# PROJECT REPORT

# ARTIFICIAL INTELLIGENCE

## CID : 106266

## GROUP MEMBERS:

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# PROJECT NAME:

Virtual Voice Assistant

# DESCRIPTION:

We have created voice virtual assistant. Our project will respond on the voice. For example if we want to listen music and also don't want to use even our hands we can just say it loud and music started. This is just an example we have many more functions in our project described below.

# FUNCTIONALITIES:

## GREET

It says hello to the user according to the current time.

## SEND EMAIL

We have use smtplib to send email just by voice. It asks the user to tell the recipient and message.

## SEARCH WIKIPEDIA

It takes input and search the keyword from wikipedia and brief the desired lines.

## OPEN SOCIAL MEDIA APPS

It can open facebook , youtube , instagram etc

**CURRENT TIME AND DATE**

It tells the current time and date

**TELL JOKE**

**PLAY SONG ON YOUTUBE**

# LIBRARIES IMPORTED:

**Pyttsx3:**

WE used it to convert text into speech

**Datetime**:

We use it to get current date and current time

**Speech recognition**

We use it to convert speech into  text

**Wikipedia**

We use it to access data from wikipedia

**Webbrowser**

We use it to open URLS in browser

**Os**

We use it to for interacting with the operating system

**Smtplib**

We use it for sending emails using the Simple Mail Transfer Protocol (SMTP)

**Pyjokes**

We use it for random jokes. We use get_joke function in our query

**<u>Pywhatkit</u>**

We use it to opens the YouTube in our default browser and plays the video you mentioned in the function.

# CODE:

```python
import pyttsx3
import datetime
import speech_recognition as sr
import wikipedia
import webbrowser as wb
import webbrowser
import os
import smtplib
import pyjokes
import pywhatkit
from datetime import date
```

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

```python
def greet():
    hour = int(datetime.datetime.now().hour)
    if hour >= 0 and hour <12:
        speak("Good morning " + name)
    elif hour >=12 and hour < 18:
        speak("good afternoon" + name)
    else:
        speak("good evening" + name)
    speak("How may I help you")
```

```python
def takeCommand():
    r = sr.Recognizer()
    with sr.Microphone() as source:
        print("Listening")
        r.pause_threshold = 1
        r.energy_threshold =300
        audio = r.listen(source)

    try:
        print("Recognizing")
        query = r.recognize_google(audio, language='en-in')
        print(f"You said: {query}\n")
    except Exception as e:
        print("say again")
        speak("say again")
        return "None"
    return query
```

```python
def sendEmail(to,content):
    server = smtplib.SMTP('smtp.gmail.com', 587)
    server.ehlo()                            #extended helo(Ext simple mail transfer proto
    server.starttls()                        # an email protocol command that tells an
    server.login('taniaayaz4@gmail.com', 'Safrestaurant123')
    server.sendmail('taniaayaz4@gmail.com', to, content)
    server.close()
```

```python
chrome_path = "C:/Program Files/Google/Chrome/Application/chrome.exe %s"
if __name__ == "__main__":
    greet()
    while True:
        query = takeCommand().lower()
        if 'wikipedia' in query:
            speak("searching")
            query = query.replace("wikipedia", "")
            results = wikipedia.summary(query, sentences=3)
            speak("According to wikipedia")
            speak(results)

        elif 'open youtube' in query:
            webbrowser.get(chrome_path).open('youtube.com')

        elif 'open google' in query:
            webbrowser.get(chrome_path).open('google.com')

        elif 'open facebook' in query:
            webbrowser.get(chrome_path).open('facebook.com')

        elif 'open instagram' in query:
            webbrowser.get(chrome_path).open('instagram.com')
```

```python
        elif 'the time' in query:
            now_time = datetime.datetime.now().strftime('%I:%M %p')
            speak(f"Its {now_time}")

        elif 'the date' in query:
            now_date = date.today().strftime("%B %d, %Y")
            speak(f"Its {now_date}")

        elif 'open vs code' in query:
            vs_code_path = "C:\\Users\\Tania Ayaz\\AppData\\Local\\Programs\\Microsoft VS Code\\Code.exe"
            os.startfile(vs_code_path)

        elif 'open visual studio' in query:
            vs_path = "C:\\Program Files (x86)\\Microsoft Visual Studio 14.0\\Common7\\IDE\\devenv.exe"
            os.startfile(vs_path)
```

```python
        elif 'send email' in query:
            try:
                speak("What should I say")
                content = takeCommand()
                speak("To whom you want to send email")
                to = takeCommand()
                if to == 'Aasir' and to == 'Aasir':


                    sendEmail("aasirrafi99@gmail.com", content)
                    speak("Email sent successfully")
            except Exception as e:
                print(e)
                speak("Sorry! Email cannot send")


        elif 'joke' in query:
            speak(pyjokes.get_joke())


        elif 'play song' in query:
            song = query.replace('play','')
            speak('playing' + song)
            pywhatkit.playonyt(song)
```