

AI ASSISTANT ALPHA (MINI PROJECT)

D : 26/12/2023
ARYAN KOTHAMBIA
22302340501002

What can this A.I. assistant do for you?

- It can send emails on your behalf.
- It can play music for you.
- It can do Wikipedia searches for you.
- It is capable of opening websites like Google, Youtube, etc., in a web browser.
- It is capable of opening your code editor or IDE with a single voice command.

CODE :

```
import pytsx3 # pip install pytsx3
import speech_recognition as sr # pip install speechRecognition
import datetime
import wikipedia # pip install wikipedia
import webbrowser
import os
import smtplib
```

```
engine = pytsx3.init('sapi5')
voices = engine.getProperty('voices')
engine.setProperty('voice', voices[0].id)
```

```
def speak(audio):
    engine.say(audio)
    engine.runAndWait()
```

```
def wish_me():
    hour = datetime.datetime.now().hour
```

```
if 0 <= hour < 12:
    speak("Good Morning!")
elif 12 <= hour < 18:
    speak("Good Afternoon!")
else:
    speak("Good Evening!")

speak("I am ALPHA Sir. Please tell me how may I help you")
```

```
def take_command():
    r = sr.Recognizer()
    with sr.Microphone() as source:
        print("Listening...")
        r.pause_threshold = 1
        audio = r.listen(source)

    try:
        print("Recognizing...")
        recognized_query = r.recognize_google(audio, language='en-in')
        print(f"User said: {recognized_query}\n")
        return recognized_query.lower()

    except sr.UnknownValueError:
        print("Could not understand the audio.")
        return "None"

    except sr.RequestError as e:
        print(f"Error making the request to Google Speech Recognition service; {e}")
        return "None"

def send_email(email_to, content):
    try:
        server = smtplib.SMTP('smtp.gmail.com', 587)
        server.ehlo()
        server.starttls()
        server.login('aryankothambia@gmail.com', 'aryankothambia2002')
        server.sendmail('your_email@gmail.com', email_to, content)
```

```

server.close()
print("Email has been sent!")
speak("Email has been sent!")

except smtplib.SMTPAuthenticationError as auth_error:
    print(f"Authentication error: {auth_error}")
    speak("Authentication error. Please check your email credentials.")
except smtplib.SMTPConnectError as connect_error:
    print(f"Connection error: {connect_error}")
    speak("Unable to connect to the SMTP server.")
except Exception as email_exception:
    print(f"Error sending email: {email_exception}")
    speak("Sorry Aryan Sir. I am not able to send this email")

if __name__ == "__main__":
    wish_me()
    while True:
        user_query = take_command()

        # Logic for executing tasks based on query
        if 'wikipedia' in user_query:
            speak('Searching Wikipedia...')
            user_query = user_query.replace("wikipedia", "")
            try:
                results = wikipedia.summary(user_query, sentences=2)
                speak("According to Wikipedia")
                print(results)
                speak(results)
            except wikipedia.exceptions.DisambiguationError as
disambiguation_error:
                print(f"DisambiguationError: {disambiguation_error}")
                speak("I found multiple results. Please be more specific.")
            except wikipedia.exceptions.PageError as page_error:
                print(f"PageError: {page_error}")
                speak("I could not find any results. Please try again.")

        elif 'open youtube' in user_query:
            webbrowser.open("https://www.youtube.com")

```

```
elif 'open google' in user_query:
    webbrowser.open("https://www.google.com")

elif 'open stackoverflow' in user_query:
    webbrowser.open("https://stackoverflow.com")

elif 'play music' in user_query:
    music_dir = r'D:\Music'
    songs = os.listdir(music_dir)
    print(songs)
    if songs:
        os.startfile(os.path.join(music_dir, songs[0]))
    else:
        speak("No music files found in the specified directory.")

elif 'the time' in user_query:
    str_time = datetime.datetime.now().strftime("%H:%M:%S")
    speak(f"Sir, the time is {str_time}")

elif 'open code' in user_query:
    code_path =
r"C:\Users\aryan\PycharmProjects\ALPHAFINAL\main.py"
    os.startfile(code_path)

elif 'email to Aryan' in user_query:
    try:
        speak("What should I say?")
        email_content = take_command()
        to = "aryankothambia@gmail.com"
        send_email(to, email_content)
    except Exception as email_exception:
        print(f"Unexpected error: {email_exception}")

print('PyCharm') # This line will be part of the continuous loop
```