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```
In [183]: #importing necessary libraries that will be overall in use
from selenium import webdriver
import time
from selenium.webdriver.support.ui import WebDriverWait
from selenium.webdriver.support import expected_conditions as EC
from selenium.webdriver.common.by import By
import pandas as pd
import numpy as np
```

1) Login to your Instagram Handle

```
In [2]: driver = webdriver.Chrome(executable_path = 'c://webdrivers/chromedriver')
driver.get('https://www.instagram.com/')

wait = WebDriverWait(driver,10)
notNow = wait.until(EC.presence_of_element_located((By.NAME,'username')))
username = driver.find_element_by_name('username')
password = driver.find_element_by_name('password')

username.send_keys('SAMPLE_USERNAME')
password.send_keys('SAMPLE_PASSWORD')
username.submit()

for i in range(2): #because I was getting 2 popups for saving the device and to get notifications
    wait = WebDriverWait(driver,10)
    notNow = wait.until(EC.presence_of_element_located((By.XPATH,'//button[contains(text(),"Not Now")]'))))
    notNow.click()
```

2) Type for “food” in search bar and print all the names of the Instagram Handles that are displayed in list after typing “food”

```
In [3]: search = driver.find_element_by_xpath('//*[@id="react-root"]/section/nav/div[2]/div/div[2]/input')
search.send_keys('food')
time.sleep(2)
food_list = driver.find_elements_by_class_name('Ap2z3')
for i in food_list:
    if i.get_attribute('innerHTML')[0] != '#':
        print(i.get_attribute('innerHTML'))

foodiesharma_
foodishta_
_foodfetish
worldfoodcentre.mohali
foodclubfc
food_gasmic_famous
food
foodys
partnersinfood_
street_food_chandigarh
chandigarhfoodguide
chandigarh.food
queeningwithfood
foodblown
foodie_crush2
yourfoodlab
foodgaism
foodiesfeature
foodbible
food_in_my_vein
foodrad
milliondollarmenu
amritsar_food_craver
men_food_
my_food.epiphany
foodnetwork
dogs_infod
my_foodamor
amritsarfood
fooddestinations
foodrush.recipe
love_food
food_n_lifestyle_
food_darzee
booksandgoodfood
folksforfood
tinyfood
bangalore_foodtales
foodmapdelhi
food_love.bangalore
cremicafoods
foodyeating
buzzfeedfood
yourclickapp
food_garage_mohali
every_mans_food_
foodcriticintown
foodieworld_09
punjabi.foodie
foodie.photographer_13
foodrecipesgram
food.in.minutes
alpinohealthfoods
Food Quest, The Food Court
```

3) Searching and Opening a profile

```
In [4]: search.clear()
search.send_keys('So Delhi')
time.sleep(1.5)
so_delhi = driver.find_element_by_class_name('Ap2z3').click()
```

4) Follow/Unfollow given handle

```
In [5]: follow_unfollow_btn = driver.find_element_by_xpath("//button[starts-with(@class, '_5f5mn')]")
if follow_unfollow_btn.get_attribute('innerHTML') != 'Follow':
    print('Already Following So Delhi')
    follow_unfollow_btn.click()

wait = WebDriverWait(driver,10)
unfollow = wait.until(EC.presence_of_element_located((By.XPATH,'//button[starts-with(@class, 'a0olw')]'))))
unfollowConfirm = driver.find_element_by_xpath("//button[starts-with(@class, 'a0olw')]).click()
print('Successfully Unfollowed So Delhi')

else:
    follow_unfollow_btn.click()
    print('Followed So Delhi Now')
    time.sleep(2)
    follow_unfollow_btn.click()
```

```

wait = WebDriverWait(driver,10)
unfollow = wait.until(EC.presence_of_element_located((By.XPATH,"//button[starts-with(@class, 'aOOlW')]")))
unfollowConfirm = driver.find_element_by_xpath("//button[starts-with(@class, 'aOOlW')]").click()
print('Successfully Unfollowed So Delhi')

```

Followed So Delhi Now
Successfully Unfollowed So Delhi

5) Like/Unlike posts

```

In [52]: search = driver.find_element_by_xpath('//*[@id="react-root"]/section/nav/div[2]/div/div[2]/input')
search.send_keys('dilsefoodie')
time.sleep(2)
dilsefoodie = driver.find_element_by_class_name('Ap253').click()

In [97]: # to like and unlike the first 30 posts we can run the same code twice
current_height = driver.execute_script('return document.body.scrollHeight;')

while len(driver.find_elements_by_class_name('_9AhH0'))<=30: # just for the case we have posts lesser than 30
    driver.execute_script('window.scrollTo(0,arguments[0]);',current_height)
    time.sleep(3)
    new_height = driver.execute_script('return document.body.scrollHeight;')
    print(current_height,new_height)
    current_height = new_height

dilsefoodiePosts = driver.find_elements_by_class_name('_9AhH0')
dilsefoodiePosts[0].click()
i = 1
while i<=30:
    #i.click()
    wait = WebDriverWait(driver,10)
    like_btn = wait.until(EC.presence_of_element_located((By.CLASS_NAME,"fr66n")))
    #driver.find_element_by_class_name('fr66n').click() # to click the like button
    like_btn.click()
    #time.sleep(1)
    #driver.find_element_by_class_name('wpO6b').click()
    driver.find_element_by_class_name('coreSpriteRightPaginationArrow').click()
    time.sleep(2)
    i += 1
print('Liked top 30 posts of dilsefoodie')
driver.get('https://www.instagram.com/dilsefoodie/')

```

Liked top 30 posts of dilsefoodie

6) Extract list of followers

```

In [130]: driver.get('https://www.instagram.com/foodtalkindia')
time.sleep(4)

driver.find_element_by_partial_link_text('followers').click()

scroll_box = driver.find_element_by_xpath('/html/body/div[4]/div/div/div[2]')
last_ht, ht = 0,1
while last_ht != ht:
    last_ht = ht
    time.sleep(1)
    ht = driver.execute_script("""
        arguments[0].scrollTo(0,arguments[0].scrollHeight);
        return arguments[0].scrollHeight;
    """,scroll_box)
    if len(driver.find_elements_by_class_name('FPmhX'))>=500:
        break

followers = driver.find_elements_by_class_name('FPmhX')
#print('length',len(followers))
foodtalkindiaFollowers = []
for i in followers[:500]:
    foodtalkindiaFollowers.append(i.get_attribute('title'))
    print(i.get_attribute('title'))

```

v_vittle
mshadab_zafar
kailash3516
food_ogasm
bhavyasahaya
esha_0999
bluejayhostels
veremo_choco_world
sonmath.bardhan
s_s_king_143
discovering_life_and_nature
itz_nurul_ansari
swatisfoodstudio
rahu_.badshah
riyaaajain
imanjyotkaur_
jv_joy_
aj_design01
ambishranganajan

```

In [168]: driver.get('https://www.instagram.com/sodelhi')
time.sleep(4)

driver.find_element_by_partial_link_text('followers').click()

scroll_box = driver.find_element_by_xpath('/html/body/div[4]/div/div/div[2]')
last_ht, ht = 0,1
while last_ht != ht:
    last_ht = ht
    time.sleep(1)
    ht = driver.execute_script("""
        arguments[0].scrollTo(0,arguments[0].scrollHeight);
        return arguments[0].scrollHeight;
    """,scroll_box)
    if len(driver.find_elements_by_class_name('FPmhX'))>=500:
        break

followers = driver.find_elements_by_class_name('FPmhX')
#print('length',len(followers))
sodelhiFollowers = []
for i in followers[:500]:
    sodelhiFollowers.append(i.get_attribute('title'))
    print(i.get_attribute('title'))

```

akhnavi_aa
_sarvijotsingh
iam_ankurgupta
singhbishtprabhudayal
manishmittal213
ssssameer._khan
swatam_pattnaik
me_its_me_0
abhisinhg_7411
arunloveran
jananeepriya2425
randomlypicture1
nomelilus
raheja_deeplika
anit6775
tyagiruchill
rakhi_jindhad

```

himani7695
_ritikaaaaaa
In [ ]:

In [201]: ## my following list

driver.get('https://www.instagram.com/')
profile_ = driver.find_element_by_partial_link_text('garryghotraa')
profile_.click()
time.sleep(3)

driver.find_element_by_partial_link_text('following').click()

following_panel = driver.find_element_by_class_name('isgrP')

current_ht = driver.execute_script('return arguments[0].scrollHeight;',following_panel)
while True:
    driver.execute_script('arguments[0].scrollTo(0,arguments[1]);',following_panel,current_ht)
    time.sleep(1)
    new_ht = driver.execute_script('return arguments[0].scrollHeight;',following_panel)

    if current_ht == new_ht:
        break
    current_ht = new_ht

my_following_list = driver.find_elements_by_class_name('FPmhX')
len(my_following_list)

def innerHTML(i):
    return i.text
my_following_list = pd.Series(my_following_list)
my_following_list = my_following_list.apply(innerHTML)
my_following_list = set(my_following_list)
print("No.of Following:",len(my_following_list))

No.of Following: 747

In [198]: ## my followers list

driver.back()
time.sleep(4)

driver.find_element_by_partial_link_text('followers').click()

followers_panel = driver.find_element_by_class_name('isgrP')

current_ht = driver.execute_script('return arguments[0].scrollHeight;',followers_panel)
while True:
    driver.execute_script('arguments[0].scrollTo(0,arguments[1]);',followers_panel,current_ht)
    time.sleep(1)
    new_ht = driver.execute_script('return arguments[0].scrollHeight;',followers_panel)

    if current_ht == new_ht:
        break
    current_ht = new_ht

my_followers_list = driver.find_elements_by_class_name('FPmhX')
len(my_followers_list)

def innerHTML(i):
    return i.text
my_followers_list = pd.Series(my_followers_list)
my_followers_list = my_followers_list.apply(innerHTML)
my.followers_list = set(my.followers_list)
print("No.of Following:",len(my.followers_list))

No.of Following: 972

In [206]: foodtalkindiaFollowers = set(foodtalkindiaFollowers)
foodtalkindiaFollowers_that_i_follow = my_following_list.intersection(foodtalkindiaFollowers)
print("Given below is the set of all the followers of \"foodtalkindia\" that I am following but those who dont follow me:")

if len(foodtalkindiaFollowers_that_i_follow-my_followers_list)==0:
    print('---->NO SUCH FOLLOWERS')

for i in foodtalkindiaFollowers_that_i_follow-my_followers_list:
    print('->',i)

Given below is the set of all the followers of "foodtalkindia" that I am following but those who dont follow me:
-> bluejayhostels

```

7) Check the story of 'coding.ninjas'. Consider the following Scenarios and print error messages accordingly

```

In [167]: # clicking the searchbox and visiting to coding ninjas and checking their stories with given conditions
driver.get('https://www.instagram.com/coding.ninjas')
time.sleep(2)
try:
    if int(driver.find_element_by_class_name('CfVWH').get_attribute('height'))==210:
        print('You have not seen the story yet! The story will be shown to you now. check out the driver window')
        driver.find_element_by_xpath('//div[contains(@class, "h5uCO")]').click()
    elif int(driver.find_element_by_xpath('//div[contains(@class, "h5uCO")]/canvas').get_attribute('height'))==208:
        print('You have already seen the story!')
except NoSuchElementException:
    print('The user has no story!')

You have already seen the story!

```

In [193]:

In []:

In []: