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| **PAINITE CHATBOT** |

<https://www.facebook.com/Painite-152274992356936/>

[LinkedIn](https://www.linkedin.com/in/raagamayee-lingam-776b4280/)

[GitHub](https://github.com/RaagamayeeL/Painite-Chatbot)

[Website](https://painite.neocities.org/Home.html)

Painite (one of the rarest healing stones on earth, known for its durability), is a mental health promoting chatbot which helps people with self-assessment of various mental health conditions. The bot also provides the user with hospital and support group details in the city of their choice and emails them with same information, granted that they choose to provide the data needed. The self-assessments offered by Painite are: Depression, Anxiety, Schizophrenia, Obsessive Compulsive Disorder, Bipolar disorder, Post- Traumatic Stress Disorder. The chatbot is integrated with a Facebook page and deployed as the messenger of the respective page. As the team leader of this project I was able to learn how to delegate tasks and manage my time. I believe the advantage of this chatbot is that with the stigma that surrounds mental health, the anonymity makes users disclose without inhibitions. Trust and the right to be forgotten are imperative in maintaining the privacy of the user. Therefore, to maintain the privacy of the user, Painite makes sure to not save any given data or trace it back to a user id.

Personal Contribution:

I integrated the bot to Facebook with the help of the Facebook developer’s platform. In the process, I created a privacy policy and a webhook to host a temporary server. I created a webhook URL using ngrok and then upgraded it by creating it using codio. To have the bot ‘GET’ and ‘POST’ messages through the webhook, I used functions local to the Flask microframework and the Pymessenger wrapper. The intents were implemented in the form of text files to avoid hard-coding and using third party websites. Each text file has various possibilities of the user input. For example, the file “Greeting.txt” has various methods of starting a conversation and when the bot ‘GETs’ one of these words its replies with a generic introduction.

I used numerous functions for reading from a file, writing into a file, connecting to the database and returning data from the tables based on the given city name, to ‘GET’ the message from the bot and, to ‘POST’ the message to the bot. Using numerous functions helped me decompose the code, reduce redundancy by not having to repeat the code and implement recursion. The self-assessments offered by Painite are: Depression, Anxiety, Schizophrenia, Obsessive Compulsive Disorder, Bipolar disorder, Post- Traumatic Stress Disorder. Each of the tests have been turned to HTML code and I dealt with the Depression self-assessment and the Home page for the website. Automated emails are also sent with the help of the Flask-Mail web-application. This helps us set up a Simple Mail Transfer Protocol (SMPT) Server using Flask. I dealt with Bad Headed Errors that arose while updating the code to send emails. It is to be noted that for the automated mail to go through I edited the email settings to allow less secure apps and enabled IMAP (Internet Message access Protocol). For the webhook to be setup without interferences, I isolated the project by creating a virtual environment and then installed the frameworks and wrappers using pip3.

Skills Developed:

* Understanding the usage of Flask and Flask-Mail
* Understanding the usage of Pymessenger
* Creating and install a Virtual Environment using pip3
* Hosting servers by creating webhook URL’s using ngrok and codio
* Reading and Writing into Files
* String, List, Tuple and Dictionary manipulations
* Connecting a database in python and returning data
* Learnt basic HTML formatting
* Usage of Facebook Developer’s Platform
* Dealing with exceptions and error detection
* Managing a GitHub repository
* Managing group work

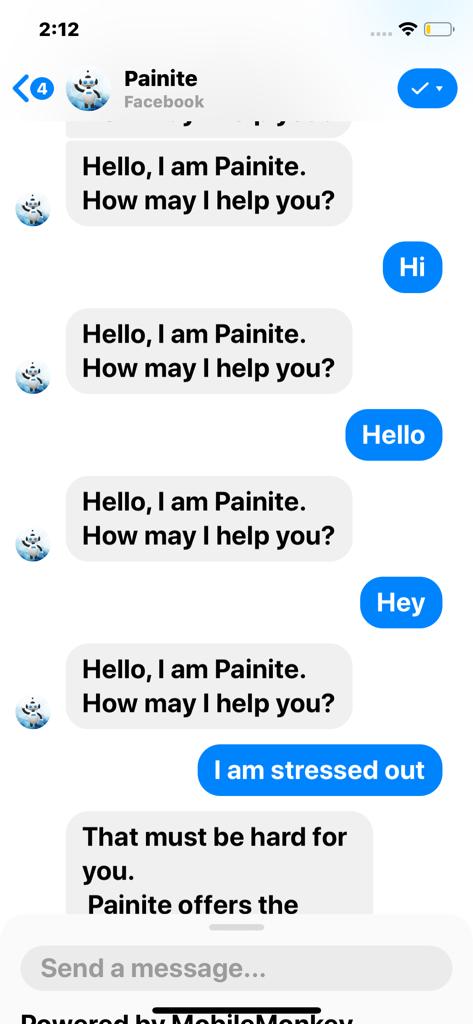
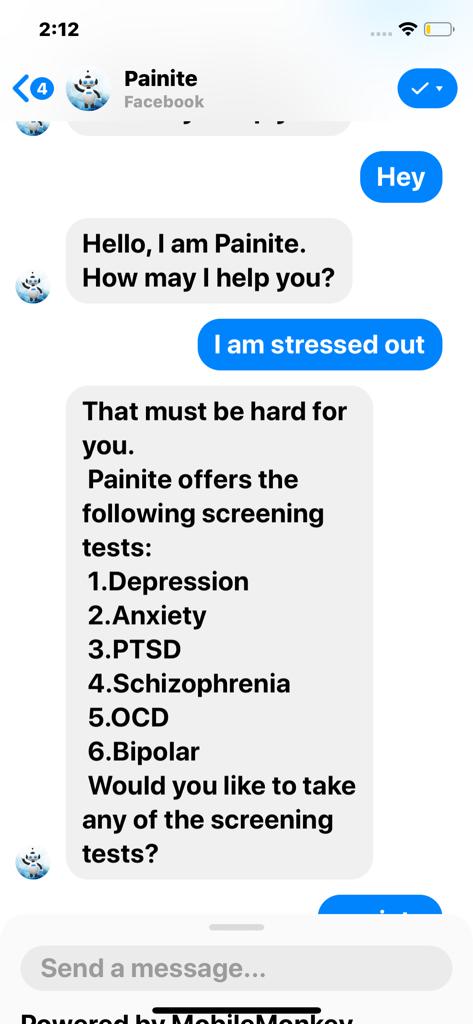
 

Figure : Generic greeting Figure :Generic greeting Reply with self-assessments offered

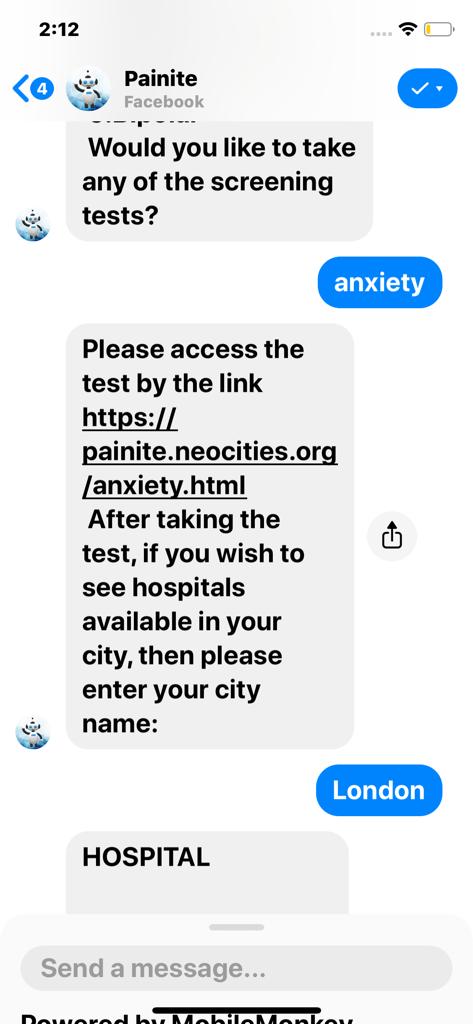
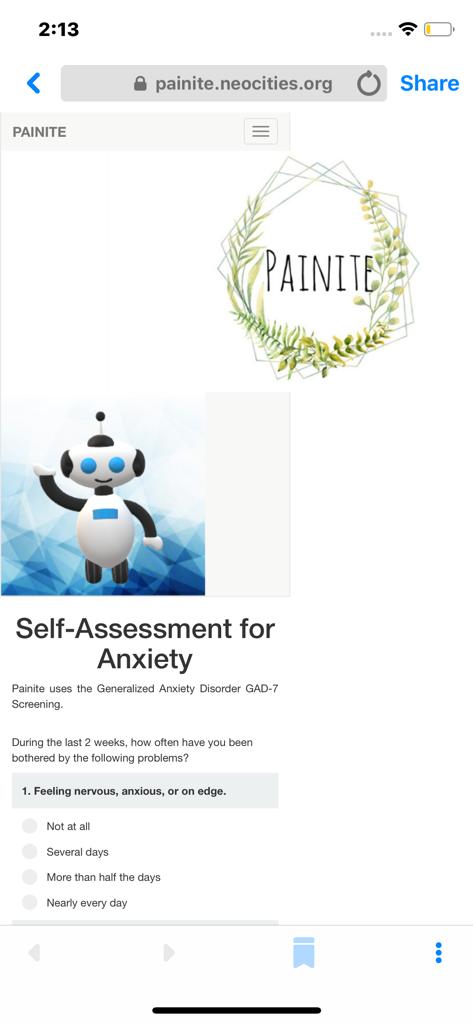
 

Figure : Reply with HTML link for self-assessment Figure : HTML Page Preview

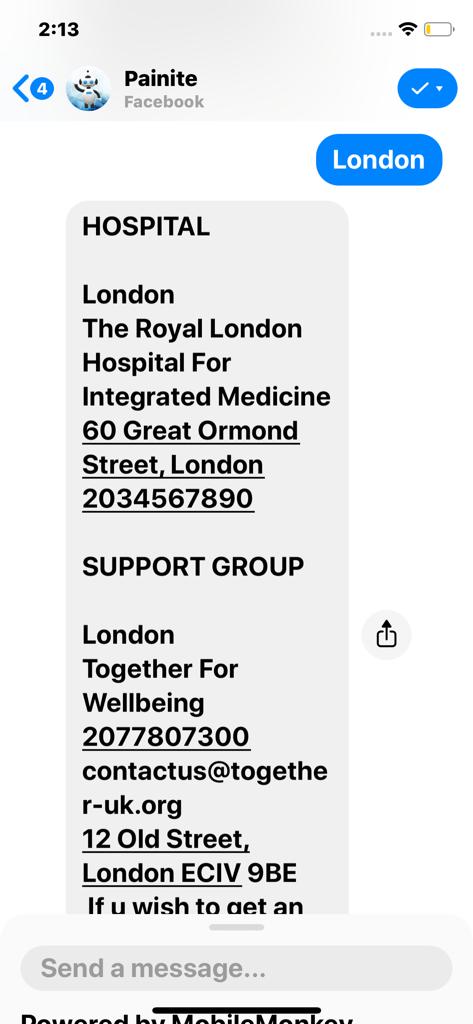
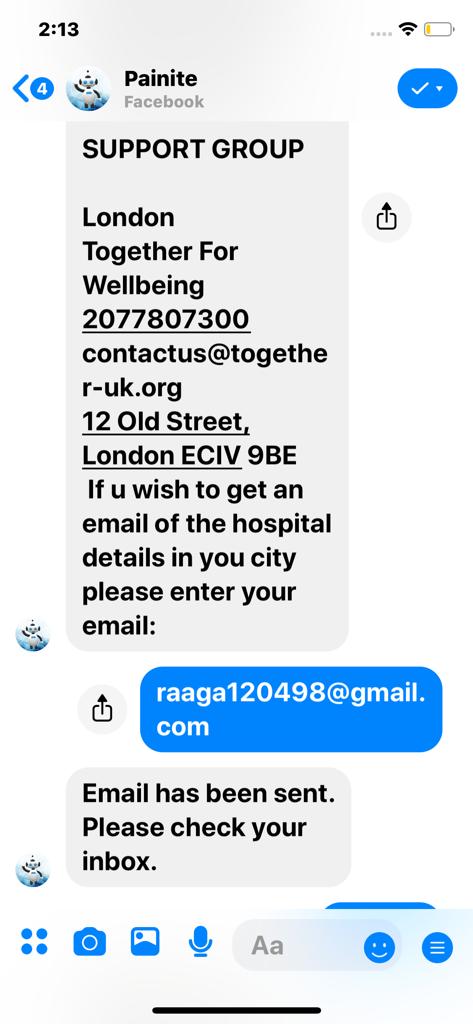
 

Figure : Hospital and Support Group Detail Figure : Asking and sending email

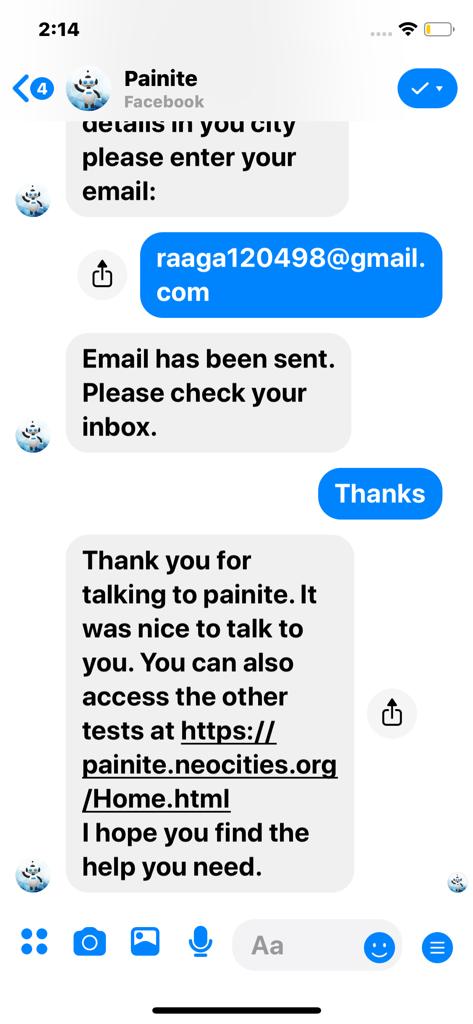
 

Figure :Email sent Figure 8: Generic Goodbye message

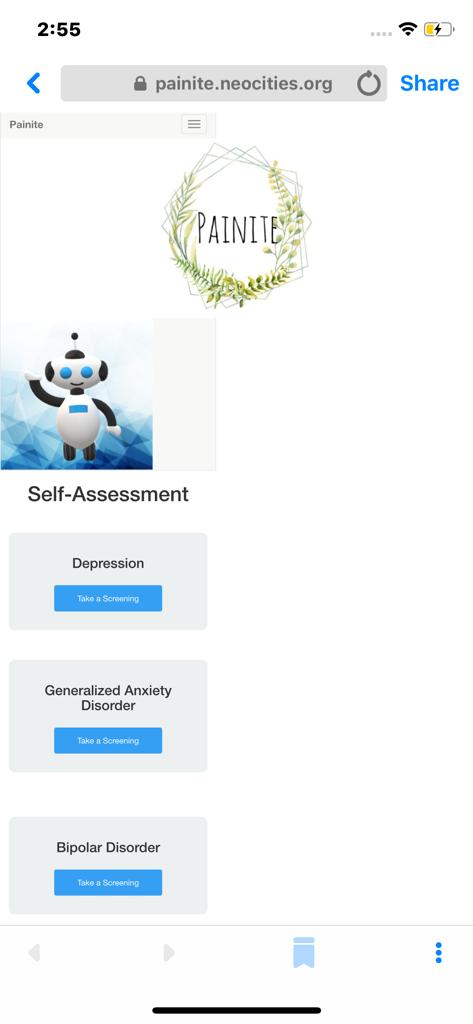
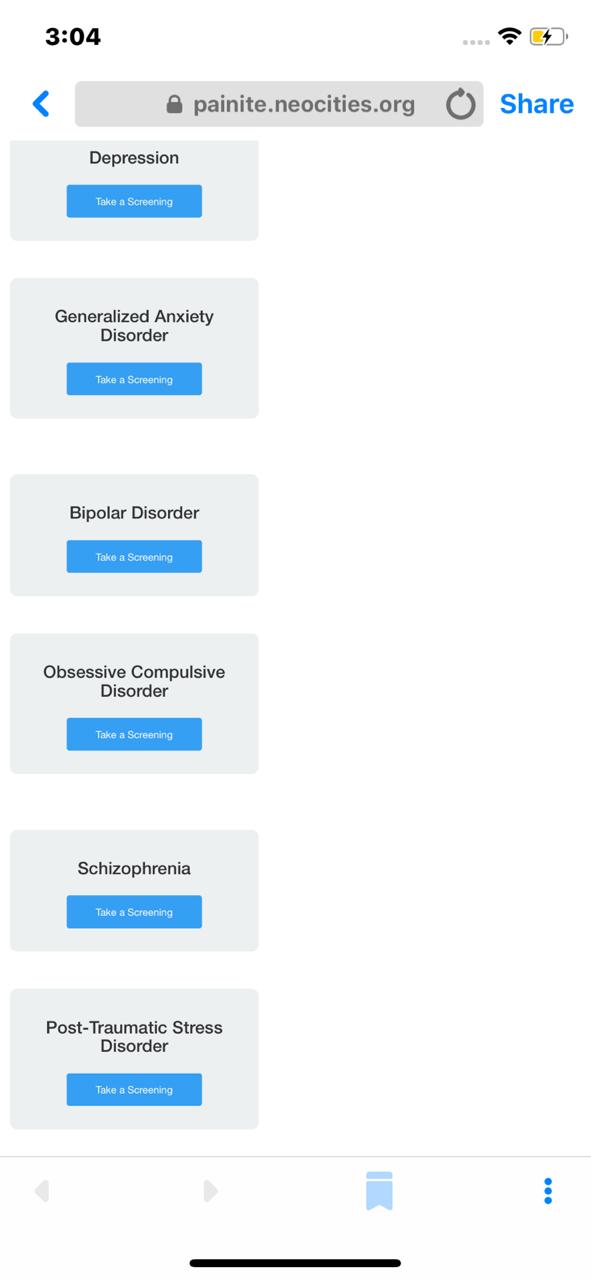
 

Figure : Website Home Page Preview (a) Figure :Website Home Page Preview (b)

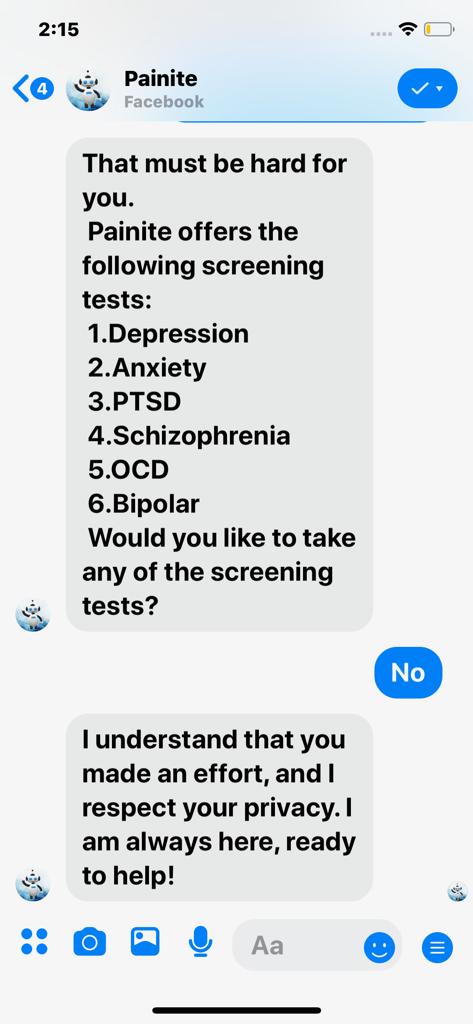
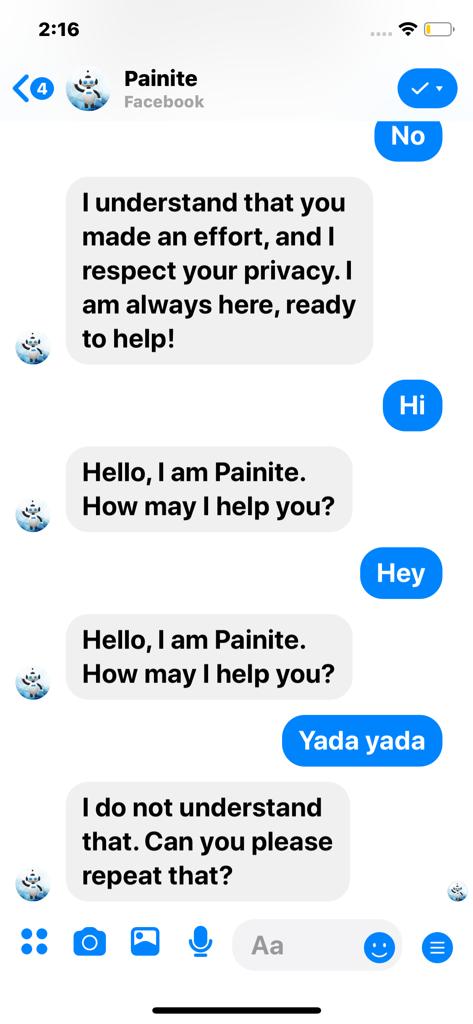
 

Figure : Reply to negative message Figure : Fail case for message not understood

Reflection & Evaluation:

One of the main issues that arose while doing this project was the with the process of returning the self-assessments to ‘POST’ through the webhook and to the messenger bot. As both a function and conditional statements can return multiple return values but cannot return multiple return statements, the self—assessments could not be called as external functions. The results of the functions could have been returned with the help of files and the readline method, but that would require us to keep copies of sensitive data. In lieu of the above, we decided to use HTML files to preserve the privacy of the user and expand our knowledge. Right now, the HTML files are hosted using the neocities.org website. A better alternative might be hosting using GitHub.

The bot needs a server and webhook url to ‘GET’ and ‘POST’ messages. At first, I created a webhook URL using ngrok but in this case the server is online only if the code and ngrok are running. This meant that the webhook setup had to be updated in the Facebook developers page every time we had to test the code. To overcome this, I then used codio to host the server and used the webhook URL generated. This makes sure that the bot will be online if we just run the code on codio. One drawback is that the existing functions don’t check for the validity of emails and using API’s like SendGrid would help us better navigate through the google mail security and has more suitable error messages.

Another issue would be the queue process of a webhook. A webhook server by default deals with the last not processed query in the queue. This will cause delays and bugs in the absence of a fail case for when the given input is not in the form of text. To deal with it we can use an API (like telegram) with flask or to have a function for validating webhooks. In the current state, the database has tables for only five cities. We contacted a website to get access to their API but haven’t heard back from them. Using an API would be more efficient.

Painite uses files as intents so leeway for not understanding the user increases. In turn we can make Painite self-learning by using the Natural Language Processing Kit. Though even NLP has its limitations in this case as most mental health conditions will have a lot to tokens in common and even with counting the word frequency it will be complicated to differentiate. Further improvement would be using machine learning.

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| **Python Code** |

[GitHub](https://github.com/RaagamayeeL/Painite-Chatbot)

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Code for Chatbot integration and replying

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The code given below has been referenced from: <https://github.com/wessilfie/BasicBGMBot/blob/master/app.py>

<http://flask.pocoo.org/docs/0.12/quickstart/>

and has been adapted to this project

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#Python libraries that we need to import for our bot

**from** **flask** **import** Flask, request

**from** **flask\_mail** **import** Mail, Message

**from** **pymessenger.bot** **import** Bot #Wrapper used to ‘GET’ and ‘POST’ messages

**import** **sqlite3** **as** **sql**

app = Flask(\_\_name\_\_)

ACCESS\_TOKEN = 'EAAjZA2xibM0ABAOCaYxeA4odWqTGt6vYcxcaF7Ln8sZBuHLD5JrKQxTnPW4VY5MSO0B19qgAyyS0Wpd1NQgk33TYsY2ySZBa5cbZB5oX44d4Octfj1bvSlBK0NrSMJr5eqgMqLEzQ9JIEhP6tpBdxVWwW9zR8fkhUPZAoZANasVnn3EleZBCtg4'

#Adapted Access Token

VERIFY\_TOKEN = 'COVENTRYJ4'

bot = Bot(ACCESS\_TOKEN)

# Receive messages that Facebook sends our bot

@app.route("/", methods=['GET', 'POST'])

**def** **receive\_message**():

**if** request.method == 'GET':

"""Before allowing people to message your bot, Facebook has implemented a verify token

that confirms all requests that your bot receives came from Facebook."""

token\_sent = request.args.get("hub.verify\_token")

**return** verify\_fb\_token(token\_sent)

#if the request was not get, it must be POST and we can just proceed with sending a message back to user

**else**:

# get whatever message a user sent the bot

output = request.get\_json()

**for** event in output['entry']:

messaging = event['messaging']

**for** message in messaging:

**if** message.get('message'):

#Facebook Messenger ID for user so we know where to send response back to

recipient\_id = message['sender']['id']

**if** message['message'].get('text'):

response\_sent\_text = get\_message()

send\_message(recipient\_id, response\_sent\_text)

#if user sends us a GIF, photo,video, or any other non-text item

**if** message['message'].get('attachments'):

response\_sent\_nontext = get\_message()

send\_message(recipient\_id, response\_sent\_nontext)

**return** "Message Processed"

**def** **verify\_fb\_token**(token\_sent):

#take token sent by facebook and verify it matches the verify token you sent

#if they match, allow the request, else return an error

**if** token\_sent == VERIFY\_TOKEN:

**return** request.args.get("hub.challenge")

**return** 'Invalid verification token'

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| ‘’’  This ends the code referenced from: <https://github.com/wessilfie/BasicBGMBot/blob/master/app.py>  <http://flask.pocoo.org/docs/0.12/quickstart/>  and adapted to this project  ’’’  #to open and return file contents  **def** **fileread**(filename):  f = open(filename, "r")  textString = f.read()  f.close()  **return** textString  #to open and write into the file  **def** **filewrite**(filename,name):  f=open(filename,"w")  f.write(name)  f.close()    #to recieve the message sent by user and return it  **def** **getmessage**():  output = request.get\_json()  **for** event in output['entry']:  messaging = event['messaging']  **for** message in messaging:  **if** message.get('message'):  **return**(message['message'].get('text'))    #Creating a database connection and returning hospital details  **def** **hospitals**(city\_name):  con = sql.connect('Chatbot.db')  cur=con.cursor()  cur.execute(''' SELECT City as "CITY:", Hospital as "Hospital Name:", Address as "ADDRESS:", Contact\_no as "NUMBER:" FROM Hospitals WHERE City==?;''',(city\_name,))  **for** row in cur:  **return**(row)  con.close()  #Creating a database connection and returning support groups details  **def** **support\_groups**(city\_name):  con = sql.connect('Chatbot.db')  cur=con.cursor()  cur.execute(''' SELECT City as "CITY:", Organisation as "Name of the organisation:", Contact\_no as "NUMBER:",Email as "EMAIL:", Address as "ADDRESS:" FROM Support\_Groups WHERE City==?;''',(city\_name,))  **for** row in cur:  **return**(row)  con.close()    **def** **details**():  n=getmessage()  filewrite("getcityname.txt",n)  r=fileread("getcityname.txt")  strh=""  strs=""  r1=r.lower()  r2=r1.capitalize()  **if** r=='Birmingham' or r=='birmingham' or r=='BIRMINGHAM':  h=hospitals(r2)  s=support\_groups(r2)  **elif** r=='London' or r=='london' or r=='LONDON':  h=hospitals(r2)  s=support\_groups(r2)  **elif** r=='Manchester'or r=='manchester' or r=='MANCHESTER':  h=hospitals(r2)  s=support\_groups(r2)  **elif** r=='Bradford'or r=='bradford' or r=='BRADFORD':  h=hospitals(r2)  s=support\_groups(r2)  **elif** r=='Leeds'or r=='leeds'or r=='LEEDS':  h=hospitals(r2)  s=support\_groups(r2)  **for** i in range(**0**,len(h)):  strh=strh+"\n"+str(h[i])  strh.strip('()')  **for** j in range(**0**,len(s)):  strs=strs+"\n"+str(s[j])  strs.strip('()')  **return**("HOSPITAL\n"+strh+"\n\nSUPPORT GROUP\n"+strs)  **def** **details2**():  r=fileread("getcityname.txt")  strh=""  strs=""  r1=r.lower()  r2=r1.capitalize()  **if** r=='Birmingham' or r=='birmingham' or r=='BIRMINGHAM':  h=hospitals(r2)  s=support\_groups(r2)  **elif** r=='London' or r=='london' or r=='LONDON':  h=hospitals(r2)  s=support\_groups(r2)  **elif** r=='Manchester'or r=='manchester' or r=='MANCHESTER':  h=hospitals(r2)  s=support\_groups(r2)  **elif** r=='Bradford'or r=='bradford' or r=='BRADFORD':  h=hospitals(r2)  s=support\_groups(r2)  **elif** r=='Leeds'or r=='leeds'or r=='LEEDS':  h=hospitals(r2)  s=support\_groups(r2)  **for** i in range(**0**,len(h)):  strh=strh+"\n"+str(h[i])  strh.strip('()')  **for** j in range(**0**,len(s)):  strs=strs+"\n"+str(s[j])  strs.strip('()')  **return**("HOSPITAL\n"+strh+"\n\nSUPPORT GROUP\n"+strs)  ‘’’  The code given below has been referenced from:  <https://github.com/robinske/gmail-python/blob/master/send.py>  <https://pythonhosted.org/Flask-Mail/>  and has been adapted to this project  ’’’  #To send an automated mail  **def** **send\_mail**():  EMAIL\_USER="”#your email  EMAIL\_PASSWORD=""#your password  e=getmessage()  filewrite("get\_email.txt",e)  r=fileread("get\_email.txt")  #Adapted to get email from user  mail\_settings = {  "MAIL\_SERVER": 'smtp.gmail.com',  "MAIL\_PORT": **465**,  "MAIL\_USE\_TLS": **False**,  "MAIL\_USE\_SSL": **True**,  "MAIL\_USERNAME":EMAIL\_USER,  "MAIL\_PASSWORD":EMAIL\_PASSWORD  }  app.config.update(mail\_settings)  mail = Mail(app)  **with** app.app\_context():  msg = Message(subject="Hello",  sender=app.config.get("MAIL\_USERNAME"),  recipients=[r,],  body=("Thanks for using Painite. The information you asked for is written below:\n"+str(details2())+"\n\nBest Regards, \nPainite\nhttps://painite.neocities.org/Home.html"))  **if** '@uni.coventry.ac.uk' in str(r) or '@gmail.com' in str(r) or '@yahoo.com' in str(r):  mail.send(msg)  **return**(**True**)  **else**:  **return** **False**    ‘’’  This ends the code referenced from:  <https://github.com/robinske/gmail-python/blob/master/send.py>  <https://pythonhosted.org/Flask-Mail/>  and adapted to this project  ’’’    #returns response to be sent, depending on the message received  **def** **reply**():  r=getmessage()  **if** r in fileread("Greeting.txt"):  **return**("Hello, I am Painite. How may I help you?")  **elif** r in fileread("Possible.txt"):  **return**("That must be hard for you.\n Painite offers the following screening tests:\n 1.Depression\n 2.Anxiety\n 3.PTSD\n 4.Schizophrenia\n 5.OCD\n 6.Bipolar\n Would you like to take any of the screening tests?")  **elif** r in fileread("positive.txt"):  **return**("Which screening test do you want to try?")  **elif** r in fileread("negative.txt"):  **return**("I understand that you made an effort, and I respect your privacy. I am always here, ready to help!")  **elif** r=="Depression" or r=="depression" or r=="1" or r=="DEPRESSION":  **return**("Please access the test by the link\nhttps://painite.neocities.org/Depression.html\n After taking the test, if you wish to see hospitals available in your city, then please enter your city name:")  **elif** r=="Anxiety" or r=="anxiety" or r=="2" or r=="ANXIETY":  **return**("Please access the test by the link\nhttps://painite.neocities.org/anxiety.html\n After taking the test, if you wish to see hospitals available in your city, then please enter your city name:")  **elif** r=="PTSD" or r=="ptsd" or r=="3" or r=="PTSD":  **return**("Please access the test by the link\nhttps://painite.neocities.org/ptsd.html\n After taking the test, if you wish to see hospitals available in your city, then please enter your city name:")  **elif** r=="Schizophrenia" or r=="schizophrenia" or r=="4" or r=="SCHIZOPHRENIA":  **return**("Please access the test by the link\nhttps://painite.neocities.org/schizophrenia.html\n After taking the test, if you wish to see hospitals available in your city, then please enter your city name:")  **elif** r=="OCD" or r=="ocd" or r=="5" or r=="Ocd":  **return**("Please access the test by the link\nhttps://painite.neocities.org/ocd.html\n After taking the test, if you wish to see hospitals available in your city, then please enter your city name:")  **elif** r=="Bipolar" or r=="bipolar" or r=="6" or r=="BIPOLAR":  **return**("Please access the test by the link\nhttps://painite.neocities.org/bipolar.html\n After taking the test, if you wish to see hospitals available in your city, then please enter your city name:")  **elif** r in fileread("allcities.txt"):  **if** r in fileread("citynames.txt"):  **return** (str(details())+"\n If u wish to get an email of the hospital details in you city please enter your email:")  **elif** '@uni.coventry.ac.uk' in r or '@gmail.com' in r or '@yahoo.com' in r:  a=send\_mail()  **if** a==**True**:  **return**("Email has been sent. Please check your inbox.")  **elif** a==**False**:  **return**("Please enter a valid email")  **elif** r in fileread("gratitude.txt"):  **return**("Thank you for talking to painite. It was nice to talk to you. You can also access the other tests at https://painite.neocities.org/Home.html\nI hope you find the help you need.")  **else**:  **return**("I do not understand that. Can you please repeat that?")  reply()    ‘’’  This code has been referenced from: <https://github.com/wessilfie/BasicBGMBot/blob/master/app.py>  <http://flask.pocoo.org/docs/0.12/quickstart/>  and has been adapted to this project  ’’’      #function has been adapted to return the message by calling another function  **def** **get\_message**():  sample\_responses = reply()  # return selected item to the user  **return** (sample\_responses)  #uses PyMessenger to send response to user  **def** **send\_message**(recipient\_id, response):  #sends user the text message provided via input response parameter  bot.send\_text\_message(recipient\_id, response)  **return** "success"  #Webhook port adapted to host on codio  **if** \_\_name\_\_ == "\_\_main\_\_":  app.run(debug = **True**, host="0.0.0.0",port=**8080**) |

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This ends the code referenced from: <https://github.com/wessilfie/BasicBGMBot/blob/master/app.py>

<http://flask.pocoo.org/docs/0.12/quickstart/>

and adapted to this project

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HTML CODE FOR HOME PAGE

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**<!DOCTYPE html>**

**<html>**

**<head>**

**<title>**Self-Assessment**</title>**

**<link** rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css"**>**

**<script** src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"**></script>**

**<script** src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js"**></script>**

**<meta** name="viewport" content="width=device-width, initial-scale=1"**>**

**<style** type="text/css"**>**

**ul** {

li: **right**;

}

**.navbar-default** **.navbar-nav** > **li** > **a** {

**color**: black;

**font-weight**: **bold**;

**margin**: **0**;

}

**.navbar-header** > **a** {

**color**: black;

**font-weight**: **bold**;

}

**.navbar** {

**margin**:**0**;

}

**.row** {

**padding-top**: **2**vh;

**padding-bottom**: **2**vh;

}

**.illness** {

**border**-radius: **10px**;

**margin**: **auto**;

**padding**: **3**vh;

**background**: **#ECF0F1**;

}

**#screening-button** {

**margin**: **4**vh **auto** **2**vh **auto**;

**padding**: **2**vh;

**background-color**: **#2196F3**;

**text-align**: **center**;

**color**: white;

**display**: **block**;

**width**: **20**vw;

**opacity**: **0**.**9**;

**border**: **none**;

}

**#screening-button**:hover {

**opacity**:**1**;

}

**@media** **screen** **and** (**max-width**: **700px**) {

**#screening-button** {

**width**: **50**vw;

}

**.col-sm-6** {

**padding-top**: **4**vh;

**padding-bottom**: **4**vh;

}

}

**</style>**

**</head>**

**<body>**

**<nav** class="navbar navbar-default"**>**

**<div** class="container-fluid"**>**

**<div** class="navbar-header"**>**

**<button** type="button" class="navbar-toggle" data-toggle="collapse" data-target="#myNavbar"**>**

**<span** class="icon-bar"**></span>**

**<span** class="icon-bar"**></span>**

**<span** class="icon-bar"**></span>**

**</button>**

**<a** class="navbar-brand" href="#"**>**Painite**</a>**

**<img** src="/logo.png" ALIGN="justify"**/>**

**<img** src="/icon.png" ALIGN="left" **/>**

**</div>**

**<div** class="collapse navbar-collapse" id="myNavbar"**>**

**<ul** class="nav navbar-nav navbar-right"**>**

**<li><a** href="https://painite.neocities.org/Home.html"**>**Home**</a></li>**

**</ul>**

**</div>**

**</div>**

**</nav>**

**<div** class="container"**>**

**<h1** style="text-align: center;"**>**Self-Assessment**</h1>**

**<div** class = "row"**>**

**<div** class = "col-sm-6" id = "depression"**>**

**<div** class = "illness"**>**

**<h3** style="text-align: center;"**>**Depression**</h3>**

**<a** href="https://painite.neocities.org/Depression.html" class="btn btn-info" role="button" id = "screening-button"**>**Take a Screening**</a>**

**</div>**

**</div>**

**<div** class = "col-sm-6" id = "anxiety"**>**

**<div** class = "illness"**>**

**<h3** style="text-align: center;"**>**Generalized Anxiety Disorder**</h3>**

**<a** href="https://painite.neocities.org/anxiety.html" class="btn btn-info" role="button" id = "screening-button"**>**Take a Screening**</a>**

**</div>**

**</div>**

**</div>**

**<div** class = "row"**>**

**<div** class = "col-sm-6" id = "bipolar"**>**

**<div** class = "illness"**>**

**<h3** style="text-align: center;"**>**Bipolar Disorder**</h3>**

**<a** href="https://painite.neocities.org/bipolar.html" class="btn btn-info" role="button" id = "screening-button"**>**Take a Screening**</a>**

**</div>**

**</div>**

**<div** class = "col-sm-6" id = "ocd"**>**

**<div** class = "illness"**>**

**<h3** style="text-align: center;"**>**Obsessive Compulsive Disorder**</h3>**

**<a** href="https://painite.neocities.org/ocd.html" class="btn btn-info" role="button" id = "screening-button"**>**Take a Screening**</a>**

**</div>**

**</div>**

**</div>**

**<div** class = "row"**>**

**<div** class = "col-sm-6" id = "schizophrenia"**>**

**<div** class = "illness"**>**

**<h3** style="text-align: center;"**>**Schizophrenia**</h3>**

**<a** href="https://painite.neocities.org/schizophrenia.html" class="btn btn-info" role="button" id = "screening-button"**>**Take a Screening**</a>**

**</div>**

**</div>**

**<div** class = "col-sm-6" id = "ptsd"**>**

**<div** class = "illness"**>**

**<h3** style="text-align: center;"**>**Post-Traumatic Stress Disorder**</h3>**

**<a** href="https://painite.neocities.org/ptsd.html" class="btn btn-info" role="button" id = "screening-button"**>**Take a Screening**</a>**

**</div>**

**</div>**

**</div>**

**</body>**

**</html>**

‘’’

HTML CODE FOR DEPRESSION SELF-ASSESSMENT

’’’

**<!DOCTYPE html>**

**<html>**

**<head>**

**<title>**Self-assessment**</title>**

**<link** rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css"**>**

**<script** src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"**></script>**

**<script** src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js"**></script>**

**<meta** name="viewport" content="width=device-width, initial-scale=1"**>**

**<style** type="text/css"**>**

**ul** {

li: **right**;

}

**.navbar-default** **.navbar-nav** > **li** > **a** {

**color**: black;

**font-weight**: **bold**;

**margin**: **0**;

}

**.navbar-header** > **a** {

**color**: black;

**font-weight**: **bold**;

}

**.navbar** {

**margin**:**0**;

}

**.myRadio** {

**display**: **block**;

**position**: **relative**;

**cursor**: **pointer**;

**padding-left**: **5**vh;

**margin**: **2**vh;

**font-weight**: **normal**;

}

**.myRadio** **input** {

**position**: **absolute**;

**opacity**: **0**;

**cursor**: **pointer**;

}

**.checkmark** {

**position**: **absolute**;

**top**: **0**;

**left**: **0**;

**height**: **20px**;

**width**: **20px**;

**background-color**: **#eee**;

**border**-radius: **50**%;

}

**.myRadio**:hover **input** ~ **.checkmark** {

**background-color**: **#ccc**;

}

**.myRadio** **input**:checked ~ **.checkmark** {

**background-color**: **#2196F3**;

}

**.checkmark**:after {

**content**: "";

**position**: **absolute**;

**display**: **none**;

}

**.myRadio** **input**:checked ~ **.checkmark**:after {

**display**: **block**;

}

**.question** {

**font-weight**: **bold**;

**background**: **#ECF0F1**;

**padding**: **2**vh;

}

**#submit-button** {

**margin**: **4**vh **auto** **2**vh **auto**;

**padding**: **2**vh;

**background-color**: **#2196F3**;

**text-align**: **center**;

**color**: white;

**display**: **block**;

**width**: **20**vw;

**opacity**: **0**.**9**;

**border**: **none**;

}

**#submit-button**:hover {

**opacity**:**1**;

}

**#result** {

**display**: **none**;

**background**: **#ECF0F1**;

**padding**: **3**vh;

**border**-radius: **10px**;

}

**#consult-button** {

**margin**: **4**vh **auto** **2**vh **auto**;

**padding**: **2**vh;

**background-color**: **#2196F3**;

**text-align**: **center**;

**color**: white;

**display**: **block**;

**width**: **20**vw;

**opacity**: **0**.**9**;

**border**: **none**;

}

**#consult-button**:hover {

**opacity**:**1**;

}

**@media** **screen** **and** (**max-width**: **700px**) {

**#consult-button** {

**width**: **50**vw;

}

}

**</style>**

**</head>**

**<body>**

**<nav** class="navbar navbar-default"**>**

**<div** class="container-fluid"**>**

**<div** class="navbar-header"**>**

**<button** type="button" class="navbar-toggle" data-toggle="collapse" data-target="#myNavbar"**>**

**<span** class="icon-bar"**></span>**

**<span** class="icon-bar"**></span>**

**<span** class="icon-bar"**></span>**

**</button>**

**<a** class="navbar-brand" href="#"**>**PAINITE**</a>**

**<img** src="/logo.png" ALIGN="justify"**/>**

**<img** src="/icon.png" ALIGN="left" **/>**

**</div>**

**<div** class="collapse navbar-collapse" id="myNavbar"**>**

**<ul** class="nav navbar-nav navbar-right"**>**

**<li** class="active"**><a** href="https://painite.neocities.org/Home.html"**>**Home**</a></li>**

**</div>**

**</div>**

**</nav>**

**<div** class = "container"**>**

**<h1** style="text-align: center;"**>**Self-Assessment for Depression**</h1>**

**<p** style="text-align: justify;"**>** Painite uses the Goldberg Depression Questionnaire. All rights reserved to Ivan Goldberg (1993). Adopted from the printed edition of the Goldberg Depression Inventory for electronic distribution.**</p>**

**<section** id = "test" style="padding-top: 3vh"**>**

**<p>**During the last week, how often have you been bothered by the following problems?**</p>**

**<div** id = "q1"**>**

**<p** class = "question"**>**1. I do everything slowly.**</p>**

**<label** class = "myRadio"**>**Not at all

**<input** type="radio" value = "0" name="q1"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Only slightly

**<input** type="radio" value = "1" name="q1"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Partly

**<input** type="radio" value = "2" name="q1"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Quite a lot

**<input** type="radio" value = "3" name="q1"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**A lot

**<input** type="radio" value = "4" name="q1"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**To a great extent

**<input** type="radio" value = "5" name="q1"**>**

**<span** class="checkmark"**></span>**

**</label>**

**</div>**

**<div** id = "q2"**>**

**<p** class = "question"**>**2. My future seems hopeless.**</p>**

**<label** class = "myRadio"**>**Not at all

**<input** type="radio" value = "0" name="q2"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Only slightly

**<input** type="radio" value = "1" name="q2"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Partly

**<input** type="radio" value = "2" name="q2"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Quite a lot

**<input** type="radio" value = "3" name="q2"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**A lot

**<input** type="radio" value = "4" name="q2"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**To a great extent

**<input** type="radio" value = "5" name="q2"**>**

**<span** class="checkmark"**></span>**

**</label>**

**</div>**

**<div** id = "q3"**>**

**<p** class = "question"**>**3. I find it hard to concentrate when I read.**</p>**

**<label** class = "myRadio"**>**Not at all

**<input** type="radio" value = "0" name="q3"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Only slightly

**<input** type="radio" value = "1" name="q3"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Partly

**<input** type="radio" value = "2" name="q3"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Quite a lot

**<input** type="radio" value = "3" name="q3"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**A lot

**<input** type="radio" value = "4" name="q3"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**To a great extent

**<input** type="radio" value = "5" name="q3"**>**

**<span** class="checkmark"**></span>**

**</label>**

**</div>**

**<div** id = "q4"**>**

**<p** class = "question"**>**4. All joy and pleasure seem to have disappeared from my life.**</p>**

**<label** class = "myRadio"**>**Not at all

**<input** type="radio" value = "0" name="q4"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Only slightly

**<input** type="radio" value = "1" name="q4"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Partly

**<input** type="radio" value = "2" name="q4"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Quite a lot

**<input** type="radio" value = "3" name="q4"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**A lot

**<input** type="radio" value = "4" name="q4"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**To a great extent

**<input** type="radio" value = "5" name="q4"**>**

**<span** class="checkmark"**></span>**

**</label>**

**</div>**

**<div** id = "q5"**>**

**<p** class = "question"**>**5. I find it hard to make decisions.**</p>**

**<label** class = "myRadio"**>**Not at all

**<input** type="radio" value = "0" name="q5"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Only slightly

**<input** type="radio" value = "1" name="q5"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Partly

**<input** type="radio" value = "2" name="q5"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Quite a lot

**<input** type="radio" value = "3" name="q5"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**A lot

**<input** type="radio" value = "4" name="q5"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**To a great extent

**<input** type="radio" value = "5" name="q5"**>**

**<span** class="checkmark"**></span>**

**</label>**

**</div>**

**<div** id = "q6"**>**

**<p** class = "question"**>**6. I have lost interest in things that used to mean a lot to me.**</p>**

**<label** class = "myRadio"**>**Not at all

**<input** type="radio" value = "0" name="q6"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Only slightly

**<input** type="radio" value = "1" name="q6"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Partly

**<input** type="radio" value = "2" name="q6"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Quite a lot

**<input** type="radio" value = "3" name="q6"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**A lot

**<input** type="radio" value = "4" name="q6"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**To a great extent

**<input** type="radio" value = "5" name="q6"**>**

**<span** class="checkmark"**></span>**

**</label>**

**</div>**

**<div** id = "q7"**>**

**<p** class = "question"**>**7. I feel sad, depressed and unhappy.**</p>**

**<label** class = "myRadio"**>**Not at all

**<input** type="radio" value = "0" name="q7"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Only slightly

**<input** type="radio" value = "1" name="q7"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Partly

**<input** type="radio" value = "2" name="q7"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Quite a lot

**<input** type="radio" value = "3" name="q7"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**A lot

**<input** type="radio" value = "4" name="q7"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**To a great extent

**<input** type="radio" value = "5" name="q7"**>**

**<span** class="checkmark"**></span>**

**</label>**

**</div>**

**<div** id = "q8"**>**

**<p** class = "question"**>**8. I feel restless and cannot relax.**</p>**

**<label** class = "myRadio"**>**Not at all

**<input** type="radio" value = "0" name="q8"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Only slightly

**<input** type="radio" value = "1" name="q8"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Partly

**<input** type="radio" value = "2" name="q8"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Quite a lot

**<input** type="radio" value = "3" name="q8"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**A lot

**<input** type="radio" value = "4" name="q8"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**To a great extent

**<input** type="radio" value = "5" name="q8"**>**

**<span** class="checkmark"**></span>**

**</label>**

**</div>**

**<div** id = "q9"**>**

**<p** class = "question"**>**9. I feel tired.**</p>**

**<label** class = "myRadio"**>**Not at all

**<input** type="radio" value = "0" name="q9"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Only slightly

**<input** type="radio" value = "1" name="q9"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Partly

**<input** type="radio" value = "2" name="q9"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Quite a lot

**<input** type="radio" value = "3" name="q9"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**A lot

**<input** type="radio" value = "4" name="q9"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**To a great extent

**<input** type="radio" value = "5" name="q9"**>**

**<span** class="checkmark"**></span>**

**</label>**

**</div>**

**<div** id = "q10"**>**

**<p** class = "question"**>**10. I find it hard to do even trivial things.**</p>**

**<label** class = "myRadio"**>**Not at all

**<input** type="radio" value = "0" name="q10"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Only slightly

**<input** type="radio" value = "1" name="q10"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Partly

**<input** type="radio" value = "2" name="q10"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Quite a lot

**<input** type="radio" value = "3" name="q10"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**A lot

**<input** type="radio" value = "4" name="q10"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**To a great extent

**<input** type="radio" value = "5" name="q10"**>**

**<span** class="checkmark"**></span>**

**</label>**

**</div>**

**<div** id = "q11"**>**

**<p** class = "question"**>**11. I feel guilty and deserve to be punished.**</p>**

**<label** class = "myRadio"**>**Not at all

**<input** type="radio" value = "0" name="q11"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Only slightly

**<input** type="radio" value = "1" name="q11"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Partly

**<input** type="radio" value = "2" name="q11"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Quite a lot

**<input** type="radio" value = "3" name="q11"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**A lot

**<input** type="radio" value = "4" name="q11"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**To a great extent

**<input** type="radio" value = "5" name="q11"**>**

**<span** class="checkmark"**></span>**

**</label>**

**</div>**

**<div** id = "q12"**>**

**<p** class = "question"**>**12. I feel like a failure.**</p>**

**<label** class = "myRadio"**>**Not at all

**<input** type="radio" value = "0" name="q12"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Only slightly

**<input** type="radio" value = "1" name="q12"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Partly

**<input** type="radio" value = "2" name="q12"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Quite a lot

**<input** type="radio" value = "3" name="q12"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**A lot

**<input** type="radio" value = "4" name="q12"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**To a great extent

**<input** type="radio" value = "5" name="q12"**>**

**<span** class="checkmark"**></span>**

**</label>**

**</div>**

**<div** id = "q13"**>**

**<p** class = "question"**>**13. I feel empty - more dead than alive.**</p>**

**<label** class = "myRadio"**>**Not at all

**<input** type="radio" value = "0" name="q13"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Only slightly

**<input** type="radio" value = "1" name="q13"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Partly

**<input** type="radio" value = "2" name="q13"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Quite a lot

**<input** type="radio" value = "3" name="q13"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**A lot

**<input** type="radio" value = "4" name="q13"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**To a great extent

**<input** type="radio" value = "5" name="q13"**>**

**<span** class="checkmark"**></span>**

**</label>**

**</div>**

**<div** id = "q14"**>**

**<p** class = "question"**>**14. My sleep is disturbed: too little, too much or disturbed sleep.**</p>**

**<label** class = "myRadio"**>**Not at all

**<input** type="radio" value = "0" name="q14"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Only slightly

**<input** type="radio" value = "1" name="q14"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Partly

**<input** type="radio" value = "2" name="q14"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Quite a lot

**<input** type="radio" value = "3" name="q14"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**A lot

**<input** type="radio" value = "4" name="q14"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**To a great extent

**<input** type="radio" value = "5" name="q14"**>**

**<span** class="checkmark"**></span>**

**</label>**

**</div>**

**<div** id = "q15"**>**

**<p** class = "question"**>**15. I wonder HOW I could commit suicide.**</p>**

**<label** class = "myRadio"**>**Not at all

**<input** type="radio" value = "0" name="q15"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Only slightly

**<input** type="radio" value = "1" name="q15"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Partly

**<input** type="radio" value = "2" name="q15"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Quite a lot

**<input** type="radio" value = "3" name="q15"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**A lot

**<input** type="radio" value = "4" name="q15"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**To a great extent

**<input** type="radio" value = "5" name="q15"**>**

**<span** class="checkmark"**></span>**

**</label>**

**</div>**

**<div** id = "q16"**>**

**<p** class = "question"**>**16. I feel confined and imprisoned.**</p>**

**<label** class = "myRadio"**>**Not at all

**<input** type="radio" value = "0" name="q16"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Only slightly

**<input** type="radio" value = "1" name="q16"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Partly

**<input** type="radio" value = "2" name="q16"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Quite a lot

**<input** type="radio" value = "3" name="q16"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**A lot

**<input** type="radio" value = "4" name="q16"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**To a great extent

**<input** type="radio" value = "5" name="q16"**>**

**<span** class="checkmark"**></span>**

**</label>**

**</div>**

**<div** id = "q17"**>**

**<p** class = "question"**>**17. I feel down even when something good happens to me.**</p>**

**<label** class = "myRadio"**>**Not at all

**<input** type="radio" value = "0" name="q17"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Only slightly

**<input** type="radio" value = "1" name="q17"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Partly

**<input** type="radio" value = "2" name="q17"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Quite a lot

**<input** type="radio" value = "3" name="q17"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**A lot

**<input** type="radio" value = "4" name="q17"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**To a great extent

**<input** type="radio" value = "5" name="q17"**>**

**<span** class="checkmark"**></span>**

**</label>**

**</div>**

**<div** id = "q18"**>**

**<p** class = "question"**>**18. I have lost or gained weight without being on a diet.**</p>**

**<label** class = "myRadio"**>**Not at all

**<input** type="radio" value = "0" name="q18"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Only slightly

**<input** type="radio" value = "1" name="q18"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Partly

**<input** type="radio" value = "2" name="q18"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**Quite a lot

**<input** type="radio" value = "3" name="q18"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**A lot

**<input** type="radio" value = "4" name="q18"**>**

**<span** class="checkmark"**></span>**

**</label>**

**<label** class = "myRadio"**>**To a great extent

**<input** type="radio" value = "5" name="q18"**>**

**<span** class="checkmark"**></span>**

**</label>**

**</div>**

**<div>**

**<input** type = "submit" value = "Submit" id = "submit-button" onclick = "calculate()"**>**

**</div>**

**</section>**

**<section** id = "result"**>**

**<h3** id = "result-type" style="text-align: center;"**></h3>**

**<p** style="text-align: justify;"**>**Please be noted that this questionnaire can be used to show your doctor how your symptoms have changed from one visit to the next. Changes of five or more points are significant. This scale is not designed to make a diagnosis of depression or take the place of a professional diagnosis. If you suspect that you are depressed, please consult a mental health professional as soon as possible.**</p>**

**<div>**

**<input** type = "button" value = "Consult a psychiatrist" id = "consult-button"**>**

**</div>**

**</section>**

**<script** type="text/javascript"**>**

**function** calculate()

{

**var** ans\_array = [];

**var** i = **1**;

**var** ans = **0**;

**var** count=**0**;

**for**(i = **1**; i <= **18**; i++)

{

**var** q = document.getElementsByName("q"+i.toString());

**var** j = **0**;

**var** temp=**0**;

**for**(j = **0**; j < **6**; j++)

{

**if**(q[j].checked)

{

count++;

ans\_array[i-**1**] = q[j].value;

ans += parseInt(q[j].value);

}

}

}

**if**(count!=**18**)

{

alert("Please make a selection.");

**return** **false**;

}

console.log(ans);

// var modalresult = document.getElementById("resultModal");

// modalresult.style.display = "block";

// document.getElementsByTagName("body")[0].style.background = "blue";

**var** diag;

**if**(ans <= **9**) diag = "Depression unlikely"

**else** **if**(ans <= **21**) diag = "Possible symptoms that may be due to depression or other medical issues"

**else** **if**(ans<= **35**) diag = "Mild to Moderate Depression"

**else** **if**(ans <= **53**) diag = "Moderate to Severe Depression"

**else** **if** (ans > **54**) diag = "Severely Depressed"

document.getElementById("test").style.display = "none";

document.getElementById("result-type").innerHTML = diag;

document.getElementById("result").style.display = "block";

**return** **true**;

}

**</script>**

**</div>**

**</body>**

**</html>**

‘’’

DEPRESSION SELF-ASSESSMENT CODE  
NOT USED

’’’

**def** **DepressionTest**():

print(" Painite uses the Goldberg Depression Questionnaire")

print("All rights reserved to 1993 Ivan Goldberg. \n Adopted from the printed edition of the Goldberg Depression Inventory for electronic distribution. ")

print("During the last week, how often have you been bothered by the following problems?")

print("Please answer with the following numbers:")

print("0 = Not at all ")

print("1 = Just a little")

print("2 = Somewhat")

print("3 = Moderately")

print("4 = Quite a lot")

print("5 = Very much")

questions = ["1) I do things slowly",

"2) My future seems hopeless",

"3) It is hard for me to concentrate on reading",

"4) The pleasure and joy has gone out of my life",

"5) I have difficulty making decisions",

"6) I have lost interest in aspects of life that used to be important to me",

"7) I feel sad, blue, and unhappy",

"8) I am agitated and keep moving around",

"9) I feel fatigued",

"10) It takes great effort for me to do simple things",

"11) I feel that I am a guilty person who deserves to be punished",

"12) I feel like a failure",

"13) I feel lifeless -- more dead than alive",

"14) My sleep has been disturbed -- too little, too much, or broken sleep",

"15) I spend time thinking about how I might kill myself",

"16) I feel trapped or caught",

"17) I feel depressed even when good things happen to me",

"18) Without trying to diet, I have lost, or gained, weight"]

ans\_choices = ['0','1','2','3','4','5']

tot = **0**

**for** question in questions:

print(question)

user\_ans = input("0,1,2,3,4,or 5:")

**if** user\_ans in ans\_choices:

tot = tot+int(user\_ans)

**else**:

print("Sorry, can you please answer with the given numbers?")

ans = input("Would you like to retry the test?")

**if** ans=="yes" or ans=="ok" or ans=="Yes" or ans=="Ok" or ans=="YES" or ans=="OK" :

DepressionTest()

**break**

**else**:

print("I understand that you made an effort, please comeback when you feel like you want to retake it. I am always here, ready to help!")

**break**

# print("Your result till now is:")

**if** tot<**10**:

print("Not depression likely.")

**elif** tot>=**10** and tot<**18**:

print("Possible symptoms that may be due to depression or other medical issues.")

**elif** tot>=**18** and tot<**22**:

print("Borderline depression.")

**elif** tot>=**22** and tot<**36**:

print("Mild to moderate depression.")

**elif** tot>=**36** and tot<**54**:

print("Moderate to severe depression.")

**else**:

print("Severely depressed")

print("Please be noted that this questionnaire can be used to show your doctor how your symptoms have changed from one visit to the next. \n Changes of five or more points are significant.\n This scale is not designed to make a diagnosis of depression or take the place of a professional diagnosis. \n If you suspect that you are depressed, please consult a mental health professional as soon as possible.")

**if** \_\_name\_\_ == "\_\_main\_\_":

DepressionTest()