PROJECT REPORT

ON

Cowin site Vaccine Notifier

REPORT SUBMITTED TO VISHWAKARMA INSTITUTE OF INFORMATION TECHNOLOGY, PUNE

For The PBL of IT WORKSHOP

BY

Sr. No.	Roll number	Name of student	PRN No.
1	231057	Sayyad Sohel	22010592
2	231075	Arbaj Momin	22120230

Class: Second year **Division: A** **Batch: A3**

INDEX

INTRODUCTION :

In this python project we have developed a notifier which notifies if a vaccine is available on provided pincode. If the slots free to book it will send a notifier mail to registered e-mail.

The project is going to be very useful nowdays as everywhere a vaccination driven is ongoing. By just providing e-mail it will automatically fetch current data from co-win site and checks if the vaccine is available on particular center and it will fetch ll the details of the vaccine and sends data return to the python scripts.

DATA USED:

We have initially fetch all the cowin.gov.in site current data by requests method and try to fetch data on given pin code and age factor. The fetched data is very big and unable to process so, We had used some json code to convert it into neat format.

Later We have processed data and stored it locally and displayed. At last we had code to send automatically mail on provided E-mail as a notifier.

This Project aims at:

1. To develop notifier for searching available vaccine slots on co-win site.
2. To fetch all data from site using python scripts.
3. To send mail to the registered E-mail id if slot is available on provided pincode.

IMPLEMENTATION CODE:

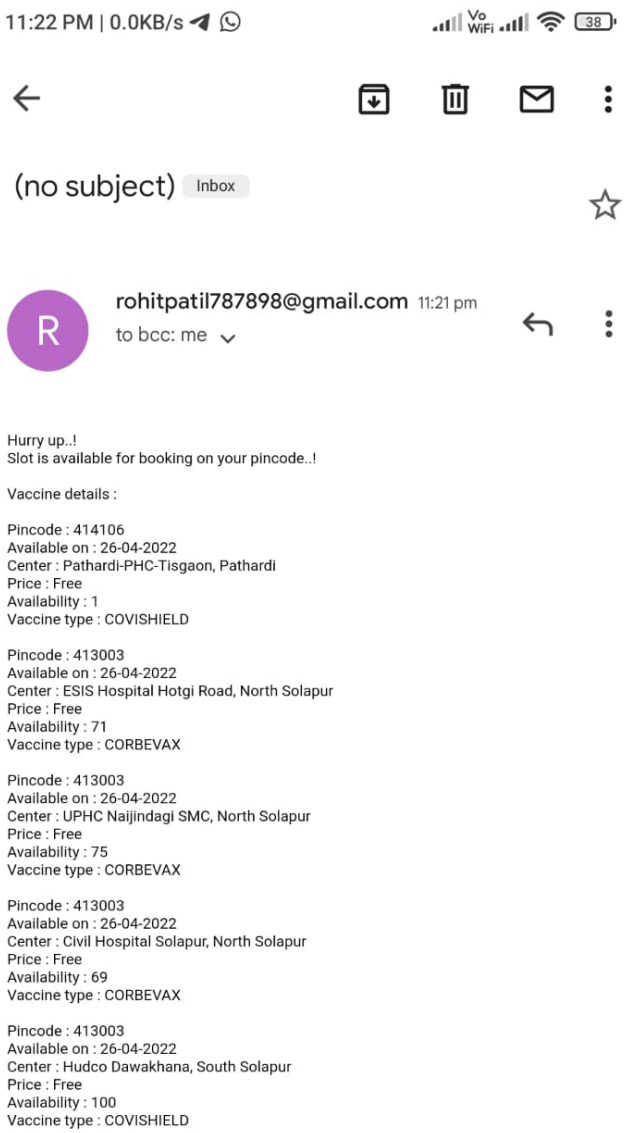
```
import requests
from datetime import datetime, timedelta
import time
from smtplib import SMTP
age = 52
#str12345=input("Enter Pincode : ")
pincodes = ["414106","413003"]
num_days = 2
print_flag = 'Y'

print("Starting search for Covid vaccine slots!")

actual = datetime.today()
```

```
list_format = [actual + timedelta(days=i) for i in range(num_days)]
actual_dates = [i.strftime("%d-%m-%Y") for i in list_format]

pin=[]
date=[]
price=[]
c_name=[]
cb=[]
capacity=[]
v_type=[]

while True:
    counter = 0
    for pincode in pincodes:
        for given_date in actual_dates:

            URL = "https://cdn-api.co-
vin.in/api/v2/appointment/sessions/public/calendarByPin?pincode={}&date={}".format(
pincode, given_date)
            header = {'User-Agent': 'Mozilla/5.0 (Windows NT 6.1; WOW64)
AppleWebKit/537.36 (KHTML, like Gecko) Chrome/56.0.2924.76 Safari/537.36'}

            result = requests.get(URL, headers=header)

            if result.ok:
                response_json = result.json()
                if response_json["centers"]:
                    if(print_flag.lower() =='y'):
                        for center in response_json["centers"]:
                            for session in center["sessions"]:
                                if (session["min_age_limit"] <= age and
session["available_capacity"] > 0 ) :
                                    print('Pincode: ' + pincode)
                                    print("Available on: {}".format(given_date))
                                    print("\t", center["name"])
                                    print("\t", center["block_name"])
                                    print("\t Price: ", center["fee_type"])
                                    print("\t Availablity : ",
session["available_capacity"])
                                    pin.append(pincode)
                                    date.append(given_date)
                                    p=str(center["fee_type"])
                                    price.append(p)
                                    c_name.append(center["name"])
                                    cb.append(center["block_name"])
                                    capacity.append(session["available_capacity"])
```

```
                                    if(session["vaccine"] != ''):
                                        print("\t Vaccine type: ",
session["vaccine"])
                                        v_type.append(session["vaccine"])
                                    print("\n")
                                    counter = counter + 1


                else:
                    print("No Response!")

        if counter==0:
            print("No Vaccination slot available..!")
        else:
            print("Search Completed..!")
            #smtp server ddress of mail provider
            HOST='smtp.gmail.com'

            #This is TLS
            PORT=587
            SENDER='rohitpatil787898@gmail.com'
            PASSWORD='Arbaj2002'

            #creating smtp server obj
            server=SMTP(host=HOST,port=PORT)

            #Connect
            server.connect(host=HOST,port=PORT)

            #extended hello; like sying hello
            server.ehlo()
            server.starttls()
            server.ehlo()

            #loggin in
            server.login(user=SENDER, password=PASSWORD)
            str2="\n\nVaccine details :"
            RECIPIENT="rohitpatil787898@gmail.com"
            pin_len=len(pin)
            for i in range(0,pin_len):
                str2=str2+"\n\nPincode : "+pin[i]+"\nAvailable on : "+date[i]+"\nCenter
: "+c_name[i]+", "+cb[i]+"\nPrice : "+price[i]+"\nAvailability :
"+str(capacity[i])+"\nVaccine type : "+v_type[i]
```

```
        MESSAGE="Hurry up..!\nSlot is available for booking on your
pincode..!"+str2
        server.sendmail(SENDER,RECIPIENT,MESSAGE)

        print("Email is sent successfully on your registered E-mail..!")
```

OUTPUT :



CONCLUSION:

By doing this project the leadership quality is increased in us. We also learned how to develop the project with the help of mentor. From this We also learned how to implement requests library in python and also learnt about various methods of web srapping in python and implemented successfully

FUTURE SCOPE:

Now days a vaccination driven is ongoing in world to fight against covid19 pandemic. In India, for vaccination we have to first registered ourselves on cowin.gov.in website by finding available slot on your nearby vaccination centers. At that time some problems are faced by people who did not have much knowledge about technology. For that I have developed a python script for automatically searching an available slot on site and notify about it by just providing pincode and age for searching. By one click you will get all the details of available vaccine on your pincode. Also I have added a E-mail facility within it to make it more featured application.

By modifying the project, We can also extend this by adding functionality of slot booking for available vaccine by collecting all user data by python script.

REFERENCES:

- https://www.coursera.org/projects/personal-desktop-notification-python
- https://analyticsindiamag.com/data-scientist-creates-python-script-to-track-available-slots-for-covid-vaccinations/