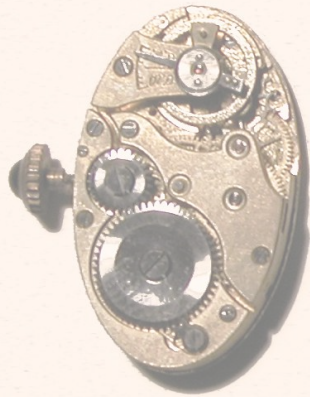
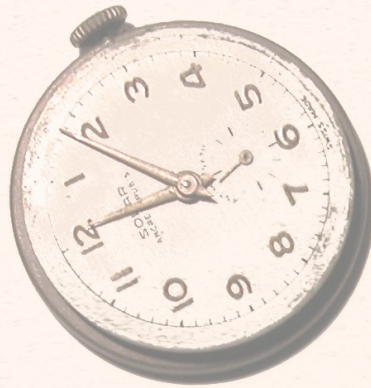




Command Line Parsing in Ruby

by karottenreibe

The Issue



**complex, but
often similar**



gem install caty --force

jeweler caty --bacon

grep -r caty .

apt-get install caty --quiet

Is there a simple solution?



The Basics

*The command line
triggers **actions**
in a program...*



*...delivers user **input**...*





*...and modifies its **behaviour***

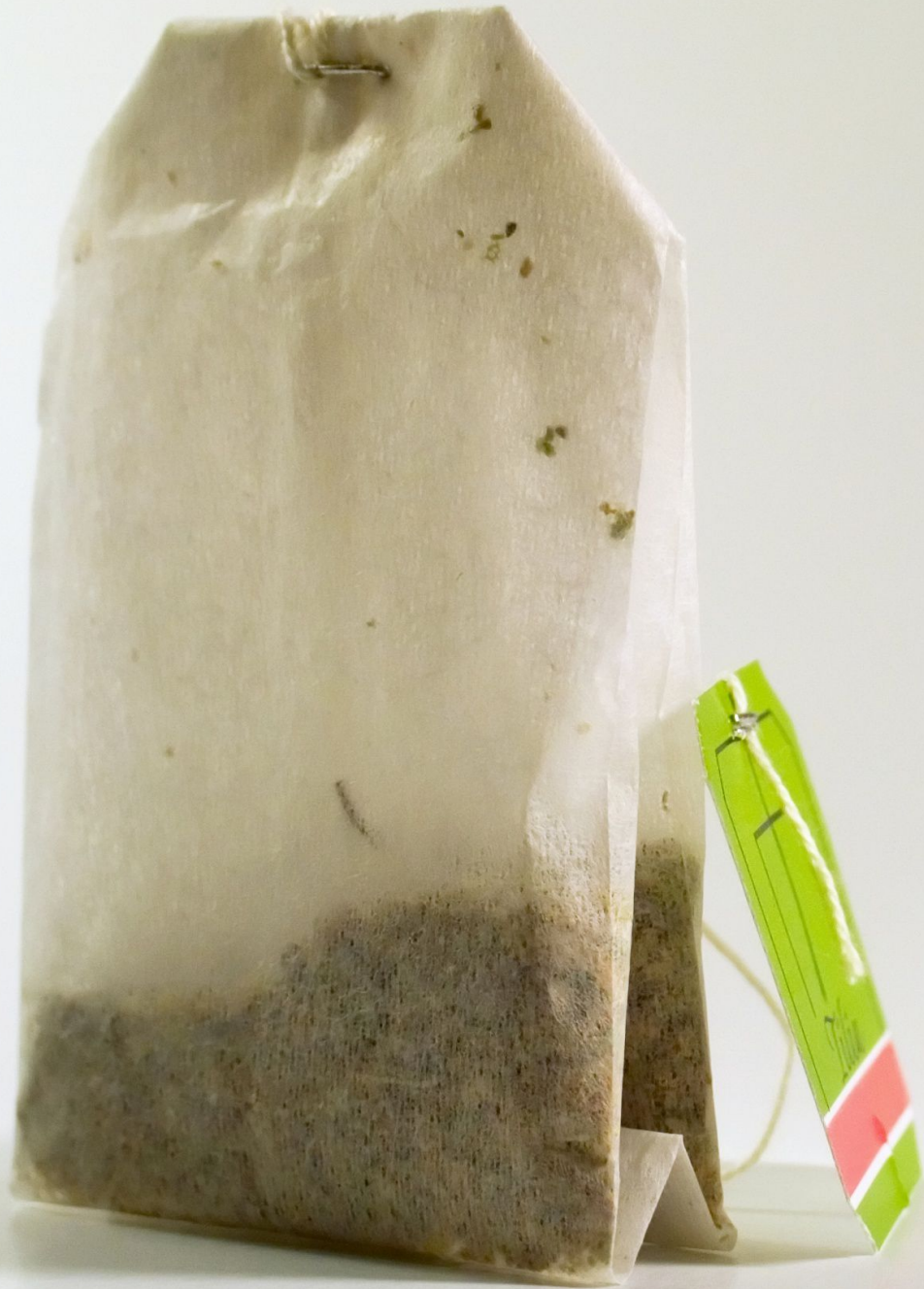
```
$ kitty.rb eat mice --speed=fast
```

action trigger

data input

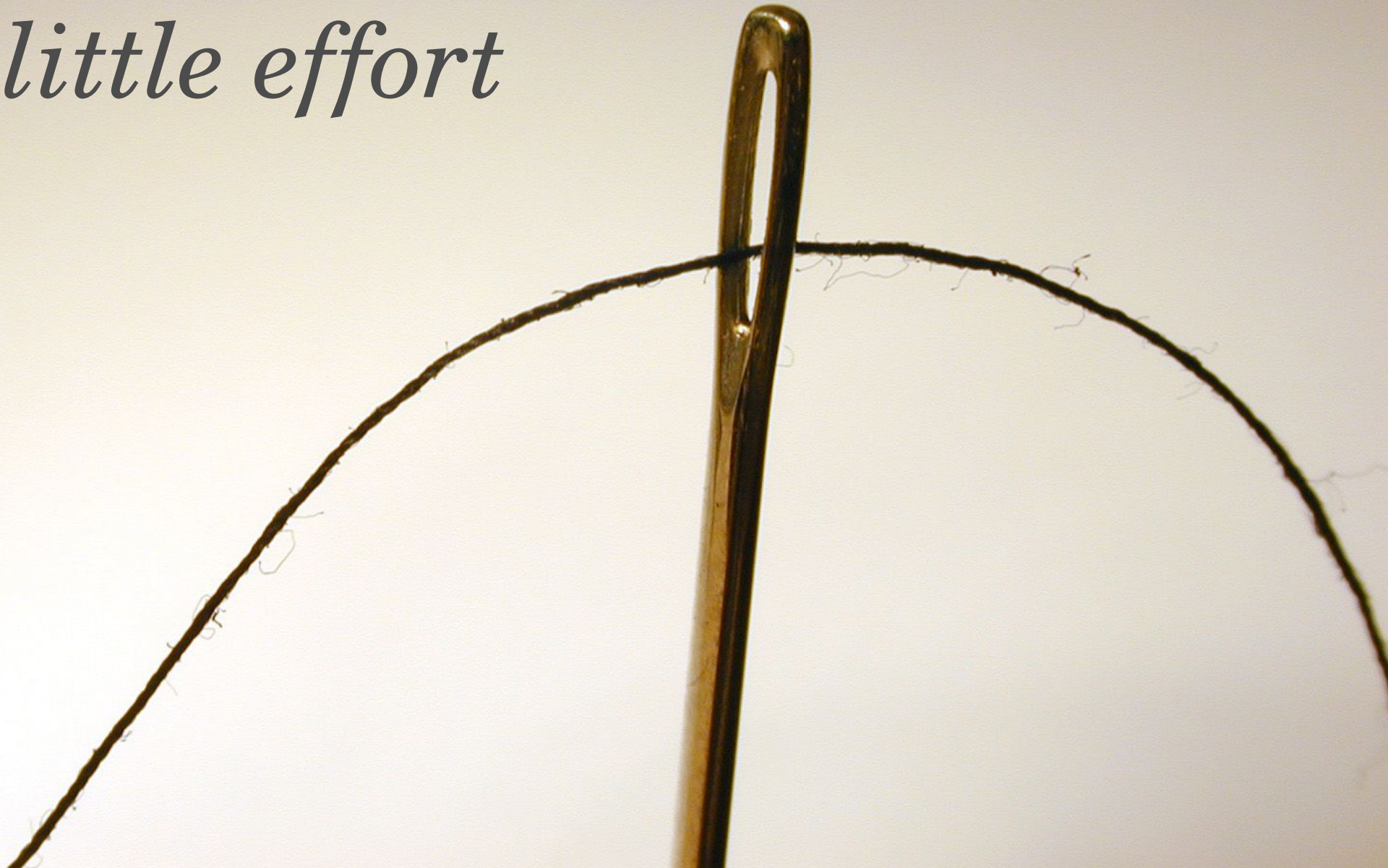
behaviour modification

What we want



simple

little effort





decorative



separation of concerns

What Caty has

action = *task*

data = *parameter*

behaviour = *option*

Now let's see some code...

require "caty"

class Kitty < Caty

....

end

Kitty.start! # uses ARGV by default

```
class Kitty < Caty  
  def eat  
    puts "eating!"  
  end  
end
```

```
$ kitty.rb eat  
eating!
```

```
class Kitty < Caty
  def eat( what )
    puts "eating! #{what}"
  end
end
```

```
$ kitty.rb eat mice
eating mice!
```

global
vs.
task-specific

```
global_options do  
  string :speed  
end
```

```
def eat  
  puts "eating #{global_options.speed}!"  
end
```

```
$ kitty.rb eat --speed=slow  
eating slow!
```

works like Rake's desc()

```
task_options :s => :string
```

```
def eat
```

```
  puts "eating #{task_options.s}!"
```

```
end
```

```
$ kitty.rb eat -s=fast
```

```
eating fast!
```


What Caty doesn't have

Complex syntax

*(subcommands, special
parameters etc.)*

*Complex validations of
parameters / options
(e.g. against a RegExp)*

Aditionally...

The Help System

```
$ kitty.rb help
```

```
Commands
```

```
=====
```

```
eat           # eats something.
```

```
sleep        # sleeps a bit.
```

```
...
```

```
$ kitty.rb help eat  
eat
```

```
eats something.  
probably some food.
```

How did we do that?


```
class Kitty < Caty  
  desc("describes the task") # like in Rake  
  def eat; ...; end  
  
  help_task # does all the magic  
end
```

*Automatically takes care of
tasks, options etc.*

*Allows you to supply a
description and a usage line*

But that's not all...

*For more features – see the
other documentation:*

<http://github.com/karottenreibe/caty>

That's Caty...

Images used for these slides:

(in order of appearance)

Clocks

by Darnok

Egg

by matthew_hull

Wrestler

by homero nuñez chapa

Stamp

by jdurham

Emotions

by SimpleLine

Teabag

by wax115

Needle

by freeimageslive

Christmas lights

by mconnors

Wall

by photojock

Thanks to all of you!

Images found on:

<http://www.morguefile.com/>

<http://www.stockvault.net/>

License:

These **slides** are licensed under a Creative Commons Attribution-Noncommercial-Share Alike 3.0 Unported License.

See also <http://creativecommons.org/licenses/by-nc-sa/3.0/>