Python for Zombies

CV Resume

- Software Express
- Credicard Mastercard
- PriceWaterhouseCoopers
- ITAU BankBoston
- FATEC SJC (I love teaching)
- SJC Hacker Space Cofounder
- Teacher grade by students: 9,7
- Volunteer for social projects related to early childhood education
- facebook.com/fmasanori
- twitter.com/fmasanori
- http://about.me/fmasanori

First pt-br programming MOOC

http://pycursos.com/python-para-zumbis/

MOOC Menu

pingmind

Pesquisar

Painel

Fernando

Python Para Zumbis - Turma Python Para Zumbis

GERENCIAR TURMA

Começando com o básico

Apresentação e Motivação

- TWP000 Apresentação e Motivação
- Slides Apresentação e Motivação

Hello World Interativo

- TWP010 Hello World Interativo

Declarando nossas primeiras variáveis

- TWP020 Variáveis e Modo Edição

Operadores Relacionais e lógicos

- Início
- Vídeo Aulas/Materiais
- Agenda
- Membros
- Fórum e Discussões
- Exercícios Online
- Trabalhos e Projetos
- Pesquisa de Safistação
- Python Tutor
- Console Python 2.7
- Wiki
- FAQ

MOOC Videos

Python Para Zumbis - Turma II - Gratuita

GERENCIAR TURMA

WP000 Apresentação e Motivação Python para Zumbis

Você sabia que o "Pi" do nome se origina de Python?

0:00 / 16:10

ANOTAÇÕES

DOWNLOADS

COMENTÁRIOS

SUMÁRIO

CÊ ESTÁ ASSISTINDO: 1.1 - TWP000 Apresentação e Motivação

sta aula irei apresentar o nosso curso Python Para Zumbis e motivar os alunos sobre o que eles verão até o final ste.

PRÓXIMO VÍDEO

1.1 - TWP100
CONDIÇÕES

MOOC Forum

pingmind

Pesquisar

Painel

Fernando

525 Questões

GERENCIAR TURMA

CRIAR TÓPICO

Pesquisar

Ordenado por

- Últimas atualizadas
- Recentes
- Mais Votos
- Mais Vistas
- Sem Resposta

Tags

links, programar, localhost, twitter, web service, divisão, lista iv, crescimento anual, intercalados, substituição, questão6 exercícioi, versões, exercício1, python 2.7 python 3 urllib2

Pequenos Zumbis Presentes?

Olá, meu nome é Bruno Ponciano, tenho 14 anos, do Projeto Decolar (desenvolvimento do talento), em São José dos Campos.... Queria saber se tem mais pessoas, crianças ou adolescentes, da minha idade, para nos conhecermos, e talvez até, aumentar nossa animação pelo curso!

29 respostas | 618 visualizações | 69 votos

04/09/2013 às 18:48 por Bruno Ponciano

[Dica] Qual editor de código que você usa?

Boa discussão aqui, Qual editor de código que vocês usam ? Eu uso o MacVIM com suporte ao Python. Mas existem hoje várias opções como o IDLE (excelente para quem esta começando), WingIDE, Sublime, PyDev (pluggin pro eclipse) e PyCharm. Mvim http://sontek.net/blog/detail/turning-vim-into-a-modern-python-ide Sublime http://dbader.org/blog/setting-up-sublime-text-for-python-development WingIDE http://www.divms.uiowa.edu/help/windows/wing/ PyCharm http://www.jetbrains.com/pycharm/ PyDev http://www.vogella.com/articles/Python/article.html

31 respostas | 541 visualizações | 10 votos

python, desenvolvimento, dica, ide

04/09/2013 às 11:47 por Marcel Caraciolo

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Differences from other MOOCs?

Community initiative

It is not an initiative of the academy

We use Python 3

- Is the future
- Convenient to use accents in foreign languages
- More natural division: 1 / 2 results 0.5

Small and "casual" videos: average 4 min

Less academic, more "dev" like

A compilation of exercises

CodingBat
Google Python Class
Cracking Code Interview
Facebook Hackaton
Google Developer Day
Edx MIT
Coursera Interactive Python
IME – USP

Special incentives to promote diversity (Zombie Girl)

Some code in videos are from 12 years old girls

12.000 enrolled! and growing...

Some availability problems

overcome with good humor

TWD Portugal Fanpage

https://www.facebook.com/The.Walking.Dead.Portugal

The Walking Dead (Portugal)

The Walking Dead (Portugal) | Timeline | Recent | Liked

The Walking Dead (Portugal) shared a link.
7 hours ago

Querem aprender Programação - e grátis!?

"Python para Zumbis" é o primeiro curso gratuito massivo, em português, para aprender a programar, destinado a zombies, upps, quer dizer iniciantes! Aprenda a programar de uma maneira profissional e divertida, e ainda com um professor fã de TWD.

Informações em: http://pycursos.com/python-para-zumbis/

CLIQUE E VEJA O VÍDEO DE APRESENTAÇÃO

Python para Zumbis com Fernando Masanori
pycursos.com

Aprenda programação com Python em seu ritmo num curso on-line grátis!

Unlike · Comment · Share 2

You, Hugo Arcanjo, Patrick Mazulo, Jujuba Carter and 25 others like this.

Write a comment...

F.O.
APS Portugal
#TWD

Some data (first class)

- 3 people: me, django dev, data dev
- Zero budget!
- 8.91% received the certificate (62% with honor)
- 407k course page views
- 307k video visualizations and downloads (enrolled)
- 215k independent video visualizations! (YouTube playlist)

Some data (first class)

- 1023 cities in Brazil (19.1%)
- 86k interations among students
- 10k exercises submissions
- University professors and Python developers!
- Diversity: retired people, 7% female, 5% incomplete high school, non CS áreas
- Creative Commons Material

Former students: PyLadies Brazil

Who organized the first PyLadies Conference in Brazil

Special use: University of Sao Paulo

USP

A thousand engineers are using the Python for Zombies videos

Zombie Operating System

How did you find the course

Zombie Experience

Video Lenght

Exercises

Zombie distribution

PS: USA 1.2%, Portugal 0.9%, Argentina 0.07%, Paraguai 0.06%

Future

- PyConUS 2014 (+experience)
- EuroPython 2014 (+experience)
- Spanish version (very important to spread Python community in some countries)
- Data Structures Course

Python at FATEC

Retention Intro. Progr. 2008

Retention Intro. Progr. 2013

Retention Data Structures 2008

Retention Data Structures 2013

History: Python at FATEC

Java and C (2007 a 2008):

- 70% retained Intro Prog (2008)
- 85% retained Data Struct (2008)
- T-shirt of 2008 class: "I hate Java"

Python (beginning end of 2008)

- 32% retained Intro Prog (2013)
- 22% retained Data Struct (2013)
- 3rd FATEC (ENADE 2013)
- 1st ICPC 2012 (regional phase)

Car 30 years ago

Car today

TV 30 years ago

TV today

Programming Class 30 year ago

Programming Class today

The same way of teach as 30 years ago

Details

- Lab Only – 6 classes == 4 + 2
- Exercises with tests included
- Weekly Coding Dojo
- Big Brother
- Monitors
- Google Developer Day
- Facebook Hackaton
- New:
  - Classic Games with Python in the browser
  - Python para Zumbis

Lab Only Classes

TDD

Weekly Coding Dojo

Big Brother

Raspberry Pi

Raspberry Pi classes

Python for Kids

Antonio concluded with me Coursera "Interactive Games with Python"

Naomi: like Justin Bieber and is studying Python

2012 students T-shirt

Talk is cheap.
Show me the code.

Linus Torvalds

CEDET Decolar

CEDET Decolar Game

```
import random
girls = '''Júlia Sophia Isabella Manuela Giovanna Alice Laura
    Luiza Beatriz Mariana Yasmin Gabriela Rafaela Isabelle Lara
    Letícia Valentina Nicole Sarah Vitória Isadora Lívia Helena
    Lorena Clara Larissa Emanuelly Heloisa Marina Melissa Gabrielly
    Eduarda Rebeca Amanda Alícia Bianca Lavínia Fernanda Ester
    Carolina Emily Cecília Pietra Milena Marcela Laís Natália
    Maria Bruna Camila Luana Catarina Olivia Agatha Mirella
    Sophie Stella Stefany Isabel Kamilly Elisa Luna Eloá Joana
    Mariane Bárbara Juliana Rayssa Alana Caroline Brenda Evelyn
    Débora Raquel Maitê Ana Nina Hadassa Antonella Jennifer
    Betina Mariah Sabrina'''.split()
girls.sort()
print (' '.join(girls))
secret = random.choice(girls)
guess = ''
while guess != secret:
    guess = input('Guess: ')
    if guess == secret:
        print ('You win!')
    elif guess > secret:
        print ('High')
    else:
        print ('Low')
print ('End of the game!')
```

Made by a 12 years old girl

https://gist.github.com/10198873

Cripto CEDET Decolar

```
def hide(msg):
    s = ''
    for c in msg: s += chr(ord(c) + 30000)
    return s

def show(msg):
    s = ''
    for c in msg: s += chr(ord(c) - 30000)
    return s

>>>
>>> hide('Made by another 12 year old girl')
'睡疑疔疕畧疒瘁畧疑疺疟疤疘疕疢畧畎畢畧瘁疕疑疢畧疟疖疔畧疗疙疢疖'
>>> show('睡疑疔疕畧疒瘁畧疑疺疟疤疘疕疢畧畎畢畧瘁疕疑疢畧疟疖疔畧疗疙疢疖')
'Made by another 12 year old girl'
```

FATEC

"What I took me almost 6 months to do in java, I made in 30 minutes in python"

Bruna Dias

o que eu demorei quase 6 meses pra fazer no meu TCC em Java, fiz em 30 minutos em Python na aula do Masanori

Curtir (desfazer) · Comentar · há 13 horas ·

Você curtiu isso.

Exibir todos os 16 comentários

42 OOP

```
class int42(int):
  def __init__(self, n):
    int.__init__(n)

  def __add__(a, b):
    return 42

  def __str__(n):
    return '42'
```

```
>>> a = int42(13)
>>> b = int42(7)
>>> a + b
42
>>> a
13
>>> b
7
>>> print (a)
42
>>> print (b)
42
```

42 is stronger than the beast

```
from functools import wraps
def hitchhiker(func):
  @wraps(func)
  def wrapper(*args, **kwargs): return 42
  return wrapper

@hitchhiker
def fat(n):
  if n < 2: return 1
  return n * fat(n-1)

@hitchhiker
def fib(n):
  if n < 2: return 1
  return fib(n-1) + fib(n-2)

print ('42 is stronger than the apocalypse beast')
print ('Fat(666)=%d' %fat(666))
print ('Fib(666)=%d' %fib(666))
```

https://gist.github.com/7034743

json object_hook

```
import urllib.request
import json
from pprint import pprint

class Dic42(dict):
  def __missing__(self, key):
    return '42'

url = 'https://graph.facebook.com/fmasanori'
resp = urllib.request.urlopen(url).read()
data = json.loads(resp.decode('utf-8'),
                  object_hook = Dic42)
pprint (data)
print ()
print ('Ultimate answer:', data['Ultimate answer'])
```

https://gist.github.com/5620404

Facebook Hackaton 2013 (Seletive Test)

```
def hack1(n, k):
  def f(s):
    return s.count('1')
  binaries = []
  for x in range(2**n):
    binaries.append(bin(x))
  binaries.sort(key=f, reverse = True)
  return binaries[k - 1]

def hack(n, k):
  return sorted([bin(x) for x in range(2**n)],
                key=lambda s: s.count('1'),
                reverse = True)[k-1]
```

Selection Test 2013 Facebook Hackaton Given two positive integers n and k, generate all binary integer between 0 and 2 ** n-1, inclusive. These binaries will be drawn in descending order according to the number of existing 1s. If there is a tie choose the lowest numerical value. Return the k-th element from the selected list. Eg n = 3 and k = 5 ['0 b111 ', '0 b11', '0 B101 ', '0 b110', '0 b1 ', '0 b10', '0 b100 ', '0 b0'] fifth element '0 b1 '

https://gist.github.com/5620075

Quicksort

```
def quicksort(v):
    if len(v) <= 1:
        return v

    pivot = v[0]
    equals  = [x for x in v if x == pivot]
    smaller = [x for x in v if x <  pivot]
    higher = [x for x in v if x >  pivot]
    return quicksort(smaller) + equals + quicksort(higher)

print (quicksort([5, 7, 9, 3, 4, 0, 2, 1, 6, 8]))
```

https://gist.github.com/4673057

Interface GUI

```
import tkinter
from time import strftime
#by Luciano Ramalho

clock = tkinter.Label()

clock.pack()
clock['font'] = 'Helvetica 120 bold'
clock['text'] = strftime('%H:%M:%S')

def tictac():
    agora = strftime('%H:%M:%S')
    if agora != clock['text']:
        clock['text'] = agora
    clock.after(100, tictac)

tictac()
clock.mainloop()
```

By Luciano Ramalho

https://gist.github.com/4961824

Facebook Friends Photos

facebook developers | Search Facebook Developers | Docs | Tools | Support | News | Apps | Fernando

Graph API Explorer

Application: Graph API Explorer | Locale: English (US)

Access Token: CAACEdEose0cBAFi0cBObkPZBL5nltrE6ZC8MpDRNvdY6575zOpoiSatbZABxNBM7XuHuibUWuZBCSdMtPMihTvgRm44RlDik | Debug | Get Access Token

Graph API | FQL Query

GET | → /1183621847?fields=id,name | Submit

Learn more about the Graph API syntax.

Node: 1183621847

- id
- name

```
{
  "name": "Fernando Masanori Ashikaga",
  "id": "1183621847"
}
```

Get the token

Facebook Friends Photos

```
import urllib.request
import json

def save_image(friend):
  size = '/picture?width=200&height=200'
  url = 'https://graph.facebook.com/'+ friend['id'] + size
  image = urllib.request.urlopen(url).read()
  f = open(friend['name'] + '.jpg', 'wb')
  f.write(image)
  f.close()
  print (friend['name'] + '.jpg impresso')
#get the token https://developers.facebook.com/tools/explorer
url = 'https://graph.facebook.com/me/friends?access_token=<token>'
resp = urllib.request.urlopen(url).read()
data = json.loads(resp.decode('utf-8'))

for friend in data['data']:
  save_image(friend)
```

https://gist.github.com/4684752

Android Wallpaper

Android Wallpaper

Rice Rocks (Asteroids)

ASTEROIDS RELOADED
Ship controls:
Left: A or left arrow:
Right: D or right arrow:
Thrust: W or up arrow
Fire: space

Key:

Mouse: Click 361, 228

PyMan = Python Pacman

Welcome to PyMan!

Instructions:
1. Click New Game to start a new game
2. Use the arrow keys to move PyMan
3. Avoid the Professors
4. Eat a large pellet to make the Professors edible
5. Eat all the pellets to go to the next level
6. Try to get a high score :)
7. High score isn't submitted until you click Go

Points:
Small pellets = 10 pts
Large pellets = 50 pts
Bonuses = level x 100 pts
1st Ghost = 200 pts
2nd Ghost = 400 pts
3rd Ghost = 800 pts
4th Ghost = 1600 pts

Credits:
Intro Music - the lecture videos
Professor Mugshots - the class info page
Power Pellet Music - playonloop.com
Sound Effects - noiseforfun.com
Other Images - clker.com

Key:

Mouse:

Questions?

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