

## 实验 2.py

普通爬取电影 top250

代码

```
import requests
from lxml import etree

def get_page(start_num):
    url='https://movie.douban.com/top250?start=%s&filter=' %start_num
    res=requests.get(url)

    tree=etree.HTML(res.text)
    top250=tree.xpath('//span[@class="title"][1]/text()')
    print(top250)
    return top250
get_page(0)
```

## 文件 One.py

爬取豆瓣电影 top 榜单，并转换为 csv

代码：

```
import requests
import csv
import lxml
from lxml import etree
class Spider:
    def __init__(self,version):
        self.version=version
        self.result=[]

    def get_page(self,start_num):
        url='https://movie.douban.com/top250?start=%s&filter='%start_num
        res=requests.get(url)

        tree=etree.HTML(res.text)
        top250=tree.xpath('//span[@class="title"][1]/text()')
        print(top250)
        return top250

    def go(self):
        print('Start...')
        for i in range(0,1):
```

```

        top250=self.get_page(i*25)
        self.result += top250

    return self.result

if __name__=="__main__":
    my_spider=Spider('1.0')
    res=my_spider.go()
    with open('D:/cs.csv','a+',encoding='UTF-8',newline='')as csvfile:
        w=csv.writer(csvfile)
        w.writerow(res)

```

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	肖申克的救赎	霸王别姬	这个杀手不太冷	阿甘正传	美丽人生	泰坦尼克号	千与千寻	辛德勒的名单	盗梦空间	忠犬八公	机器人总动员	三傻大闹宝莱坞	海上钢琴师	放牛班的春天	楚门的世界	大话西游
2																
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## 文件 Two.py

将 csv 转存进数据库

代码:

```

import csv
import pymysql

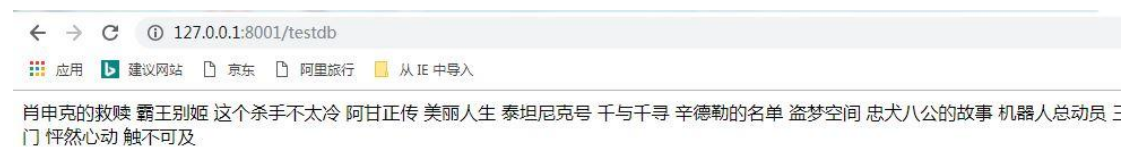
def readData():
    result=[]
    with open('D:/cs.csv','r',encoding='UTF-8') as csvfile:
        csv_reader=csv.reader(csvfile)
        for row in csv_reader:
            for a in row:
                result.append(a)
    return result

db=pymysql.connect("localhost","root","123456","mysql")
cursor=db.cursor()
res=readData()
print(res)
sql="INSERT INTO testmodel_test(Name) VALUES(%s)"
for a in res:

```

```
cursor.execute(sql,(a))
db.commit()
db.close()
```

文件夹 Test（django）  
将爬取内容通过 Django 显示到网页  
Test/Test/settings.py 配置数据库  
Test/Test/testdb.py 连接数据库



京东.py  
爬取京东手机商品页面内容保存记事本（Jd.txt）  
代码：

```
from selenium import webdriver
from selenium.webdriver.support.wait import WebDriverWait
from selenium.webdriver.support import expected_conditions as EC
from selenium.webdriver.common.by import By
import selenium.common.exceptions
import json
import csv
import time

class JdSpider():
    def open_file(self):
        self.fm = input('请输入文件保存格式（txt、json、csv）：')
        while self.fm!='txt' and self.fm!='json' and self.fm!='csv':
            self.fm = input('输入错误，请重新输入文件保存格式（txt、json、csv）：')
        if self.fm=='txt':
```

```

        self.fd = open('D:\Jd.txt','w',encoding='utf-8')
    elif self.fm=='json' :
        self.fd = open('Jd.json','w',encoding='utf-8')
    elif self.fm=='csv' :
        self.fd = open('Jd.csv','w',encoding='utf-8',newline='')

def open_browser(self):
    self.browser = webdriver.Chrome()
    self.browser.implicitly_wait(10)
    self.wait = WebDriverWait(self.browser,10)

def init_variable(self):
    self.data = zip()
    self.isLast = False

def parse_page(self):
    try:
        skus = self.wait.until(EC.presence_of_all_elements_located((By.XPATH,'//li[@class="gl-item"]')))
        skus = [item.get_attribute('data-sku') for item in skus]
        links = ['https://item.jd.com/{sku}.html'.format(sku=item) for item in skus]
        prices = self.wait.until(EC.presence_of_all_elements_located((By.XPATH,'//div[@class="gl-i-wrap"]/div[3]/strong/i')))
        prices = [item.text for item in prices]
        names = self.wait.until(EC.presence_of_all_elements_located((By.XPATH,'//div[@class="gl-i-wrap"]/div[4]/a/em')))
        names = [item.text for item in names]
        comments = self.wait.until(EC.presence_of_all_elements_located((By.XPATH,'//div[@class="gl-i-wrap"]/div[5]/strong')))
        comments = [item.text for item in comments]
        self.data = zip(links,prices,names,comments)
    except selenium.common.exceptions.TimeoutException:
        print('parse_page: TimeoutException')
        self.parse_page()
    except selenium.common.exceptions.StaleElementReferenceException:
        print('parse_page: StaleElementReferenceException')
        self.browser.refresh()

def turn_page(self):
    try:

```

```

self.wait.until(EC.element_to_be_clickable((By.XPATH,'//a[@class="pn-next"]'))).click()
    time.sleep(1)
    self.browser.execute_script("window.scrollTo(0,document.body.scrollHeight)")
    time.sleep(2)
except selenium.common.exceptions.NoSuchElementException:
    self.isLast = True
except selenium.common.exceptions.TimeoutException:
    print('turn_page: TimeoutException')
    self.turn_page()
except selenium.common.exceptions.StaleElementReferenceException:
    print('turn_page: StaleElementReferenceException')
    self.browser.refresh()

def write_to_file(self):
    if self.fm == 'txt':
        for item in self.data:
            self.fd.write('-----\n')
            self.fd.write('link: ' + str(item[0]) + '\n')
            self.fd.write('price: ' + str(item[1]) + '\n')
            self.fd.write('name: ' + str(item[2]) + '\n')
            self.fd.write('comment: ' + str(item[3]) + '\n')
    if self.fm == 'json':
        temp = ('link','price','name','comment')
        for item in self.data:
            json.dump(dict(zip(temp,item)),self.fd,ensure_ascii=False)
    if self.fm == 'csv':
        writer = csv.writer(self.fd)
        for item in self.data:
            writer.writerow(item)

def close_file(self):
    self.fd.close()

def close_browser(self):
    self.browser.quit()

def crawl(self):
    self.open_file()
    self.open_browser()
    self.init_variable()
    print('开始爬取')

self.browser.get('https://search.jd.com/Search?keyword=%E6%89%8B%E6%9C%BA&enc=utf-8')
    time.sleep(1)

```

```

self.browser.execute_script("window.scrollTo(0,document.body.scrollHeight)")
time.sleep(2)
count = 0
while count!=10:
    time.sleep(2)
    count += 1
    print('正在爬取第 ' + str(count) + ' 页.....')
    self.parse_page()
    self.write_to_file()
    self.turn_page()
self.close_file()
self.close_browser()
print('结束爬取')

if __name__ == '__main__':
    spider = JdSpider()
    spider.crawl()

```

```

DevTools listening on ws://127.0.0.1:54819/devtools/browser/91824484-4546-494b-8772-a6c29c616d5a
开始爬取
正在爬取第 1 页.....
正在爬取第 2 页.....
正在爬取第 3 页.....
正在爬取第 4 页.....
正在爬取第 5 页.....
[0409/165055.934:ERROR:stun_port.cc(92)] Binding request timed out from 0.0.0.x:55346 (any)
正在爬取第 6 页.....
正在爬取第 7 页.....
正在爬取第 8 页.....
正在爬取第 9 页.....
正在爬取第 10 页.....
结束爬取

```

```

文件(F)  编辑(E)  格式(O)  查看(V)  帮助(H)
-----
link: https://item.jd.com/100003484294.html
price: 7699.00
name: 三星 Galaxy S10 8GB+512GB炭晶黑 (SM-G9730) 3D超声波屏下指纹超感官全视屏双卡双待
comment: 2.4万+条评价
-----
link: https://item.jd.com/100000177760.html
price: 6049.00
name: Apple iPhone XR (A2108) 128GB 黑色 移动联通电信4G手机 双卡双待
comment: 87万+条评价
-----
link: https://item.jd.com/100003433872.html
price: 3298.00
name: 【KPL官方比赛用机】vivo iQOO 44W超快闪充 8GB+128GB电光蓝 全面屏拍照手机 骁龙855
comment: 7.7万+条评价
-----
link: https://item.jd.com/7652013.html
price: 1199.00
-----
小米 红米Redmi 7 4GB+64GB 幻影蓝 全网通4G 双卡双待 移动联通电信

```

## 网页展示

### index.html（首页）

代码：

```
<head>

  <meta charset="utf-8">

  <title>赵佳豪的导航栏</title>

  <link rel="stylesheet" href="https://cdn.staticfile.org/twitter-bootstrap/3.3.7/css/bootstrap.min.css">

  <script src="https://cdn.staticfile.org/jquery/2.1.1/jquery.min.js"></script>

  <script src="https://cdn.staticfile.org/twitter-bootstrap/3.3.7/js/bootstrap.min.js"></script>

</head>

<body>

<nav class="navbar navbar-default" role="navigation">

  <h1>python 首页</h1>

  <div class="container-fluid">

    <div class="navbar-header">

      <a class="navbar-brand" href="#">爬虫</a>

    </div>

    <div>

      <ul class="nav navbar-nav">

        <li class="active"><a href="http://127.0.0.1:8000/testdb/">电影</a></li>

        <li><a href="#">京东</a></li>

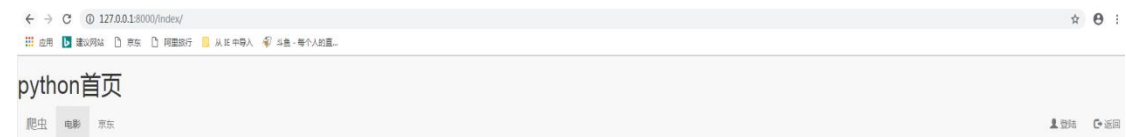
        </li>

      </ul>

      <ul class="nav navbar-nav navbar-right">

        <li><a href="#"><span class="glyphicon glyphicon-user"></span> 登陆</a></li>

        <li><a href="http://127.0.0.1:8000/index/"><span class="glyphicon glyphicon-log-out"></span> 返
```



## 电影 top.html

代码：

```
<!DOCTYPE html>

<html>
```

```

<head>

    <meta charset="utf-8">

    <title>电影排行</title>

    <link rel="stylesheet"
href="https://cdn.staticfile.org/twitter-bootstrap/3.3.7/css/bootstrap.min.css">

    <script src="https://cdn.staticfile.org/jquery/2.1.1/jquery.min.js"></script>

    <script
src="https://cdn.staticfile.org/twitter-bootstrap/3.3.7/js/bootstrap.min.js"></script>
</head>
<body>

    <nav class="navbar navbar-default" role="navigation">

        <div class="container-fluid">

            <div class="navbar-header">

                <a class="navbar-brand" href="#">搜索你喜爱的电影</a>          搜索栏

            </div>

            <form class="navbar-form navbar-left" role="search">

                <div class="form-group">

                    <input type="text" class="form-control" placeholder="Search">

                </div>

                <button type="submit" class="btn btn-default">Search</button>

            </form>

            <ul class="nav navbar-nav navbar-right">

                <li><a href="#"><span class="glyphicon glyphicon-user"></span> 登陆</a></li>

                <li><a href="file:///C:/Users/Administrator/Desktop/%E7%88%AC%E8%99%AB/1.html#"><span
class="glyphicon glyphicon-log-out"></span> 返回</a></li>

            </ul>

        </div>

    </nav>

    <div class="table-responsive" style="width:500px;margin:10px auto;text-align: center;">

        <table class="table table-striped table-hover">

            <tr><th colspan="4" style="text-align:center;"><h4>电影 top25</h4></th></tr>

            <tr><td>排名 </td><td>电影名</td></tr>

            {% for movie in list %}

            <tr>

                <td>{{movie.id}}</td>

                <td>{{movie.name}}</td>

            </tr>

            {% endfor %}

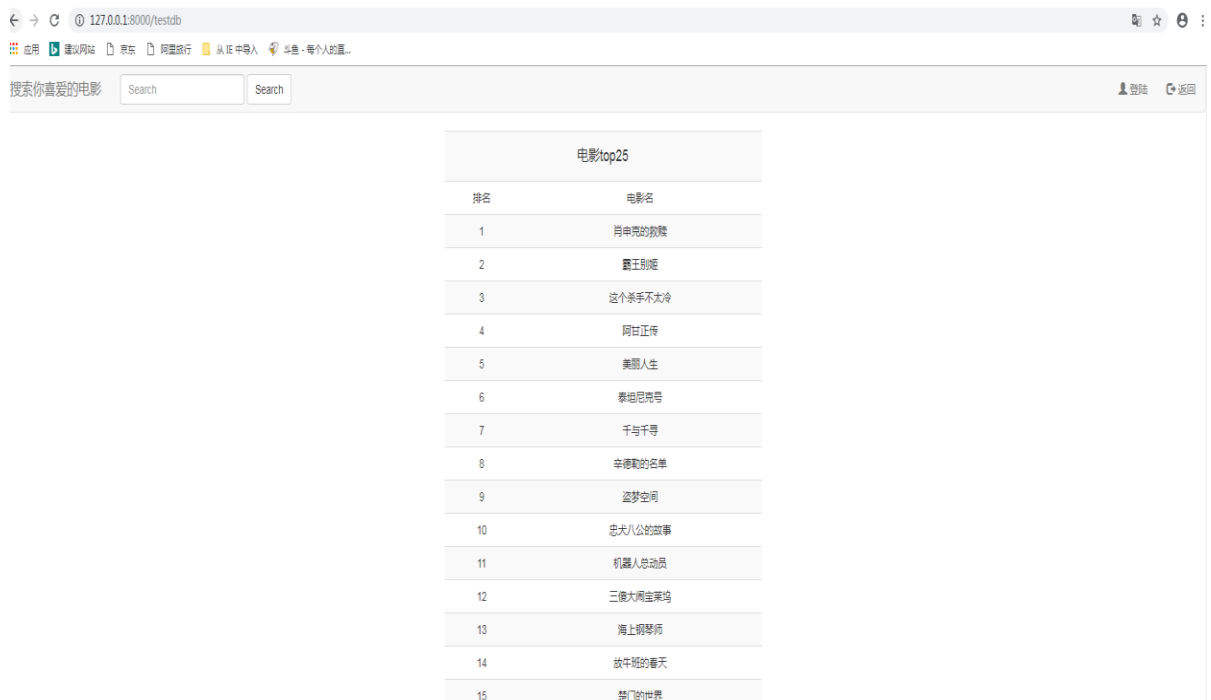
        </table>

    </div>

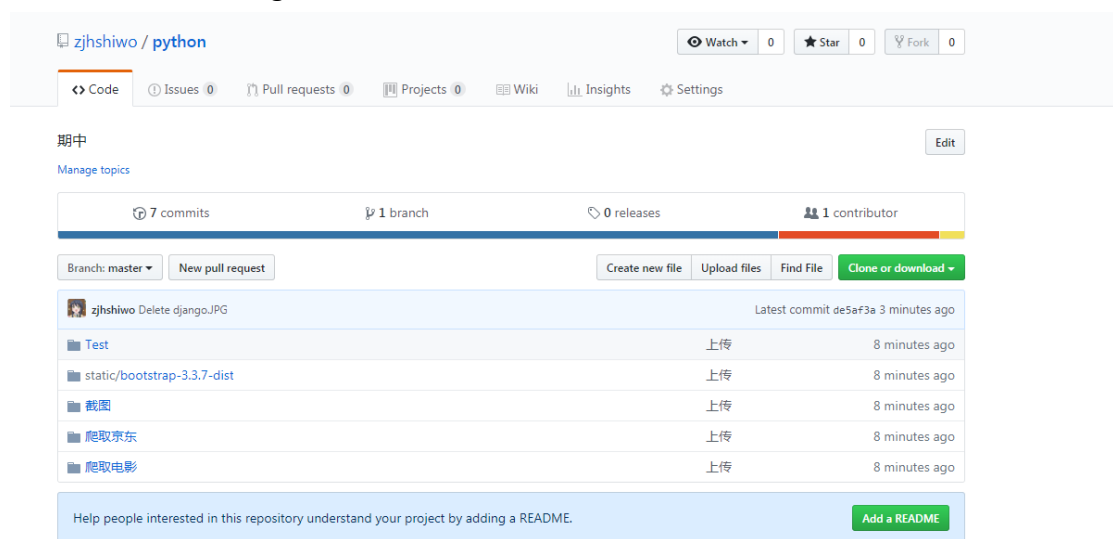
</body>

```





## 将文件代码上传到 github



<https://github.com/zjhshiwo/python>