

**I <3 dateutil**

MOTM: dateutil

# In the beginning

- We had `time` in the `stdlib`
  - And it was horrible
- Then came `mxDateTime`
  - And it was painfull to deploy
- Then came `datetime`



# However, datetime is not perfect

- What is the first day of last month?
- What is the last day of next month?
- When is 3 months from now?
- When is a year from the 29th of February, 2012
- This costs me x\$ monthly. What is the price over a given time span?

# Yay for dateutil!

(or python-dateutil, as pip calls it, because I would totally try to install java-dateutil with pip. Anyway, I digress...)

It takes decisions for you, but also handles corner cases:

```
>>> from dateutil.relativedelta import \
relativedelta
>>> feb29 = datetime(2012, 2, 29)
>>> feb29 + relativedelta(months=1)
datetime.datetime(2012, 3, 29, 0, 0)
>>> feb29 + relativedelta(years=1)
datetime.datetime(2013, 2, 28, 0, 0)
```

# **rrule rules!**

Easily lets you calculate recurring dates. For example, get me all the Mondays for the last month:

```
>>> today = datetime(2012, 9, 17)
>>> list(rrule.rrule(rrule.WEEKLY,
... byweekday=0,
... dtstart=today - relativedelta(months=1),
... until=today))
[datetime.datetime(2012, 8, 20, 0, 0),
 datetime.datetime(2012, 8, 27, 0, 0),
 datetime.datetime(2012, 9, 3, 0, 0),
 datetime.datetime(2012, 9, 10, 0, 0),
 datetime.datetime(2012, 9, 17, 0, 0)]
```