### **ZOPE CORPORATION**

# **Python Regrets**

OSCON, July 25, 2002

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## **Relics**



Stuff that's already being phased out

- string exceptions
- sys.exc\_type etc. (use sys.exc\_info())
- int/int returning int
- apply() (use f(\*args, \*\*kwds))
- coerce() (no longer needed)
- 3-way compare? (but... comparing lists)





### **Lexical details**

- continued lines or strings with \
  - use (...) continuation and/or string literal concatenation
- if expression: statement
  - put statement on next line
- tabs?
  - require all spaces
  - or very restricted use of tabs (not mixed)





### Lambda and functional stuff

- I've never liked lambda
  - crippled (only one expression)
  - confusing (no argument list parentheses)
  - can use a local function instead
- map(), filter()
  - using a Python function here is slow
  - list comprehensions do the same thing better
- reduce()
  - nobody uses it, few understand it
  - a for loop is clearer & (usually) faster





# print, str() and repr()

- drop `x` for repr(x)
  - ` is hard to read in many fonts
  - publication process turns 's' into 's'
- do we really need both str() and repr()?
  - mostly intended to be able to special-case
    "print x" when x is a string
  - still not enough; need nice() that's a bybrid
- print should've been a function
  - write(x, y, z)
  - writeln(x, y, z)
  - spaces between items controlled by keyword arg



### **Builtins**

- intern(), id(): put in sys
- xrange(): make range() return an iterator
- buffer(): must die (use bytes, PEP 296)
- raw\_input(): use sys.stdin.readline()
- input(): use eval(sys.stdin.readline())
- callable(): just call it, already
- execfile(), reload(): use exec()
- compile(): put in sys





# **Special cases for exec**

- exec as a statement is not worth it
  - make it a function (again :-)
- perhaps shouldn't have locals(), globals(), vars()





### **Restricted execution**

- Too many bugs to be trusted
  - didn't get enough review, and never will
- Confusion btw. \_\_builtins\_\_\_, \_\_builtin\_\_\_

- But there's a useful idea somewhere...
  - Zope uses this





### Float to int conversion

- need more ways to convert float to int (round, truncate-towards-zero, floor, ceil)
- need differentiate to \_\_\_int\_\_ which truncates and int which doesn't

