NATIONAL PUBLIC SCHOOL BANASHANKARI

Computer Science Project

Covid Quarantine Assistance Program

Shaunak Saxena

Class: 12- B

Roll No: 19

Acknowledgement

“Computer Science is a science of abstraction -creating the right model for a problem and devising the appropriate mechanizable techniques to solve it.” — Alfred Aho.

Firstly, I would like to express my sincere gratitude to our respected principal ma’am, **Mrs. Jayanti Nair** and our Academic director **Ms Grace C.D.** for giving us the opportunity work on this project.

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CERTIFICATE

This is to certify that **Shaunak Saxena** of Grade XII has successfully completed the Computer Science project titled "COVID Quarantine Assistance Program " as prescribed by CBSE for the year 2020-21.

Date:_____

Signature of Teacher: _____ Signature of Principal: _____

AISSCE Code No: _____

Signature of Examiner: _____

Contents

Introduction

The arrival of the corona virus pandemic was unprecedented, unparalleled and a rather complicated scenario. It affected the lives of millions in India and around the world. There was great skepticism about the situation when people first learned about the virus. With countries enforcing lockdowns and the number of cases increasing rapidly, the entire world seemed to be in turmoil. The group of people affected most is the elderly. Due to weaker immune systems, senior citizens are more likely to be infected with the virus. They account for around 80% of all COVID-19 deaths in the US.

Moreover, many older people who live alone face a greater level of difficulty as it is a challenge for them to take precautions, identify the symptoms and act accordingly. Those with physical disabilities may not be able to reach the closest hospital for a check-up. Even if they manage to reach one, the havoc of most Indian hospitals will not be the most comfortable setting for them.

Covid Quarantine Assistance program has been created to provide aid to senior citizens and other individuals amidst the pandemic. The program will help those who have minor symptoms and wish to determine if they're infected but can't approach hospitals to get professionally checked, or perhaps aren't knowledgeable about the symptoms. Although the program is not capable of providing a definitive result of presence of the virus as a professional COVID test does, it will help users to identify if they're likely infected with COVID-19.

The prompt runs on the basis of simple health related statistics, which it uses to provide a health score and a report suggesting the likeliness of being infected. The program will also contact the respective COVID-19 authorities to provide further assistance if the

user is highly likely to be infected, in addition to sending emergency messages to the user's primary contacts.

This automation incorporated by the program ensures that any individual likely to be affected is provided with professional help as soon as possible. The health report provided to authorities ensures that they are aware of the seriousness of the patient.

The government has created a robust health response and is working hard to ramp up its testing and flatten the curve. We play a huge role in tackling this pandemic by being well informed about the COVID-19 virus, its symptoms and how it spreads. Taking proper precautions such as wearing masks, applying sanitizers frequently and practicing social distancing makes a huge difference and the Covid Quarantine Assistance program was created to play its role in this change.

System and Python Requirements

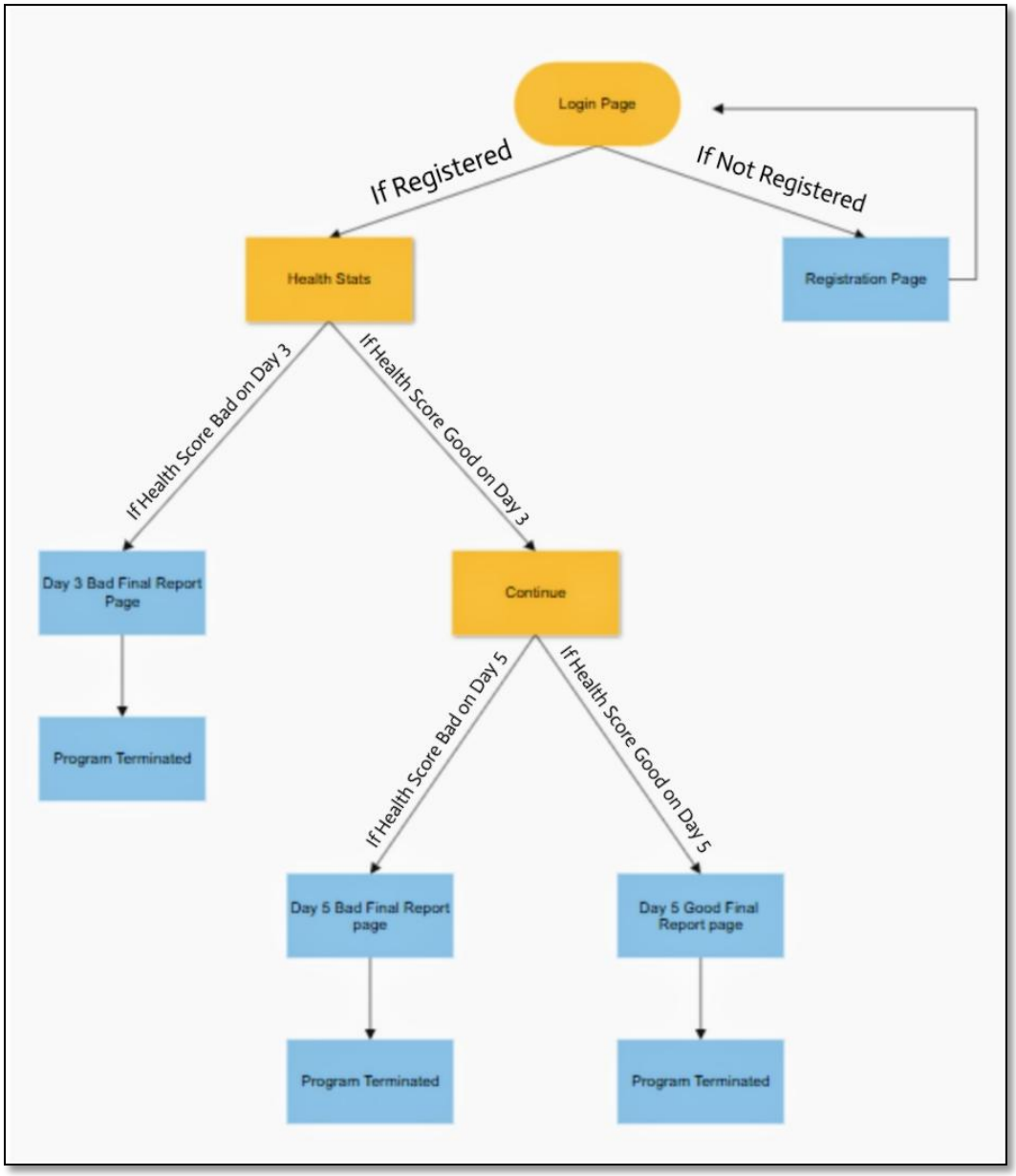
The following is a comprehensive list of the minimum system requirements to be able to execute this project successfully--

- Windows or MacOS operating system
- Python version<3.9
- Mysql
- Source Code
- Internet connection
- Hard disc space - at least 2MB
- Computer peripherals such as keyboard and mouse

The following libraries must be installed to python (if not pre installed) through pip install command--

- tkinter
- mysql python connector
- smtplib
- csv
- pillow

Flow Chart


Login Page
If Registered
If Not Registered
Health Stats
Registration Page
If Health Score Bad on Day 3
If Health Score Good on Day 3
Day 3 Bad Final Report Page
Continue
Program Terminated
If Health Score Bad on Day 5
If Health Score Good on Day 5
Day 5 Bad Final Report page
Day 5 Good Final Report page
Program Terminated
Program Terminated

Functions List

Function Name	Parent Function	Description
select0()		Takes user login page
select1()		Takes user to register page
select2()		Takes user to health stats page and prints day number
select3()		Takes user to day 3 negative report page
select4()		Takes user to day 5 negative report page
select5()		Takes user to day 5 positive report page
day_no_check()	select2()	Checks number of days of program already completed
login()		Checks if login info is correct
username_check()	login()	Checks if username entered exists in database
variables()	details()	Accepts values on registration page
validate()	details()	Validates the info on registration page
exists_id()	validate()	Checks if user id is already existing in the database
exists_email()	validate()	Checks if the entered registration email already exists in database
exists_phone()	validate()	Checks if the user phone number is already existing in the database

check(email)	validate()	Checks if the email entered is valid
details()		Accepts registration data and validates it
save()		Validates health stats values and saves them into a csv file. Calculates health score and sends eail accordingly.
healthvalid()	Save()	Validates the health stats entered
clicked()	Save()	Returns message box after saving health stats

**A function with a parent function here is not necessarily a nested function but is called only through the parent function

Source Code

```
1.  import tkinter as tk
2.  from tkinter import *
3.  from tkinter import ttk
4.  from PIL import Image,ImageTk #PIL -> Pillow
5.  from tkinter import messagebox
6.  import random
7.  import mysql.connector
8.  import csv
9.  import smtplib
10. from email.mime.multipart import MIMEMultipart
11. from email.mime.text import MIMEText
12. from email.mime.base import MIMEBase
13. from email import encoders
14. import os.path
15. from os import path
16.
17. ##############################################################################
    ##############################################################################
    #############
18.
19. mydb = mysql.connector.connect(
20.   host="localhost",
21.   user="root",
22.   passwd="user",
23.   database="cqap"
24. )
25. mycursor = mydb.cursor()
26. ##############################################################################
    ##############################################################################
    ################################
27.
28. ##tab1
29. root = Tk()
30. root.title("CQA-1")
31. root.configure(bg="white")
32. root.geometry("2000x1000")
33. tc=ttk.Notebook(root)
34. tc.pack(pady=0,padx=0)
35. page0 = Frame(tc,width=1280,height=720)
36. page1 = Frame(tc,width=1280,height=720 )
37. page2 = Frame(tc,width=1280,height=720 )
38. page3 = Frame(tc,width=1280,height=720 )
39. page4 = Frame(tc,width=1280,height=720 )
40. page5 = Frame(tc,width=1280,height=720 )
41. page0.pack(expand = 1,fill="both")
42. page1.pack(expand = 1,fill="both")
43. page2.pack(expand = 1,fill="both")
44. page3.pack(expand = 1,fill="both")
45. page5.pack(expand = 1,fill="both")
46. tc.add(page0 , text='WELCOME')
47. tc.add(page1 , text='REGISTER')
48. tc.add(page2 , text='GENERAL')
49. tc.add(page3 , text='RESULT-DAY3')
```

```
tc.add(page4 , text='RESULT-DAY5')
tc.add(page5 , text='RESULT-DAY5')
tc.hide(1)
tc.hide(2)
tc.hide(3)
tc.hide(4)
tc.hide(5)
canvas = tk.Canvas(page0, width=1280, height=720)
canvas.grid()
back=Image.open("welcome.jpeg")
resize=back.resize((800,690),Image.ANTIALIAS)
new=ImageTk.PhotoImage(resize)
canvas.create_image(400,360,image=new)
back1=Image.open("logo.png")
resize=back1.resize((400,450),Image.ANTIALIAS)
new1=ImageTk.PhotoImage(resize)
canvas.create_image(1100,160,image=new1)
noaccount=tk.Label(page0,fg="black",text="OR",bg="white",font="CaviarDreams 20 bold ").place(x=1080,y=550)
user=tk.Label(page0,fg="black",text=" User ID :",font="CaviarDreams 10 bold ").place(x=860,y=400)
user1_e=tk.Entry(page0,width=45,font="CaviarDreams 10 bold ",bg="white",borderwidth=3)
user1_e.place(x=950,y=400)
pwd=tk.Label(page0,fg="black",text="   Enter Password: ",font="CaviarDreams 10 bold").place(x=810,y=440)
pwd1_e=tk.Entry(page0,width=45,font="CaviarDreams 10 bold ",bg="white",borderwidth=3,show="*")
pwd1_e.place(x=950,y=440)


################################################################################################################################

global t1
t1=user1_e.get()
def select1():
    tc.select(1)
    tc.hide(0)
def select2():
    tc.select(2)
    tc.hide(1)
    tc.hide(0)
    def day_no_check():
        global day_count
        if path.exists(filename)==False:
            day_count='Welcome to day 1'
        else:
            global pre_stats_rows
            pre_stats_rows=[]
            with open(filename, 'r') as file:
                reader = csv.reader(file)
                for row in reader:
                    pre_stats_rows.append(row)
            if len(pre_stats_rows)==4:
                day_count='Welcome to day 2'
                elif len(pre_stats_rows)==8:
```

```
                        day_count='Welcome to day 3'
                    elif len(pre_stats_rows)==12:
                        day_count='Welcome to day 4'
                    elif len(pre_stats_rows)==16:
                        day_count='Welcome to day 5'
                    else:
                        day_count= 'Day Count Limit Reached'

                    gnqu=tk.Label(page2,fg="red",text=day_count,bg="white",font="Georgia 15 bold italic").place(x=560,y=15)
            day_no_check()


        ##login
        def login():
            global t1
            t1=user1_e.get()
            global t2
            t2=pwd1_e.get()

            global filename
            filename = t1+"_"+"daily_stats.csv"

            if t1=="" or t2=="":
                messagebox.showinfo('Error',"Please fill all fields")
                return

            def username_check():
                mycursor.execute("select username from users")
                tab=mycursor.fetchall()
                u=[]
                for i in tab:
                    u.append(i[0])
                for z in u:
                    if z==t1:
                        return True
                else:
                    messagebox.showinfo('Error',"Incorrect UserID")

            pwd_check=True
            if username_check()==True:
                mycursor.execute("select pwd from users where username =  '" + t1 + "' ") ##gives form 't1'
                tab1=mycursor.fetchall()
                for j in tab1:
                    if j[0]==t2:
                        select2()
                    else:
                        pwd_check=False

            if pwd_check==False:
                messagebox.showinfo('Error',"Incorrect password")


        ### button from login to question
        ##need to add if condition to check if user id matches database
        weltoque_but1=Image.open("login.png")
```

```
        resize=weltoque_but1.resize((120,50),Image.ANTIALIAS)
        ne47=ImageTk.PhotoImage(resize)

        welqnext_but1=tk.Button(page0,bg="white",image=ne47,command=login,borderwidth=0)
        welqnext_but1.place(x=1050,y=474)


        #own create button
        myimgnext_but1=Image.open("register.png")
        resize=myimgnext_but1.resize((120,50),Image.ANTIALIAS)
        ne44=ImageTk.PhotoImage(resize)

        next_but1=tk.Button(page0,bg="white",image=ne44,command=select1,borderwidth=0)
        next_but1.place(x=1050,y=600)

        ##########################################################################################################

        def variables():
            global n1,n2,n3,n4,n5,n6,n7,n8,n9,n10,n11,n12,n13,n14,n15,n16,n17,n18,n19,n20,lpg1,lpg2
            n1=name_e.get()
            n2=username_e.get()
            n3=pwd_e.get()
            n4=cpwd_e.get()
            n5=varg.get()
            n6=ph_e.get()
            n7=email_e.get()
            n8=age_e.get()
            n9=address_e.get('1.0',END)
            n10=pr1_e.get()
            n11=pr1e_e.get()
            n12=pr2_e.get()
            n13=pr2e_e.get()
            n14=pr3_e.get()
            n15=pr3e_e.get()
            n16=md_e.get()
            n17=click.get()
            n18=allr_e.get()
            n19=vart.get()
            n20=sptr_e.get()
            lpg1=[n1,n2,n3,n4,n5,n6,n7,n8,n9,n10,n11,n12,n13,n14,n15,n16,n17,n18,n19,n20]
            lpg2=[n1,n2,n3,n4,n5,n6,n7,n8,n9,n10,n11,n12,n13,n14,n15,n17,n19]


        def exists_id():
            mycursor.execute("select username from users")
            tab=mycursor.fetchall()
            u=[]
            for i in tab:
                u.append(i[0])
            if n2 in u:
                return True
```

```
            else:
                return False


        def exists_email():
            global n7
            mycursor.execute("select email from users")
            tab=mycursor.fetchall()
            u=[]
            for i in tab:
                u.append(i[0])
            if n7 in u:
                return True
            else:
                return False


        def exists_phone():
            mycursor.execute("select contact_no from users")
            tab=mycursor.fetchall()
            u=[]
            for i in tab:
                u.append(i[0])
            for z in u:
                if z==n6:
                    return True
                else:
                    return False

        def check(email):
            import re
            regex = '^[a-z0-9]+[.]?[a-z0-9]+[@]\w+[.]\w{2,3}$'
            if(re.search(regex,email)):
                return True
            else:
                return False


        def validate():
            duplicatemails=False
            e_mails=[n7,n11,n13,n15]
            e_mails_set=set(e_mails)

            if  n1!="" and  n2!="" and n3!="" and n4!="" and n5!="" and n6!="" a
    nd n7!="" and n8!="" and n9!="" and n10!="" and n11!="" and n12!="" and n13!=""
     and n14!="" and n15!="" and n17!="SELECT" and n19!="":
                if exists_id()==True:
                    messagebox.showinfo('Error-
    Username', "This username is already taken.")
                if exists_email()==True:
                    print(n7)
                    messagebox.showinfo('Error-Email', "The entered email-
    id aldreday exists. Please login.")
                if exists_phone()==True:
                    messagebox.showinfo('Error-
    Contact Number', "This contact number is already taken.")
```

```
                a=n1.split()
                b=n10.split()
                c=n12.split()
                d=n12.split()
                for i in a:
                    if i!=" " and i.isalpha()==False :
                            messagebox.showinfo('Error-
    Name',"Enter alphabets only")

                for i in b:
                    if i!=" " and i.isalpha()==False :
                            messagebox.showinfo('Error-
    Name',"Enter alphabets only")

                for i in c:
                    if i!=" " and i.isalpha()==False :
                            messagebox.showinfo('Error-
    Name',"Enter alphabets only")

                for i in d:
                    if i!=" " and i.isalpha()==False :
                            messagebox.showinfo('Error-
    Name',"Enter alphabets only")
                #if n1.isalpha()==False and n1.split()!=" "  or n10.isalpha()==F
    alse and n10.split()!=" " or n12.isalpha()==False and n12.split()!=" " or n14.i
    salpha()==False or n14.split()!=" " :
                 #   messagebox.showinfo('Error-Name',"Enter alphabets only")
                if len(n3)< 8:
                    messagebox.showinfo('Error-
    login',"Password should be greater than 8 characters")
                if n3!=n4:
                    messagebox.showinfo('Error-
    password',"Passwords do not match")
                if len(n6)!=10 :
                    messagebox.showinfo('Error-
    contact',"contact number should be 10 digits only")
                if len(n9)< 10 :
                    messagebox.showinfo('Error-
    address',"Please enter valid address")
                if n6.isdigit()==False:
                    messagebox.showinfo('Error-
    contact',"Enter numeric characters only")
                if check(n7)==False or check(n11)==False or check(n13)==False or
     check(n15)==False:
                    messagebox.showinfo('Error-
    Email',"Invalid email, Please enter a valid email")
                if n8.isdigit()==False:
                    messagebox.showinfo('Error-age',"Enter a valid age")

                if len(e_mails)!=len(e_mails_set):
                     duplicatemails=True
                     messagebox.showinfo('Error-
    Email',"Emails can not be repeated")

                if n1.isalpha()==True and n10.isalpha()==True and n12.isalpha()=
    =True and n14.isalpha()==True and len(n3)>=8 and n3==n4 and len(n6)==10 and n6.
    isdigit()==True and check(n7)==True and check(n11)==True and check(n13)==True a
```

```
    nd check(n15)==True and exists_id()==False and exists_email()==False and exists
    _phone()==False and duplicatemails==False:
                    sql = "INSERT INTO users (name,username,pwd,cpwd,gender,cont
    act_no,email,age,address,pricon1_name,pricon1_email,pricon2_name,pricon2_email,
    pricon3_name,pricon3_email,med_disorder,bld_grp,algy,treat_speci) VALUES (%s, %
    s,%s, %s,%s, %s,%s, %s,%s, %s,%s, %s,%s, %s,%s,%s,%s,%s)"
                    val = (n1,n2,n3,n4,n5,n6,n7,n8,n9,n10,n11,n12,n13,n14,n15,n1
    6,n17,n18,n20)
                    mycursor.execute(sql, val)
                    mydb.commit()
                    messagebox.showinfo('Login',"account created")
                    '''''with open(filename,'a') as csvfile:
                         csvwriter = csv.writer(csvfile)  # creating a csv write
    r object
                         csvwriter.writerow([n2])      # writing the fields
                        # csvwriter.writerow(rows)      # writing the data rows
    '''
                    select0()
            else:
                messagebox.showinfo('Error-
    fields',"Fill all required fields (all except medical disorder, allergy, specia
    l treatment)")

        def details():
            variables()
            validate()


        def select0():
            tc.select(0)


        canvas = tk.Canvas(page1, width=1280, height=720)
        canvas.grid()
        f_back=Image.open("bgwhite2.jpg")
        resize=f_back.resize((1280,800),Image.ANTIALIAS)
        n=ImageTk.PhotoImage(resize)
        canvas.create_image(633,324, image=n)

        register=tk.Label(page1,fg="black",text="CREATE NEW ACCOUNT",bg="white",
    font="Georgia 20 bold").place(x=60,y=50)


        #name
        global name_e
        name=tk.Label(page1,fg="black",text="Name :",bg="White",font="Georgia 11
    ").place(x=60,y=110)
        name_e=tk.Entry(page1,width=25,font="Georgia 11",bg="white",borderwidth=
    3)
        name_e.place(x=350,y=100)


        #username
        username=tk.Label(page1,fg="black",text="Username :",bg="White",font="Ge
    orgia 11").place(x=60,y=140)
        username_e=tk.Entry(page1,width=25,font="Georgia 11",bg="white",borderwi
    dth=3)
```

```
343.        username_e.place(x=350,y=135)
344.
345.
346.        #phone
347.        ph=tk.Label(page1,fg="black",text=" Contact number :",bg="white",font="G
    eorgia 11").place(x=60,y=170)
348.        ph_e=tk.Entry(page1,width=25,font="Georgia 11",bg="white",borderwidth=3)

349.        ph_e.place(x=350,y=165)
350.
351.
352.        #email
353.        email=tk.Label(page1,fg="black",text=" Email ID :",bg="white",font="Geor
    gia 11").place(x=60,y=205)
354.        email_e=tk.Entry(page1,width=25,font="Georgia 11",bg="white",borderwidth
    =3)
355.        email_e.place(x=350,y=205)
356.
357.        #age
358.        age=tk.Label(page1,fg="black",text=" Age:",bg="white",font="Georgia 11",
    ).place(x=60,y=240)
359.        age_e=tk.Entry(page1,width=25,font="Georgia 11",relief="sunken",borderwi
    dth=3)
360.        age_e.place(x=350,y=240)
361.
362.
363.        #address
364.        address=tk.Label(page1,fg="black",text=" Address:",bg="white",font="Geor
    gia 11",).place(x=60,y=270)
365.        address_e=Text(page1,width=25,height=4,font="Georgia 11",relief="sunken"
    ,borderwidth=3)
366.        address_e.place(x=350,y=270)
367.
368.        #primary1name
369.        pr1=tk.Label(page1,fg="black",text=" Primary contact 1 name:",bg="white"
    ,font="Georgia 11",).place(x=60,y=360)
370.        pr1_e=tk.Entry(page1,width=25,font="Georgia 11",relief="sunken",borderwi
    dth=3)
371.        pr1_e.place(x=350,y=360)
372.
373.        #primary1email
374.        pr1e=tk.Label(page1,fg="black",text=" Primary contact 1 email id:",bg="w
    hite",font="Georgia 11",).place(x=60,y=390)
375.        pr1e_e=tk.Entry(page1,width=25,font="Georgia 11",relief="sunken",borderw
    idth=3)
376.        pr1e_e.place(x=350,y=390)
377.
378.        #primary2
379.        pr2=tk.Label(page1,fg="black",text=" Primary contact 2 name:",bg="white"
    ,font="Georgia 11",).place(x=60,y=420)
380.        pr2_e=tk.Entry(page1,width=25,font="Georgia 11",relief="sunken",borderwi
    dth=3)
381.        pr2_e.place(x=350,y=420)
382.
383.
384.        #primary2email
```

```
385.        pr2e=tk.Label(page1,fg="black",text=" Primary contact 2 email id:",bg="w
    hite",font="Georgia 11",).place(x=60,y=450)
386.        pr2e_e=tk.Entry(page1,width=25,font="Georgia 11",relief="sunken",borderw
    idth=3)
387.        pr2e_e.place(x=350,y=450)
388.
389.        #primary3
390.        pr3=tk.Label(page1,fg="black",text=" Primary contact 3 name:",bg="white"
    ,font="Georgia 11",).place(x=60,y=480)
391.        pr3_e=tk.Entry(page1,width=25,font="Georgia 11",relief="sunken",borderwi
    dth=3)
392.        pr3_e.place(x=350,y=480)
393.        #primary3email
394.        pr3e=tk.Label(page1,fg="black",text=" Primary contact 3 email id:",bg="w
    hite",font="Georgia 11",).place(x=60,y=510)
395.        pr3e_e=tk.Entry(page1,width=25,font="Georgia 11",relief="sunken",borderw
    idth=3)
396.        pr3e_e.place(x=350,y=510)
397.
398.        #password
399.        pwd=tk.Label(page1,fg="black",text=" ENTER PASSWORD:",bg="white",font="G
    eorgia 11").place(x=861,y=290)
400.        pwd_e=tk.Entry(page1,width=22,font="Georgia 10",bg="white",borderwidth=3
    ,show="*")
401.        pwd_e.place(x=1050,y=290)
402.
403.        #confirmpassword
404.        cpwd=tk.Label(page1,fg="black",text=" CONFIRM PASSWORD:",bg="white",font
    ="Georgia 11").place(x=840,y=330)
405.        cpwd_e=tk.Entry(page1,width=22,font="Georgia 10",bg="white",borderwidth=
    3,show="*")
406.        cpwd_e.place(x=1050,y=330)
407.
408.
409.        #medical disorder
410.        md=tk.Label(page1,fg="black",text=" Medical Disorder (if any):",bg="whit
    e",font="Georgia 11").place(x=60,y=615)
411.        md_e=tk.Entry(page1,width=25,font="Georgia 11",bg="white",borderwidth=3)

412.        md_e.place(x=350,y=615)
413.
414.        #bloofgroup
415.        bldgrp=tk.Label(page1,fg="black",text=" Blood Group :",bg="white",font="
    Georgia 11").place(x=60,y=540)
416.        click=StringVar()
417.        names=['SELECT',' A+',' B+',' O+', ' AB+',' A-',' B-',' O-',' AB-']
418.        click.set(names[0])
419.        drop=OptionMenu(page1,click,*names)
420.        drop.config(width=20,bg="white",font="Georgia 11",borderwidth=3)
421.        drop.place(x=350,y=540)
422.
423.
424.        #gender-radio button
425.        gen=tk.Label(page1,fg="black",text="Gender :",bg="white",font="Georgia 1
    1").place(x=952,y=100)
426.        varg=IntVar()
```

```
427.        R1 = Radiobutton(page1, text="M", variable=varg, value="1",command=varia
    bles)
428.        R1.place(x=1050,y=100)
429.        R2 = Radiobutton(page1, text="F", variable=varg, value="2",command=varia
    bles)
430.        R2.place(x=1120,y=100)
431.        R3 = Radiobutton(page1, text="Other", variable=varg, value="3",command=v
    ariables)
432.        R3.place(x=1190,y=100)
433.
434.
435.        #allergies
436.        allr=tk.Label(page1,fg="black",text="Allergies to any specific medicatio
    n? :",bg="white",font="Georgia 11").place(x=761,y=190)
437.        allr_e=tk.Entry(page1,width=22,font="Georgia 11",bg="white",borderwidth=
    3)
438.        allr_e.place(x=1050,y=190)
439.
440.
441.        #travelhistory- raDIO BUTTON
442.        trvhis=tk.Label(page1,fg="black",text="Have you travelled internationall
    y in last the 30 days :",bg="white",font="Georgia 11").place(x=647,y=140)
443.        vart=IntVar()
444.        R1 = Radiobutton(page1, text="Yes", variable=vart, value=1,command=varia
    bles)
445.        R1.place(x=1050,y=140)
446.        R2 = Radiobutton(page1, text="No", variable=vart, value=2,command=variab
    les)
447.        R2.place(x=1120,y=140)
448.
449.
450.        #specifictreatment
451.        sptr=tk.Label(page1,fg="black",text="Under any specfic treatment, if yes
     specify :",bg="white",font="Georgia 11").place(x=720,y=235)
452.        sptr_e=tk.Entry(page1,width=22,font="Georgia 11",bg="white",borderwidth=
    3)
453.        sptr_e.place(x=1050,y=235)
454.
455.
456.        #created account successfully thing button
457.        myimgreg=Image.open("create_acc.png")
458.        resize=myimgreg.resize((180,100),Image.ANTIALIAS)
459.        ne41=ImageTk.PhotoImage(resize)
460.
461.        reg_button=tk.Button(page1,bg="white",image=ne41,command=details,borderw
    idth=0)
462.        reg_button.place(x=1050,y=620)
463.
464.
465.        acc_created=tk.Label(page1,fg="black",bg="white",font="Georgia 11")
466.        acc_created.place(x=960,y=550)
467.
468.        def select3():
469.            tc.select(3)
470.            tc.hide(2)
471.
```

```
472.        ##########################################################################
    ##########################################################################
    ########################################
473.        #tab3 general questions
474.        Canvas = tk.Canvas(page2, width=1280, height=720)
475.        Canvas.grid()
476.        f_back=Image.open("bgwhite2.jpg")
477.        resize=f_back.resize((1280,850),Image.ANTIALIAS)
478.        no=ImageTk.PhotoImage(resize)
479.        Canvas.create_image(633,324, image=no)
480.
481.        gnqu=tk.Label(page2,fg="black",text="HEALTH QUESTIONS",bg="white",font="
    Georgia 20 bold").place(x=60,y=60)
482.
483.
484.        ##input questions
485.        symp=tk.Label(page2,fg="black",text="Are you facing any of the following
     symptoms?",bg="white",font="Georgia 20").place(x=60,y=100)
486.        ####save function
487.        def save():
488.            global filename
489.            filename = t1+"_"+"daily_stats.csv"
490.            avg_d3=0
491.            avg_d5=0
492.            h1=var1.get()
493.            h2=var2.get()
494.            h3=var3.get()
495.            h4=var4.get()
496.            h5=var5.get()
497.            h6=var6.get()
498.            h7=var7.get()
499.            h8=var8.get()
500.            h9=var9.get()
501.            h10=var10.get()
502.            h11=var11.get()
503.            h12=var12.get()
504.            h13=var13.get()
505.            h14=temp_e.get()
506.            h15=wt_e.get()
507.            h16=bp_e.get()
508.            h17=hr_e.get()
509.        ##########################################################################
    ##########################################################################
    ############
510.
511.            ##health validation
512.            def healthvalid():
513.                if h14.isdigit()==False:
514.                    messagebox.showinfo('Error-
    Temperature', "Enter valid Temperature.")
515.                if h15.isdigit()==False:
516.                    messagebox.showinfo('Error-Weight', "Enter valid Weight")
517.                if re.match('^[0-9]{2,3}/[0-9]{2,3}$', h16):
518.                    h16_check=True
519.                else:
520.                    h16_check=False
```

```
                    messagebox.showinfo('Error-
    Blood Pressure', "Enter valid Blood Pressure")
                if h17.isdigit()==False:
                    messagebox.showinfo('Error-
    Heart Rate', "Enter valid Heart Rate")
                if h14.isdigit()==True and h15.isdigit()==True and h17.isdigit()
    ==True and h16_check==True:
                    return True

            ##if len(ld)==4:
            if h14!="" and h15!="" and h16!="" and h17!="":
                if healthvalid()==True:
                    c=0
                    p=[]#point backend
                    l=[]#csv yes or no
                    #f=open

                    h18=''
                    l.append(h18)
                    if h1==1:#cough
                        l.append("Yes")
                        p.append(4)
                    else:
                        l.append("No")
                    if h2==1:#fever
                        l.append("Yes")
                        p.append(2)
                    else:
                        l.append("No")

                    if h3==1:#chest pain
                        l.append("Yes")
                        p.append(4)
                    else:
                        l.append("No")
                    if h4==1:#difficulty in breathing
                        l.append("Yes")
                        p.append(5)
                    else:
                        l.append("No")
                    if h5==1:#sore throat
                        l.append("Yes")
                        p.append(2)
                    else:
                        l.append("No")
                    if h6==1:#body pains and aches
                        l.append("Yes")
                        p.append(2)
                    else:
                        l.append("No")
                    if h7==1:#diarrhoea
                        l.append("Yes")
                        p.append(3)
                    else:
                        l.append("No")
                    if h8==1:#headache
                        l.append("Yes")
```

```
                    p.append(3)
                else:
                    l.append("No")
                #
                if h9==1:#loss of taste or smell
                    l.append("Yes")
                    p.append(3)
                else:
                    l.append("No")
                if h10==1:#tiredness
                    l.append("Yes")
                    p.append(3)
                else:
                    l.append("No")
                if h11==1:#conjuctivitis
                    l.append("Yes")
                    p.append(2)
                else:
                    l.append("No")
                if h12==1:#rash or skin discoloration
                    l.append("Yes")
                    p.append(3)
                else:
                    l.append("No")
                if h13==1:#loss of speech or movement
                    l.append("Yes")
                    p.append(5)
                else:
                    l.append("No")


                #temp
                l.append(h14)
                #weight
                l.append(h15)
                #BP
                l.append(h16)
                #Heart rate
                l.append(h17)

                if vart==1: #international travel
                    p.append(6)
                    '''''l.append("Yes")
                else:
                    l.append("No")'''
                for j in p:
                    c+=j
                l.append(100-((c/47)*100))
                ##columns
                fields=["Day","Dry Cough", "Fever", "Chest Pain", "Difficulty in breathing", "Sore throat", "Body Pains and Aches", "Diarrhoea", "Headache", "Loss of taste or smell", "Tiredness", "Conjuctivits", "Rash or skin discolouration", "Loss of speech or locomotion","Temperature", "Weight", "Blood Pressure", "Heart Rate", "Health Score"]
                rows=[]
                for i in l:
                    rows.append(i)
```

```
628.
629.
630.                    # name of csv file
631.                    # writing to csv file
632.
633.
634.
635.                    with open(filename,'a') as csvfile:
636.                         csvwriter = csv.writer(csvfile)  # creating a csv write
    r object
637.                         csvwriter.writerow(fields)      # writing the fields
638.                         csvwriter.writerow(rows)      # writing the data rows
639.
640.                    global stats_rows
641.                    stats_rows=[]
642.                    with open(filename, 'r') as file:
643.                        reader = csv.reader(file)
644.                        for row in reader:
645.                            stats_rows.append(row)
646.
647.                    #checking if health is bad after day 3
648.                    if len(stats_rows)==12:
649.
650.                        print('d3 got')
651.
652.                        #print (stats_rows)
653.                        print ('following are the scores extracted and averaged
    from first 3 days')
654.
655.                        stats_d1=[]
656.                        stats_d1=stats_rows[2]
657.                        #print (stats_d1[19])
658.
659.                        stats_d2=[]
660.                        stats_d2=stats_rows[6]
661.                        #print (stats_d2[19])
662.
663.                        stats_d3=[]
664.                        stats_d3=stats_rows[10]
665.                        #print (stats_d3[19])
666.
667.                        #global avg_d3
668.                        avg_d3=((float(stats_d1[19])+float(stats_d2[19])+float(s
    tats_d3[19]))/3)
669.                        print (avg_d3)
670.
671.
672.                        if (avg_d3<=45):
673.
674.                            stats_rows[2][0]=str(1)
675.                            stats_rows[6][0]=str(2)
676.                            stats_rows[10][0]=str(3)
677.
678.                            with open(filename, 'w') as file:
679.                                file.truncate()
680.
681.                            with open(filename, 'a+', newline ='') as file:
```

```
                                with file:
                                    write = csv.writer(file)
                                    write.writerows(stats_rows)


                            scoretext=tk.Label(page3,bg="white", fg="red",text="Your Health Score is: "+ str(round(avg_d3,2))+'/100',font="TimesNewRoman 15 italic").place(x=500, y=131)
                            select3()

                            b=[]
                            data=[]
                            mycursor.execute("select name, gender, contact_no, email, age, address, med_disorder, bld_grp, algy, treat_speci, pricon1_email, pricon2_email, pricon3_email from users where username='" + t1 + "' ") ##gives form 't1'
                            tab2=mycursor.fetchall()
                            for z in tab2:
                                b.append(z)
                            for i in z:
                                data.append(i)

                            #print(emails)
                            name=data[0]
                            gender=data[1]
                            if gender=='1':
                                gender='M'
                            elif gender=='2':
                                gender='F'
                            else:
                                gender='other'
                            contact_no=data[2]
                            age=data[4]
                            address=data[5]
                            med_disorder=data[6]
                            if med_disorder=='':
                                med_disorder='N/a'
                            bld_grp=data[7]
                            algy=data[8]
                            if algy=='':
                                algy='N/a'
                            treat_speci=data[9]
                            if treat_speci=='':
                                treat_speci='N/a'
                            email=[data[3], data[10], data[11], data[12]]


                            #print(email)

                            for i in email:

                                fromaddr = "EMAIL address of the sender"
                                toaddr = "EMAIL address of the receiver"


                                # instance of MIMEMultipart
                                msg = MIMEMultipart()
```

```
734.
735.                                 fromaddr ='covidquarantineassisstance@gmail.com'

736.                                 my_password="gocoronago"
737.                                 # storing the receivers email address
738.                                 toaddr= i
739.
740.                                 msg['Subject'] = "COVID Quarantine Assistance Pr
    ogram Report"
741.                                 msg["From"]=fromaddr
742.                                 msg['To']=toaddr
743.
744.                                 #l=["Thank you for entering your data!","Please
    come back tomorrow.","You may close the application."]
745.                                 #messagebox.showinfo('Covid Quarantine Assisstan
    ce',"\n".join(l))
746.                                 body = "Dear Sir/ma'am\n\nPlease find attached a
     copy of Mr/Mrs "+str(name)+ "'s COVID Quarantine assistance program health sta
    ts report.\n\nFollowing are the user's details:\n\nName: "+str(name)+"\nGender:
     "+str(gender)+"\nContact No: "+str(contact_no)+"\nEmail: "+str(email[0])+"\nAg
    e: "+str(age)+"\nAddress: "+str(address)+"Medical Disorder: "+str(med_disorder)
    +"\nBlood Group: "+str(bld_grp)+"\nAllergy: "+str(algy)+"\nSpecial Treatment: "
    +str(treat_speci)+"\n\nThe users health has not been looking good for the past
    few days. He/she should seek professional help as soon as possible\n\nThank you
     for using our programme\nRegards\nCQAP team"
747.                                 msg.attach(MIMEText(body, 'plain'))
748.
749.
750.                                 # open the file to be sent
751.                                 #filename = "sardarth_daily_stats.csv.csv"
752.                                 attachment = open(filename, "rb")
753.
754.                                 # instance of MIMEBase and named as p
755.                                 p = MIMEBase('application', 'octet-stream')
756.
757.                                 # To change the payload into encoded form
758.                                 p.set_payload((attachment).read())
759.
760.                                 # encode into base64
761.                                 encoders.encode_base64(p)
762.
763.                                 p.add_header('Content-
    Disposition', "attachment; filename= %s" % filename)
764.
765.                                 # attach the instance 'p' to instance 'msg'
766.                                 msg.attach(p)
767.
768.                                 s = smtplib.SMTP_SSL('smtp.gmail.com')
769.                                 s.login(fromaddr,my_password)
770.                                 s.sendmail(fromaddr,toaddr, msg.as_string())
771.                                 s.quit()
772.
773.
774.                     #checking if health is bad after day 5
775.                     if len(stats_rows)==20:
776.
777.                         #print (stats_rows)
```

```
                        print ('following are the scores extracted and averaged from first 5 days')

                        stats_d1=[]
                        stats_d1=stats_rows[2]
                        #print (stats_d1[19])

                        stats_d2=[]
                        stats_d2=stats_rows[6]
                        #print (stats_d2[19])

                        stats_d3=[]
                        stats_d3=stats_rows[10]
                        #print (stats_d3[19])


                        stats_d4=[]
                        stats_d4=stats_rows[14]

                        stats_d5=[]
                        stats_d5=stats_rows[18]


                        avg_d5=(float(stats_d1[19])+float(stats_d2[19])+float(stats_d3[19])+float(stats_d4[19])+float(stats_d5[19]))/5
                        print (avg_d5)

                        if (avg_d5<=45):

                            stats_rows[2][0]=str(1)
                            stats_rows[6][0]=str(2)
                            stats_rows[10][0]=str(3)
                            stats_rows[14][0]=str(4)
                            stats_rows[18][0]=str(5)

                            with open(filename, 'w') as file:
                                file.truncate()

                            with open(filename, 'a+', newline ='') as file:
                                with file:
                                    write = csv.writer(file)
                                    write.writerows(stats_rows)


                            scoretext=tk.Label(page4,bg="white", fg="red",text="Your Health Score is: "+ str(round(avg_d5,2))+'/100',font="TimesNewRoman 15 italic").place(x=500, y=131)
                            select4() ## put button there, to view avg score after 5 days

                            b=[]
                            data=[]
                            mycursor.execute("select name, gender, contact_no, email, age, address, med_disorder, bld_grp, algy, treat_speci, pricon1_email, pricon2_email, pricon3_email from users where username='" + t1 + "' ") ##gives form 't1'
                            tab2=mycursor.fetchall()
```

```
                            for z in tab2:
                                b.append(z)
                            for i in z:
                                data.append(i)

                            #print(emails)
                            name=data[0]
                            gender=data[1]
                            if gender=='1':
                                gender='M'
                            elif gender=='2':
                                gender='F'
                            else:
                                gender='other'
                            contact_no=data[2]
                            age=data[4]
                            address=data[5]
                            med_disorder=data[6]
                            if med_disorder=='':
                                med_disorder='N/a'
                            bld_grp=data[7]
                            algy=data[8]
                            if algy=='':
                                algy='N/a'
                            treat_speci=data[9]
                            if treat_speci=='':
                                treat_speci='N/a'
                            email=['goicovid@gmail.com',data[3], data[10], data[
    11], data[12]]

                            for i in email:

                                fromaddr = "EMAIL address of the sender"
                                toaddr = "EMAIL address of the receiver"


                                # instance of MIMEMultipart
                                msg = MIMEMultipart()

                                fromaddr ='covidquarantineassisstance@gmail.com'

                                my_password="gocoronago"
                                # storing the receivers email address
                                toaddr= i


                                msg['Subject'] = "COVID Quarantine Assistance Pr
    ogram Report"
                                msg["From"]=fromaddr
                                msg['To']=toaddr

                                body = "Dear Sir/ma'am\n\nPlease find attached a
     copy of Mr/Mrs "+str(name)+ "'s COVID Quarantine assistance program health sta
    ts report.\n\nFollowing are the user's details:\n\nName: "+str(name)+"\nGender:
     "+str(gender)+"\nContact No: "+str(contact_no)+"\nEmail: "+str(email[1])+"\nAg
    e: "+str(age)+"\nAddress: "+str(address)+"Medical Disorder: "+str(med_disorder)
```

```
    +"\nBlood Group: "+str(bld_grp)+"\nAllergy: "+str(algy)+"\nSpecial Treatment: "
    +str(treat_speci)+"\n\nThe users health has not been looking good for the past
    few days. He/she should seek professional help as soon as possible\n\nThank you
     for using our programme\nRegards\nCQAP team"
                                    msg.attach(MIMEText(body, 'plain'))


                                    # open the file to be sent
                                    attachment = open(filename, "rb")



                                    # instance of MIMEBase and named as p
                                    p = MIMEBase('application', 'octet-stream')

                                    # To change the payload into encoded form
                                    p.set_payload((attachment).read())

                                    # encode into base64
                                    encoders.encode_base64(p)

                                    p.add_header('Content-
    Disposition', "attachment; filename= %s" % filename)

                                    # attach the instance 'p' to instance 'msg'
                                    msg.attach(p)
                                    s = smtplib.SMTP_SSL('smtp.gmail.com')
                                    s.login(fromaddr,my_password)
                                    s.sendmail(fromaddr,toaddr, msg.as_string())
                                    s.quit()


                            elif (avg_d5>45):

                                stats_rows[2][0]=str(1)
                                stats_rows[6][0]=str(2)
                                stats_rows[10][0]=str(3)
                                stats_rows[14][0]=str(4)
                                stats_rows[18][0]=str(5)

                                with open(filename, 'w') as file:
                                    file.truncate()

                                with open(filename, 'a+', newline ='') as file:
                                    with file:
                                        write = csv.writer(file)
                                        write.writerows(stats_rows)

                                scoretext=tk.Label(page5,bg="white", fg="green",text
    ="Your Health Score is: "+ str(round(avg_d5,2))+'/100',font="TimesNewRoman 15 i
    talic").place(x=500, y=105)
                                select5()

                                b=[]
                                data=[]
                                mycursor.execute("select name, gender, contact_no, e
    mail, age, address, med_disorder, bld_grp, algy, treat_speci, pricon1_email, pr
```

```
    icon2_email, pricon3_email from users where username='" + t1 + "' ") ##gives fo
    rm 't1'
                            tab2=mycursor.fetchall()
                            for z in tab2:
                                b.append(z)
                            for i in z:
                                data.append(i)

                            #print(emails)
                            name=data[0]
                            gender=data[1]
                            if gender=='1':
                                gender='M'
                            elif gender=='2':
                                gender='F'
                            else:
                                gender='other'
                            contact_no=data[2]
                            age=data[4]
                            address=data[5]
                            med_disorder=data[6]
                            if med_disorder=='':
                                med_disorder='N/a'
                            bld_grp=data[7]
                            algy=data[8]
                            if algy=='':
                                algy='N/a'
                            treat_speci=data[9]
                            if treat_speci=='':
                                treat_speci='N/a'
                            email=[data[3]]


                            #print(email)

                            for i in email:

                                fromaddr = "EMAIL address of the sender"
                                toaddr = "EMAIL address of the receiver"


                                # instance of MIMEMultipart
                                msg = MIMEMultipart()

                                fromaddr ='covidquarantineassisstance@gmail.com'

                                my_password="gocoronago"
                                # storing the receivers email address
                                toaddr= i



                                msg['Subject'] = "COVID Quarantine Assistance Pr
    ogram Report"
                                msg["From"]=fromaddr
                                msg['To']=toaddr

```

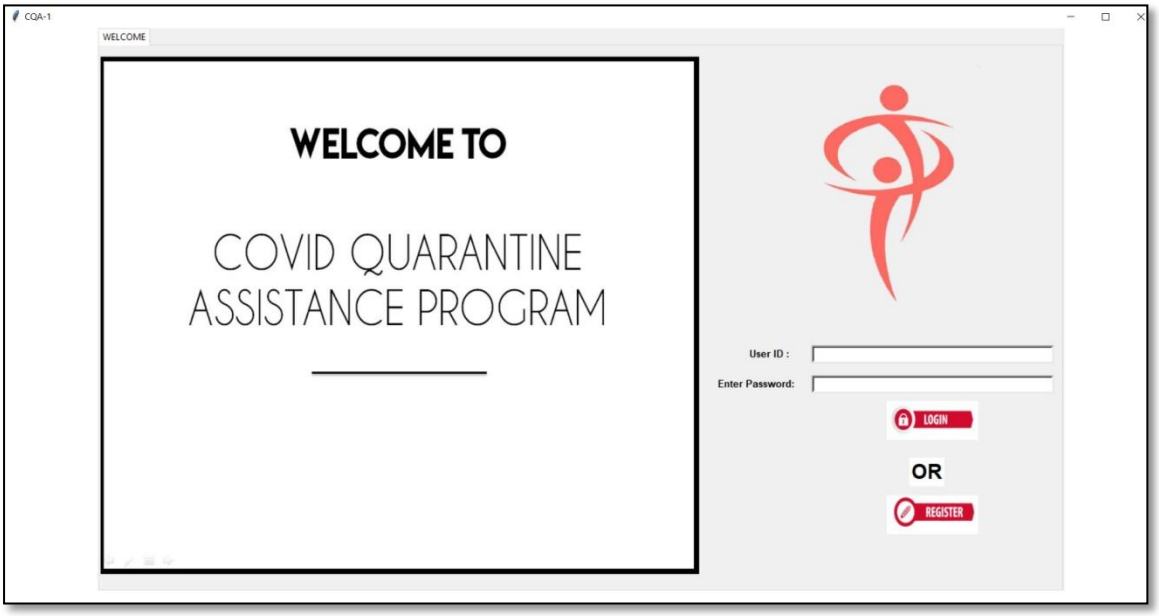
```
979.
980.                                 body = "Mr/Mrs "+str(name)+"\n\nPlease find atta
    ched a copy of your COVID Quarantine assistance program health stats report.\n\
    nUser details:\n\nName: "+str(name)+"\nGender: "+str(gender)+"\nContact No: "+s
    tr(contact_no)+"\nEmail: "+str(email[0])+"\nAge: "+str(age)+"\nAddress: "+str(a
    ddress)+"Medical Disorder: "+str(med_disorder)+"\nBlood Group: "+str(bld_grp)+"
    \nAllergy: "+str(algy)+"\nSpecial Treatment: "+str(treat_speci)+"\n\nYour healt
    h has been looking fine for the past few days. There is no need urgent to seek
    professional help.\n\nThank you for using our programme\nRegards\nCQAP team"
981.                                 msg.attach(MIMEText(body, 'plain'))
982.
983.
984.                                 # open the file to be sent
985.                                 attachment = open(filename, "rb")
986.                                 # instance of MIMEBase and named as p
987.                                 p = MIMEBase('application', 'octet-stream')
988.
989.                                 # To change the payload into encoded form
990.                                 p.set_payload((attachment).read())
991.
992.                                 # encode into base64
993.                                 encoders.encode_base64(p)
994.
995.                                 p.add_header('Content-
    Disposition', "attachment; filename= %s" % filename)
996.
997.                                 # attach the instance 'p' to instance 'msg'
998.                                 msg.attach(p)
999.
1000.
1001.                                s = smtplib.SMTP_SSL('smtp.gmail.com')
1002.                                s.login(fromaddr,my_password)
1003.                                s.sendmail(fromaddr,toaddr, msg.as_string())
1004.                                s.quit()
1005.
1006.                    def clicked():
1007.                        if (len(stats_rows)==4 or len(stats_rows)==8 or (len(sta
    ts_rows)==12 and avg_d3>45) or (len(stats_rows)==16 and ((float(stats_rows[2][1
    9])+float(stats_rows[6][19])+float(stats_rows[10][19]))/3)>45)):
1008.                               l=["Thank you for entering your data!","Please come
    back tomorrow.","You may close the application."]
1009.                               messagebox.showinfo('Covid Quarantine Assisstance',"
    \n".join(l))
1010.                               root.destroy()
1011.                       elif (len(stats_rows)>20) or ((len(stats_rows)>12) and (
    len(stats_rows)<17) and ((float(stats_rows[2][19])+float(stats_rows[6][19])+flo
    at(stats_rows[10][19]))/3)<=45):
1012.                               l1=["You have already entered your health stats for
    the maximum number of days and the program has been terminated for your account
    .", "Please login from a different ID or create a new account.", "Thank you. We
     hope you liked using COVID Quarantine Assistance"]
1013.                               messagebox.showinfo('Covid Quarantine Assisstance',"
    \n".join(l1))
1014.                               root.destroy()
1015.
1016.
1017.                   clicked()
```

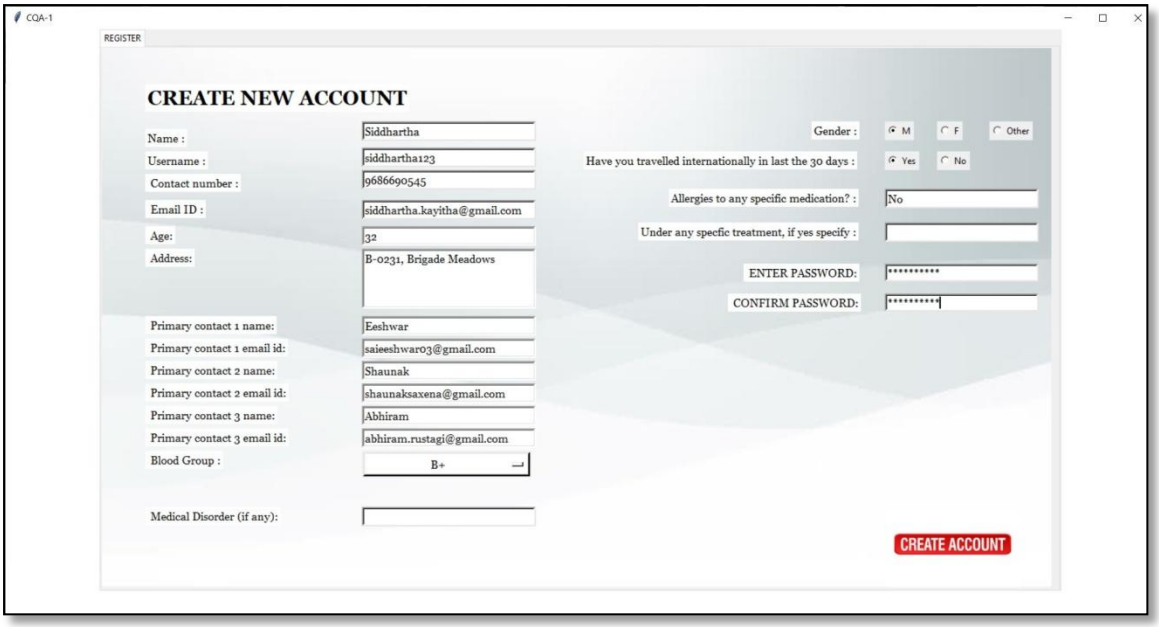
```
1018.
1019.
1020.
1021.           else:
1022.               messagebox.showinfo('Error',"Please fill all mandatory fields")
1023.
1024.
1025.       ##########################################################################
    ##########################################################################
    ######################
1026.
1027.
1028.       var1= IntVar()
1029.       c1=Checkbutton(page2,text="Dry Cough",variable=var1,bg="white",font="Geo
    rgia 11")
1030.       c1.place(x=60,y=150)
1031.
1032.       var2= IntVar()
1033.       c2=Checkbutton(page2,text="Fever",variable=var2,bg="white",font="Georgia
     11")
1034.       c2.place(x=60,y=190)
1035.
1036.
1037.       var3= IntVar()
1038.       c3=Checkbutton(page2,text="Chest Pain",variable=var3,bg="white",font="Ge
    orgia 11")
1039.       c3.place(x=60,y=230)
1040.
1041.
1042.       var4= IntVar()
1043.       c4=Checkbutton(page2,text="Difficulty in breathing",variable=var4,bg="wh
    ite",font="Georgia 11")
1044.       c4.place(x=60,y=270)
1045.
1046.
1047.       myimgsave=Image.open("save.png")
1048.       resizesav=myimgsave.resize((90,50),Image.ANTIALIAS)
1049.       ne21=ImageTk.PhotoImage(resizesav)
1050.       save_button=tk.Button(page2,bg="white",image=ne21,command=save,borderwid
    th=0)
1051.       save_button.place(x=1110,y=640)
1052.
1053.       var5= IntVar()
1054.       c5=Checkbutton(page2,text="Sore throat",variable=var5,bg="white",font="G
    eorgia 11")
1055.       c5.place(x=60,y=310)
1056.
1057.       var6= IntVar()
1058.       c6=Checkbutton(page2,text="Body pain and aches",variable=var6,bg="white"
    ,font="Georgia 11")
1059.       c6.place(x=60,y=350)
1060.
1061.       var7= IntVar()
1062.       c7=Checkbutton(page2,text="Diarrhoea",variable=var7,bg="white",font="Geo
    rgia 11")
1063.       c7.place(x=60,y=390)
```

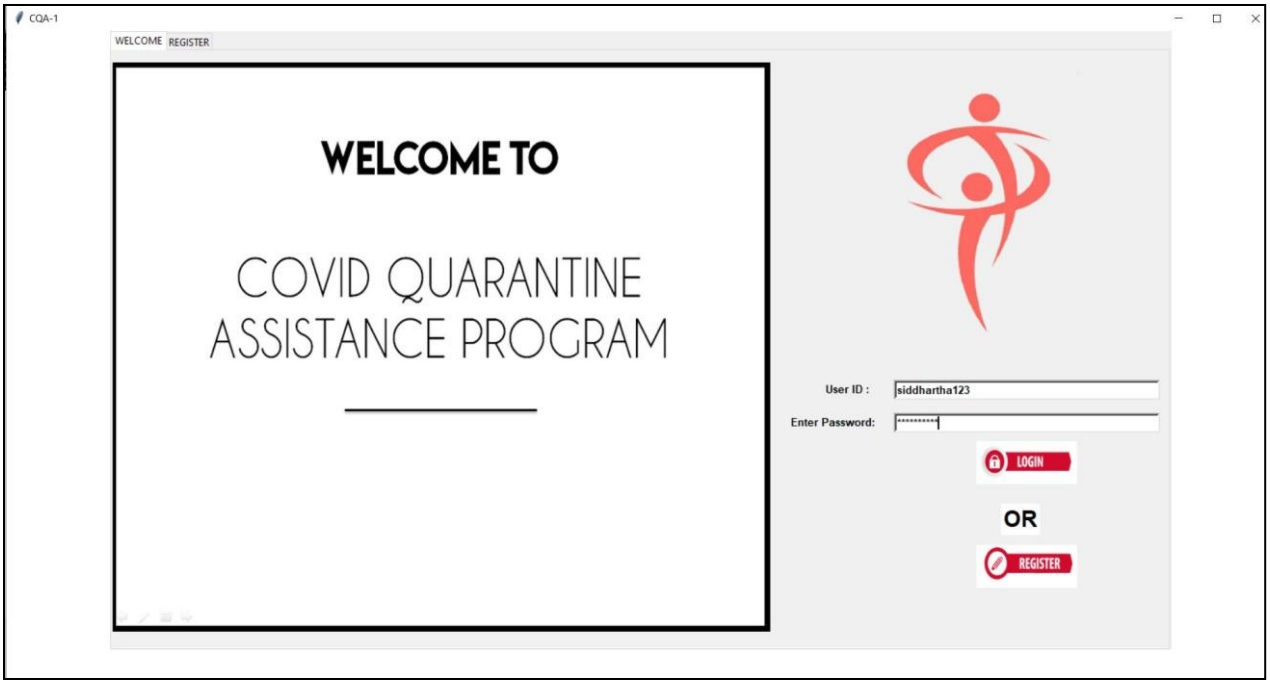
```
1064.
1065.       var8= IntVar()
1066.       c8=Checkbutton(page2,text="Headache",variable=var8,bg="white",font="Geor
    gia 11")
1067.       c8.place(x=60,y=430)
1068.
1069.       var9= IntVar()
1070.       c9=Checkbutton(page2,text="Loss of taste or smell",variable=var9,bg="whi
    te",font="Georgia 11")
1071.       c9.place(x=60,y=470)
1072.
1073.       var10= IntVar()
1074.       c10=Checkbutton(page2,text="Tiredness",variable=var10,bg="white",font="G
    eorgia 11")
1075.       c10.place(x=60,y=510)
1076.
1077.       var11= IntVar()
1078.       c11=Checkbutton(page2,text="Conjuctivitis",variable=var11,bg="white",fon
    t="Georgia 11")
1079.       c11.place(x=60,y=550)
1080.
1081.       var12= IntVar()
1082.       c12=Checkbutton(page2,text="Rash or skin discolouration",variable=var12,
    bg="white",font="Georgia 11")
1083.       c12.place(x=60,y=590)
1084.
1085.       var13= IntVar()
1086.       c13=Checkbutton(page2,text="Loss of speech or movement",variable=var13,b
    g="white",font="Georgia 11")
1087.       c13.place(x=60,y=630)
1088.
1089.
1090.       ##temp
1091.       temp=tk.Label(page2,fg="black",text="Enter Current Temperature (°C):",bg
    ="white",font="Georgia 11",).place(x=660,y=150)
1092.       temp_e=tk.Entry(page2,width=21,font="Verdana 9 bold italic",relief="sunk
    en",borderwidth=3)
1093.       temp_e.place(x=1000,y=150)
1094.
1095.
1096.       ##weight
1097.       wt=tk.Label(page2,fg="black",text="Enter Weight (Kgs):",bg="white",font=
    "Georgia 11",).place(x=660,y=200)
1098.       wt_e=tk.Entry(page2,width=21,font="Verdana 9 bold italic",relief="sunken
    ",borderwidth=3)
1099.       wt_e.place(x=1000,y=200)
1100.
1101.
1102.       ##bloodpressure
1103.       bp=tk.Label(page2,fg="black",text="Enter Blood Pressure (mm Hg):",bg="wh
    ite",font="Georgia 11",).place(x=660,y=300)
1104.       bpp=tk.Label(page2,fg="black",text="(Systolic/Diastolic)",bg="white",fon
    t="Georgia 11",).place(x=660,y=330)
1105.       bp_e=tk.Entry(page2,width=21,font="Verdana 9 bold italic",relief="sunken
    ",borderwidth=3)
1106.       bp_e.place(x=1000,y=300)
1107.
```

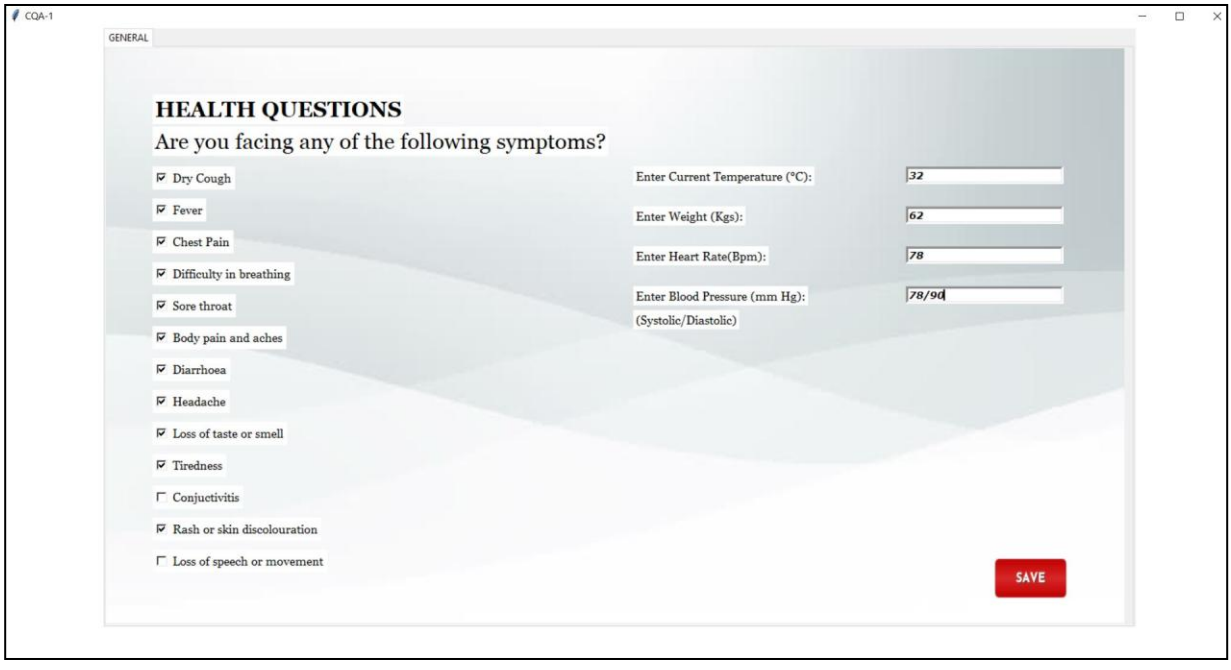
```
1108.
1109.       ##heartrate
1110.       hr=tk.Label(page2,fg="black",text="Enter Heart Rate(Bpm):",bg="white",fo
    nt="Georgia 11 ",).place(x=660,y=250)
1111.       hr_e=tk.Entry(page2,width=21,font="Verdana 9 bold italic",relief="sunken
    ",borderwidth=3)
1112.       hr_e.place(x=1000,y=250)
1113.
1114.
1115.       def select3():
1116.           tc.select(3)
1117.           tc.hide(2)
1118.
1119.       ##############################################################################
    ##############################################################################
    ####################################
1120.       ##tab 4
1121.       canvass = tk.Canvas(page3, width=1280, height=700)
1122.       canvass.grid()
1123.       back11=Image.open("day 3 bad.jpeg")#program ends here
1124.       resizee=back11.resize((1200,700),Image.ANTIALIAS)
1125.       new11=ImageTk.PhotoImage(resizee)
1126.       canvass.create_image(640,360,image=new11)
1127.
1128.       def select4():
1129.           tc.select(4)
1130.           tc.hide(3)
1131.
1132.
1133.
1134.
1135.       ##tab5
1136.       ##bad day 5
1137.       canvass_w = tk.Canvas(page4, width=1280, height=700)
1138.       canvass_w.grid()
1139.       back15=Image.open("day 5 bad.jpeg")#program ends here
1140.       resizeea=back15.resize((1260,780),Image.ANTIALIAS)
1141.       new112=ImageTk.PhotoImage(resizeea)
1142.       canvass_w.create_image(640,360,image=new112)
1143.
1144.       def select5():
1145.           tc.select(5)
1146.           tc.hide(4)
1147.
1148.
1149.       ##tab6
1150.       ##good after 5 days
1151.       canvass_ww = tk.Canvas(page5, width=1280, height=700)
1152.       canvass_ww.grid()
1153.       back151=Image.open("day 5 good thank you.jpeg")#program ends here
1154.       resizeez=back151.resize((1260,780),Image.ANTIALIAS)
1155.       new113=ImageTk.PhotoImage(resizeez)
1156.       canvass_ww.create_image(640,360,image=new113)
1157.
1158.       root.mainloop()
```

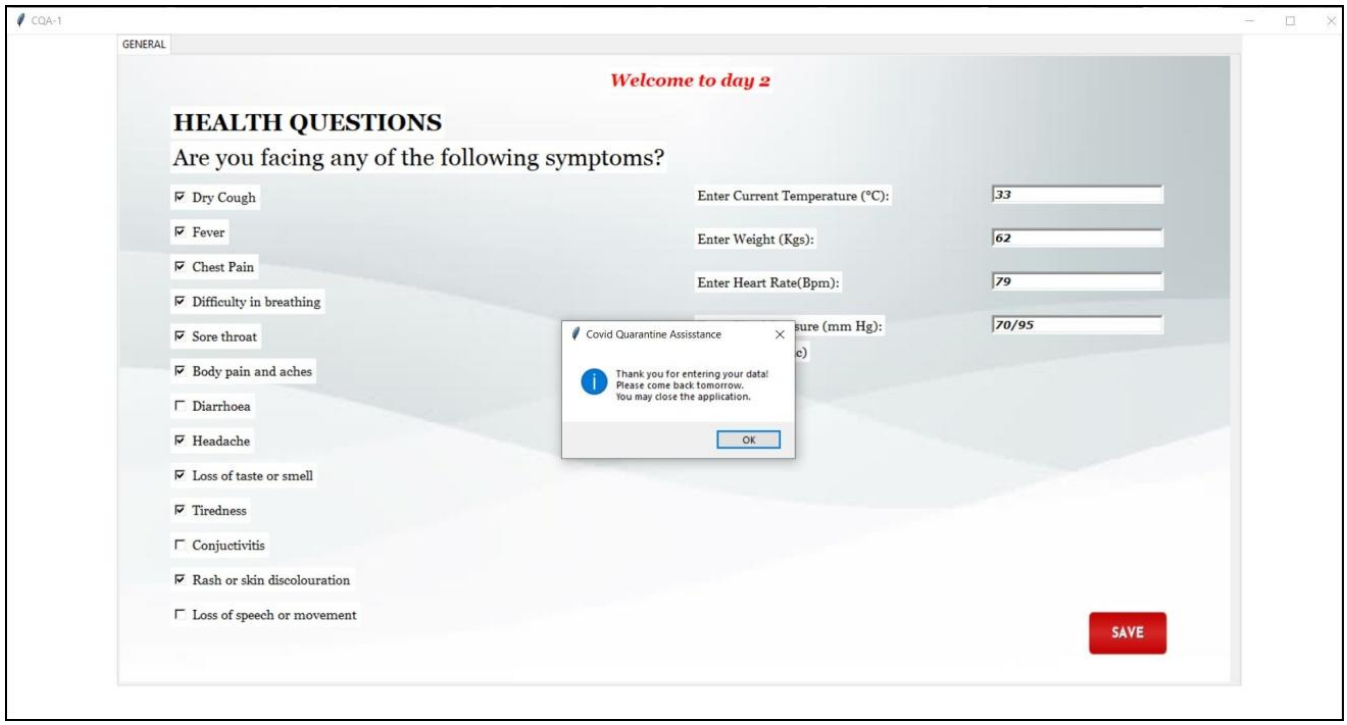
Sample Output

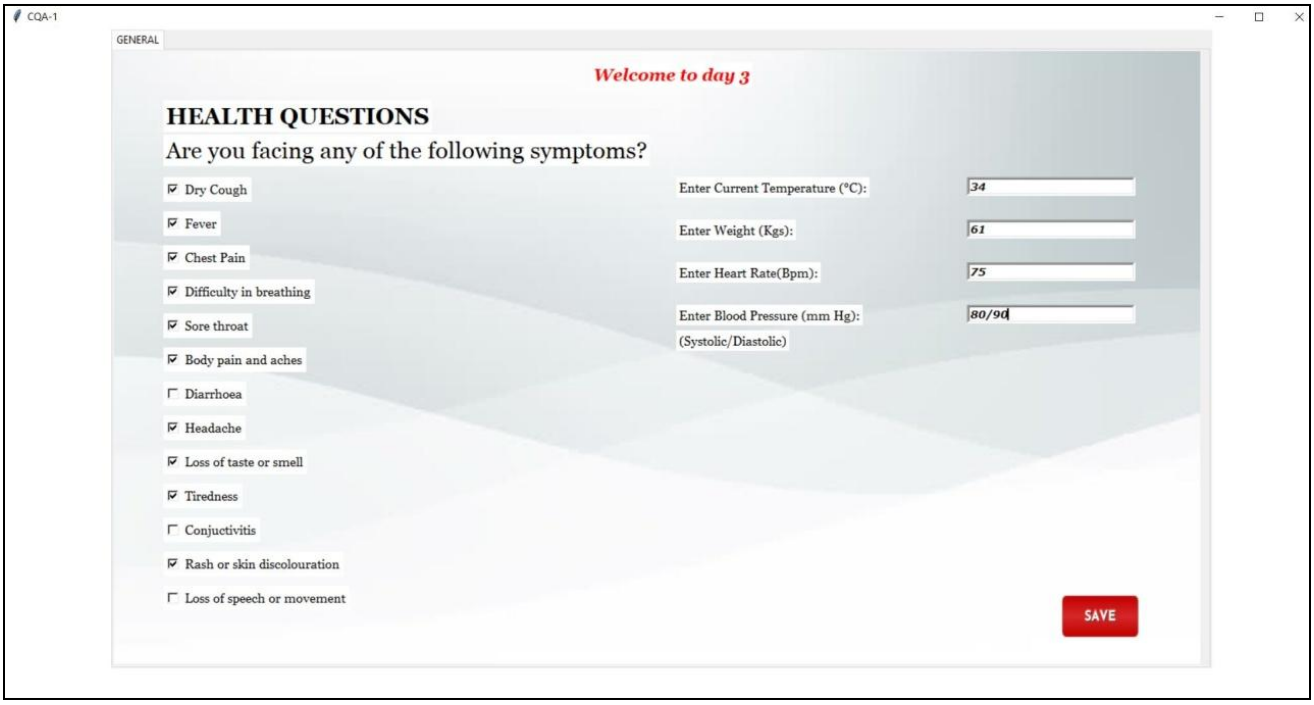


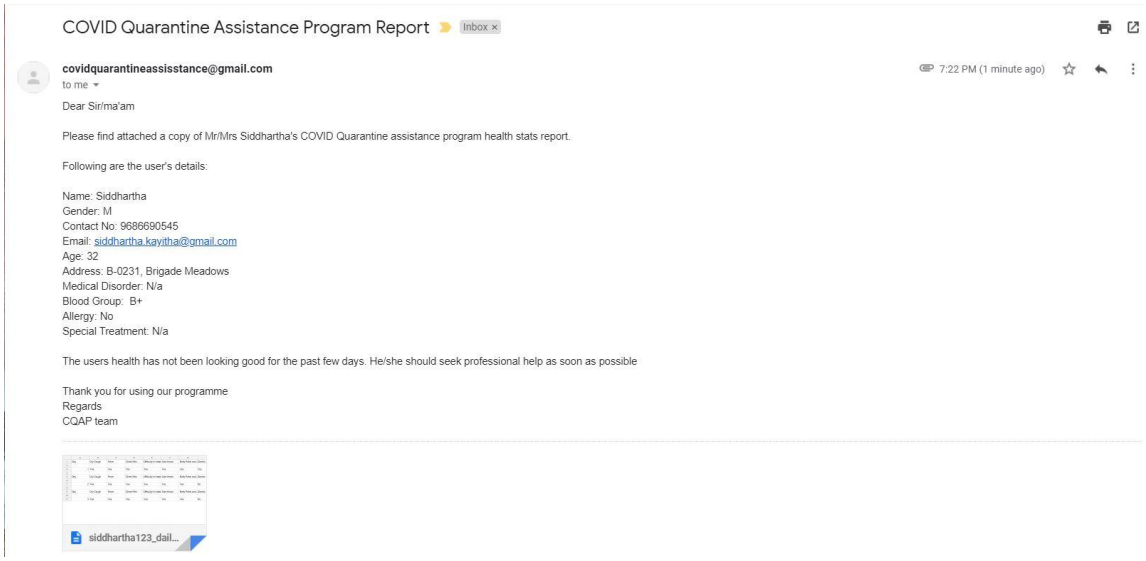


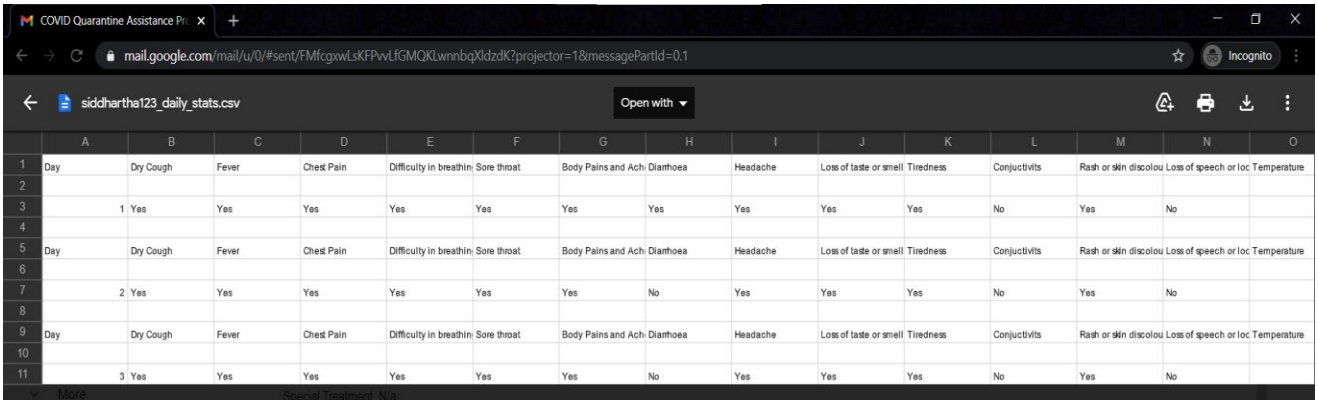

CQA-1
WELCOME
REGISTER
WELCOME TO
COVID QUARANTINE
ASSISTANCE PROGRAM
User ID :
siddhartha123
Enter Password:
LOGIN
OR
REGISTER


CQA-1
GENERAL
HEALTH QUESTIONS
Are you facing any of the following symptoms?
Dry Cough
Fever
Chest Pain
Difficulty in breathing
Sore throat
Body pain and aches
Diarrhoea
Headache
Loss of taste or smell
Tiredness
Conjuctivitis
Rash or skin discolouration
Loss of speech or movement
Enter Current Temperature (°C):
32
Enter Weight (Kgs):
62
Enter Heart Rate(Bpm):
78
Enter Blood Pressure (mm Hg):
(Systolic/Diastolic)
78/90
SAVE


CQA-1
GENERAL
Welcome to day 2
HEALTH QUESTIONS
Are you facing any of the following symptoms?
Dry Cough
Fever
Chest Pain
Difficulty in breathing
Sore throat
Body pain and aches
Diarrhoea
Headache
Loss of taste or smell
Tiredness
Conjuctivitis
Rash or skin discolouration
Loss of speech or movement
Enter Current Temperature (°C):
33
Enter Weight (Kgs):
62
Enter Heart Rate(Bpm):
79
ure (mm Hg):
70/95
c)
Covid Quarantine Assisstance
Thank you for entering your data!
Please come back tomorrow.
You may close the application.
OK
SAVE


CQA-1
GENERAL
Welcome to day 3
HEALTH QUESTIONS
Are you facing any of the following symptoms?
Dry Cough
Fever
Chest Pain
Difficulty in breathing
Sore throat
Body pain and aches
Diarrhoea
Headache
Loss of taste or smell
Tiredness
Conjuctivitis
Rash or skin discolouration
Loss of speech or movement
Enter Current Temperature (°C):
34
Enter Weight (Kgs):
61
Enter Heart Rate(Bpm):
75
Enter Blood Pressure (mm Hg):
(Systolic/Diastolic)
80/90
SAVE





	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Day	Dry Cough	Fever	Chest Pain	Difficulty in breathin	Sore throat	Body Pains and Achi	Diarrhoea	Headache	Loss of taste or smell	Tiredness	Conjuctivits	Rash or skin discolou	Loss of speech or loc	Temperature
2															
3	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	
4															
5	Day	Dry Cough	Fever	Chest Pain	Difficulty in breathin	Sore throat	Body Pains and Achi	Diarrhoea	Headache	Loss of taste or smell	Tiredness	Conjuctivits	Rash or skin discolou	Loss of speech or loc	Temperature
6															
7	2	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No	
8															
9	Day	Dry Cough	Fever	Chest Pain	Difficulty in breathin	Sore throat	Body Pains and Achi	Diarrhoea	Headache	Loss of taste or smell	Tiredness	Conjuctivits	Rash or skin discolou	Loss of speech or loc	Temperature
10															
11	3	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No	

Constraints and Scope

The following is a list of the current shortcomings of our project and some ideas we hope to implement in the near future.

- The project runs based on the symptoms entered by the user and will not be to detect special asymptomatic cases.
- We created this project mainly for the elderly who aren't as self-sufficient as the youth. Yet, the successful operation of the project is based on installation and proper working of softwares such as mysql which may be rather complex for a senior citizen who isn't versed in it.
- Currently the project is restricted to only guiding a user and helping him determine if he may be infected . We aim at providing a live track of other cases nearby.
- The health stats entered are easily manipulatable and there is no system to detect a manually changed data stats file.
- The program is dependent on extrinsic factors such as a stable internet connection. Thus, it's prone to crashing.
- By basing the program on an online server database, we can eliminate the requirement of a local database such as mysql.
- Tasks such as calculating health score and sending emails are time consuming, especially for low specification machines. We are working on minimizing the run time of the program to make it run smooth and efficiently.

Bibliography

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- Computer Science with Python - Sumita Arora