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ARTIFICIAL INTELLIGENCE BASED SEVA - SPARROW AND ESSENTIAL VOICE ASSISTANT

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Abstract: In this emerging world technology enhancement is growing rapidly and virtual voice-assistant are playing a vital role which is used for many purposes and enhances user interaction and user experience with machines. And all these facilities and comforts are only acceptable if it's not compromised with user data, numerous clients are worried about their protection and what befalls their information taken by the voice assistant. To address this issue, we need to execute SEVA – Sparrow an Essential Voice Assistant utilizing python which is the most significant for its acknowledgment for protection, this SEVA – Sparrow an Essential Voice Assistant use to take numerous choices on easy-to-understand orders and to utilize a work area voice collaborator consistently relies upon a mix of various segments, by which protection is by all accounts most significant will be gotten and our own aide. This can open and do numerous procedures on client-based voice orders.

I. INTRODUCTION

To build a SEVA A.I. based Personal Voice Assistant to have our own A.I. assistant. It will be simpler to order and it can simply use to send messages without composing solitary words, can open Wikipedia and other search without searching and opening default internet browser present in the system, and performs many functions and others day to day undertakings like its play songs with assistance of the solitary voice order.

It will be implemented using Python. And by having an interactive GUI it will look more attractive while using. To make it as an executable application rather than accessing it on some IDE. AS in this emerging world technology enhancement is growing rapidly and virtual voice-assistant are playing a vital role which is used for many purposes and enhances user interaction and user experience with machines.

All these facilities and comforts are only acceptable if it's not compromised with user data, numerous clients are worried about their protection and what befalls their information taken by the voice assistant.

To address this issue, we want to implement SEVA - Sparrow an Essential Voice Assistant using python which is the most significant for its acknowledgment for protection, this SEVA - Sparrow an Essential Voice Assistant use to take many decisions on user friendly commands and to use a desktop voice assistant always depends on a combination of different components, by which privacy seems to be most important will be secured and our own assistant.

This can open and do many operations on user-based voice commands. It's a self-learning application which holds our data in local storage which they learn from user and again they enhance their performance and their Feature.

Block Diagram

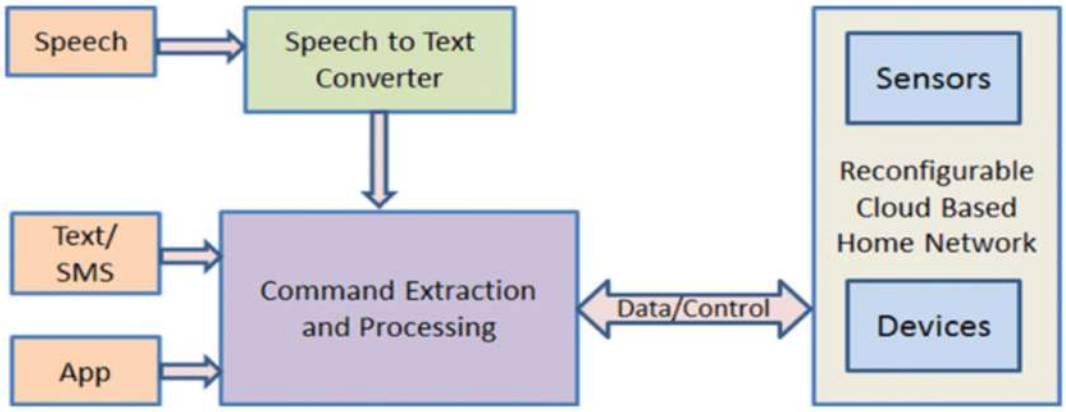

Fig 2.3.1: Block Diagram Of Existing System

Proposed System

Developing an AI-based SEVA-Sparrow and Essential Voice Assistant system integrating SEVA for social services, essential information, and voice-activated controls with NLP, multi-language support, accessibility features, and robust security, ensuring a user-friendly, inclusive, and efficient experience across platforms with scalability for future enhancements.

II. ANALYSIS

The AI-Based SEVA Project signifies a transformative initiative at the intersection of Artificial Intelligence (AI) and social services. Designed to revolutionize service delivery, it focuses on enhancing accessibility, efficiency, and inclusivity. By leveraging AI algorithms for personalized assistance and data-driven decision-making, the project aims to overcome barriers and create a more connected and empowered society.

To address this issue, we want to implement SEVA - Sparrow an Essential Voice Assistant using python which is the most significant for its acknowledgment for protection, this SEVA - Sparrow an Essential Voice Assistant use to take many decisions on user friendly commands and to use a desktop voice assistant always depends on a combination of different components, by which privacy seems to be most important will be secured and our own assistant. This can open and do many operations on user-based voice commands. It's a self-learning application which holds our data in local storage which they learn from user and again they enhance their performance and their features.

III. DESIGN

DFD OR UML DIAGRAMS

Use Case Diagram

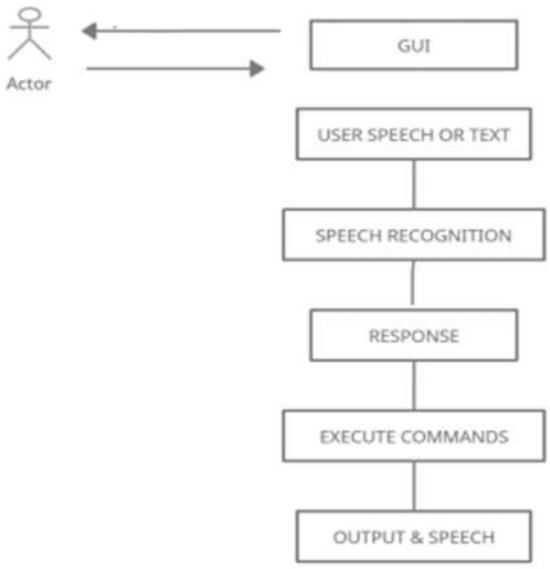

Fig 4.2.1: Use Case Diagram

Sequence Diagram

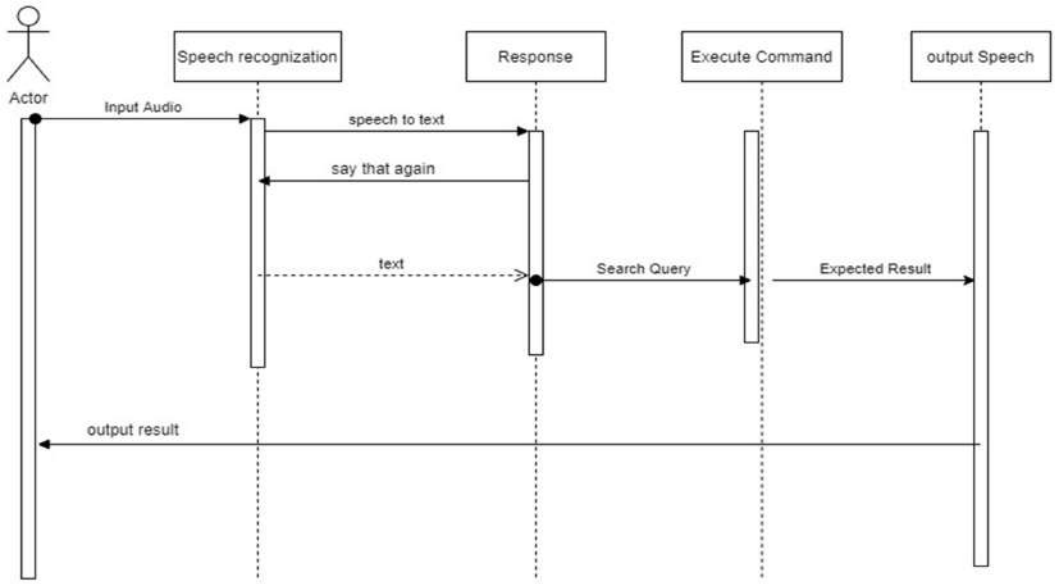

Fig 4.2.3: Sequence Diagram

Collaboration Diagram

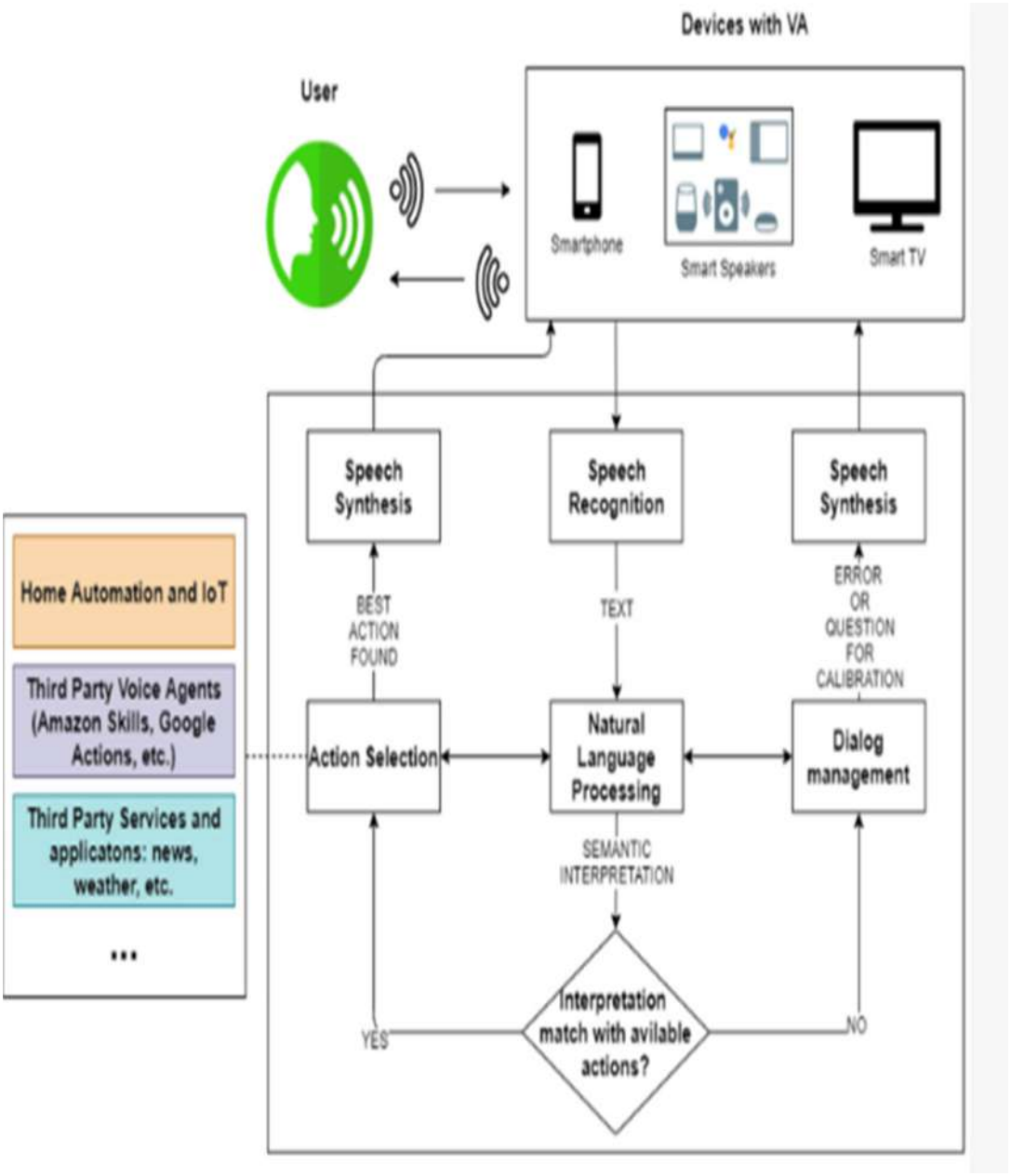

Fig 4.2.4: Collaboration Diagram

A collaboration diagram for the AI-based SEVA (Smart Emergency Vehicle Assistance) project visually illustrates the interactions and relationships among system components, showcasing how AI modules, emergency vehicles, and communication systems collaborate to enhance emergency response efficiency. The diagram highlights real-time data exchange, decision-making processes, and seamless coordination for timely assistance.

Data Flow Diagram

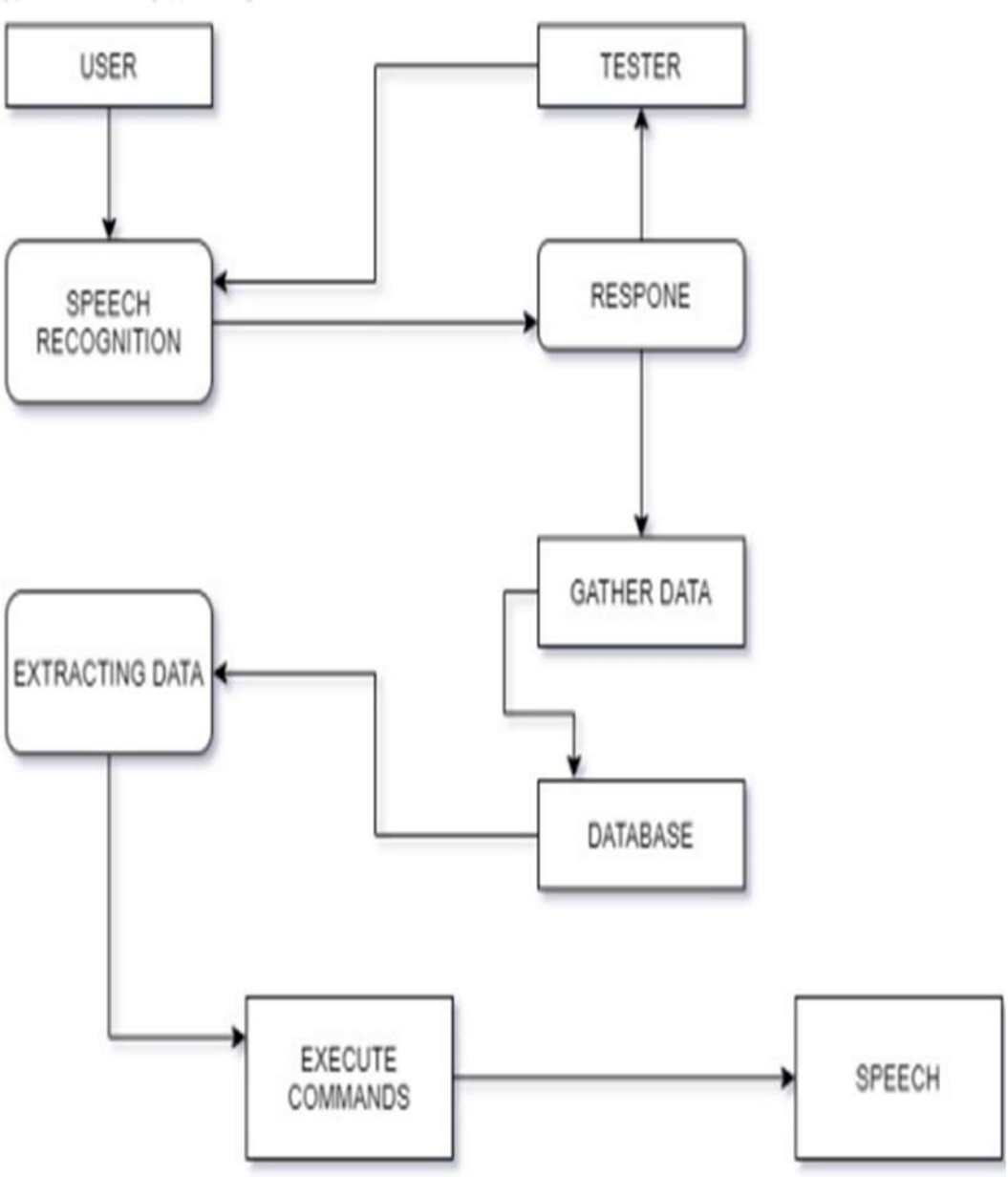

Fig 4.2.6: Data Flow Diagram

IV. OUTPUT SCREENS

Main Page:

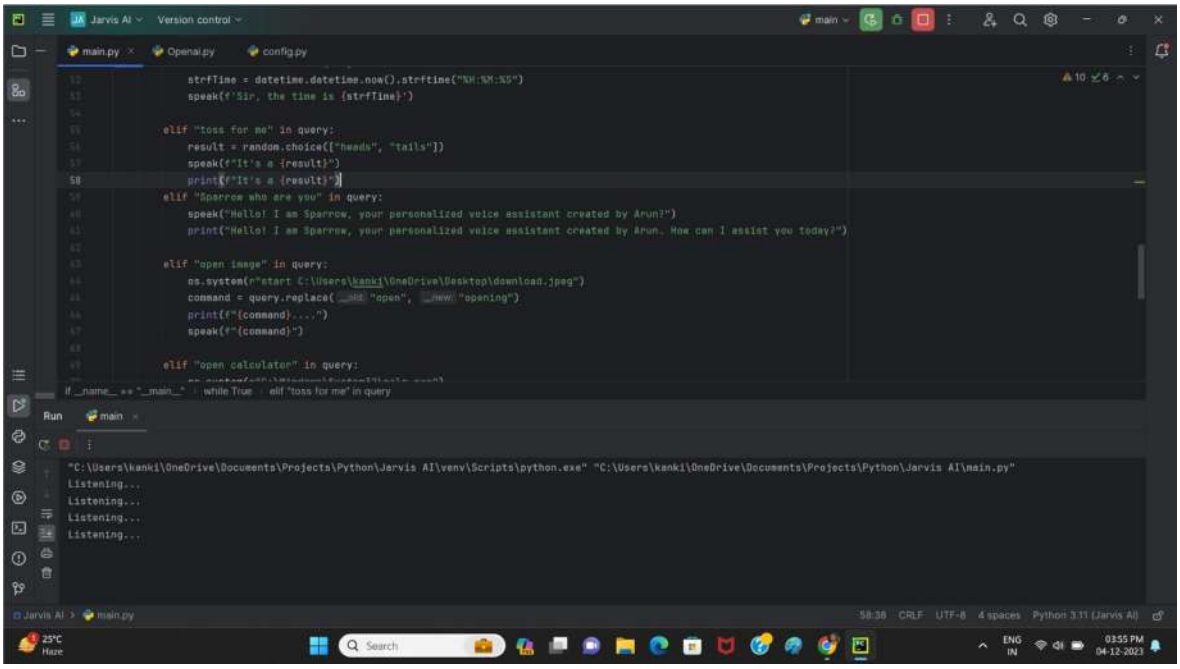

Fig 5.4.1.: Out Put Template

This is the basic output of the code in this we use to give the input.

Table: database

	question	answer
	Filter	Filter
1	open youtube	open youtube
2	i want to watch some video	open youtube
3	what is the time now	get current time
4	open instagram	open instagram
5	open facebook	open facebook
6	open whatsapp	open whatsapp
7	open reddit	open reddit
8	who are you	about sparrow
9	toss for me	flip a coin
10	do some calculations	open calculator
11	i want to write something	open notepad
12	open command prompt	open cmd
13	open control panel	open control panel

Fig 5.4.2.: Database

Basic Default Commands which will be increased as the SEVA will learn more commands

Files which are used to make project

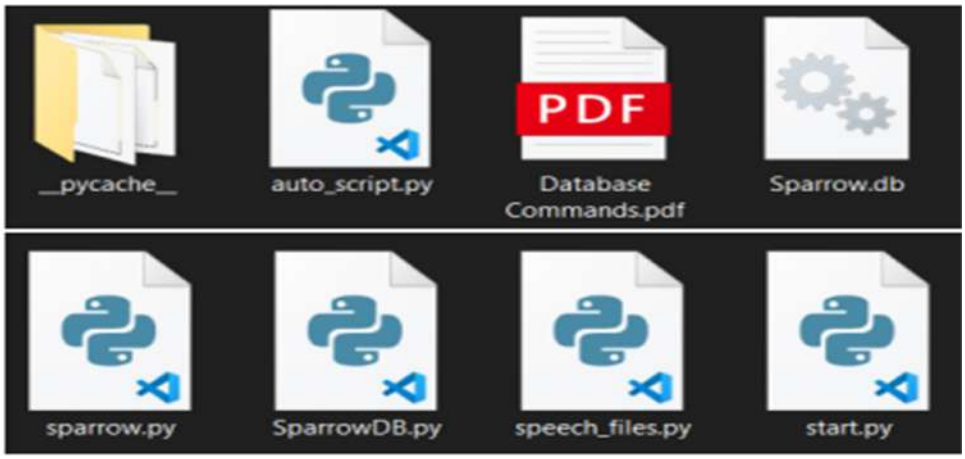

Fig 5.4.3.: Files

Fig 5.4.4.: Program is using microphone

When user presses the listen button this icon tells that program is now using the microphone to take input.

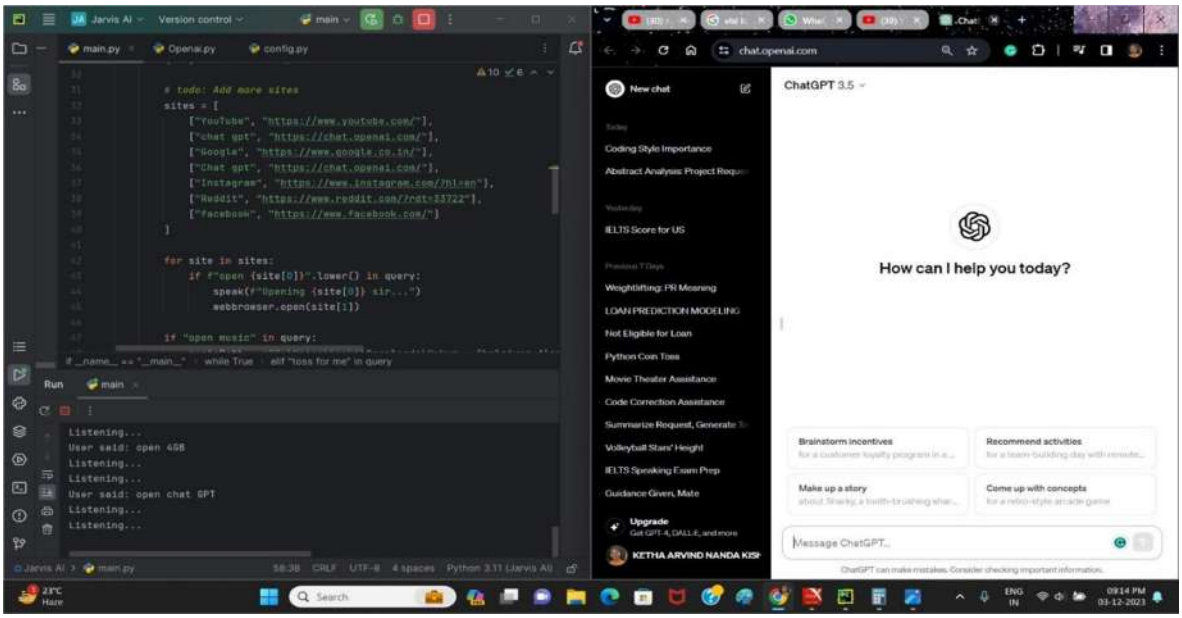

Fig 5.4.5.:(a) Program Performing Task

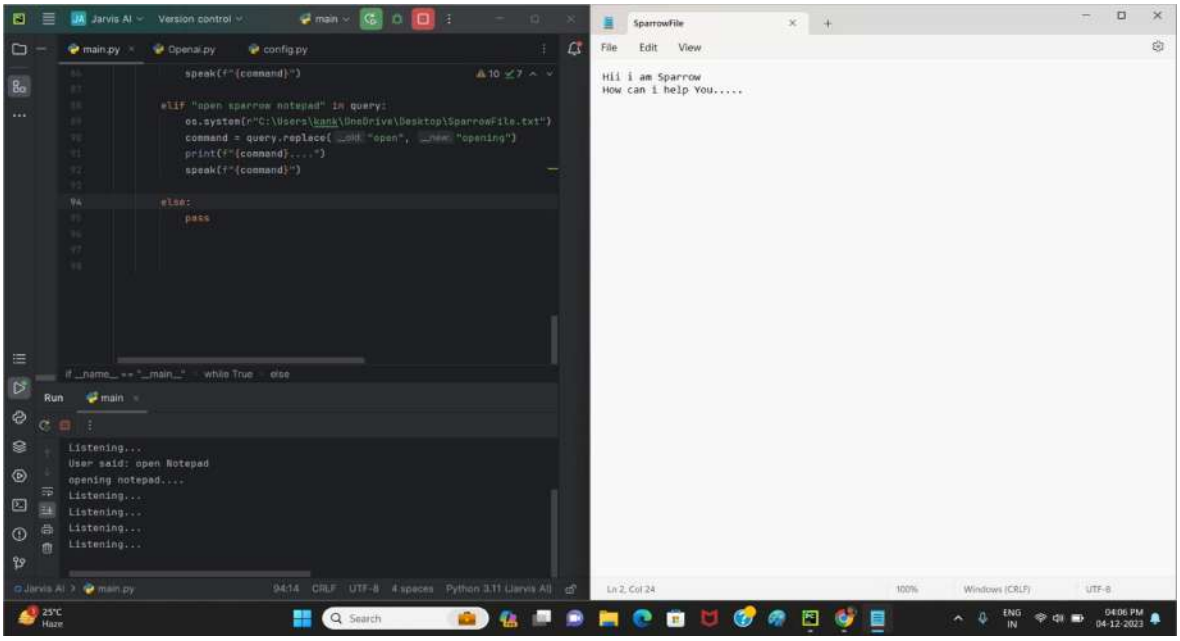

Fig 5.4.6.:(b) Program Performing Tasks

After taking the input SEVA will process and give output according to it and Like this it can perform many different sets of tasks and can also learn the different ways of how any question can be asked.

V. CONCLUSION

By taking all the output into consideration, it can be concluded that if we are looking to average out the accuracies of each output, we can say that SEVA application can perform and give most accurate results across all the questions were asked, making it a more efficient and accurate working application that solves the purpose of users. It can perform many daily-to-daily tasks and also tries to learn more and more and save into its own users local database. It has been developed with good GUI with executable and portable. It can on any Windows OS. SEVA is growing with users. It is learning new languages, new speeches and also new responses. It is a constant effort to make SEVA more and more interactive and user-friendly.

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