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```
import requests
import time
import random
import selenium
from selenium import webdriver
from selenium.webdriver.chrome.service import Service as ChromeService
from webdriver_manager.chrome import ChromeDriverManager
from selenium.webdriver.common.by import By
from time import sleep
from random import randint
options = webdriver.ChromeOptions()
#options.headless = True --> deprecated
driver = webdriver.Chrome(service=ChromeService(ChromeDriverManager().install()))
import pandas as pd
```

```
In [2]: urlList = ['avengers_infinity_war','spider_man_across_the_spider_verse','top_gun_ma
        #You can manually put movies into the URL list or you can have a webscraper pull mo
        #Please make sure to follow roten tomatoes formatting, all spaces replaced with \_ a
        #the movies are separated by year. Ex: smile_2022
        #Also, shows have a different URL, so be sure to customize per your needs
        for url in urlList:
            finalUrl = 'https://www.rottentomatoes.com/m/'+url+'/reviews?type=user&intcmp=r
            data = []
            stars = []
            rmList = []
            df = pd.DataFrame()
            driver.get(finalUrl)
            #Will run for 50 pages
            for i in range(0,50):
                rmList = []
                #Find star section, count how many full stars and half star in each section
                starSection = driver.find_elements(By.CLASS_NAME, 'star-display')
                for section in starSection:
                    count = 0.0
                    fullStars = section.find_elements(By.CLASS_NAME, 'star-display__filled'
                    for fullStar in fullStars:
                        count +=1.0
                    halfStars = section.find_elements(By.CLASS_NAME, 'star-display_half')
                    for halfStar in halfStars:
                         count +=0.5
                    stars.append(count)
                sleep(randint(2,10))
                #Find review element, then append each review to the data frame
                elements = driver.find_elements(By.CLASS_NAME, 'audience-reviews__review')
                index = 0
                for title in elements:
                    data.append(title.text)
                sleep(randint(2,10))
                #Keep a time difference between each parse to avoid overloading rotten toma
                #The scraper SHOULD NOT interfere with the website at all
```

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```
#This part will click the "next" button
    driver.find_element("xpath", '/html/body/div[3]/main/div/div/section/div/di
    sleep(10)
finalData = {'Review':data,'Stars':stars}
    df = pd.DataFrame(finalData)
#df = df.rename(columns={0:'Review', 1:'Stars')
#Send the data frame to a CSV file that we can edit
    df.to_csv('reviewsRated.csv', mode='a', index=False, header=False)
    sleep(randint(2,10))
```

```
In [3]: driver.close()
In [4]: driver.quit()
```