常用第三方包

requests

```python
import urllib2

gh_url = 'https://api.github.com'

req = urllib2.Request(gh_url)

password_manager = urllib2.HTTPPasswordMgrWithDefaultRealm()
password_manager.add_password(None, gh_url, 'user', 'pass')

auth_manager = urllib2.HTTPBasicAuthHandler(password_manager)
opener = urllib2.build_opener(auth_manager)

urllib2.install_opener(opener)

handler = urllib2.urlopen(req)

print handler.getcode()
print handler.headers.getheader('content-type')
```

```python
import requests

r = requests.get('https://api.github.com',
                 auth=('user', 'pass'))

print r.status_code
print r.headers['content-type']
```

httpie

1. 友好的语法高亮输出,

2. 默认输出的内容的结构是json的，可读性好且易于二次处理

3. 支持持久性会话

attrs

click

1. 支持任意命令的嵌套

2. 提供有用的功能函数，如在终端输出可以带颜色

3. 支持子命令的懒加载。懒加载就是都有哪些命令是动态算出来的，而不需要预先定义好

```python
import argparse


parser = argparse.ArgumentParser(description='This says hello a particular number of times.')
parser.add_argument('name', help='Name to use when saying hello.', type=str)
parser.add_argument('--times', default=1, help='Number of greetings: 1-5', type=int,
                    choices=range(1, 6))
args = parser.parse_args()
for _ in range(args.times):
    print('Hello, {}!'.format(args.name))
```

```
❯ python argparse_example.py -h
usage: argparse_example.py [-h] [--times {1,2,3,4,5}] name

This says hello a particular number of times.

positional arguments:
  name                 Name to use when saying hello.

optional arguments:
  -h, --help           show this help message and exit
  --times {1,2,3,4,5}  Number of greetings: 1-5

❯ python argparse_example.py --times 2 World
Hello, World!
Hello, World!
```

```python
import click


@click.command()
@click.option('--times', default=1, type=click.IntRange(1, 5),
              help='Number of greetings: 1-5')
@click.argument('name')
def hello(name, times):
    for _ in range(times):
        click.echo('Hello, {}!'.format(name))


hello()
```

```
❯ python click_example.py --help
Usage: click_example.py [OPTIONS] NAME

Options:
  --times INTEGER RANGE  Number of greetings: 1-5
  --help                 Show this message and exit.

~/sansa/introduction-python/2.Python知识/22 master*
❯ python click_example.py --times 2 World
Hello, World!
Hello, World!
```

docopt

```
"""Naval Fate.

Usage:
  naval_fate.py ship new <name>...
  naval_fate.py ship <name> move <x> <y> [--speed=<kn>]
  naval_fate.py ship shoot <x> <y>
  naval_fate.py mine (set|remove) <x> <y> [--moored | --drifting]
  naval_fate.py (-h | --help)
  naval_fate.py --version

Options:
  -h --help     Show this screen.
  --version     Show version.
  --speed=<kn>  Speed in knots [default: 10].
  --moored      Moored (anchored) mine.
  --drifting    Drifting mine.

"""
from docopt import docopt


if __name__ == '__main__':
    arguments = docopt(__doc__, version='Naval Fate 2.0')
    print(arguments)
```

```
❯ python naval_fate.py
Usage:
  naval_fate.py ship new <name>...
  naval_fate.py ship <name> move <x> <y> [--speed=<kn>]
  naval_fate.py ship shoot <x> <y>
  naval_fate.py mine (set|remove) <x> <y> [--moored | --drifting]
  naval_fate.py (-h | --help)
  naval_fate.py --version

❯ python naval_fate.py ship Guardian move 100 150 --speed=15
{'--drifting': False,
 '--help': False,
 '--moored': False,
 '--speed': '15',
 '--version': False,
 '<name>': ['Guardian'],
 '<x>': '100',
 '<y>': '150',
 'mine': False,
 'move': True,
 'new': False,
 'remove': False,
 'set': False,
 'ship': True,
 'shoot': False}
```

six

pelican

mkdocs

延伸阅读

1. https://gist.github.com/kennethreitz/973705
2. https://devhints.io/httpie
3. https://zhuanlan.zhihu.com/p/34963159
4. https://realpython.com/comparing-python-command-line-parsing-libraries-argparse-docopt-click/
5. https://www.youtube.com/watch?v=pXhcPJK5cMc
6. https://pythonhosted.org/six/
7. http://www.mkdocs.org/