

# Let's implement useless Python objects

役に立たない Python オブジェクトを作ろう

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## GitHub

- <https://github.com/HayaoSuzuki/pyconapac2023>

## Hashtag

- #pyconapac #pyconapac2023 #pyconjp

# Who am I ?

## Who am I ? (お前誰よ)



Name Hayao Suzuki (鈴木 駿)

X(Twitter) @CardinalXaro

Work Software Developer @ BeProud Inc.



- BeProud Inc.

- connpass 
- PyQ 
- Tracery  TRACERY

# Who am I ?

## Translated Books

- TBA(O'Reilly Japan) **New!**

## Supervised Translated Books

- **Introducing Python 2nd ed.**(O'Reilly Japan)
- **Robust Python**(O'Reilly Japan)

# Who am I ?

## Selected My Talks

- Symbolic Mathematics using SymPy(PyCon JP 2018)
- How to Use In-Memory Streams(PyCon JP 2020)
- Unknown Evolution of the Built-in Function `pow`(PyCon JP 2021)

Listed at <https://xaro.hatenablog.jp/> .

## Today's Theme

And now for something  
completely different...

Let's implement  
useless Python objects

# What is it mean useless?

## From LDOCE

- ① not useful or effective in any way
- ② (informal) unable or unwilling to do anything properly



# Is the useless object really useless?

From Zhuangzi Ren-jian shi (莊子 人間世篇)

人皆知有用之用 而莫知無用之用也

Everyone knows the usefulness of the useful, but no one knows the usefulness of the useless.

# Today's Theme

## Let's implement useless Python objects

The useless objects are useless, but how to make a useless object is very useful.

# What is a useless Python object?

## Example: ElasticSized

```
>>> s = ElasticSized([1, 2, 3, 4, 5])
>>> for _ in range(3):
...     print(len(s), end=" ")
...
1 3 4
```

# What is a useless Python object?

## Example: ForgottenContainer

```
>>> c = ForgottenContainer([1, 2, 3, 4, 5])
>>> for _ in range(3):
...     print(3 in c, end=" ")
...
False True False
```

# What is a useless Python object?

## Example: ShuffledIterable

```
>>> it = ShuffledIterable([1, 2, 3, 4, 5])
>>> for _ in range(3):
...     for v in it:
...         print(v, end=" ")
...     print()
...
5 3 4 2 1
4 1 2 3 5
2 5 3 1 4
```

# What is a useless Python object?

## Definition of a useless Python object in this talk

A useless Python object behave *Pythonic*, but does not work as expected.