

# Git, Python, Django, Heroku

Startup Camp  
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<http://georgik.sinusgear.com>  
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# Obsah

Git

Python

Django

Heroku

# Git

Remote repository

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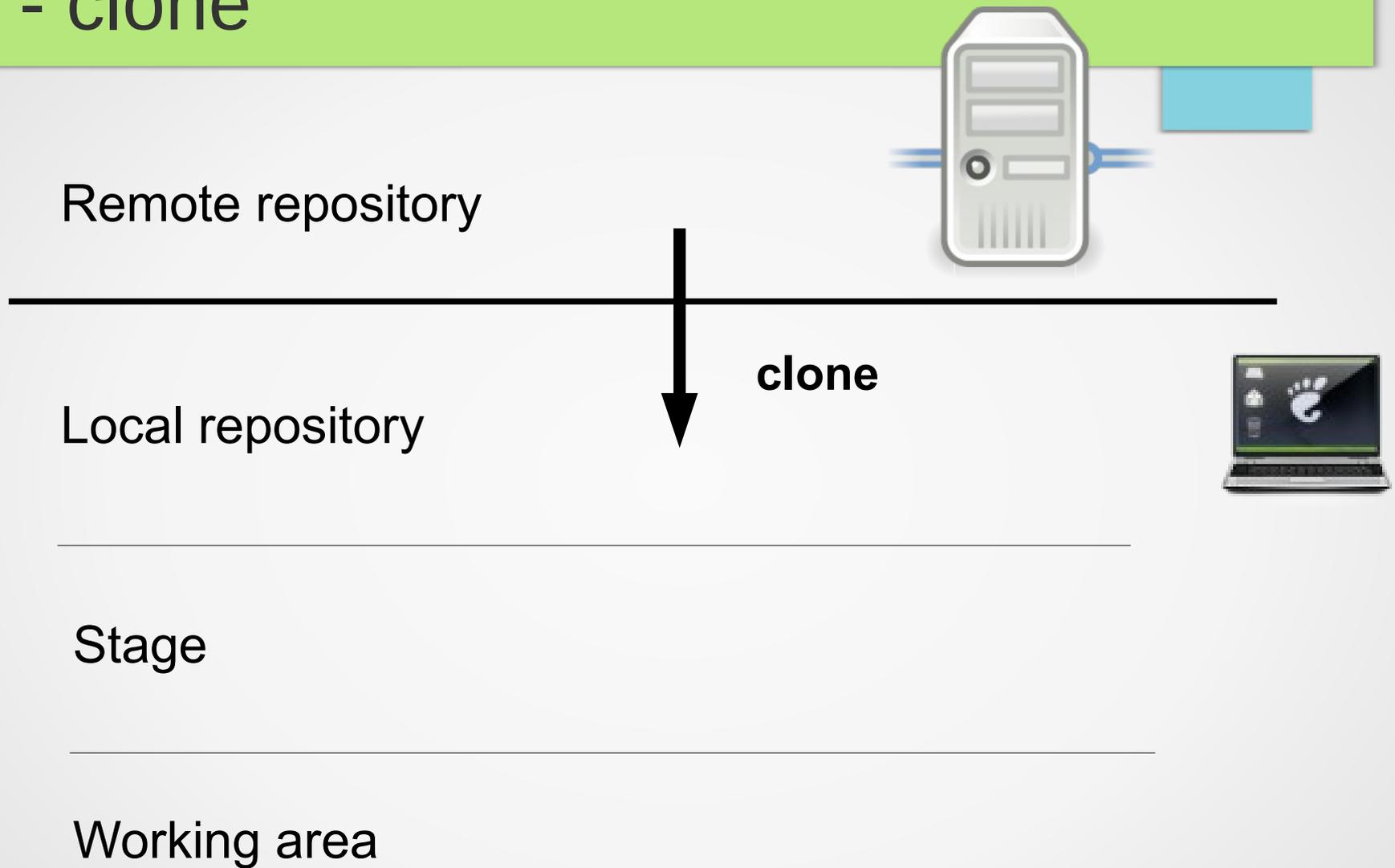
Local repository

Stage



Working area

# Git - clone



# Git - add

Remote repository

---



Local repository

---



Stage

---

**add**

Working area



# Git - commit

Remote repository

---



Local repository

---



**commit**



Stage

---

Working area

# Git - push

Remote repository



push

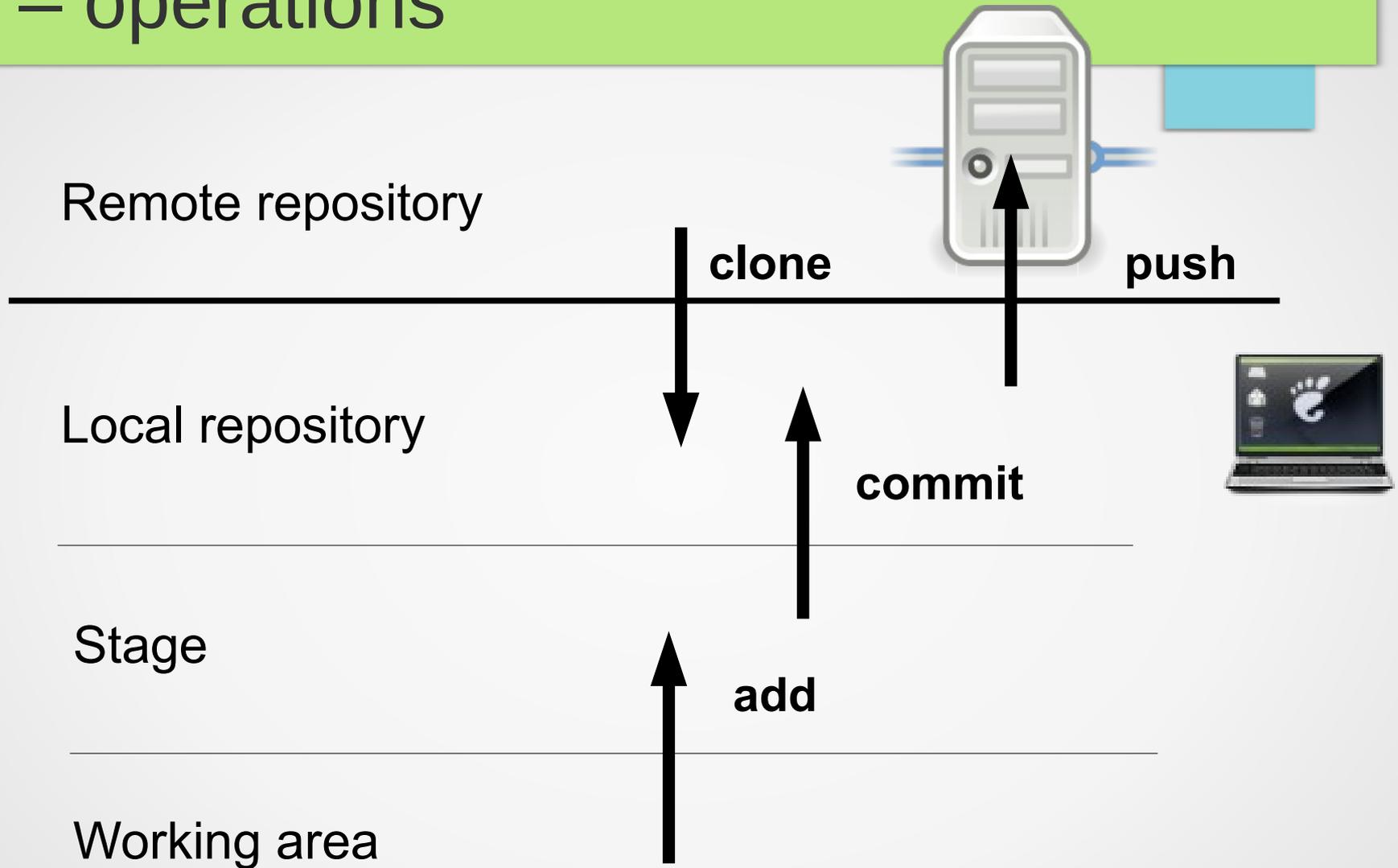
Local repository



Stage

Working area

# Git – operations



# TortoiseGit



<http://code.google.com/p/tortoisegit/>

# GitHub



## Set Up Git

A quick guide to help you get started with Git.

1



## Create A Repository

Create the place where your commits will be stored.

2



## Fork a Repository

Copy a repo to create a new, unique project from its contents.

3



## Be social

Follow a friend.  
Watch a project.

4

# Python



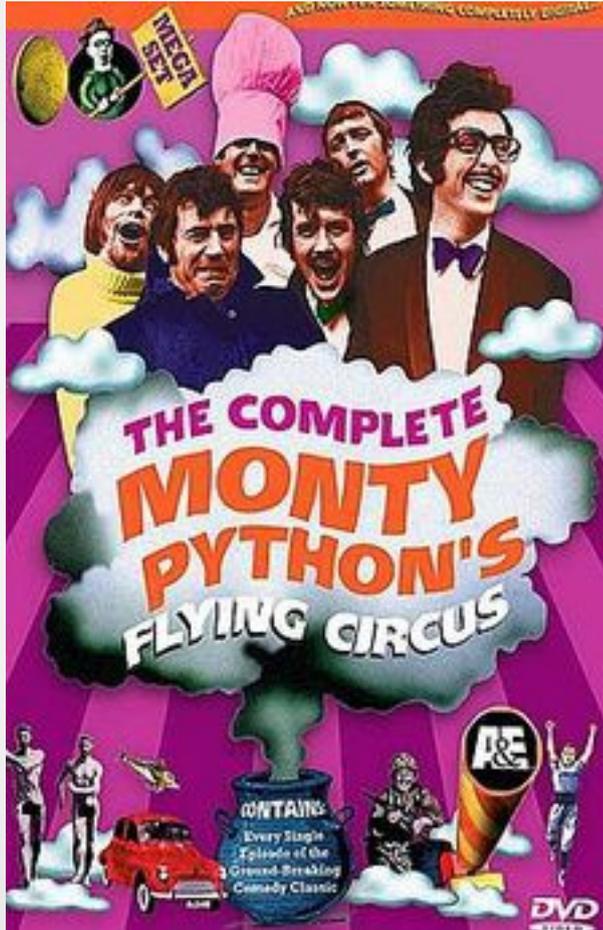
<http://python.org>

# Guido van Rossum



Computer programming for everybody.

# Monty Python's Flying Circus

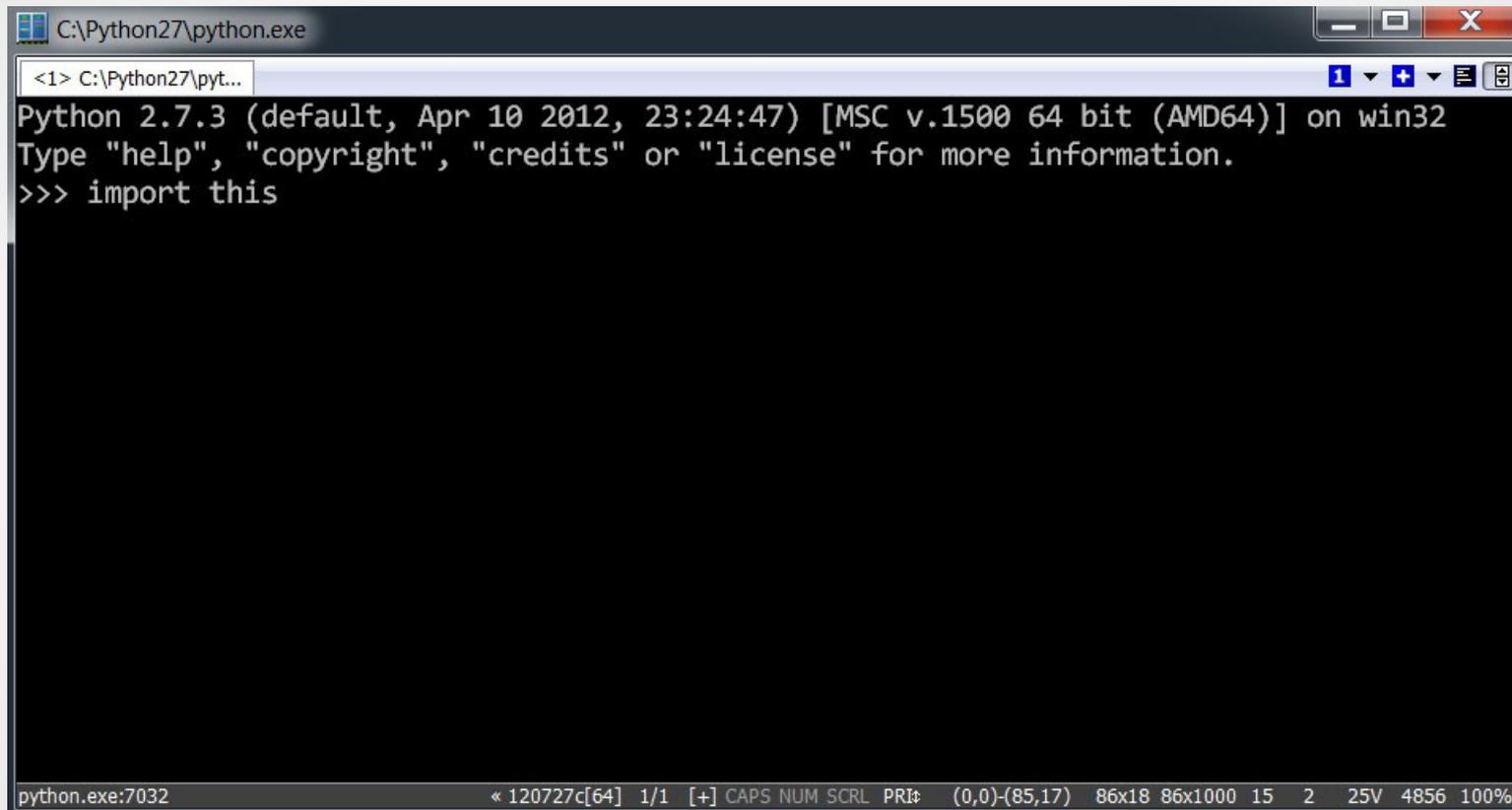


Spam & Eggs

Go web

```
python -m SimpleHTTPServer
```

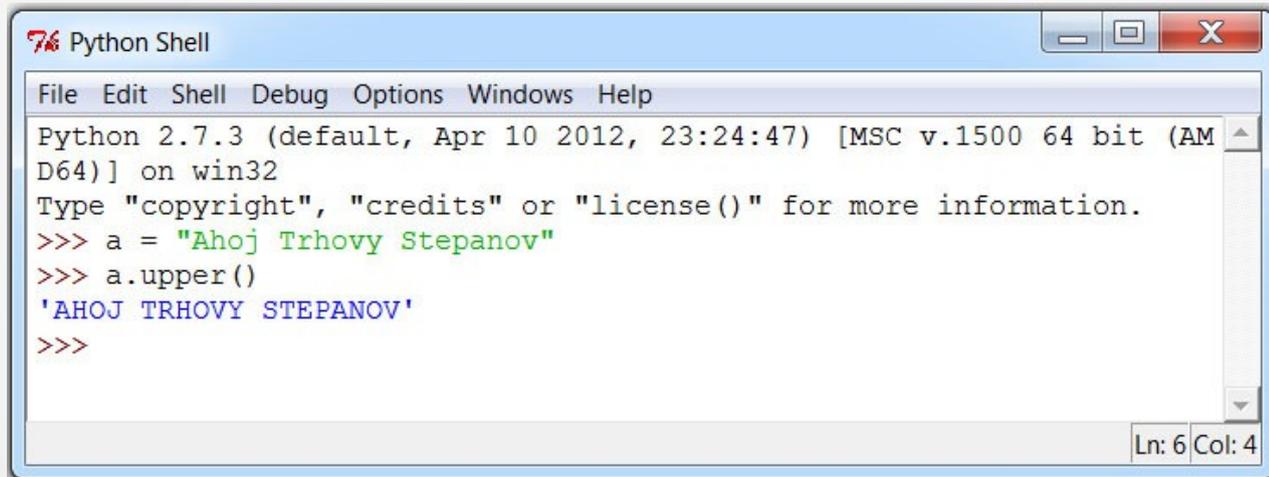
# Python Shell



```
C:\Python27\python.exe
<1> C:\Python27\pyt...
Python 2.7.3 (default, Apr 10 2012, 23:24:47) [MSC v.1500 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import this
```

Lin/Mac - CTRL+D, Win - CTRL+Z - terminate  
exit()

# IDLE (Python GUI)



```
Python Shell
File Edit Shell Debug Options Windows Help
Python 2.7.3 (default, Apr 10 2012, 23:24:47) [MSC v.1500 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>> a = "Ahoj Trhovy Stepanov"
>>> a.upper()
'AHOJ TRHOVY STEPANOV'
>>>
```

Ln: 6 Col: 4

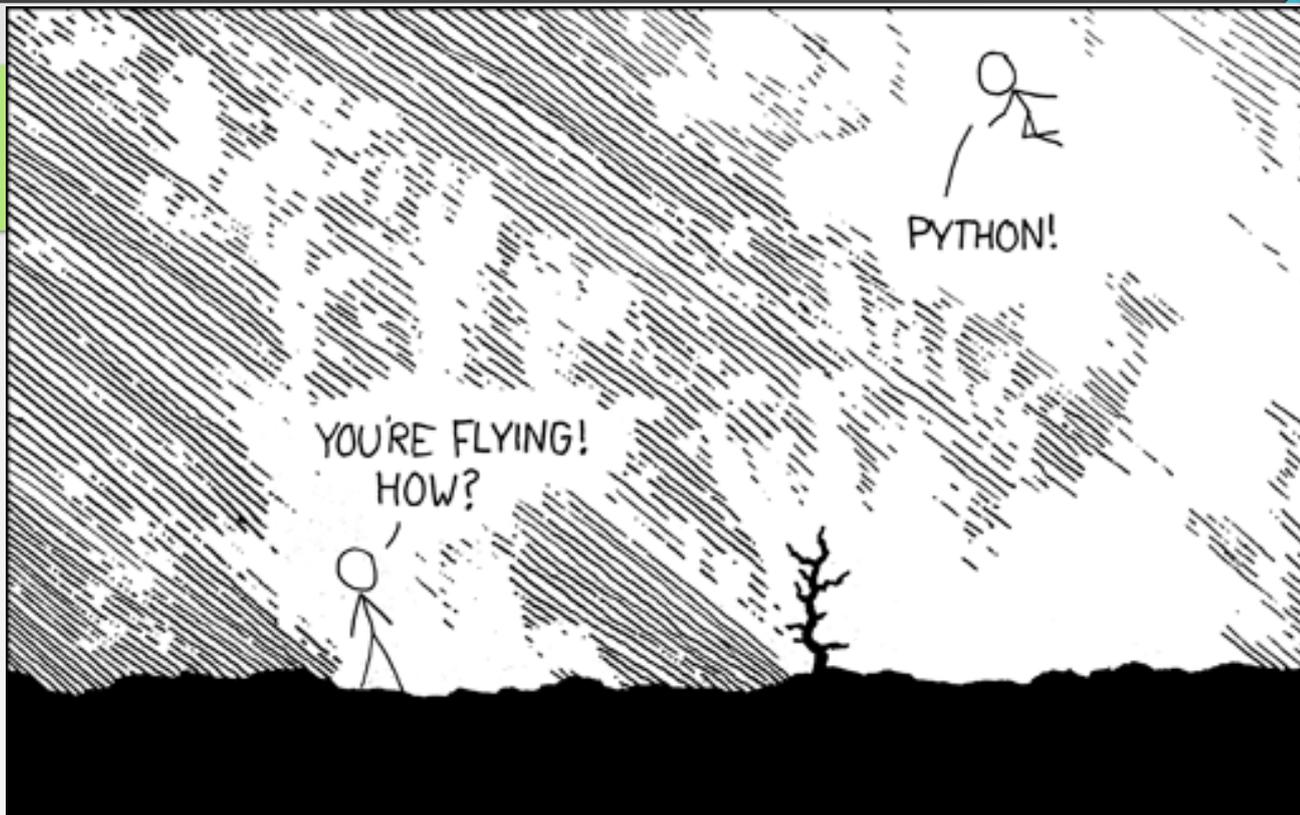
# Python 2 or 3?

2.x stable, libraries, frameworks

3.x new syntax, missing part of legacy

# Import & Python 3

```
import antigravity
```



I LEARNED IT LAST NIGHT! EVERYTHING IS SO SIMPLE!  
HELLO WORLD IS JUST  
`print "Hello, world!"`

I DUNNO...  
DYNAMIC TYPING?  
WHITESPACE?

COME JOIN US!  
PROGRAMMING IS FUN AGAIN!  
IT'S A WHOLE NEW WORLD  
UP HERE!



BUT HOW ARE YOU FLYING?

I JUST TYPED  
`import antigravity`

THAT'S IT?

... I ALSO SAMPLED EVERYTHING IN THE MEDICINE CABINET FOR COMPARISON.



BUT I THINK THIS IS THE PYTHON.

# Django

# django

<http://djangoproject.com>

The Web framework for perfectionists  
(with deadlines).

Django makes it easier to build better Web  
apps more quickly and with less code.

# Python 2 in Django context



Experimental Python 3 support

Recommended: Python 2.7

# Sample Django

[https://github.com/georgik/try\\_git](https://github.com/georgik/try_git)

```
git clone git@github.com:georgik/try_git.git
```

# Start sample Django

```
cd try_git
```

```
cd hellodjango
```

```
python manage syncdb
```

```
python manage.py runserver
```

```
http://localhost:8000/admin
```

# Python/Django advanced



# Programming philosophy

Multi-paradigm prog. Lang.

Object Orientated Programming  
Structured Programming  
Functional Programming  
Aspect Oriented Programming

# IDE

- IntelliJ Idea or PyCharm
- Eclipse – pyDev
- Boa Constructor ;-)
- etc...

# Python 01-bootstrap examples

Print

Input

Arguments

# Python 02-data examples

List

Dictionary

Excel

# Virtualenv

<http://www.virtualenv.org>

Isolated environment

# easy\_install (old fashioned)

Win: Python27\Scripts

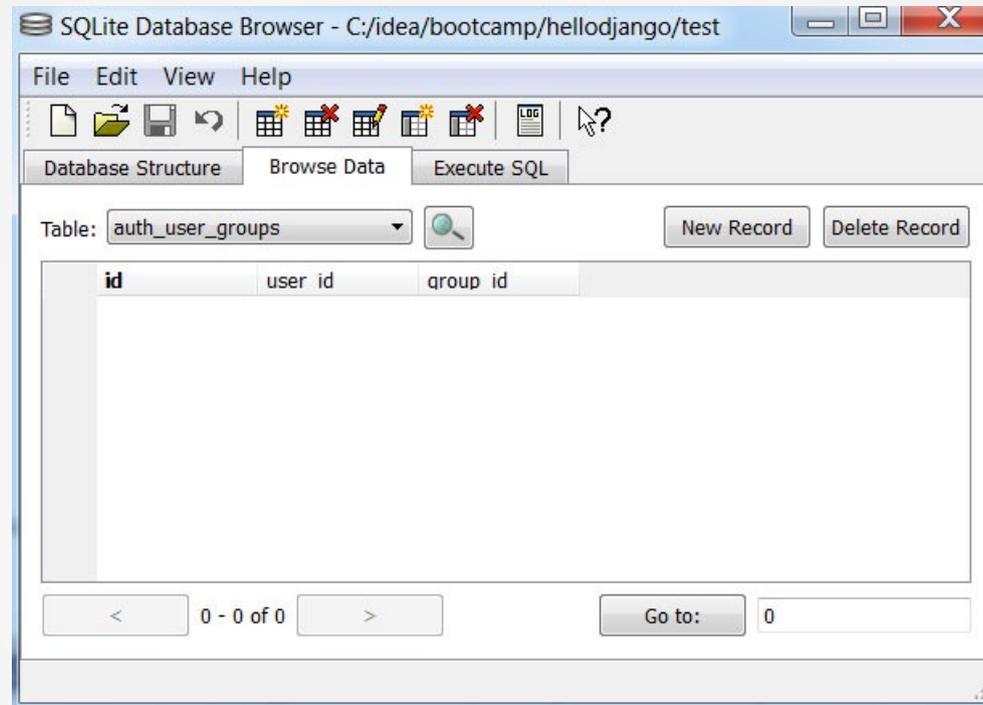
easy\_install pip

pip

```
pip install virtualenv
```

<http://pypi.python.org/pypi>

# Sqlite browser



<http://sourceforge.net/projects/sqlitebrowser/files/>

# Templates – Wat?

```
TEMPLATE_DIRS = (
```

```
    # Put strings here, like "/home/html/django_templates" or  
    "C:/www/django/templates".
```

```
    # Always use forward slashes, even on Windows.
```

```
    # Don't forget to use absolute paths, not relative paths.
```

```
)
```

# Templates

```
import os
import django
```

```
SITE_ROOT = os.path.dirname(os.path.realpath(__file__))
```

```
TEMPLATE_DIRS = (
    os.path.join(SITE_ROOT, 'templates')
)
```

7 tips for Python & Django - <http://goo.gl/svZ5O>

# cURL



<http://curl.haxx.se/>

# Test

```
curl http://localhost
```



# Heroku

Heroku Toolbelt