ARTIFICIAL INTELLIGENCE

INT404

Project Title

– AI Personal Assistant

PROJECT MEMBERS:

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SUBMITTED TO : DR.RAHUL

ABSTRACT:

Workers were replaced by machines throughout the commercial revolution, sending more people into the service industry. Chatbots and voice assistants, that might offer support to customers or users, square measure currently a part of the digital revolution\'s assault on this field. Voice assistants (VA) are the type of voice- enabled artificial intelligence (AI). AI refers to some level of intelligence displayed by digital interfaces, or the ability of algorithms to mimic intelligent human behaviour.

INTRODUCTION

A voice assistant (VA) is a sort of artificial intelligence that can respond to voice commands. Voice is currently incorporated in varied merchandise in consumers'

homes, including smartphones and smart speakers. Voice assistants are also growing more and more important in our daily lives. AI-based voice assistants are operating systems that can recognize the human voice and respond via integrated voices. This voice assistant will gather the audio from the microphone and then convert that into text. Later it is sent through pyttsx3. Voice assistants like Siri, Cortana or google assistant can do useful things for you like opening applications, searching for information, sending messages and more.

Scope:

1. **RUN SYSYTEM COMMANDS, SHOW NOTES , OPEN A WEB SITE.**
2. **SEND MESSAGES, PLAY MUSIC, SAY GREETINGS.**
3. **CREATE CUSTOM AI VOICE , ANSWER TO ANY WIKIPEDIA QUESTION:**
4. **THE RESPONSE TIME INTO SPEECH, TURN DO THE RELEVANT ACTIONS**

Modules needed for Ai Voice Assistant:

- comes built-in with Python. **Subprocess:-** This module is used to get system subprocess details used in various commands i.e Shutdown, Sleep, etc. This module comes built-in with Python.

- **Wolfram Alpha:-** It is used to compute expert-level answers using Wolfram's algorithms, knowledgebase and AI technology. To install this module type the below command in the terminal

- **Pyttsx3:-** This module is used for the conversion of text to speech in a program it works offline. To install this module type the below command in the terminal.

- **Wikipedia:-** As we all know Wikipedia is a great source of knowledge just like Geeks for Geeks we have used the Wikipedia module to get information from Wikipedia or to perform a Wikipedia search. To install this module type the below command in the terminal.

- **Speech Recognition:-** Since we're building an Application of voice assistant, one of the most important things in this is that your assistant recognizes your voice (means what you want to say/ ask). To install this module type the below command in the terminal.

- **Web browser:-** To perform Web Search. This module

- **Datetime:-** Date and Time are used to showing Date and Time. This module comes built-in with Python.

LANGUAGE :

- Python is used in this project as Python is an OOPs (Object Oriented Programming) based, high level, interpreted programming language. It is a

robust, highly useful language focused on rapid application development (RAD). Python helps in easy writing and
execution of codes.

- Its growing popularity has allowed it to enter into some of the most popular and complex processes like

Artificial Intelligence (AI), Machine Learning (ML), natural language processing, Data science etc. Python has a lot of
libraries for every need of this project.

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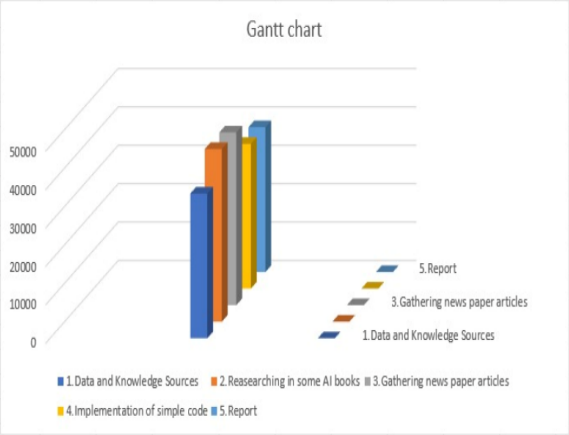
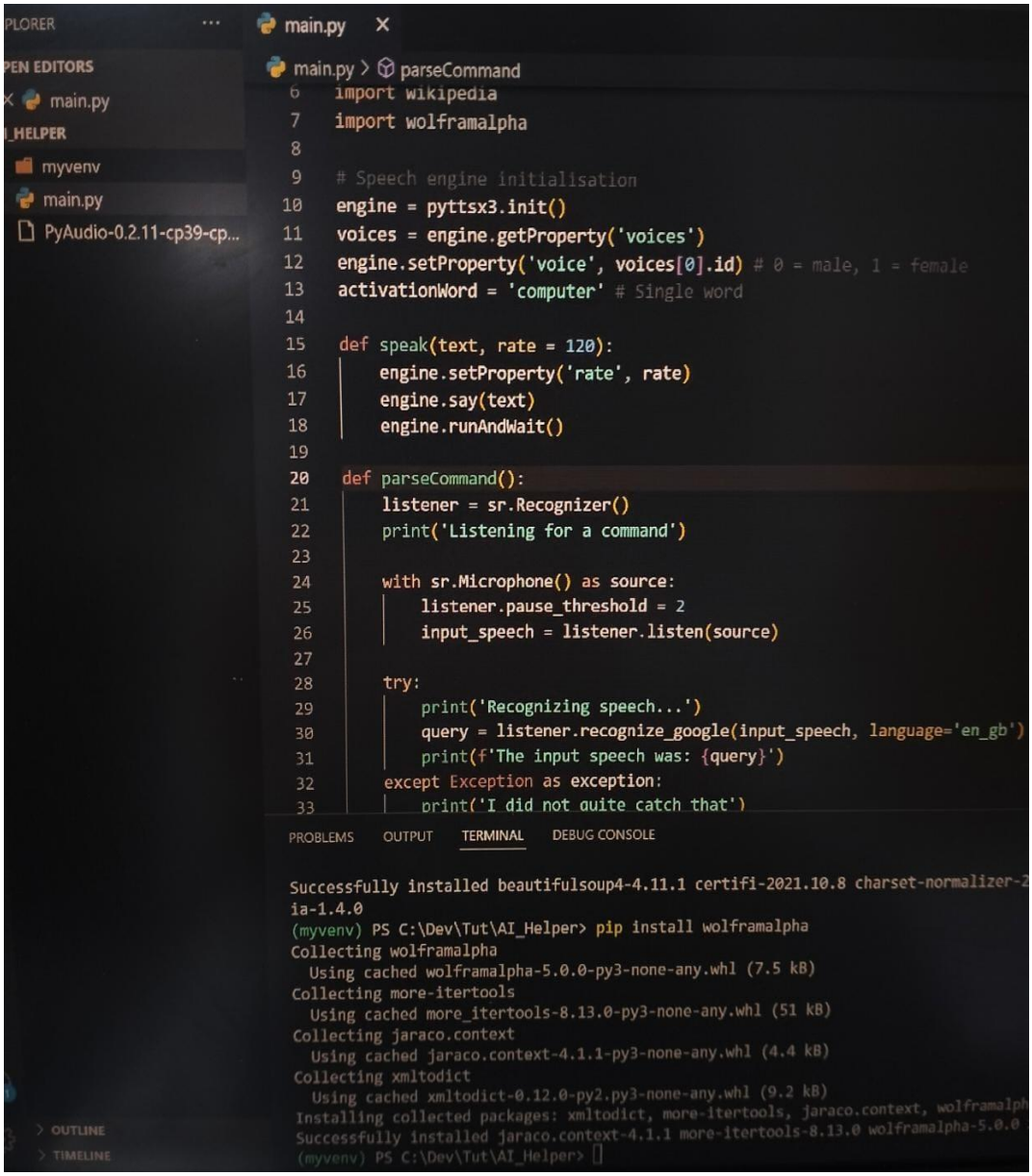
TASK	START	DURATION
1.Data and Knowledge Sources	01-Mar	1 day
2.Reasearching in some AI books	01-03-2023	2 days
3.Gathering news paper articles	04-03-2023	2 days
4.Implementation of simple code	06-03-2003	10 days
5.Report	20-03-2003	3 days



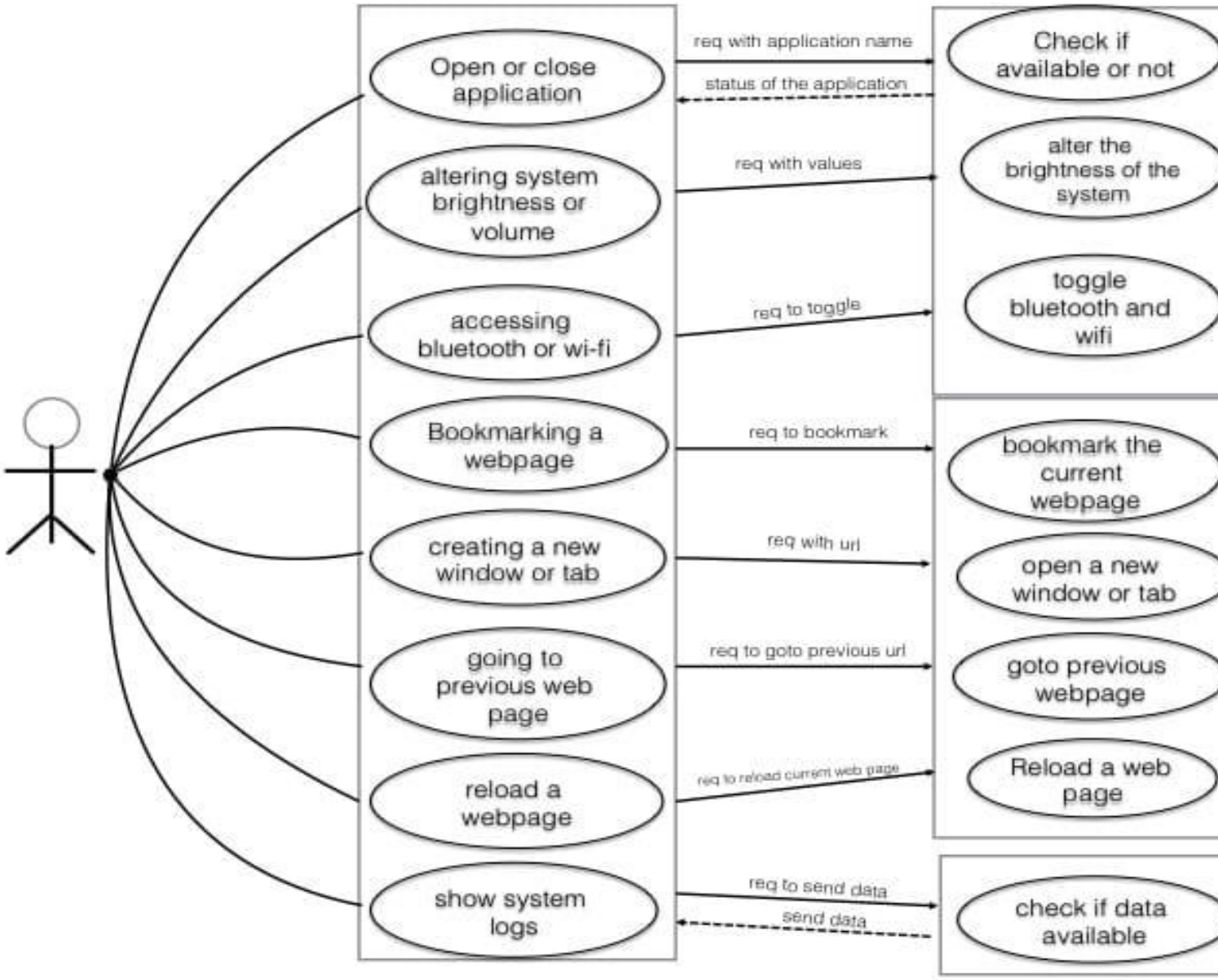
Roles and responsibilities:

Name	Role
Himanshu Yadav	Intro of the code and Implementing parse command and recognising speech part of the code. Like greetings and responding to your question.
Deepanshi bohra	Website navigation part of the code and Wikipedia queries and its implementation part in the code. Like it will connect to the chrome and open the website as the command given by the user.
Maitri Singh	Wolfram Alpha queries and note recording and its implementation (the ending part where the voice assistant convert your speech into a written format).

Code:



USE CASE DIAGRAM:



- A USE CASE IS A SET OF SCENARIOS THAT DESCRIBE AN INTERACTION BETWEEN A USER AND A SYSTEM. A USE CASE DIAGRAM DISPLAYS THE RELATIONSHIP AMONG ACTORS AND USE CASES.

- THE TWO MAIN COMPONENTS OF A USE CASE DIAGRAM ARE USE CASES AND ACTORS

CONCLUSION:

Through this voice assistant, we have automated various services using a single line command. It eases most of the tasks of the user like searching the web, retrieving weather forecast details, vocabulary help , playing music ,and medical related queries. We aim to make this project a complete server assistant and make it smart enough to act as a replacement for a general server administration. Further, in the long run. We put our best efforts to complete this project as we also learn so many things which we are not aware of using the libraries and commands wolfram Alpha, parse command, for website navigation we set the path and configure browser and what not.