Fastcampus Data Science Extension SCHOOL

Web Scraping - Static Pages with BeautifulSoup

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continuous pull

continuous pull

```
$ git remote add upstream
https://github.com/anotheruser/original-repo.git
```

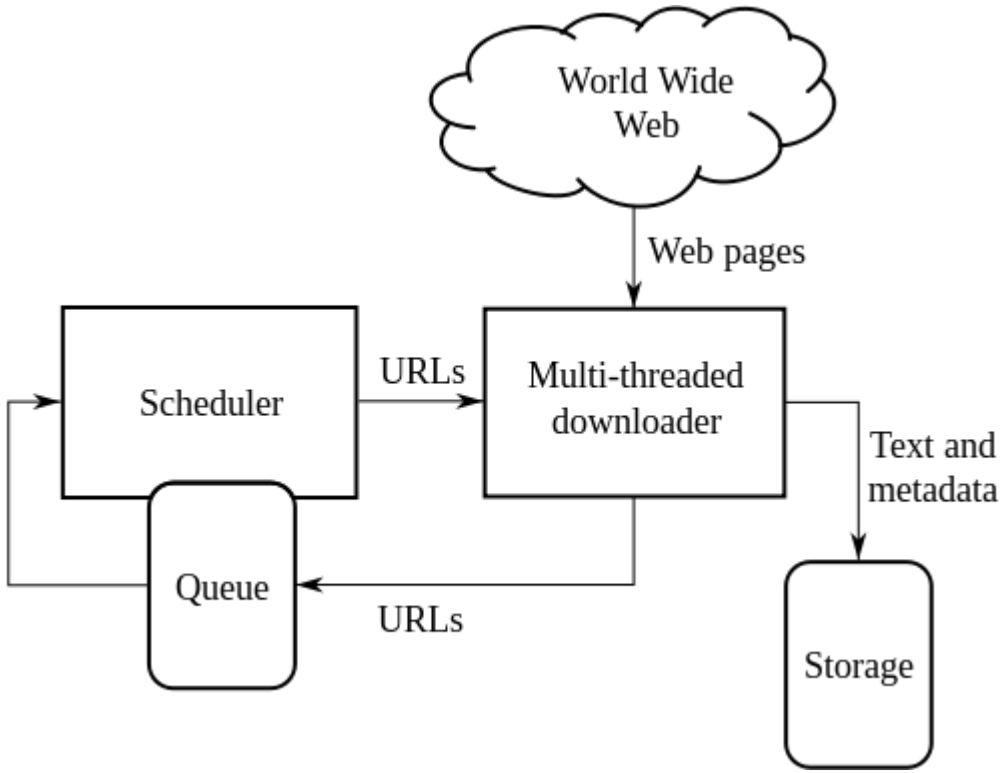
```
$ git fetch upstream
$ git merge upstream/master
```

Get static page content from web

Crawling, Scraping, Parsing

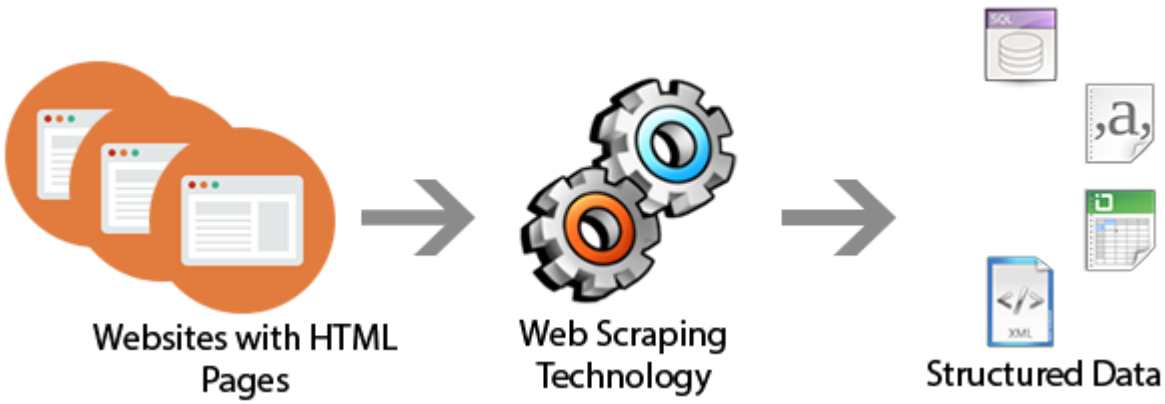
Crawling

Crawling: 조직적 자동화된 방법으로 월드 와이드 웹을 탐색하는 것



Scraping

Scraping: 데이터를 수집하는 행위



Parsing

Parsing: 문장 혹은 문서를 구성 성분으로 분해하고 위계관계를 분석하여 문장의 구조를 결정하는 것

Caution!!

저작권 침해 위반 소지

- 웹사이트 운영자의 크롤링 금지 룰을 어길경우
- 월권하여 데이터베이스에 접근
- 타인의 경제적 이익을 침해할 경우
- 개인정보를 수집할 경우(전화번호, 주소, ..)

Requirements

- requests
- beautifulsoup4

How to request??

```
$ pip install requests
```

```
requests.get(url)
```

How to parse from response data??

```
>>> url="https://www.google.com/"
>>> response = requests.get(url)
>>> response
>>> response.status_code
>>> response.encoding
>>> response.text
>>> response.json()
>>> response.headers
```

get li data

```
<ul>
<li></li>
<li></li>
<li></li>
</ul>
```

with beautifulsoup

```
$ pip install beautifulsoup4
```

```
$ pip install lxml
```

```
import requests
from bs4 import BeautifulSoup
import lxml


html = request.get().text
soup = BeautifulSoup(html, 'lxml')
lis = soup.find('li')
for li in lis:
    print(li.get_text())
```

find headline news from the guardian

https://www.theguardian.com/uk/technology

get table data

```
<table>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

Top Box Office data from rotten tomatoes

https://www.rottentomatoes.com

editorials in rotten tomatoes

https://editorial.rottentomatoes.com/publications/

get article title and contents

```
<article>
<h1>Title</h1>
<p></p>
<p></p>
<p></p>
</article>
```

```
article_section = soup.find('article')
title = article_section.a.get_text()
contents = article_section.find_all('p')
text = ""
for p in contents:
        text += p.string
print(title, text)
```

get article title and contents from the guardian