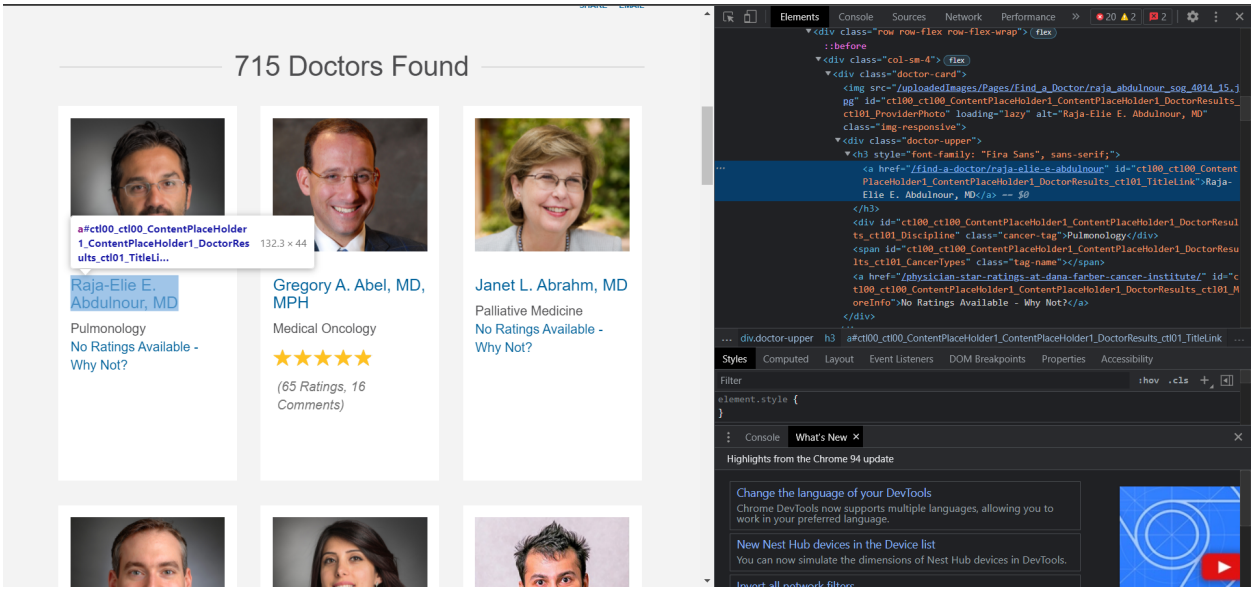
1. Install Python 3.10.0 on pc from the below link
    - [ ] https://www.python.org/ftp/python/3.10.0/python-3.10.0-amd64.exe
2. Download Vscode or Atom or any python compiler.
3. Now open the terminal and type ‘pip install selenium’ to download the selenium framework(which we will import in the code) from any website so rather than just scraping information that we can do with selenium, we can grab information from web pages.
4. To interact with a web page like chrome, firefox, etc. We need to install their respective driver so the code can interact with the webpage. Mostly we use google chrome. So download the chrome driver from the link below.
    - [ ] https://chromedriver.storage.googleapis.com/index.html?path=94.0.4606.41/
5. Put the chrome drive in a location. We need to give this path location in the python code.
6. Now, Open Vscode or any code editor to type the code.
7. To get the required information, we need to check the division tag of the Html page.
8. To do that, we need to inspect the web page to get that Html code, and now check by the element, name, xpath, tagname, classname, or CSS selector. By using any of these we can get the information needed from the web page.



9. Create a CSV file with any name and save it. (must give this same name and path in code)
10. After running the code we get all the information needed in a CSV file created.
11. As we take the information by inspecting the page elements and as every web page has different Html or PHP code, The python code for web scraping will be slightly different for each web page.

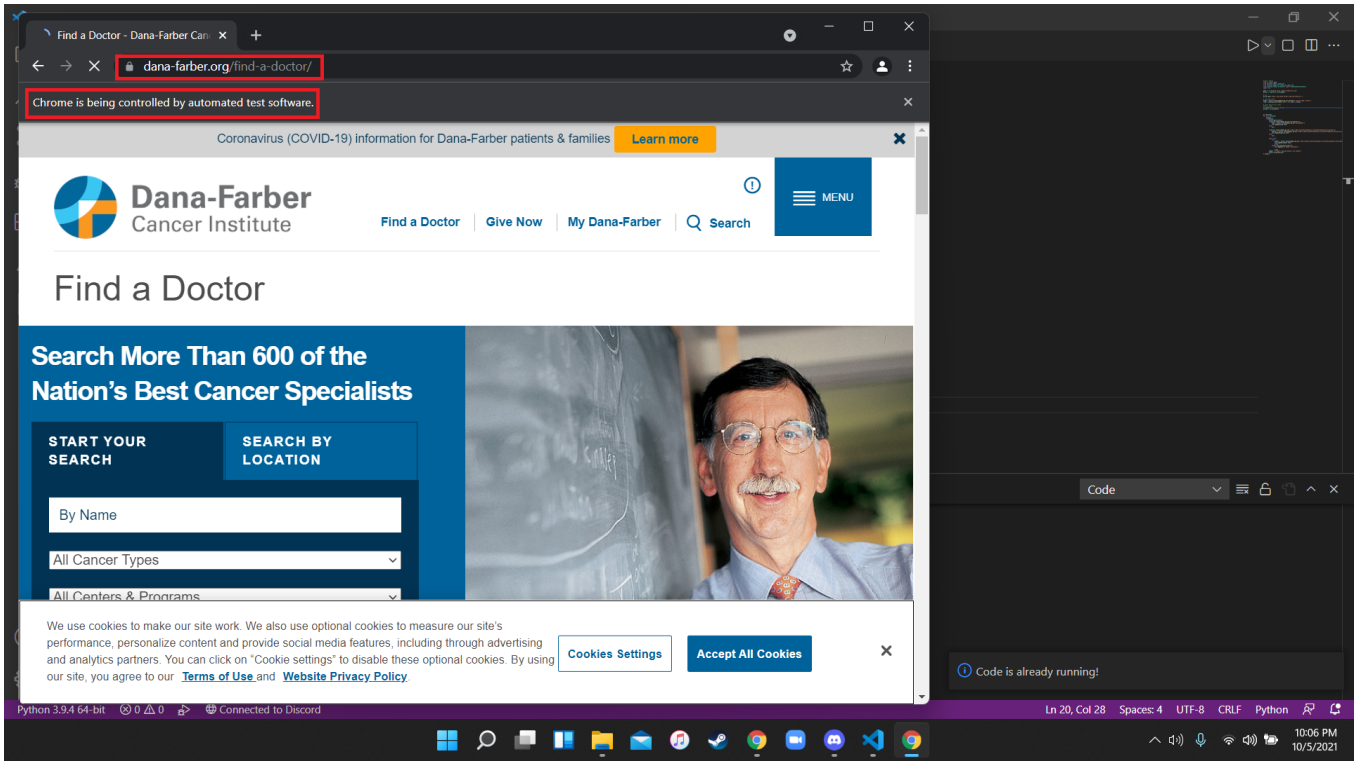
CODE:-

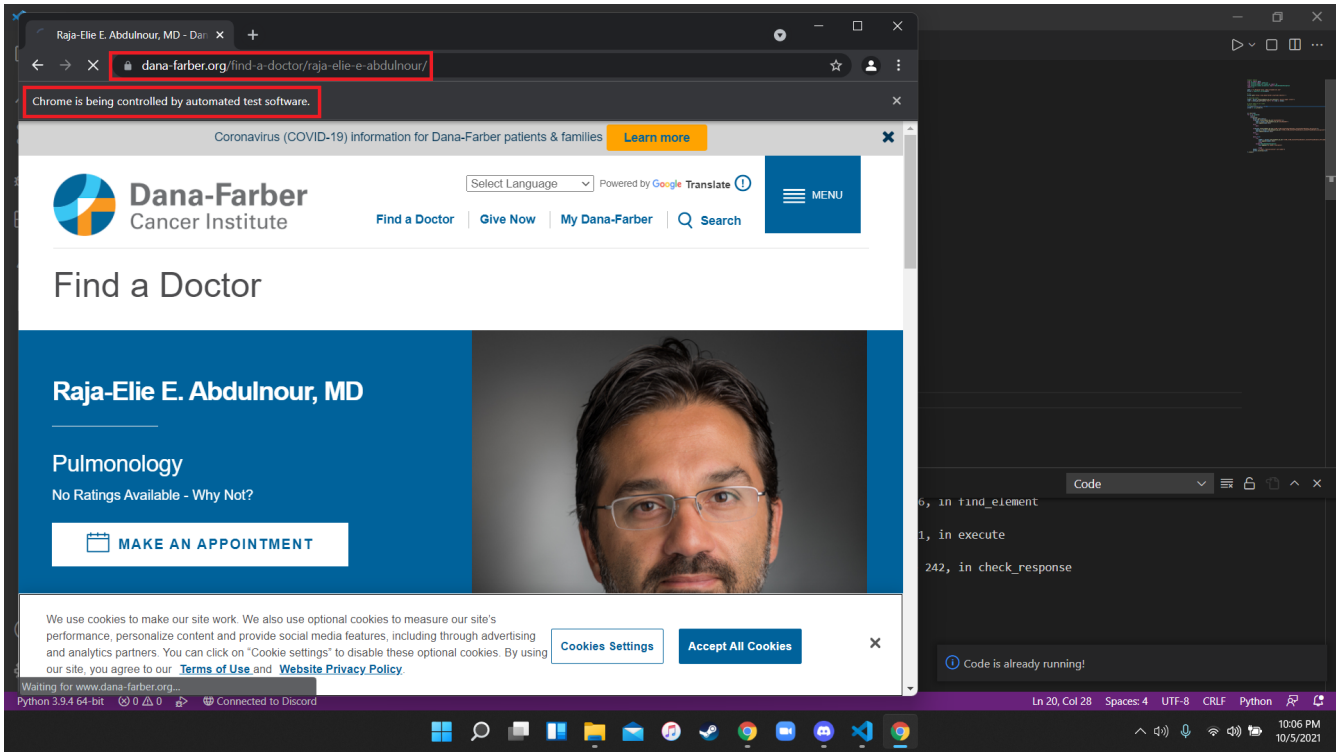
```
#import module
from os import path
from selenium import webdriver
from selenium.webdriver.common.by import By
from selenium.common.exceptions import NoSuchElementException
import csv

path = "C:\Program Files (x86)\chromedriver.exe"
driver = webdriver.Chrome(path)

# url
driver.get('https://www.dana-farber.org/find-a-doctor/')

# find web links
elems = driver.find_elements_by_css_selector(".doctor-upper [href]")
link = [elem.get_attribute('href') for elem in elems]

# print name of all links
```

```
#print (link)
f = open('Doctor.csv', 'w')
writer = csv.writer(f)




a= len(link)
for i in range(a):
    list=[]
    if(i%2==0):
        driver.get(link[i])
        if(driver.find_element_by_id("physNameRef")):
            name = driver.find_element_by_id("physNameRef")
            list.append(name.text)
        else:
            pass



if(driver.find_element_by_id("ctl00_ctl00_ContentPlaceHolder1_ContentPlaceHolder1_
Dicipline")):
            special =
driver.find_element_by_id("ctl00_ctl00_ContentPlaceHolder1_ContentPlaceHolder1_Di
cipline")
            list.append(special.text)
        else:
            pass
```

```
        while True:
            try:
                number =
driver.find_element_by_id("ctl00_ctl00_ContentPlaceHolder1_ContentPlaceHolder1_Of
ficeNumber")
                list.append(number.text)
                break
            except NoSuchElementException:
                list.append("No Number Available")


                break
        header = ["name","specialization","ph number"]
        writer.writerow(list)
f.close()
```

Images after running:- (The python runs an automation which opens the chrome)




Raja-Elie E. Abdulnour, MD - Dan
dana-farber.org/find-a-doctor/raja-elie-e-abdulnour/
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Pulmonology
No Ratings Available - Why Not?
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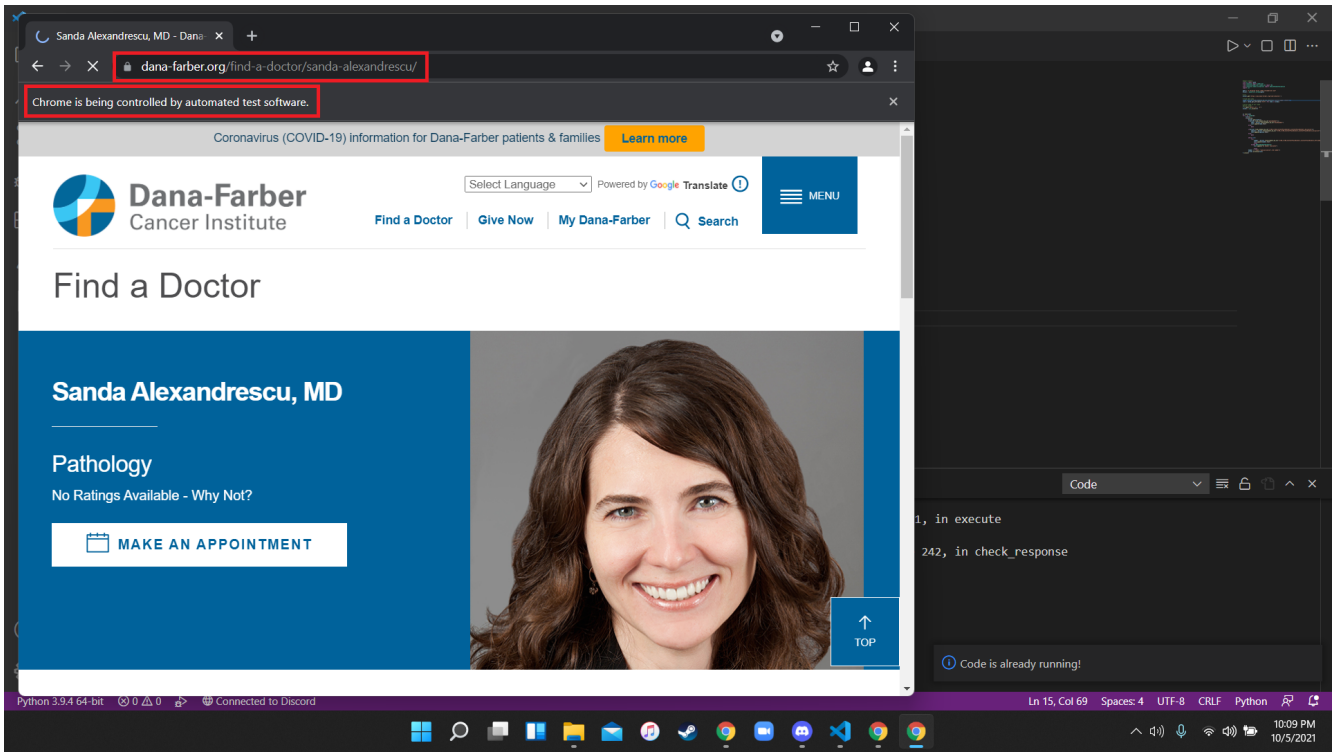
Cookies Settings
Accept All Cookies
Waiting for www.dana-farber.org...
Code
, in find_element
1, in execute
242, in check_response
Code is already running!
Python 3.9.4 64-bit
Connected to Discord
Ln 20, Col 28
Spaces: 4
UTF-8
CRLF
Python
10:06 PM
10/5/2021


Sanda Alexandrescu, MD - Dana-
dana-farber.org/find-a-doctor/sanda-alexandrescu/
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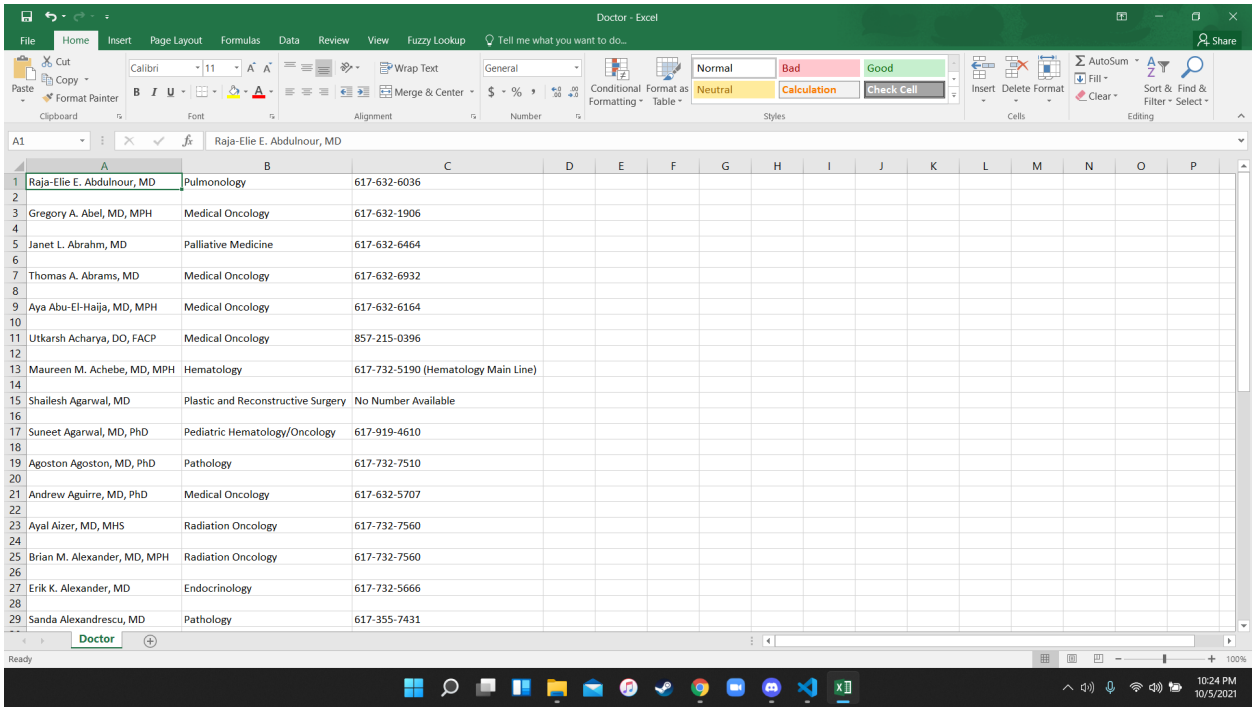
Connected to Discord
Ln 15, Col 69
Spaces: 4
UTF-8
CRLF
Python
10:09 PM
10/5/2021

CSV File:- (The information needed is saved here)



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6			
7	Thomas A. Abrams, MD	Medical Oncology	617-632-6932
8			
9	Aya Abu-El-Haija, MD, MPH	Medical Oncology	617-632-6164
10			
11	Utkarsh Acharya, DO, FACP	Medical Oncology	857-215-0396
12			
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14			
15	Shailesh Agarwal, MD	Plastic and Reconstructive Surgery	No Number Available
16			
17	Suneet Agarwal, MD, PhD	Pediatric Hematology/Oncology	617-919-4610
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