3/23/2021 HW 3

## **HW 3: Scrape Movie Reviews**

Choose one of your favorite movies and find the URL of "Top Critics" at rottentomatoes.com

- e.g. for the latest movie 'Soul', the URL is: https://www.rottentomatoes.com/m/soul\_2020/reviews?type=top\_critics
- Q1. Write a function to scrape all **Top Critics on the first page**, including, **reviewer's name** (see (1) in Figure), **source** (see (2) in Figure), **content** (see (3) in Figure), **review date** (see (4) in Figure), and **score** (see (5) in Figure).
  - Input: "Top Critics" page URL
  - Output: save all reviews as a DataFrame of columns (reviewer, source, content, date, score). E.g., for the given URL, you can get 20 reviews.
  - If a field, e.g. score, is missing, use None to indicate it.



```
In [51]: import requests
from bs4 import BeautifulSoup
import pandas as pd

def getReviews(page_url):
    reviews= None
    # Add your code here
    return reviews
```

In [52]: url = 'https://www.rottentomatoes.com/m/soul\_2020/reviews?type=top\_critics'
 reviews=getReviews(url)
 reviews.head(5)

]:		reviewer	source	content	date	score
	0	Stephen Romei	The Australian	What follows is an absolute delight. It will m	February 13, 2021	4/5
	1	Kambole Campbell	Hyperallergic	It shortchanges itself at every turn by overex	February 8, 2021	None
	2	Nick Schager	The Daily Beast	It's got a bebopping spirit that's difficult t	February 3, 2021	None
	3	Udita Jhunjhunwala	Scroll.in	Doctor, Powers and Mike Jones have written a s	January 26, 2021	None
	4	Robert Daniels	Polygon	Even with the film's bid for a suspension of r	January 25, 2021	None

• Q2 (Bonus). Modify the function you defined in Q1 to Scrape **Top Critics on all the pages**. Since a movie may have multiple pages, use the **next** button (see (6) in Figure) to navigate to the next page. Continue scraping all the pages until the next button is greyed out. Please don't hardcode the page number in the URL because the number of pages varies by movie.

## Note:

Out[52]

- Test your function with a few movies to make your function is generic enough. A few URLs for testing:
  - https://www.rottentomatoes.com/m/soul\_2020/reviews?type=top\_critics
  - https://www.rottentomatoes.com/m/coco\_2017/reviews?type=top\_critics
- Follow the reference code structure below and save your script as .py file and submit to Canvas

```
In [49]: # best practice to test your class
           # if your script is exported as a module,
           # the following part is ignored
          # this is equivalent to main() in Java
               #url = 'https://www.rottentomatoes.com/m/soul 2020/reviews?type=top critics'
               url = 'https://www.rottentomatoes.com/m/coco_2017/reviews?type=top_critics'
               reviews=getReviews(url)
               print(reviews.head(5))
                      reviewer
                                                         source \
                                                812filmreviews
                Robert Daniels
                  Mark Kermode Kermode & Mayo's Film Review
          2
             Mey Valdivia Rude
                                                  Autostraddle
                  Linda Marric
                                                      HevUGuvs
                   Ryan Gilbey
                                                 New Statesman
                                                          content
                                                                                  date score
         0      In a country with an ever increasing Hispanic ...
1      I don't think there's any question that Coco i...
                                                                    September 5, 2018
                                                                                         3/4
                                                                     August 28, 2018
                                                                                        None
             Several times I found myself sobbing without k...
                                                                       April 20, 2018
             A wonderful return to form for Pixar, who agai...
                                                                     January 26, 2018
          4 The film has a galloping rhythm, and the anima...
                                                                     January 25, 2018
In [ ]:
```