华夏中文学校2020-05-29 Python 暑期班 level1 (11:30-01:30pm)

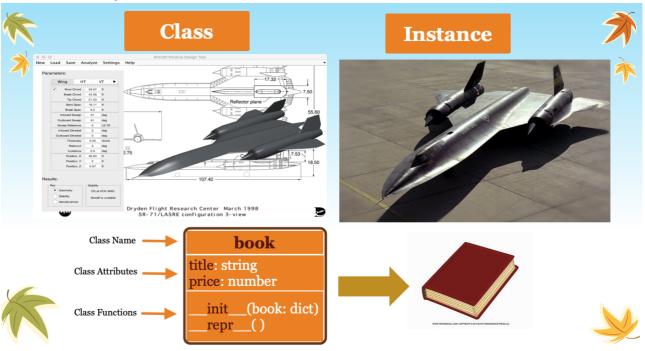
Python Tutorial

w3Schools

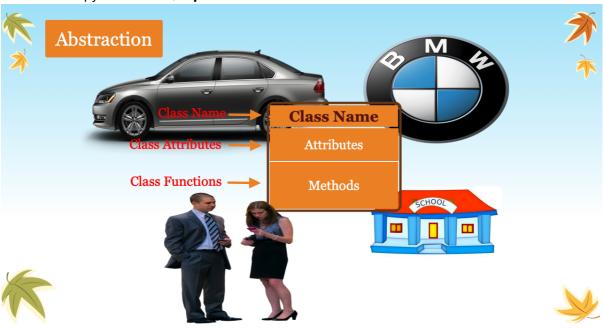
2020-07-30

OOP

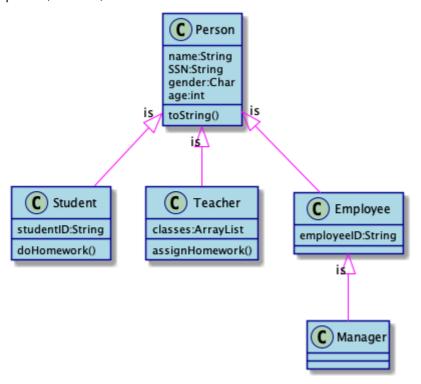
YouTube Classes Python Classes



- o class book, init, repr
- o class student.py constructor, repr abstraction



- o user.py, User, SubUser inheritence testUser
- o person, teacher, student inheritence



sqlite

- sqlite0.py > create connection
- o sqlite1.py
- o sqlite2.py
- o sqlite4.py
- sqlite5.py
- o sqlite6.py
- o sqlite7.py > build relational data
- sqlite8.py > show relation between project and task

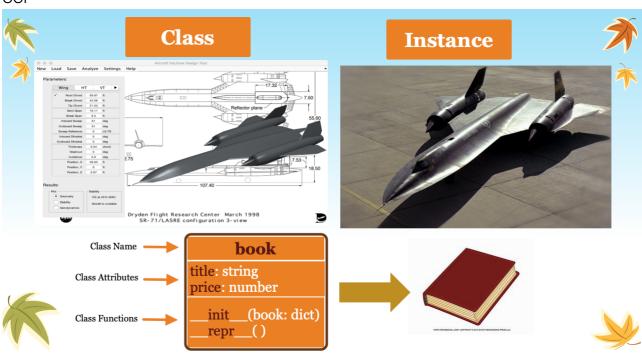
- Fix issue last class
- Review
 - Markdown document
 - o ball game
 - o draw snowman
 - o plot
 - o covid_19
 - o debug python code

- database access (CRUD)
- o Postman to test web service
- o application web server
- react JS front end GUI server

Function

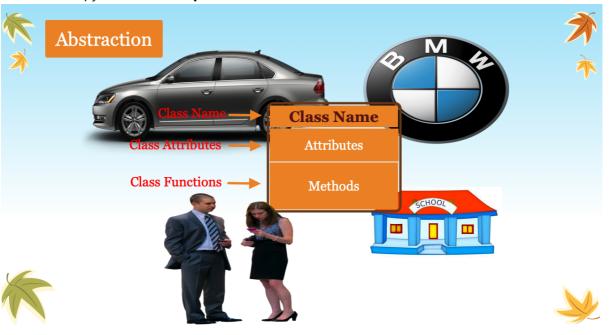
- o math1.py (circle area, rectangule area, triangle area)
- defineFunction.py (help(sum))
- keywordArgs.py
- o practice: define a function with keyword arguments -(createList.py parseString(str, sep=','))
- o defaultValue.py
- o ask.pys

OOP

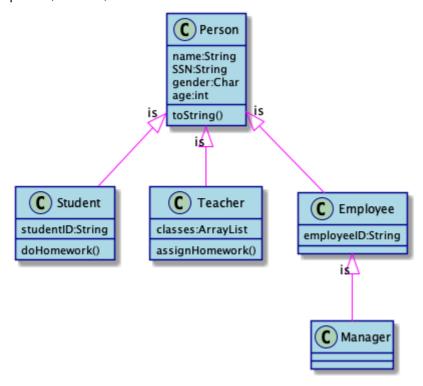


o class book, init, repr

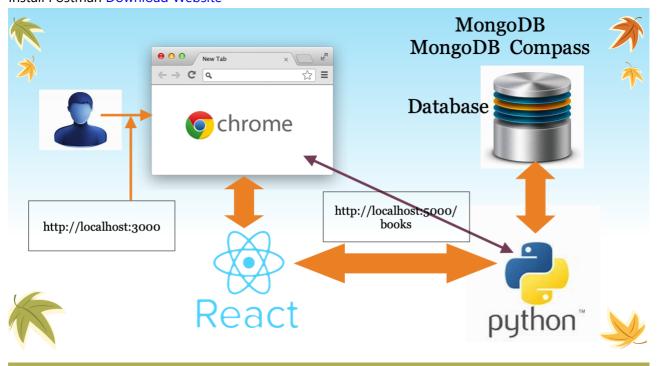
o class student.py constructor, **repr** abstraction



- o user.py, User, SubUser inheritence testUser
- o person, teacher, student inheritence

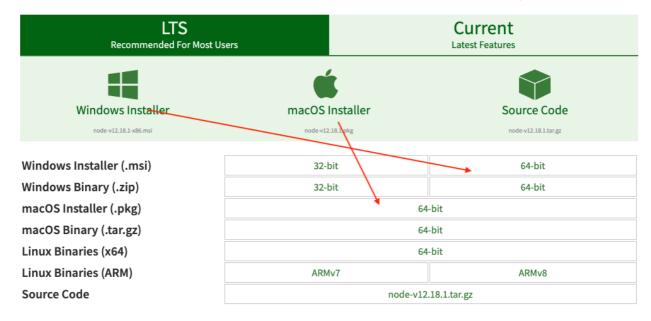


Install Postman Download Website



- app server
 - o app4.py (get data from mongodb)
 - o postman
- install npm Download and install node

Download the Node.js source code or a pre-built installer for your platform, and start developing today.



- windows
- o macos
- Install NodeJS & npm on windows 10 nodejs.org/en/ download page Google Search: install reactjs on windows 10 Step by step option 2

```
node --version

npm --version

npm install -g create-react-app

create-react-app --version

create-react-app reactproject2
```

Install ReactJs on MacOS

sudo npx create-react-app wang-app sudo chown -R wangqianjiang wang-app cd wang-app npm start

Create a new reactjs app

2020-07-27

- Mongo DB
 - o retrieve.py
 - o update.py
 - o delete.py
 - o bookdb.py
- App server
 - app1.py > ping-pong
 - o app2.py >
 - o app3.py > display books
 - o app4.py > postman > test service
- Install Postman Download Website

- Prime
 - o prime0.py > straight forward
 - o prime1.py > optimized by half
 - prime2.py > define function isPrime()
 - prime3.py > calculate range(40-50)
 - prime4.py > define function rangePrime(x,y)
- Mongo DB
 - o install MongoDB
 - install MongoDB Compass
 - o create.py > create book db
 - o retrieve.py
 - o update.py

- o delete.py
- o bookdb.py

2020-07-22

- plot
 - plot3.py
 - Practice: plot sin(x) and cos(x) in the same chart > plot4.py
 - China-vs-USA.py
 - Online data
 - o Online data
 - Practice

2020-07-21

- file access
 - o file5.py
 - o csvReader.py
- snowman continue
 - create a class snowman.py > drawSnowMan.py
- ploy
 - o plot0.py
 - o plot1.py
 - o plot2.py

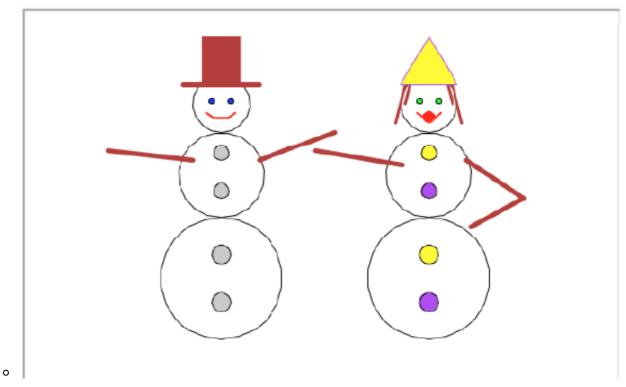
2020-07-20

- check homework snowcouple
 - o demo draw_snowman.py
- file read
 - o file0.py (write to file)
 - file1.py (write to existing file)
 - o file2.py (with open, auto close)
 - o file3.py (dump json)
 - o file4.py (pandas read csv)
 - o file5.py ()
 - o file6.py ()
- plot

2020-07-16

Check homework

- roll dice
 - o dice.py
 - o Practice: add total value of 2 dices
 - Practice: circle.py > circle_area(r)
- guess number
 - o guessNumber.py
- draw snow man



- o demo draw_snowman.py
- o shapes.py
- o testShapes.py
- o drawSun.py
- homework> draw snowcouple

2020-07-15

- ball game
 - o ball1.py
 - o ball2.py ~ ball10.py

- turtle
 - turtle1.py ~ turtle5.py
- ball game

o ball1.py ~ ball10.py

2020-07-13

- check homework
 - o yichen > 17 > Google Search: Roman Numerals >
- Loop
 - o forLoop1.py
 - o forBreak.py
 - forContinue.py
 - o forNested1.py
 - o while.py
 - o Practice:

```
We're on time 0
We're on time 1
We're on time 2
We're on time 3
```

- loop string
- o forElse.py
- If-Else
 - o ifelse.py
 - o if-else.py
 - Infinit loop while True: > input("Continue? (y/n)")
 - Practice:

```
2, 4, 6, 8, 10
1, 3, 5, 7, 9
```

2020-07-09

• Data Type

- Number
 - int 整数
 - float 浮点数
 - complex 复数
 - String
 - str 字符串

- Tuple
 - tuple 圆数组
- List
 - list 方数组
- Set
 - set 集合
- Dictionary
 - dict 词典

- o set > setTest.py
- o dict > dictTest.py

2020-07-08

- Python playground and help document
 - python >>> help(print) (positional arguments, keyword arguments)
 - Practice: different print statements
 - o print.py
 - o
- Data Type



- int 整数
- float 浮点数
- complex 复数
- String
 - str 字符串

- Tuple
 - tuple 圆数组
- List
 - list 方数组
- Set
 - set 集合
- Dictionary
 - dict 词典

python terminal

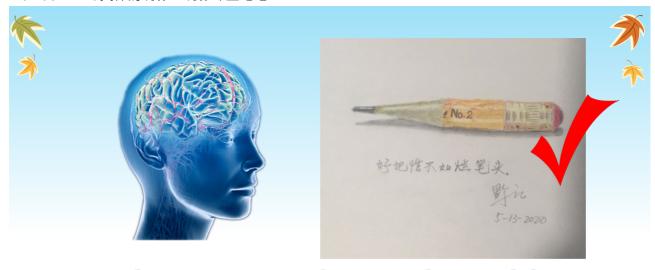
int, float, complex > floatTest.py

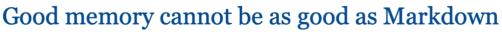
10 / 15

0

- o str > strTest.py
- tuple > tupleTest.py
- o list > listTest.py
- o set > setTest.py
- o dict > dictTest.py

- turn in homework to GitHub
- Markdown md文件的制作,制作课堂笔记









- o add Markdown Extension
- o 显示标题,子标题 #, ##
- o 显示 tablet *, 1
- o 显示命令行
- ο 显示图形
- ο 显示链接

• Familiar with your keyboard





space : ctrl+c Ctrl+v ctrl+/ shift+downarrow tab shift+tab Enter(Return) " `

- Hello World
 - o hello.py
 - o helloHim.py

2020-07-06

• installation check

python --version
git --version
code --version

• Famillar with your keyboard

mkdir workspace
ls
cd workspace
mkdir python
cd python
ls





locate ·, enter, space, tab, ·, "", ", up-arrow, left-arrow

Software Installation

• 下载 VSCode

Google search: vs code download Search result: Download Visual Studio Code - Mac, Linux, Windows VSCode Download Website File: VSCode-darwin-stable.zip

下载 Python

Google search: python download Search result: Download Python | Python.org Python Download Website

• 安装 Git

Google search: git downloads Search result: Git - Downloads

Git Download

```
brew install git
ls -la /usr/local
sudo chown -R wangqianjiang:wheel /usr/local
brew link git
```

Getting start

```
mkdir workspace
cd workspace
mkdir python
```

use text editor: NotePad.exe

```
print("Hello, world!")
a = 4
b = 5
print(a+b)
```

save to first.py

```
python first.py
```

Email Address

Inact.audreyxy@gmail.com; wanghangyao@gmail.com; yutiyang@swbell.net; meijenho0407@gmail.com; xuelian.hu@outlook.com; xinlian.chang@gmail.com; libraluo@hotmail.com; ty7701@gmail.com; bing88us@yahoo.com; pagyy26@gmail.com; jzygeorgia@hotmail.com; lanachau@gmail.com; lanachau@gmail.com; milmil_22@hotmail.com; crystalchm@yahoo.com; crystalchm@yahoo.com;

总校

- Kayden Gao (高宇晨) Katy
- Robert Garcia
- June Garcia