Mini Project:Virtual Assistant(Boomer)

import speech\_recognition as aa

import pyttsx3

import datetime

import wikipedia

import pyjokes

import webbrowser

from tkinter import \*

from pil import ImageTk,Image

import numpy

import cv2

listener=aa.Recognizer()

machine=pyttsx3.init()

def talk(text):

machine.say(text)

machine.runAndWait()

instruction='nill'

def input\_instruction():

global instruction

try:

with aa.Microphone() as origin:

print("listening")

speech=listener.listen(origin)

instruction=listener.recognize\_google(speech)

instruction=instruction.lower()

if "boomer" in instruction:

instruction=instruction.replace('boomer'," ")

print(instruction)

except:

pass

return instruction

class Widget:

def \_\_init\_\_(self):

root=Tk()

root.title('boomer')

root.geometry('520x320')

img=cv2.imread("C:\\Users\\hp\\OneDrive\\Desktop\\boomer.jpg")

img=ImageTk.PhotoImage(Image.open("C:\\Users\\hp\\OneDrive\\Desktop\\boomer.jpg"))

panel=Label(root,image=img)

panel.pack(side='right',fill='both',expand='no')

userText=StringVar()

userText.set('I am Boomer,How can i help you')

userFrame=LabelFrame(root,text='boomer',font=('Railways',24,'bold'))

userFrame.pack(fill='both',expand='yes')

top=Message(userFrame,textvariable=userText,bg='black',fg='white')

top.config(font=("Century Gothic",15,'bold'))

top.pack(side='top',fill='both',expand='yes')

btn=Button(root,text='run',font=('railways',10,'bold'),bg='blue',fg='white' ,command=self.clicked).pack(fill='x',expand='no')

btn2=Button(root,text='Close',font=('railways',10,'bold'),bg='blue',fg='white',command=root.destroy).pack(fill='x',expand='no')

root.mainloop()

def clicked (self):

print('working')

def play\_boomer():

instruction=input\_instruction()

print(instruction)

if 'time' in instruction:

time=datetime.datetime.now().strftime('%I:%M%p')

talk('Current time'+time)

elif 'date' in instruction:

date=datetime.datetime.now().strftime('%d /%m /%Y')

talk("Today's date "+date)

elif 'how are you' in instruction:

talk('I am fine, how abot you')

elif 'what is your name'in instruction:

talk('I am boomer ,what can i do for you')

elif 'who is' in instruction:

human=instruction.replace('who is',"")

info = wikipedia.summary(human,1)

print(info)

talk(info)

elif "joke"in instruction:

talk(pyjokes.get\_joke())

elif 'youtube' in instruction:

talk('here you go')

webbrowser.open('youtube.com')

elif 'search' in instruction or 'play' in instruction:

instruction=instruction.replace('search','')

instruction=instruction.replace('play','')

webbrowser.open(instruction)

elif'weather' in instruction:

instruction=instruction.replace('weather','')

webbrowser.open(instruction)

else:

talk('please repeat')

play\_boomer()

if \_\_name\_\_=='\_\_main\_\_':

widget=Widget()

Working: Our work started with analyzing the audio commands given by the user through the microphone. It can be anything like getting any information. The text used in this project are made by programming according to books and online resources.

It is developed using python language with minimum number of lines and simple control statements.

We have imported many python packages for voice recognition, accessing date and to communicate with users.

It is both time and cost efficient.