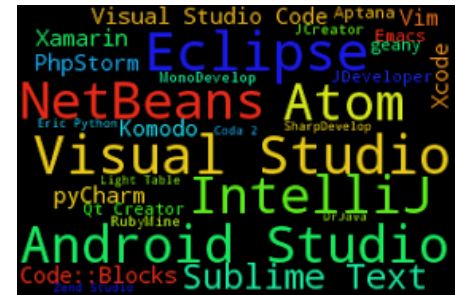


Sasidhar Donaparthi

# Agenda



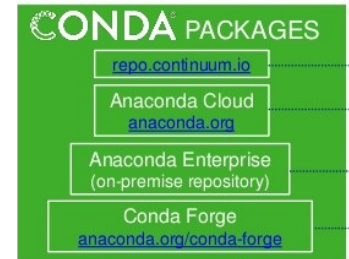
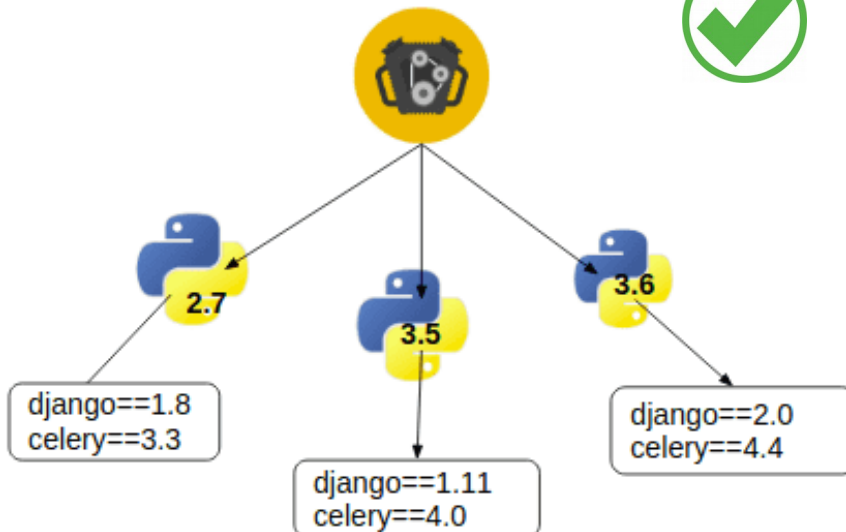
Python – Environment setup



# Python Environment Setup



Installing Python  
Using Miniconda/Anaconda



CONDA

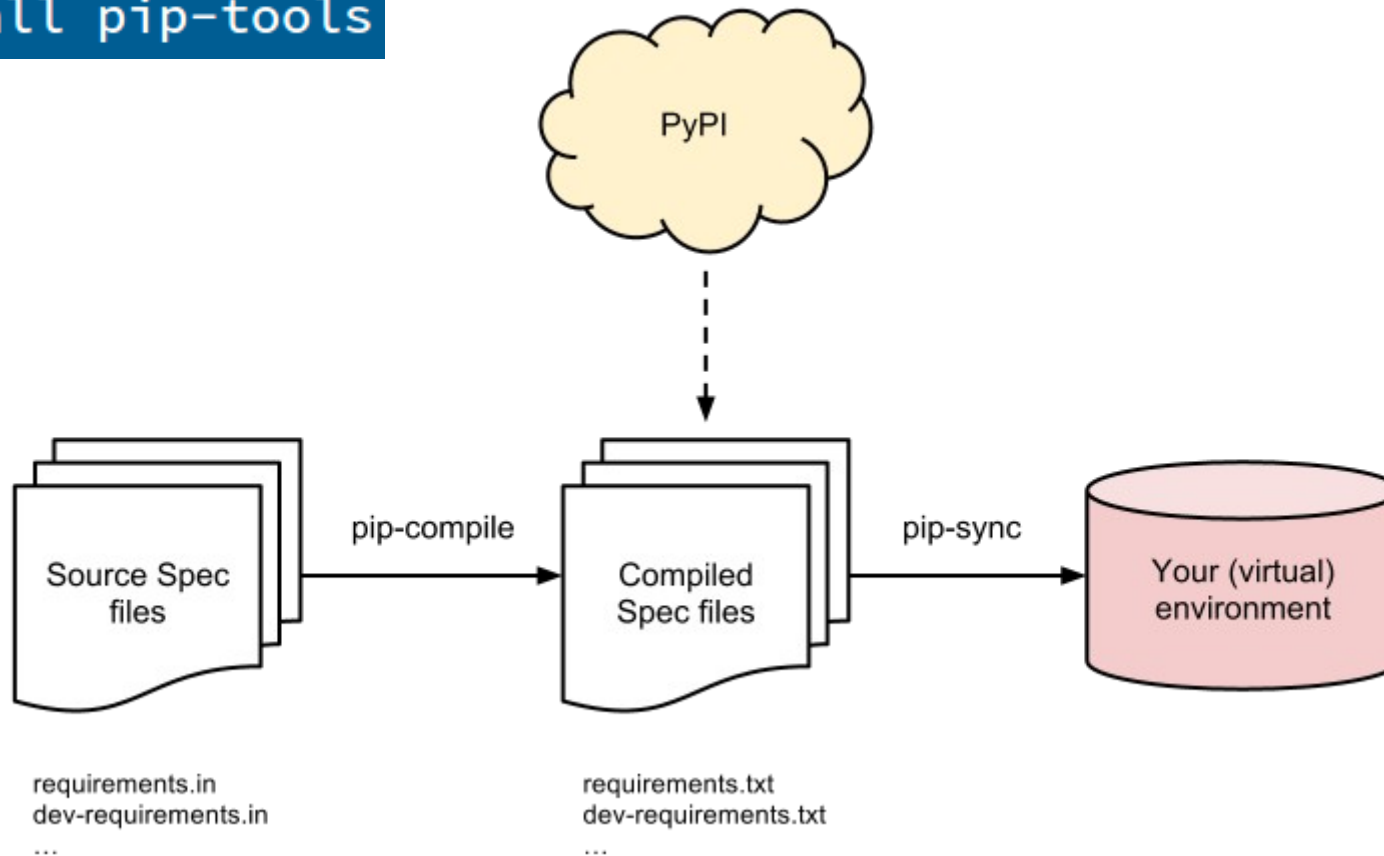


Virtualenv  
python  Package

```
$ pip install -r requirements.txt
beautifulsoup4==4.5.3
blinker==1.4
boto==2.46.1
certifi==2017.1.23
Chameleon==3.1
docopt==0.4.0 # pyup: <=0.4.0
html2text==2016.9.19
```

# Tracking my dependencies

```
pip install pip-tools
```



# IDE for python development



IDLE

Source code: [Lib/idlelib/](https://lib.idlelib.com/)

IDLE is Python's Integrated Development and Learning Environment.



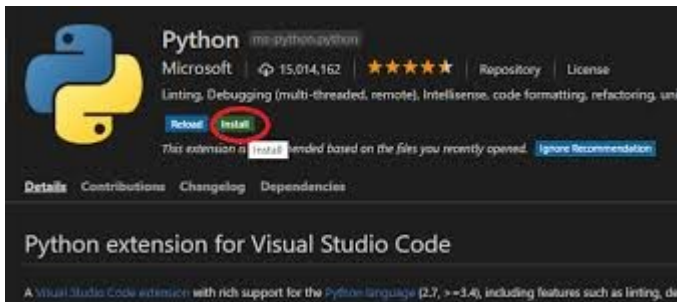
Sublime Text



# Best Practices



PEP 8 - Style Guide for Python Code



`unittest` — Unit testing framework



pytest

pytest: helps you write better programs

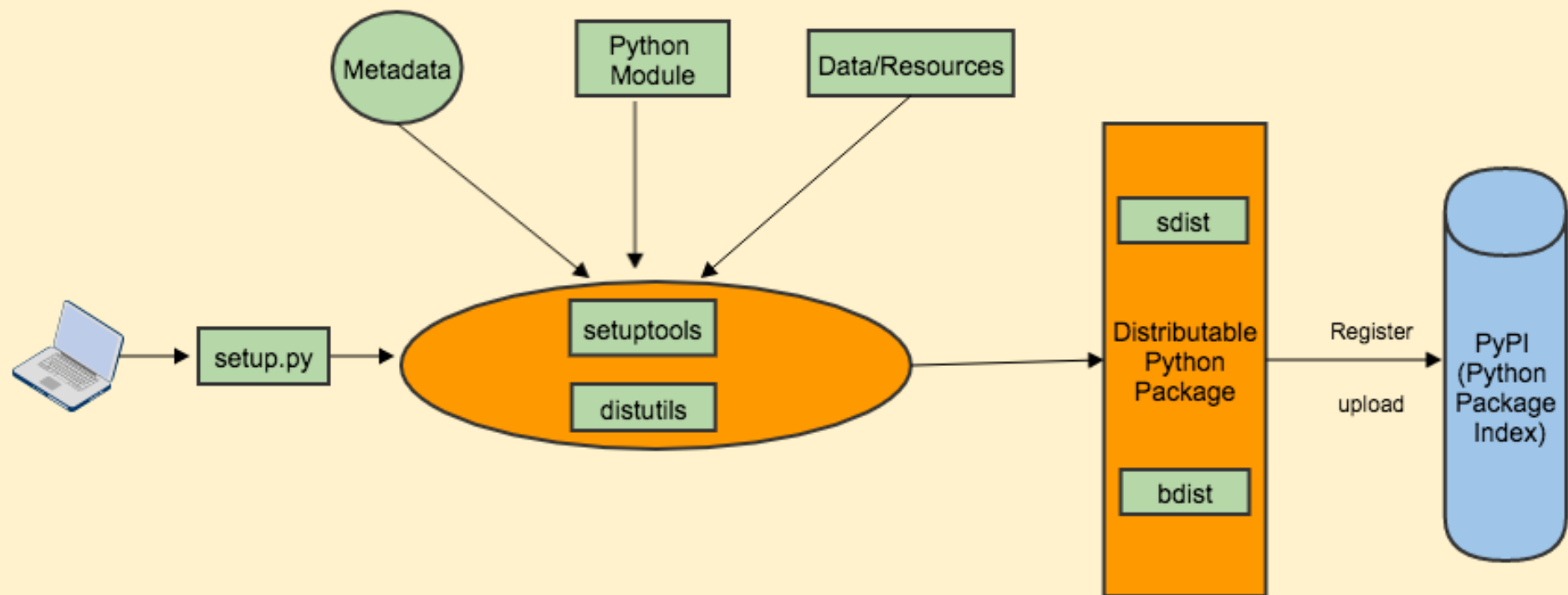
`logging` — Logging facility for Python



**Python Exceptions**



# Publishing Python Package

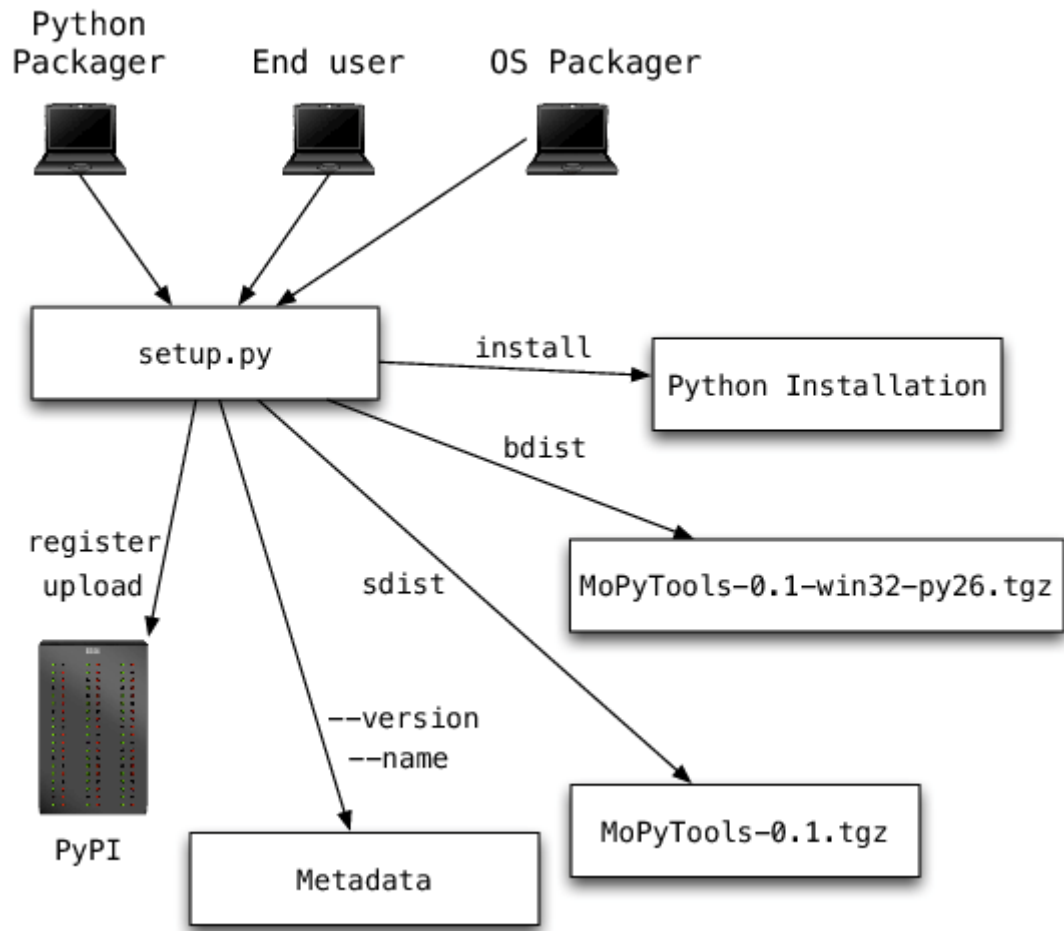


# Publishing Python Package

## Creating setup.py

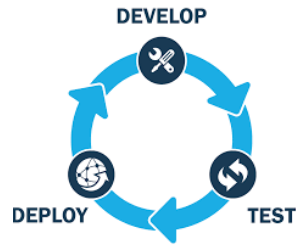
```
/example_pkg  
/example_pkg  
__init__.py  
setup.py  
LICENSE  
README.md
```

```
import setuptools  
  
with open("README.md", "r") as fh:  
    long_description = fh.read()  
  
setuptools.setup(  
    name="example_pkg",  
    version="0.0.1",  
    author="Example Author",  
    author_email="author@example.com",  
    description="A small example package",  
    long_description=long_description,  
    long_description_content_type="text/markdown",  
    url="https://github.com/pypa/sampleproject",  
    packages=setuptools.find_packages(),  
    classifiers=[  
        "Programming Language :: Python :: 3",  
        "License :: OSI Approved :: MIT License",  
        "Operating System :: OS Independent",  
    ],  
)
```



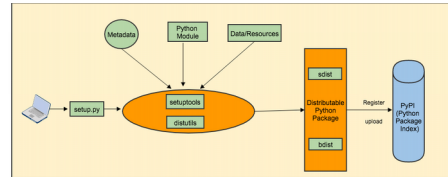


# Continuous Integration with Python



Jenkins

```
$ pip install -r requirements.txt
beautifulsoup4==4.5.3
blinker==1.4
boto==2.46.1
certifi==2017.1.23
Chameleon==3.1
docopt==0.4.0 # pyup: <=0.4.0
html2text==2016.9.19
```



Continuous  
Code Quality



Nexus



Jenkins



Nexus

pip install



# Mock with Unit testing

`unittest.mock` — mock object library



**Moto: Mock AWS Services**

Unit Test & TDD Lambda Functions