Lab#3, NLP@CGU Spring 2023

This is due on 2023/03/20 16:00, commit to your github as a PDF (lab3.pdf) (File>Print>Save as PDF).

IMPORTANT: After copying this notebook to your Google Drive, please paste a link to it below. To get a publicly-accessible link, hit the *Share* button at the top right, then click "Get shareable link" and copy over the result. If you fail to do this, you will receive no credit for this lab!

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Question 1 (100 points)

Implementing Yahoo Movies Crawler.

1. Design a Yahoo! Movie Crawler.
2. Crawl all the movie information listed in movie_intheaters page
3. The more movie data crawled, the higher the score

```
import requests
from bs4 import BeautifulSoup

Y_MOVIE_URL = r"https://movies.yahoo.com.tw/movie_intheaters.html"

class MovieCrawler(object):
        def __init__(self):
                pass

        def get_movies(self, page_url):
                # 創建一個空列表，用於存儲電影資訊
                movies = []

                # 使用requests模組發送GET請求獲取網頁內容
                resp = requests.get(page_url)

                # 解析HTML內容
                soup = BeautifulSoup(resp.content, 'html.parser')

                # 查找所有電影資訊的HTML元素
                movie_items = soup.find_all('div', {'class': 'release_info'})

                # 循環處理每個電影資訊元素，提取所需的資訊
                for item in movie_items:
                        movie = {}
                        # 獲取電影中文名
                        movie['ch_name'] = item.find('div', {'class': 'release_movie_name'}).a.text.strip()
                        # 獲取電影英文名
                        movie['en_name'] = item.find('div', {'class': 'en'}).a.text.strip()
                        # 獲取電影詳細頁面的URL
                        movie['movie_url'] = item.find('div', {'class': 'release_movie_name'}).a['href']
                        # 獲取電影上映日期
                        movie['release_date'] = item.find('div', {'class': 'release_movie_time'}).text.strip().replace('上映日期：\n
                        # 獲取電影簡介
                        movie['intro'] = item.find('div', {'class': 'release_text'}).text.strip().replace('\r\n', '').replace('\n', '')

                        # 將電影資訊添加到列表中
                        movies.append(movie)

                return movies
# 創建MovieCrawler對象，獲取前3頁電影資訊
crawler = MovieCrawler()

for page in range(1, 9):
        page_url = f"{Y_MOVIE_URL}?page={page}"
        movies = crawler.get_movies(page_url)
        # 輸出當前頁數和電影數量
        print(f"Page {page} - Total movies: {len(movies)}")
        # 輸出電影資訊
        print(*movies, sep="\n")
# 創建MovieCrawler對象，獲取電影資訊
# crawler = MovieCrawler()
```

```
# crawler = MovieCrawler()
# movies = crawler.get_movies(Y_MOVIE_URL)

# 輸出電影資訊
print(len(movies))
print(*movies, sep="\n")
```

```
Page 1 - Total movies: 10
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✓ 4 秒 完成時間：下午3:58