HEALTH ASSISTANT

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ABSTRACT

This is a Virtual Assistant for Medical Device which stores and processes the data given to it using voice recognition and speech recognition system. All the work which is done manually now a day will be automated using this such as patient can register themselves even after reaching the hospital and yes can monitor their own personal registration and all the data.

And not only the registration, it also instructs the patient using their symptoms and redirects them to the required specific doctor's cabin. And for the Doctor Panel the doctor can read the symptoms and other details of patient just on their screen and after diagnosis doctor's prescription for medicine and cure would also be stored. All the info related to the hospital's pharmacy such as availability of medicinal drugs or expected date if it's not in the stock.

Keywords :- *HEALTH ASSISTANT, Python, Tkinter, Symptoms and OS.*

1.INTRODUCTION

This is a Virtual Assistant for Medical Device which stores and processes the data given to it using voice recognition and speech recognition system. All the work which is done manually now a day will be automated using this such as patient can register themselves even after reaching the hospital and yes can monitor their own personal registration and all the data.

For medical imaging device, a good user experience requires to guide technologist to the specific functions they need most and help them in quick decision making during medical imaging/interventional procedures. Instructions provided are often tedious to read.

2. METHODOLOGY
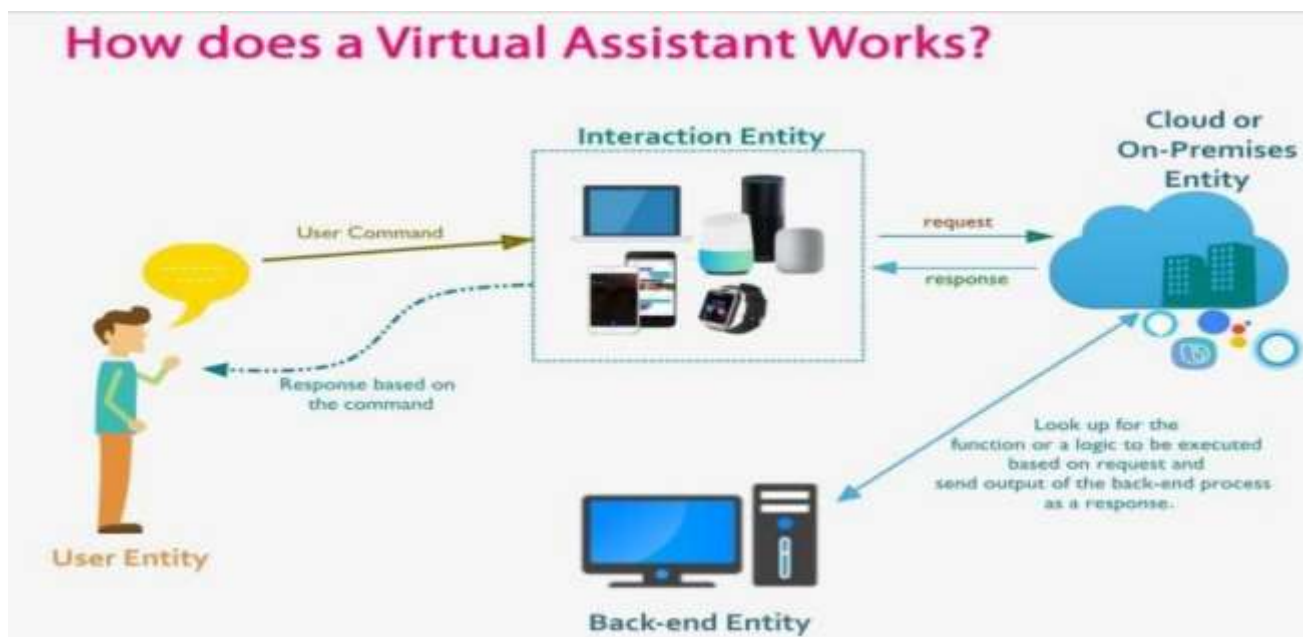
Health assistant uses to match user text input to executable commands to find a suitable answer. Health Assistant is used to run machines on your own commands. The data is then compared with a data of the software to find a suitable answer for making virtual assistant we use some python installer packages like-

2.1 Graphical User Interface:

Tkinter -

Tkinter is the standard GUI library for Python. Python when combined with Tkinter provides a fast and easy way to create GUI applications. Tkinter provides a powerful object-oriented interface to the Tk GUI toolkit. Import the Tkinter module.

Python Backend -

The whole program is written on python Backend. The python Backend work on getting the output in exchange of text input provided by the users and then identifies whether the

command given is valid or not. The response is then sent back to give required output.

Wikipedia -

It is a great and huge source of knowledge just like GeeksforGeeks or any other sources we have used the Wikipedia module in our project to get more information from Wikipedia or to perform a Wikipedia search. To install this Wikipedia module, use pip install Wikipedia.

WebBrowser -

To perform Web Search. This module comes built-in with Python.
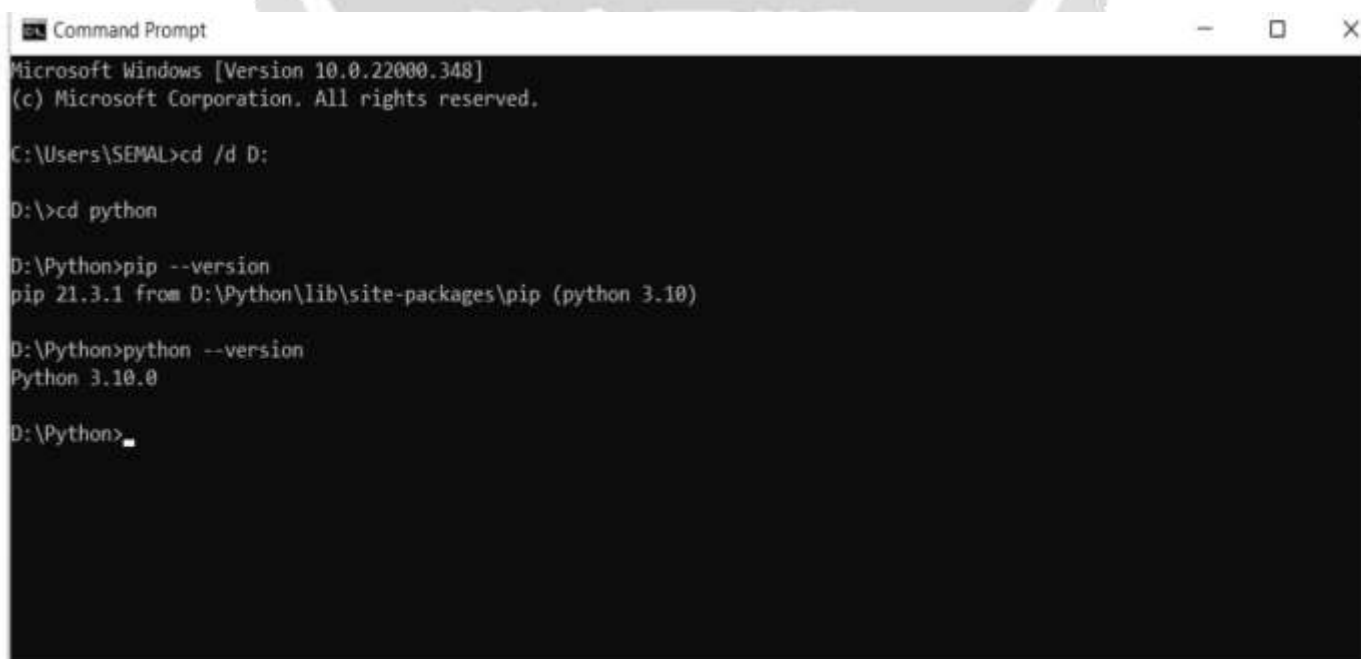
OS Module -

The OS module in Python provides functions for interacting with the os. OS comes under Python's standard utility modules. This module provides a way of using operating system dependent functionality.

Smtplib -

The simple mail transfer protocol library is a Python library for sending emails using the Simple Mail Transfer Protocol (SMTP). The smtplib is a built-in module in python; do not need to install it. It abstracts all the complexities of SMTP away. It provides a Simple Mail Transfer Protocol (SMTP) client implementation.

Requests -

Requests module allows you to send http requests using python. It is used for making GET and POST requests. It abstracts the complexities of making requests behind a beautiful, simple API.

```
Command Prompt                                            —    □    ×
Microsoft Windows [Version 10.0.22000.348]
(c) Microsoft Corporation. All rights reserved.

C:\Users\SEMAL>cd /d D:

D:\>cd python

D:\Python>pip --version
pip 21.3.1 from D:\Python\lib\site-packages\pip (python 3.10)

D:\Python>python --version
Python 3.10.0

D:\Python>_
```

3. MODULES

Homepage   Diet
page
Health details like Temperature
Oxygen level
Blood pressure
Height
weight
Symptoms Assesment
Result

4. RESULT

Health assistant is a less time consuming. Virtual assistant is a software that understands commands and complete task assigned by. It is the fast process, therefore it saves time. Virtual assistant is working for you at set times, so always available to you and able to adapt to changing needs quickly. Virtual assistant will be available to you and should their workload enable, help others too such as family and colleagues.

5. APPLICATION IN REAL LIFE

Many times, people are suffering from an ailment, but they don't know what must be done first hand. Instead, they tend to freak out and immediately try to contact the hospital. Thus, they do not know the standard procedure of first aid. Our web service will eliminate this problem by giving step-by-step procedures.

Like now our country is facing this pandemic (COVID19). Our web service contains online video appointments in which users can get prescriptions from our specialized doctors and physician. Not only these users can also get online medicine delivery at their doorstep.

During any emergency situation, our web service will provide u the location and contact no of nearby medical facilities. This web service uses the latest technology and machine learning algorithms to process the data given by the user and generate the diet and exercise chart that helps the user to maintain a healthy lifestyle.

6. CONCLUSION

In this paper we have discussed about Personal Virtual Assistant for Windows Using Python. Virtual assistant makes life easier to humans. Virtual assistant is the flexibility to contract for just the services they need. As like Alexa, Cortana, Siri, Google assistant we also make virtual assistant using python for all windows versions. We use Artificial Intelligence technology for this project. Virtual Personal Assistants are effective way to manage or organize your schedule. Virtual Personal assistants are also reliable than Human Personal Assistant because, virtual personal Assistants are more portable, loyal and available to use anytime. Our virtual assistant will be intimate you with suggestions and taking instructions, and will know more about you. We can expect this device to be permanent.

7. OUTCOME

In this study, we have developed a voice assistant which can perform any kind of task in exchange of commands given by the users without any error. We have added more features like it will listen to the users' voice only and will not be activated from environment noise. The modular nature of this project makes it easy to understand and more flexible. We can add more features in the program without disturbing thefunctionalities. All the packages required in python programming language has been installed and the code was implemented using VS Code Integrated Development Environment (IDE). The python version used for this project was 3.x and the data of different noises also taken from the environment.

8. SUMMARY

In this study, we have developed a voice assistant which can perform Any kind of task in exchange of commands given by the users without any error. We have added more features like it will listen to the users' voice only and will not be activated from environment noise. The modular nature of this project makes it easy to understand and more flexible. We can add more feature in the program without disturbing the functionalities. All the packages required in python programming language has been installed and the code was implemented using VS Code Integrated Development Environment (IDE). The python version used for this project was 3.x and the data of different noises also taken from the environment Methodology.

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