

The Future of Python

PyCon India 2018

October 7, 2018



Carol Willing

Python Core Developer

Fellow, Former Director
Python Software Foundation

Jupyter Core Developer
Steering Council
Project Jupyter

@WillingCarol

now



#PyConIndia



the COMMUNITY

PyCon India
October 5-9, 2018

#PyConIndia #PyConIndia2018
PyCon India
October 5-9, 2018



#PyConIndia2018

1989

<http://python-history.blogspot.com/2009/01/brief-timeline-of-python.html>

349 | 360

<http://py3readiness.org>

154,293 projects | 1,094,879 releases

1,503,765 files | 268,049 users

<https://pypi.org>



41

basic, fortran, pascal, c, c++,
java, **python**, rust, go,
javascript, processing, julia

2 million

<https://jupyter.org>



past



Change is a
constant



People have
opinions

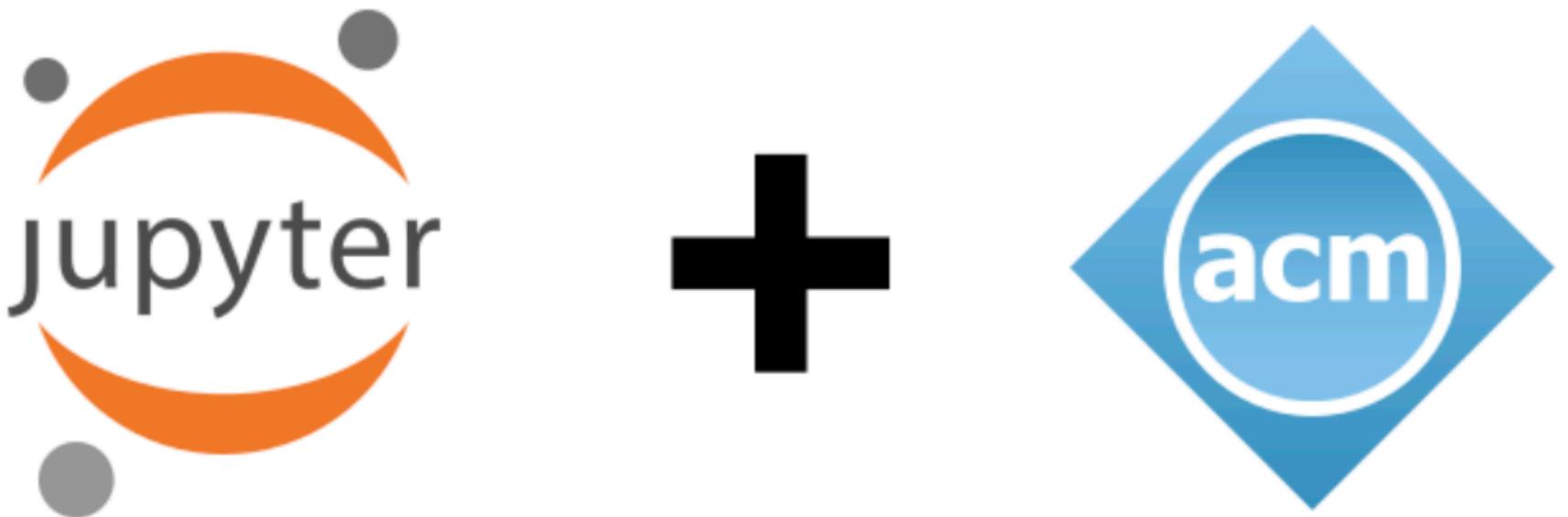


Great code
requires
communication





@twitter_handle



Jupyter receives the ACM Software System Award

It is our pleasure to announce that Project Jupyter has been awarded the 2017 ACM Software System Award, a significant honor for the project. We are humbled to join an illustrious list of projects that contains major highlights of computing history, including Unix, TeX, S (R's predecessor), the Web, Mosaic, Java, INGRES (modern databases) and more.

Officially, the recipients of the award are the fifteen members of the Jupyter steering council as of November 2016, the date of nomination (listed in chronological order of joining the project): Fernando Pérez, Brian Granger, Min Ragan-Kelley, Paul Ivanov, Thomas Kluyver, Jason Grout, Matthias Bussonnier, Damián Avila, Steven Sylvester, Jonathan Frederic, Kyle Kelley, Jessica Hamrick, Carol Willing, Sylvain Corlay and Peter Parente.



AWARDS & RECOGNITION

Project Jupyter Team Honored for Developing Open Source Tools for Interactive Computing

Fernando Pérez , Brian E. Granger , Min Ragan-Kelley , Paul Ivanov , Thomas Kluyver , Jason Grout , Matthias Bussonnier , Damián Avila , Steven Sylvester , Jonathan Frederic , Kyle Kelley , Jessica Hamrick , Carol Willing , Sylvain Corlay , and Peter Parente  received the 2017 ACM Software System Award for developing Jupyter, a broad collaboration that develops open source tools for interactive computing, with a language-agnostic design.

Optimism



Language Design

In reality, programming languages
are how programmers express and
communicate ideas – and the
audience for those ideas is **other
programmers**, not computers.

– Guido van Rossum

<http://neopythonic.blogspot.com/2016/04/kings-day-speech.html>



Python for everyone

the most important
lesson I learned...

sharing

– Guido van Rossum



<http://neopythonic.blogspot.com/2016/04/kings-day-speech.html>



future



Python core
Pythonistas
Possibilities



Python core language



What
happens to
CPython?



CPython governance



8000

Python Language Governance Proposal
Overview

Warsaw

8001

Python Governance Voting Process

Warsaw

8002

Open Source Governance Survey

Warsaw, Langa, Pitrou, Hellmann,
Willing

8010

The BDFL Governance Model

Warsaw

8011

The Council Governance Model

Wijaya, Warsaw

8012

The Community Governance Model

Langa

8013

The External Council Governance Model

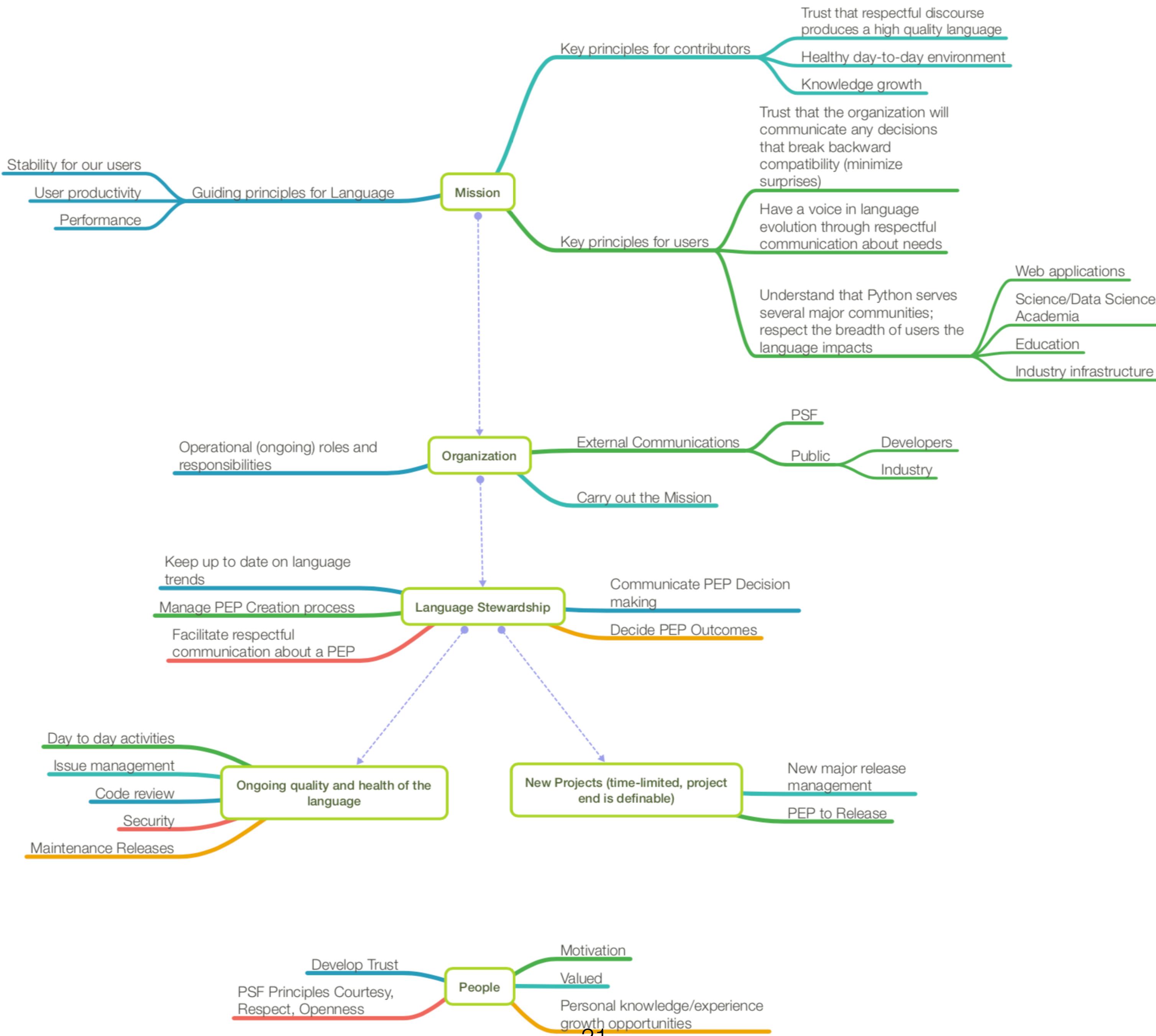
Dower

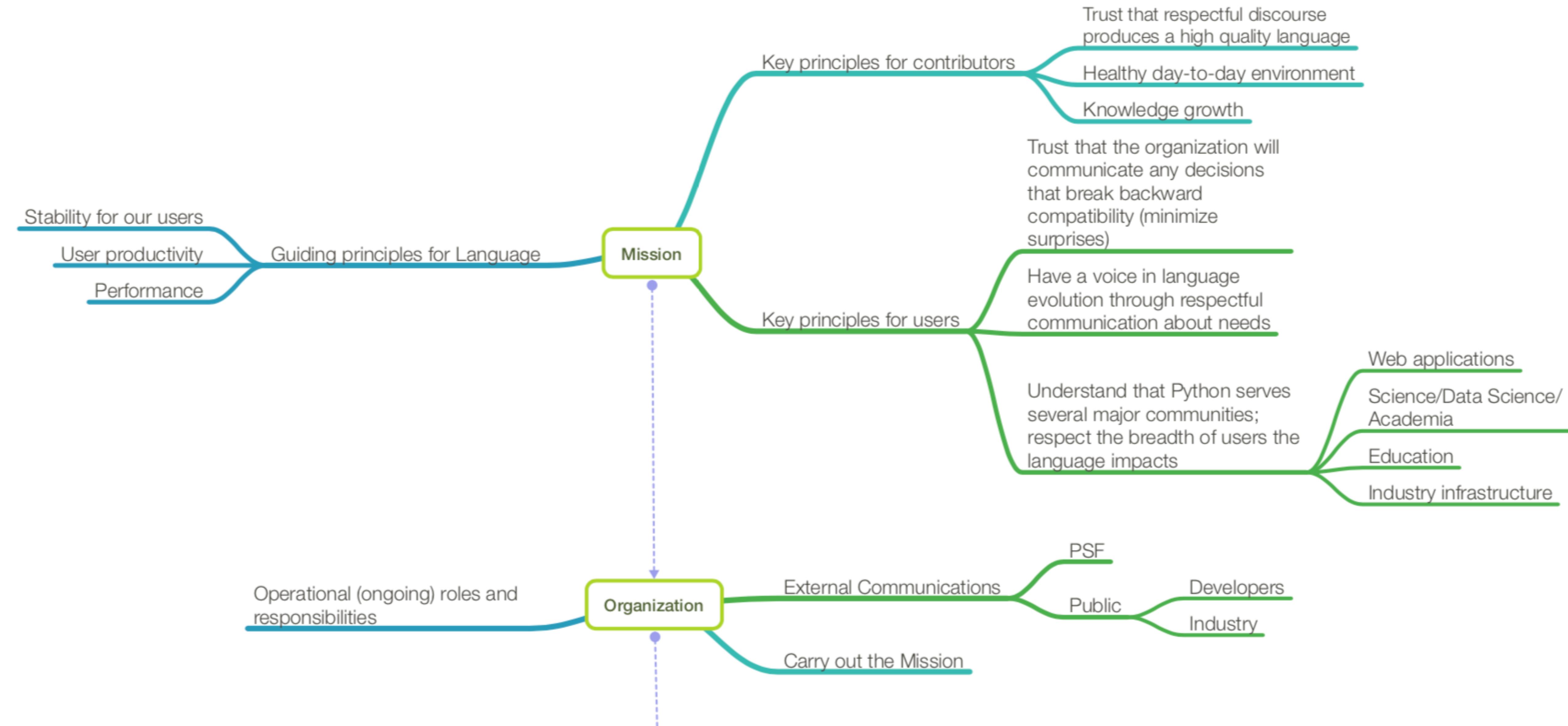
8014

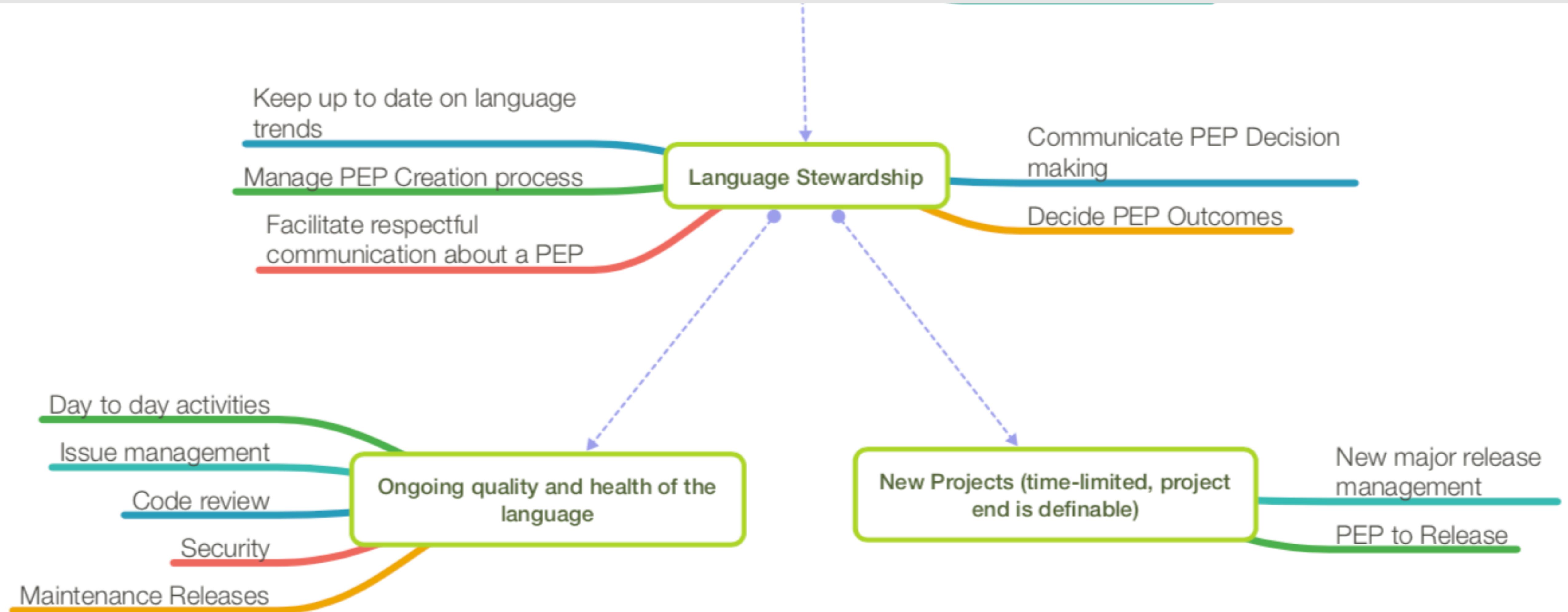
The Commons Governance Model

Jansen

<https://www.python.org/dev/peps/>









Python 2.7 will retire in...

1

Year

2

Months

24

Days

15

Hours

8

Minutes

13

Seconds

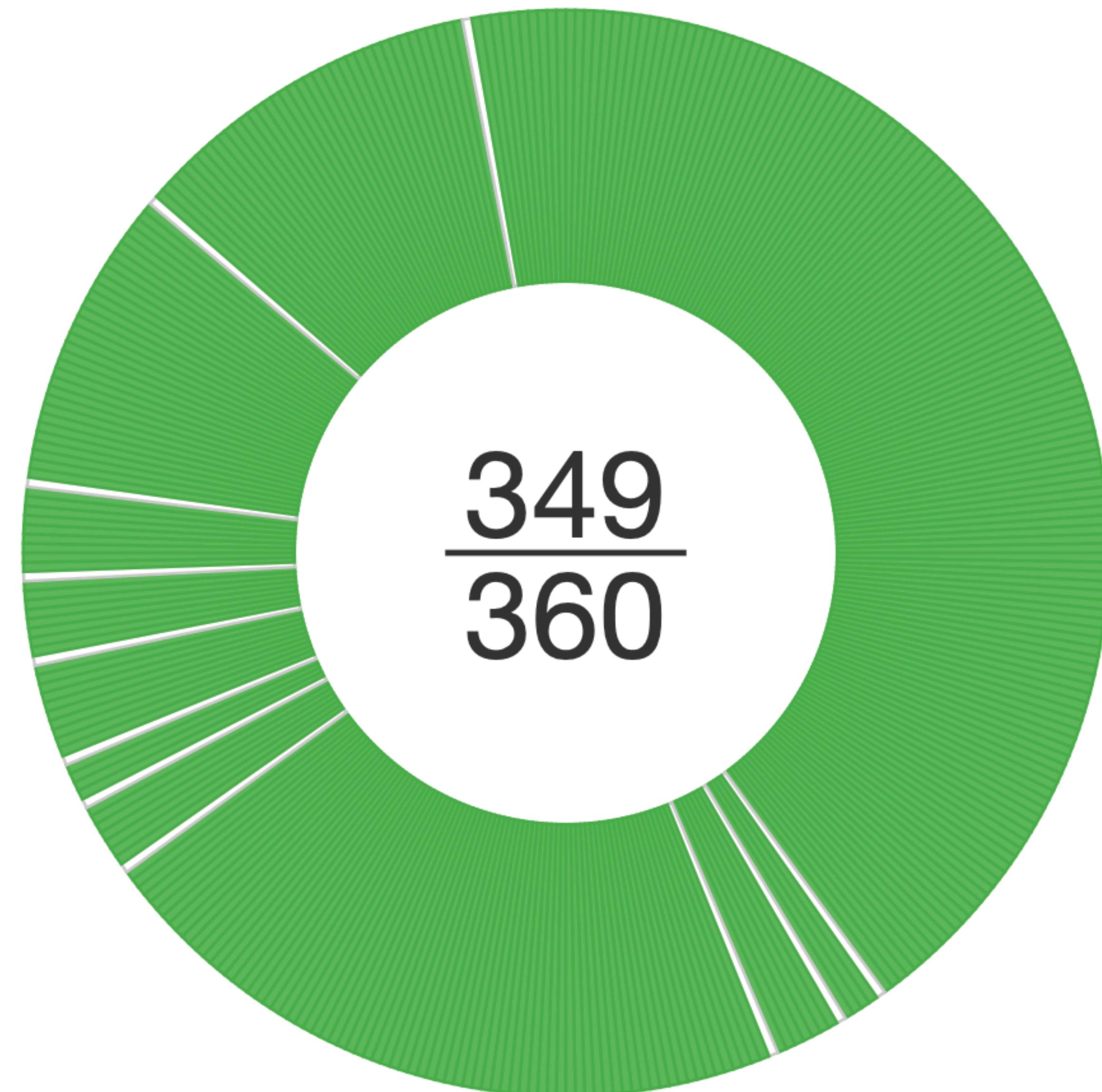
[Enable Guido Mode](#) [Huh?](#)

pythonclock.org
python3statement.org

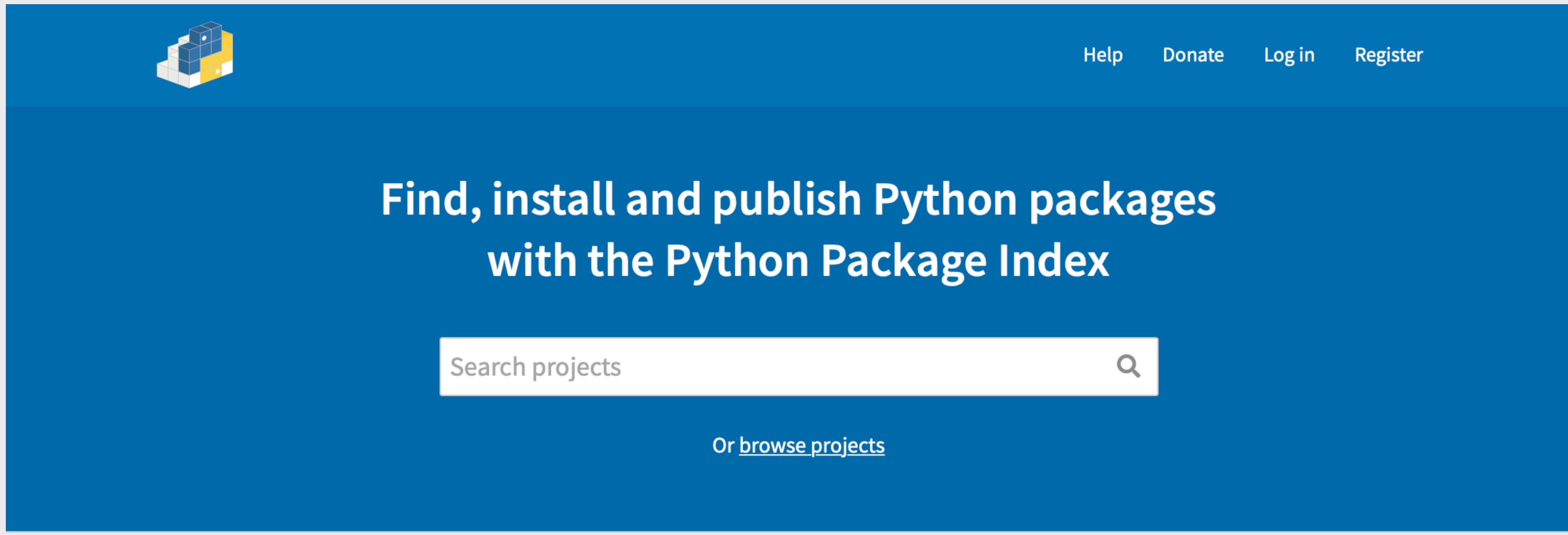


Python 3 Readiness

Python 3 support graph for 360 most popular Python packages!



Rich ecosystem of libraries



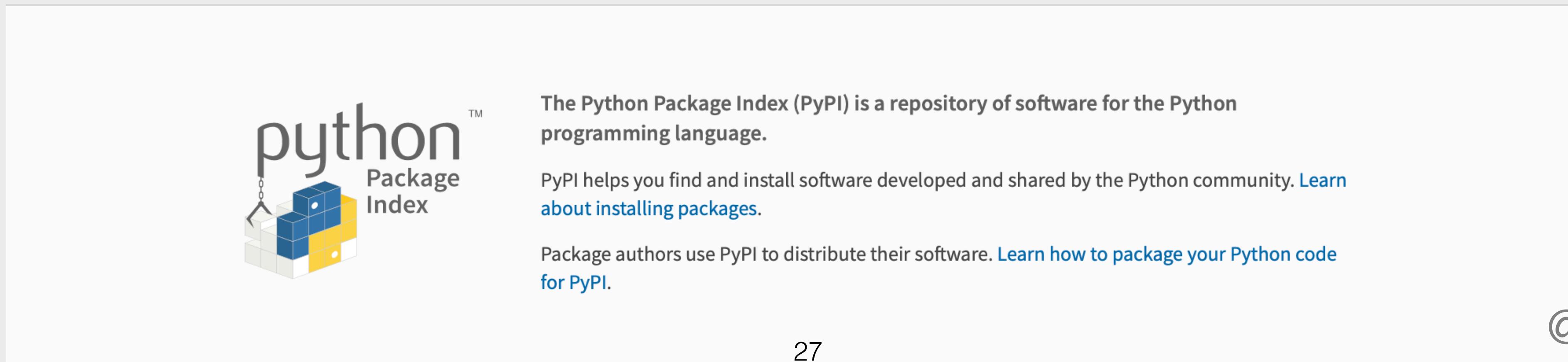
The screenshot shows the PyPI homepage with a dark blue header. On the left is the PyPI logo (a 3D cube icon). On the right are links for Help, Donate, Log in, and Register. The main title "Find, install and publish Python packages with the Python Package Index" is centered in white text. Below it is a search bar with the placeholder "Search projects" and a magnifying glass icon. Underneath the search bar is the text "Or [browse projects](#)". At the bottom of the main section, there are four statistics: "154,296 projects", "1,094,913 releases", "1,503,835 files", and "268,060 users".

Find, install and publish Python packages
with the Python Package Index

Search projects

Or [browse projects](#)

154,296 projects 1,094,913 releases 1,503,835 files 268,060 users



The screenshot shows the PyPI landing page with a white background. On the left is the PyPI logo. To its right is a paragraph of text: "The Python Package Index (PyPI) is a repository of software for the Python programming language. PyPI helps you find and install software developed and shared by the Python community. [Learn about installing packages.](#) Package authors use PyPI to distribute their software. [Learn how to package your Python code for PyPI.](#)" At the bottom right is the text "@WillingCarol".

python Package Index™

The Python Package Index (PyPI) is a repository of software for the Python programming language. PyPI helps you find and install software developed and shared by the Python community. [Learn about installing packages.](#) Package authors use PyPI to distribute their software. [Learn how to package your Python code for PyPI.](#)

@WillingCarol





Pythonistas



The future of Python
must include
diversity of ideas.



How do I learn?



To which
project should
I contribute?



How can I become a speaker?



How do we
get more
people at my
meetup?



How do I
become a
core Python
developer?



Why do I want
to become a
core Python
developer?



inclusive =
impact



Pythonistas - the sequel



Sensible Defaults



Respect

time

graceful disagreement

your approach may not be best



Listen

understanding

consideration

value ideas of others



Share
experiences
knowledge
risk and reward



Trust

Negativity shuts down creativity.

Silencing productive discourse and
gatekeeping result in toxic workflows.



Humility

Long term success

Learning from failures

Innovation



Possibilities



WebAssembly

Mobile

Gaming

Distribution



Interactivity

Education

Research

Exploration



Web

Science

Data Science

Education

Open Hardware

Gaming

Mobile



Empowerment



Python core
Pythonistas
Possibilities



...a programming
language created by a
community fosters
happiness in its **users**
around the **world**.

– Guido van Rossum

<http://neopythonic.blogspot.com/2016/04/kings-day-speech.html>



the future of

Python

is



YOU



Thank you

What will you do now for
Python and Pythonistas?

