

inflect.py

Python Hamilton

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Who's this guy?

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Background: new style string formatting

before 2.6

```
print "%s %s" % ("Hello", "world!")
```

Hello world!

after 2.6 (incl 3!)

```
print("{0} {1}".format("Hello", "world!"))
```

Hello world!

What's all this inflect business?

- **inflection**: modification of a word to show grammatical information
- In English, we do this a bit:
 - I am, you are, it is, they are...
 - one sock, two socks, ...
 - good, better, best
- **inflect.py** handles this stuff for us

Who has seen this before?

```
n_users = [0, 1, 2, 3]

for n in range(3):
    print("There are {0} users currently
online.".format(n))

# There are 0 users currently online.
# There are 1 users currently online.
# There are 2 users currently online.
```

Much better

```
import inflect
p = inflect.engine()

for n in range(3):
    print("There {0} {1} {2} currently online."
          .format(p.plural_verb("is", n),
                  n,
                  p.plural("user", n)))

# There are 0 users currently online.
# There is 1 user currently online.
# There are 2 users currently online.
```

Let's spell some numbers

```
import inflect  
p = inflect.engine()
```

```
big_number = 2234259.53
```

```
print(p.number_to_words(big_number))
```

```
# two million, two hundred and thirty-four thousand, two  
hundred and fifty-nine point five three
```

Satisfying the style guide

```
import inflect
p = inflect.engine()

print("Most style guides recommend:")
print("- words for small numbers, such as
{0}".format(p.number_to_words(5, threshold=10)))
print("- numerals for larger numbers, such as
{0}".format(p.number_to_words(50, threshold=10)))

# Most style guides recommend:
# - words for small numbers, such as five
# - numerals for larger numbers, such as 50
```


Giving out one's digits

```
import inflect
p = inflect.engine()

phone_number = 5554908

print("Call me at:
{0}.".format(p.number_to_words(phone_number, group=1,
zero="oh"))))

# Call me at: five, five, five, four, nine, oh, eight.
```

Following the yellow brick road

```
import inflect
p = inflect.engine()

dorothy_fears = ["lions", "tigers", "bears"]

print("{0}, oh my!".format(p.join(dorothy_fears)))

# lions, tigers, and bears, oh my!
```

For the purists

```
import inflect
p = inflect.engine()

# let's get pedantic!
p.classical(all=True)

print("The plural of formula is {0}.".format(p.plural("formula")))

# The plural of formula is formulae.

# or not
p.classical(all=False)

print("The plural of formula is {0}.".format(p.plural("formula")))

# The plural of formula is formulas.
```

Recipe for success

```
import inflect
p = inflect.engine()

instructions = ["go outside", "turn left", "turn left",
               "turn left", "turn left", "arrive"]

for i, instruction in enumerate(instructions):
    print("{0}, {1}".format(p.ordinal(i + 1), instruction))

# 1st, go outside
# 2nd, turn left
# 3rd, turn left
# 4th, turn left
# 5th, turn left
# 6th, arrive
```

Saving keystrokes

```
import inflect
p = inflect.engine()

for n in range(3):
    print(p.inflect("num({0},)There plural(is)
number_to_words({0}) plural(person) who plural(eats)
pie.".format(n)))

# There are zero people who eat pie.
# There is one person who eats pie.
# There are two people who eat pie.
```

That's it!

Go forth and inflect things.

In the meantime, here's a
picture of an owl.

