

Build a COVID19 Vaccine Tracker Using Python

As we know the world is facing an unprecedented challenge with communities and economies everywhere affected by the COVID19. So, we are going to do some fun during this time by tracking their vaccine. Let's see a simple Python script to improve for tracking the COVID19 vaccine.

Modules Needed

- ***bs4***: Beautiful Soup(*bs4*) is a Python library for pulling data out of *HTML* and *XML* files. This module does not comes built-in with Python. To install this type the below command in the terminal.

```
pip install bs4
```

- ***requests***: Requests allows you to send *HTTP/1.1* requests extremely easily. This module also does not comes built-in with Python. To install this type the below command in the terminal.

```
pip install requests
```

Approach:

- *Extract data form given URL*

- Scrape the data with the help of requests and BeautifulSoup
- Convert that data into html code.
- Find the required details and filter them.

Let's see the stepwise execution of the script

Step 1: Import all dependence

Python3

```
import requests
from bs4 import BeautifulSoup
```

Step 2: Create a URL get function

Python3

```
def getdata(url):
    r = requests.get(url)
    return r.text
```

Step 3: Now pass the URL into the getdata function and Convert that data into HTML code

Python3

```
htmldata = getdata("https://covid.
```

```
res = soup.find_all("div", class_=
print(str(res))
```

Output:

```

Investigational Medicine Unit(/div>, <div class="is_h5-2 is_developer w-richtext">University of Hong Kong (BMS)/div>, <div cl
ass="is_h5-2 is_developer w-richtext">Sunan Jingyuan Hospital/>div>, <div class="is_h5-2 is_developer w-richtext">abc.com/>di
v>, <div class="is_h5-2 is_developer w-richtext">Ablexis / Allvab Discovery Services / Berkeley Lights Collaborate/>div>, <
div class="is_h5-2 is_developer w-richtext">Alliance
- Proteus/ NMI/ OUS Enterprise/IBR Genomics/ Novogene/IT/ Twist Bioscience/
University Hospitals/>div>, <div class="is_h5-2 is_developer w-richtext">Anogen / Adaptive Biotechnologies/>div>, <div class
="is_h5-2 is_developer w-richtext">AstraZeneca / US Army Medical Research Institute of Infectious Diseases (USAMRIID) / Unive
rsity of Maryland School of Medicine/>div>, <div class="is_h5-2 is_developer w-richtext">Atrixa / Beigene / IGM Biosciences/>
div>, <div class="is_h5-2 is_developer w-richtext">C&I Behring / M&B Biotherapeutics/>div>, <div class="is_h5-2 is_developer
w-richtext">C&I Behring Australia
</div>, <div class="is_h5-2 is_developer w-richtext">Celltrion/>div>, <div class="is_h5-2 is_developer w-richtext">Celltrion
</div>, <div class="is_h5-2 is_developer w-richtext">Centivax (Distributed Bio)</div>, <div class="is_h5-2 is_developer w-ric
htext">Chelsea and Westminster Hospital, Imperial College London/>div>, <div class="is_h5-2 is_developer w-richtext">CoVig 19
Plasma Alliance (Takeda, C&I Behring, Biotech AG, Bio Products Laboratory, LPS, and Octapharma, ADMA Biologics, BioPharma Pla
sma, GC Pharma, Sanquin)/ National Institute of Allergy and Infectious Diseases (NIAID)/ Microsoft (CoVig 19 Platform)</div>,
<div class="is_h5-2 is_developer w-richtext">Costa Rican Social Security Fund (CCSS)/ The University of Costa Rica (UCR)/ C&I
Amelino Picado Institute/>div>, <div class="is_h5-2 is_developer w-richtext">Idesa Biotech / Light Chain Bioscience (Novimmun
e)</div>, <div class="is_h5-2 is_developer w-richtext">Idesa Biotech / Light Chain Bioscience (NovImmune)</div>, <div class
="is_h5-2 is_developer w-richtext">Imerger BioSolutions/>div>, <div class="is_h5-2 is_developer w-richtext">Imerger BioSolu
tions / National Institute of Allergy and Infectious Diseases (NIAID)</div>, <div class="is_h5-2 is_developer w-richtext">Jai

```

Note: These scripts will give you only Raw data in String format you have to print your data with your needs.

Complete code:

Python3

```

import requests
from bs4 import BeautifulSoup

def getdata(url):
    r = requests.get(url)
    return r.text
```

```
htmldata = getdata("https://covid.  
soup = BeautifulSoup(htmldata, 'h  
result = str(soup.find_all("div",  
  
print("NO 1 " + result[46:86])  
print("NO 2 " + result[139:226])  
print("NO 3 " + result[279:305])  
print("NO 4 " + result[358:375])  
print("NO 5 " + result[428:509])
```

Output:

```
NO 1 Alexion Pharmaceuticals. TACTIC-R trial  
NO 2 Assistance Publique - Hopitaux de Paris (Phase II); Alexion (Expanded Access Protocols)  
NO 3 AstraZeneca; ACCORD trial  
NO 4 BioCon/ Equillum  
NO 5 Celltrion/ University of Oxford/ University Hospitals Birmingham (CATALYST trial)
```