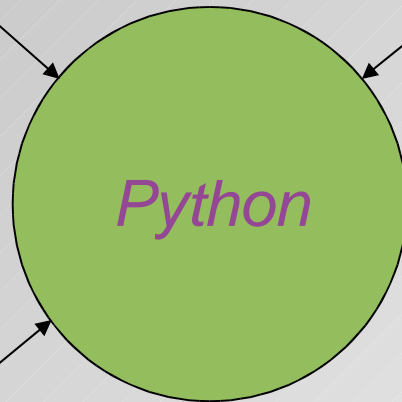# OOP and Scripting in Python

Introduction

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Python Roots ...

Object Oriented
Programming
(C++, Modula-3, ABC, Icon)

Scripting Languages
(Perl, Tcl)

Python

Author:
Guido Van Rossum, 1990

Functional
Programming
(Scheme)

Timeline

- 2003 Latest release (v2.3.3)
- 2001 Official GPL-compatibility
- 2000 Python 2.0
- 1998 Z Object Publishing Environment, aka Zope.
- 1995 Website
- 1993 comp.lang.python Python newsgroup
- 1992 Python 0.9.6 for MS-DOS.
- 1992 Mailing list
- 1991 First Release
- 1989/1990 First code

http://www.python.org

- Python is an easy to learn, powerful programming language.
- It has efficient high-level data structures and a simple but effective approach to object-oriented programming.
- Python's elegant syntax and dynamic typing, together with its interpreted nature, make it an ideal language for scripting and rapid application development in many areas on most platforms.

Bibliography

- Python in a Nutshell: Martelli (O'Reilly, 2003)
- Python Cookbook: Martelli, Ascher (O'Reilly, 2002)
- Programming Python, Lutz (O'Reilly 2001, 2nd ed.)
- Learn to Program Using Python: Gauld (Addison-Wesley, 2000)
- Learning Python: Lutz, Ascher (O'Reilly, 1998)

The Zen of Python

- Beautiful is better than ugly.
- Explicit is better than implicit.
- Simple is better than complex.
- Complex is better than complicated.
- Flat is better than nested.
- Sparse is better than dense.
- Readability counts.
- Special cases aren't special enough to break the rules. Although practicality beats purity.
- ...

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The Zen of Python

- Errors should never pass silently. Unless explicitly silenced.

- In the face of ambiguity, refuse the temptation to guess.

- There should be one-- and preferably only one -- obvious way to do it. Although that way may not be obvious at first unless you're Dutch.

- ...

The Zen of Python

- Now is better than never. Although never is often better than *right* now.

- If the implementation is hard to explain, it's a bad idea.

- If the implementation is easy to explain, it may be a good idea.

- Namespaces are one honking great idea -- let's do more of those !

The Python Interpreter ...

Yes, Python is interpreted !

```
Python 2.3 (#46, Jul 29 2003, 18:54:32)
[MSC v.1200 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more
information.

IDLE 1.0
>>> 2+3
5
>>> print "Hello, world"
Hello, world
>>>
```

Summary

- Part 0 - Introducing Python (*yes, this document*)
- Part 1 - Python Basic Features
- Part 2 - Python OOP Features
- Part 3 - Python Advanced Features