

A
Synopsis/Project Report On

AI VOICE ASSISTANT

Submitted in partial fulfillment of the requirement for the III semester

Bachelor of Technology (C.S.E.)

By

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2021 – 2022

STUDENT'S DECLARATION

I, KASHISH ANSARI AND SARTHAK JOSHI hereby declare the work, which is being presented in the project, entitled “AI Voice Assistant “ in partial fulfillment of the requirement for the award of the degree (B.Tech C.S.E.) in the session **2021-2022**, is an authentic record of my own work carried out under the supervision of GEHU college /company guide name Mr. Shobit kumar The matter embodied in this project has not been submitted by me for the award of any other degree.

Date: 24 DEC 2021

SARTHAK JOSHI

KASHISH ANSARI



CERTIFICATE

The project report entitled “ AI VOICE ASSISTANT ” being submitted by SARTHAK JOSHI AND KASHISH ANSAR enrollment no PV-21610300, PV-21620055 Roll no :2161300,2162055 to Graphic Era Hill University Bhimtal Campus for the award of bonafide work carried out by them. They has worked under my guidance and supervision and fulfilled the requirement for the submission of report.

(MR. SHOBHIT KUMAR)

Project Guide

(DR. ANKUR BISHT)

HOD, CSE Dept.



ACKNOWLEDGEMENT

I take immense pleasure in thanking **“MR. SHOBHIT KUMAR”** (Designation, CSE, GEHU Bhimtal Campus) to permit me and carry out this project work with his excellent and optimistic supervision. This has all been possible due to his novel inspiration, able guidance and useful suggestions that helped me to develop as a creative researcher and complete the research work, in time.

Words are inadequate in offering my thanks to GOD for providing me everything that I need. I again want to extend thanks to our President **“Prof. (Dr.) Kamal Ghanshala”** for providing us all infrastructure and facilities to work in need without which this work could not be possible.

Many thanks to Professor **“Prof(Dr.) Manoj Chandra Lohani”** (Director, GEHU Bhimtal), **“Mr-Shobhit kumar”** and other faculties for their insightful comments, constructive suggestions, valuable advice, and time in reviewing this thesis.

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CHAPTER 1

PROLOGUE

The main objective of any computer science student is to get as much of practical knowledge as possible. Being an able to have a practical knowledge by developing a project is a lifetime experience. As practical knowledge is as important as theoretical knowledge we are thankful of having a project.

Through the development of the project we had a great experience of various strategies that can be applied in development of project. This project is the stepping stone for the our carrier.

We are pleased to present this project. Proper care has been taken while organizing the project so that it is to comprehend. Also, various software engineering concepts have been implemented.

BACKGROUND AND MOTIVATION

With the growing utility of today's conversational virtual assistants, the importance of user motivation in human-artificial intelligence interactions is becoming more obvious. However, previous studies in this and related fields, such as humancomputer interaction, scarcely discussed intrinsic motivation (the motivation to interact with the assistants for fun). Previous studies either treated motivation as an inseparable concept or focused on non-intrinsic motivation (the motivation to interact with the assistant for utilitarian purposes).

"Amazon Echo" are conducted. Intrinsic motivation is measured both by using questionnaires and by covertly monitoring a five-minute free-choice period in the experimenter's absence, during which the participants could decide for themselves whether to interact with the virtual assistants.

PROBLEM STATEMENT

Artificial Intelligence personal assistants have become plentiful over the last few years. Applications such as Siri, Ok Google, Cortana make mobile/laptop device users' daily routines that much easier. You may be asking yourself how these functions. Well, the assistants receive external data (such as movement, voice, light, GPS readings, visually defined markers, etc.) via the hardware's sensors for further processing- and take it from there to function accordingly.

Not too long ago, building an AI assistant was a small component of developers' capacities; however, nowadays, it is quite a realistic objective even for novice programmers. To create a simple personal AI assistant, one simply needs dedicated software and few hours of working time. It would take much.

OBJECTIVES AND RESEARCH METHODOLOGY

Increasingly, AI is competent when it comes to identifying objects in a scene: built-in AI for an app like Google Photos, for instance, might recognize a bench, or a bird, or a tree. But that same AI might be left clueless if you ask it to identify the bird flying between two trees, or the bench beneath the bird, or the tree to the left of a bench. Now, MIT researchers are working to change that with a new machine learning model aimed at understanding the relationships between objects.

“When I look at a table, I can’t say that there is an object at XYZ location,” explained Yilun Du, a PhD student in MIT’s Computer Science and Artificial Intelligence Laboratory (CSAIL) and co-lead author of the paper, in an interview with MIT’s Adam Zewe. “Our minds don’t work like that. In our minds, when we understand a scene, we really understand it based on the relationships between the objects. We think that by building a system that can understand the relationships between objects, we could use that system to more effectively manipulate and change our environments.”



CHAPTER 2

HISTORY Ai voice assistant

Voice Assistant, a technology that is familiar to our ears in the last few years. This technology has mushroomed and are available everywhere. If you are an Apple product user like iPhone and iMac or Macbook, you might know Siri, the virtual assistant that is pinned on all of Apple devices.

If you are an Android user, you might have heard of Google Now, similar to Siri, they are both virtual assistants that already exist on each smartphone when you buy it.

Besides being available on smartphones, voice assistants are also available on Windows with the name Cortana, as well as smart speakers created by other manufacturers such as Amazon with its Amazon Echo products and others. Before we discuss more about this Voice Assistant, let's study the history of this technology feature.

CHAPTER 3

MINIMUM S/W AND H/W REQUIREMENTS

3.1 SOFTWARE REQUIREMENTS

NAME OF COMPONENT	SPECIFICATION
Operating system	Windows or Linux
Language	python
IDE	Visual studio code, pycharm
Version	python 3.9.9 or Above

3.2 HARDWARE REQUIREMENTS

NAME OF THE COMPONENT	MINIMUM SPECIFICATION
Processor	Intel Core i3 or Ryzen 3
Ram	4gb ram
Hard disk	20 GB or Above
Monitor	“15.6” inch color
Keyboard	122 keys
Mouse	Any



ES OF AI ASSISTANT



CHAPTER-04

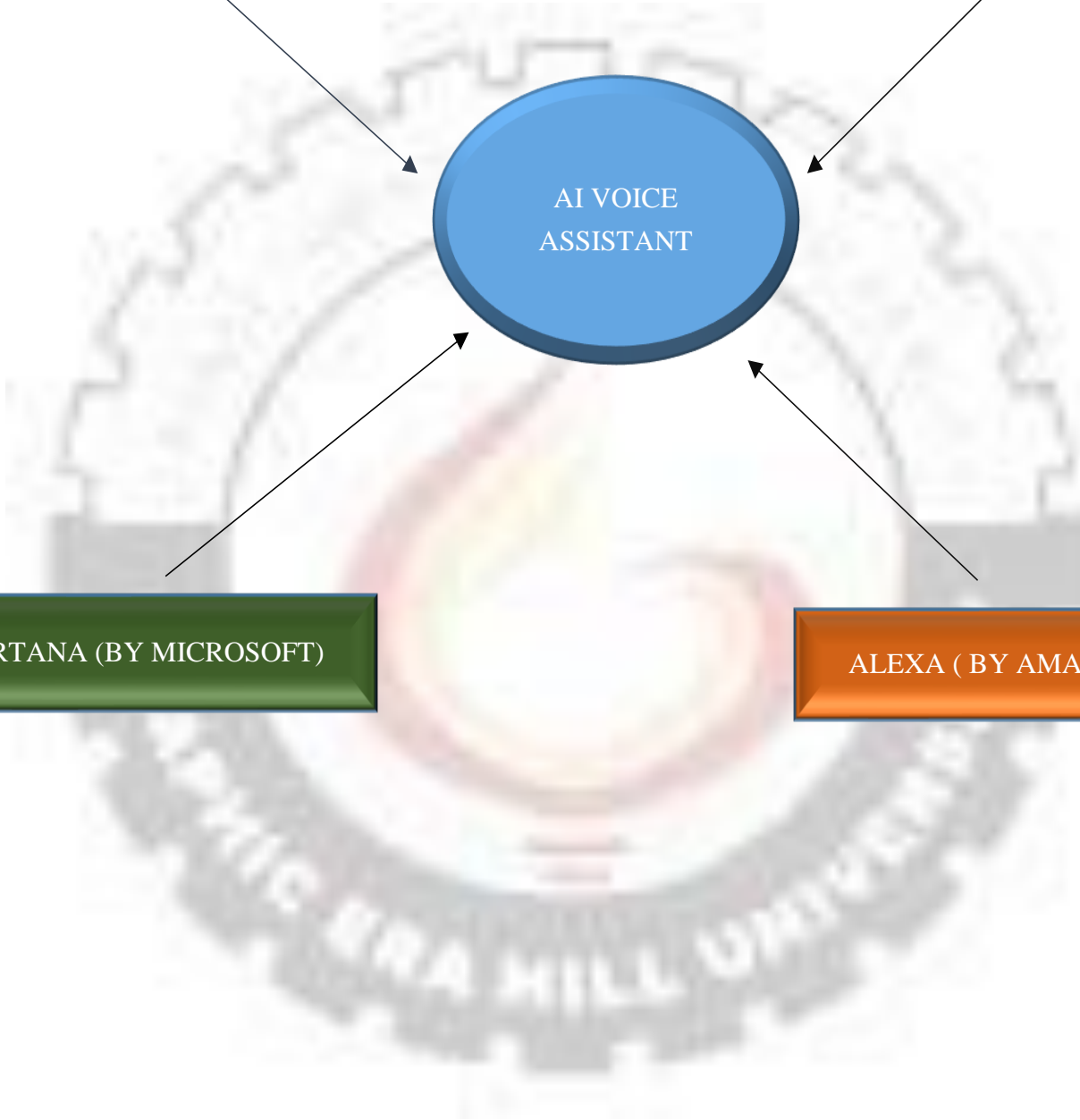
GOOGLE ASSISTANT (BY GOOGLE)

SIRI (BY APPLE)

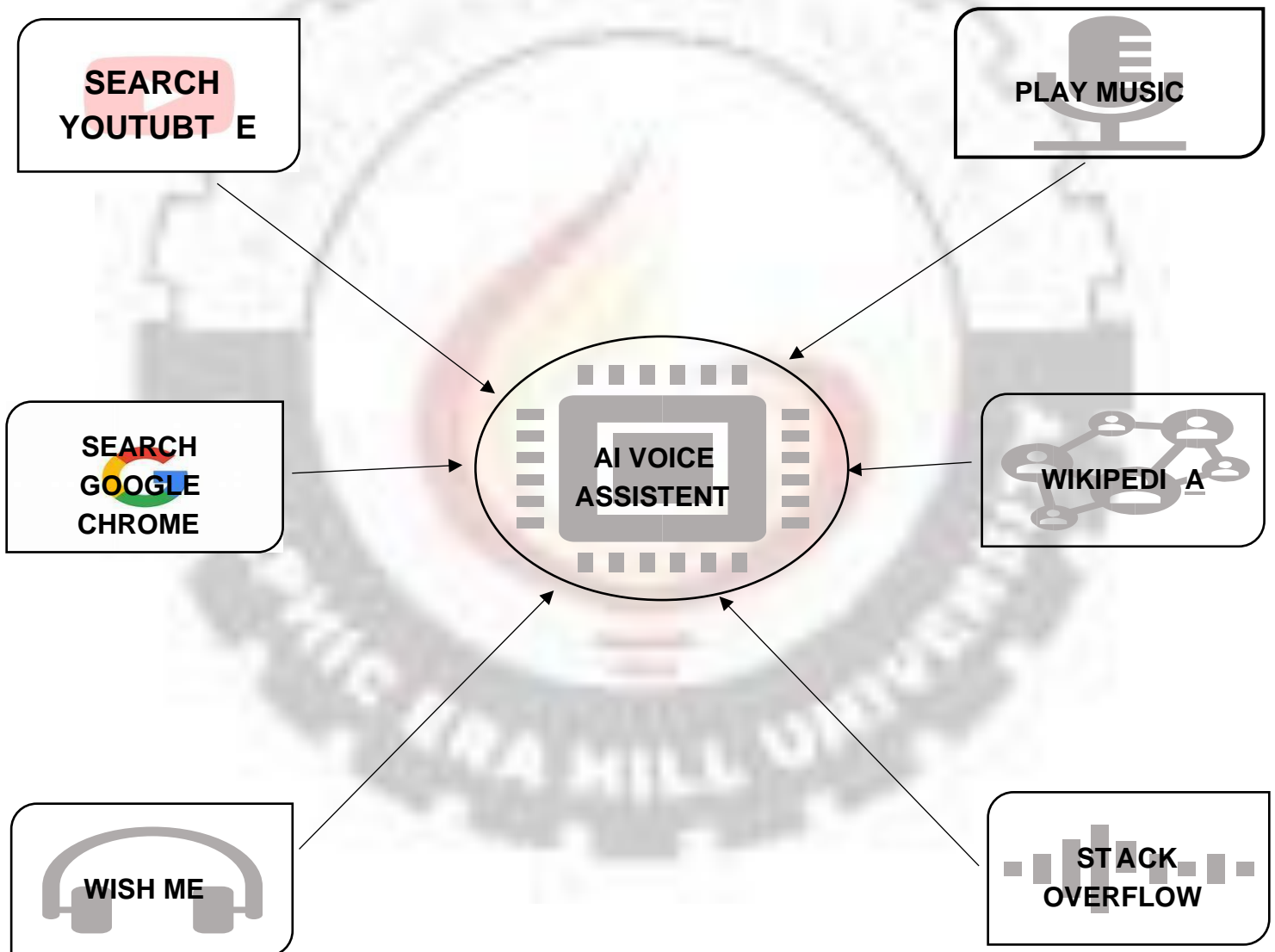
AI VOICE
ASSISTANT

CORTANA (BY MICROSOFT)

ALEXA (BY AMAZON)

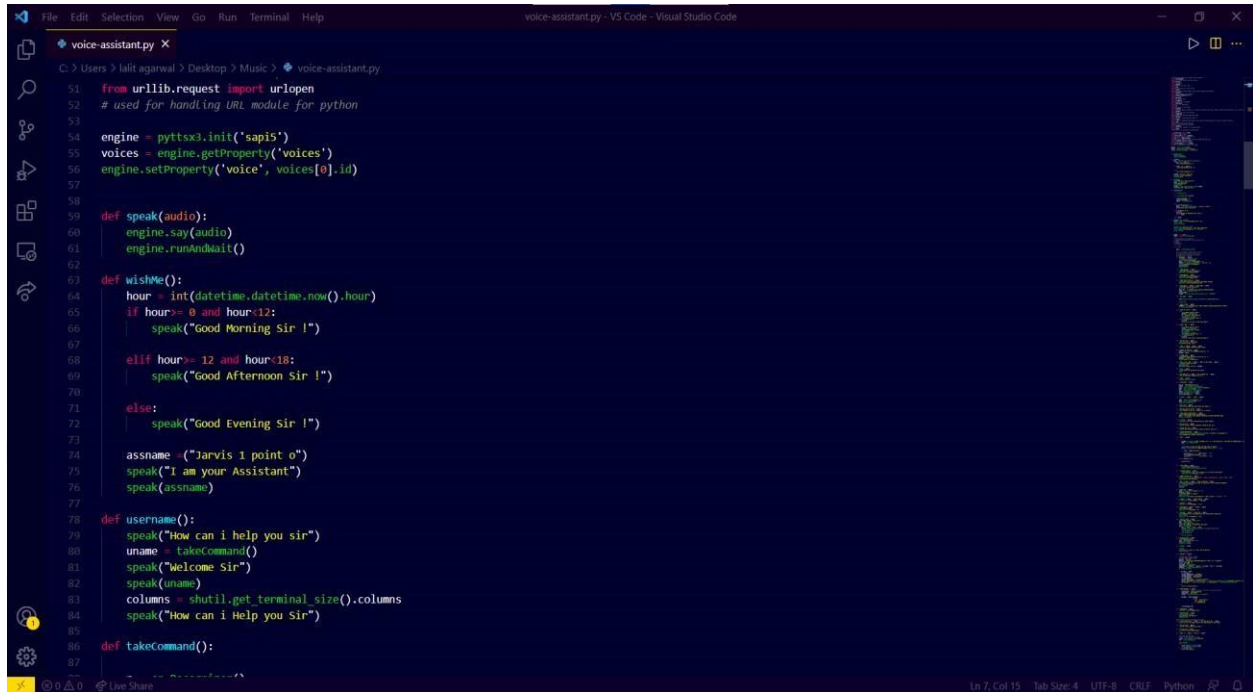


FIRST LEVEL DFD



CHAPTER 5

CODING OF AI

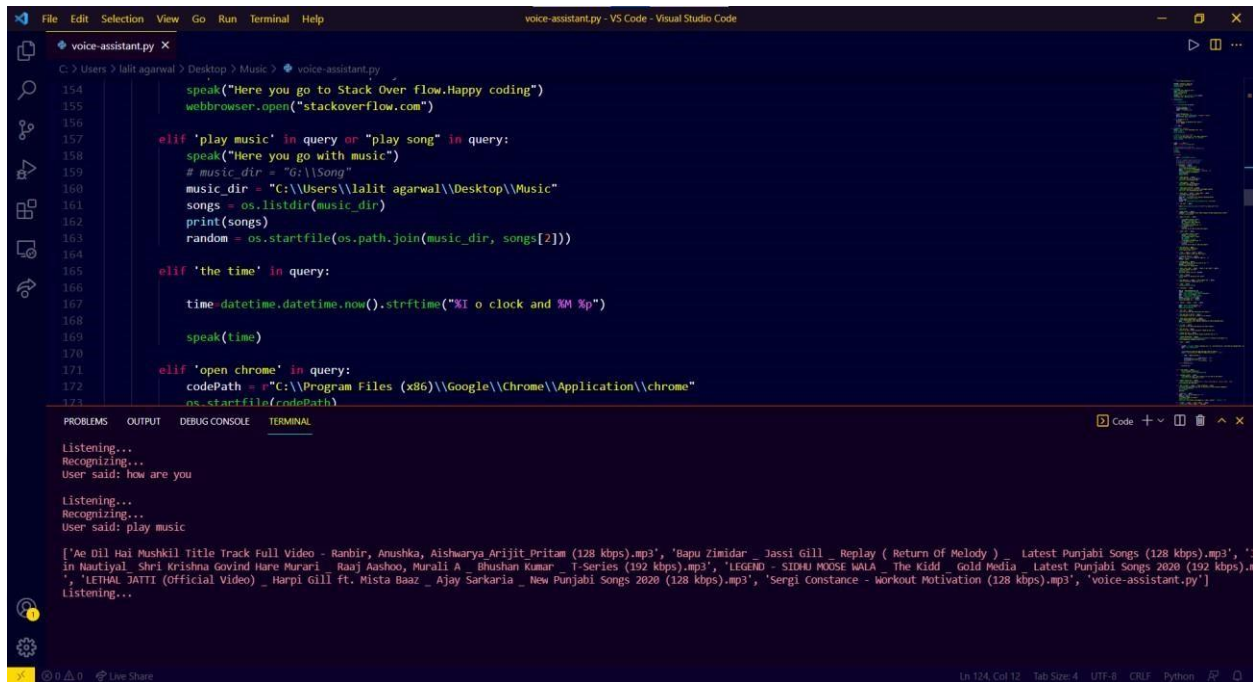


```
voice-assistant.py X
C:\Users\hali agarwal\Desktop\Music> voice-assistant.py
51: from urllib.request import urlopen
52: # used for handling URL module for python
53:
54: engine = pyttsx3.init('sapi5')
55: voices = engine.getProperty('voices')
56: engine.setProperty('voice', voices[0].id)
57:
58:
59: def speak(audio):
60:     engine.say(audio)
61:     engine.runAndWait()
62:
63: def wishMe():
64:     hour = int(datetime.datetime.now().hour)
65:     if hour >= 0 and hour < 12:
66:         speak("Good Morning Sir !")
67:
68:     elif hour >= 12 and hour < 18:
69:         speak("Good Afternoon Sir !")
70:
71:     else:
72:         speak("Good Evening Sir !")
73:
74:     asname = ("Jarvis 1 point o")
75:     speak("I am your Assistant")
76:     speak(asname)
77:
78: def username():
79:     speak("How can i help you sir")
80:     unname = takeCommand()
81:     speak("Welcome Sir")
82:     speak(unname)
83:     columns = shutil.get_terminal_size().columns
84:     speak("How can i Help you Sir")
85:
86:
87: def takeCommand():
```

Ln 7, Col 15 Tab Size: 4 UTF-8 CRLF Python

CHAPTER 6

OUTPUT OF AI



The screenshot displays a Visual Studio Code window with a Python file named `voice-assistant.py`. The script contains logic for voice commands: opening a web browser, playing music from a local directory, telling the current time, and opening a web browser. The terminal at the bottom shows the execution process, including listening, recognizing, and executing these commands. A list of music files is printed when the 'play music' command is executed.

```
voice-assistant.py X
C:\Users\lalit agarwal\Desktop\Music> voice-assistant.py
154 speak("Here you go to Stack Over flow.Happy coding")
155 webbrowser.open("stackoverflow.com")
156
157 elif 'play music' in query or "play song" in query:
158     speak("Here you go with music")
159     # music_dir = "G:\Song"
160     music_dir = "C:\\Users\\lalit agarwal\\Desktop\\Music"
161     songs = os.listdir(music_dir)
162     print(songs)
163     random = os.startfile(os.path.join(music_dir, songs[2]))
164
165
166 elif 'the time' in query:
167
168     time = datetime.datetime.now().strftime("%I o'clock and %M %p")
169
170     speak(time)
171
172 elif 'open chrome' in query:
173     codePath = "C:\\Program Files (x86)\\Google\\Chrome\\Application\\chrome"
174     os.startfile(codePath)
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```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
Listening...
Recognizing...
User said: how are you
Listening...
Recognizing...
User said: play music
['Ae Dil Hai Mushkil Title Track Full Video - Ranbir, Anushka, Aishwarya Arijit Pritam (128 kbps).mp3', 'Bapu Zimidar - Jassi Gill - Replay ( Return Of Melody ) - Latest Punjabi Songs (128 kbps).mp3', 'J in Nautiyal Shri Krishna Govind Hare Murari - Raaj Aashoo, Murali A - Bhushan Kumar - T-Series (192 kbps).mp3', 'LEGEND - SIDHU MOOSE WALA - The Kidd - Gold Media - Latest Punjabi Songs 2020 (192 kbps).m', 'LETHAL JATTI (Official Video) - Harpi Gill ft. Mista Baaz - Ajay Sarkaria - New Punjabi Songs 2020 (128 kbps).mp3', 'Sergi constance - Workout Motivation (128 kbps).mp3', 'voice-assistant.py']
Listening...
```

LIMITATIONS

As every program have strength and limitations , this application also have limitation,

We cannot use AI without internet because it needs paths to open however, we can improve them and make flexible to accept further modification.

In this we are dealing with just AI voice assistant to do our daily work easier .

CHAPTER 7

ENHANCEMENT

There is always a room for improvements in any code or packages or modules however good and efficient it may be done. But the most important thing should be flexible to accept further modification. Right now we are just dealing with AI VOICE ASSISTANT .in future this modules may be extended to include features such as :

1. Updating commands
2. Updating modules
3. Update API(Application Programming Interface)
4. Update function

CHAPTER 8

CONCLUSION

It is concluded that project helps one to learn new techniques and strategies in the field of it sector. During working on a project we have enhanced our skills and knowledge and gained a experience in programming.

As you know that project helps in improving the efficiency of a human being like that our project is based on “AI VOICE ASSISTANT” (using python language) which helps in interaction of H2M (Human to Machine).

e.g., siri (by apple) , alexa (by amazon) , etc.