

# **Project Report On**

**“Personal Voice Assistant ”**

**Submitted for partial fulfillment of diploma in  
Information Technology**

**By**

- 1) Vicky Patle (18)**
- 2) Saurabh Dahake (12)**
- 3) Vishveshawar Kathane (13)**
- 4) Tejas Gujarkar (23)**
- 5) Yashkumar Kore (24)**
- 6) Mahesh Bawane (29)**

**Under the Guidance of Prof-Ashwini Raipure.**



**DEPARTMENT OF COMPUTER TECHNOLOGY  
GOVERNMENT POLYTECHNIC, BRAMHAPURI  
DIST.CHANDRAPUR  
2021-22**

**DEPARTMENT OF INFORMATION TECHNOLOGY  
GOVERNMENT POLYTECHNIC, BRAMHAPURI**

**Dist.CHANDRAPUR**



**CERTIFICATE**

*This is to certify that the Project titled*

**“Personal Voice Assistant ”**

*is submitted*

*By*

- 1) Vicky Patle (18)**
- 2) Saurabh Dahake (12)**
- 3) Vishveshawar Kathane (13)**
- 4) Tejas Gujarkar (23)**
- 5) Yashkumar Kore (24)**
- 6) Mahesh Bawane (29)**

*Of 6<sup>th</sup> semester in the partial fulfillment of the diploma in  
Information Technology during the academic year  
2021– 2022*

**Prof- Ashwini Raipure**  
Guide  
Information Technology

**Prof- Ashwini Raipure**  
Head of Dept  
Information Technology

**Dr. D.N. Shingade**  
Principal  
Government Polytechnic,  
Bramhapuri.

## **ACKNOWLEDGEMENT**

We take this opportunity to express out profound gratitude and the whole hearted thanks to our project guide **Prof- Ashwini Raipure** mam, for her valuable guidance kind suggestion and constant encouragement.

We are very much indebted to **Prof- Ashwini Raipure** mam, HOD of Information Technology Department for her valuable motivation and effective support.

We would also like to thank our Principal **Dr. D.N. Shingade** sir for his support and encouragement.

We would also like to thanks all the teaching and non-teaching staff of Computer Technology Department who directly and indirectly helped us for completing this task successfully.

- |                                |             |
|--------------------------------|-------------|
| <b>1) Vicky Patle</b>          | <b>(18)</b> |
| <b>2) Saurabh Dahake</b>       | <b>(12)</b> |
| <b>3) Vishveshawar Kathane</b> | <b>(13)</b> |
| <b>4) Tejas Gujarkar</b>       | <b>(23)</b> |
| <b>5) Yashkumar Kore</b>       | <b>(24)</b> |
| <b>6) Mahesh Bawane</b>        | <b>(29)</b> |

**DEPARTMENT OF COMPUTER TECHNOLOGY**  
**GOVERNMENT POLYTECHNIC, BRAMHAPURI**  
**DIST-CHANDRAPUR.**



**SUBMISSION**

We the undersigned solemnly declare that the report of the project work entitled **“Personal Voice Assistant”** is based on our work carried out during the course of our study under the guidance of **Prof. Ashwini Raipure Mam** (Lecturer & HOD in IF Dept.)

We assert that the statements made and conclusions drawn are an outcome of our project work. We further certify that

- The work contained in the project report is original and has been done by us under the guidance of guide
- The work has not been submitted to any other institute for diploma in this university or any other university of India or abroad.

Date:

Place: Govt. Polytechnic College  
Bramhpuri.

Signature of Students

## **LIST OF FIGURES**

- DATAFLOW DIAGRAM (DFD) Pg. No. – 20
- SCREEN SHOTS 1 (SS) Pg. No. – 24
- SCREEN SHOTS 2 (SS) Pg. No. – 25
- SCREEN SHOTS 3 (SS) Pg. No. – 26
- SCREEN SHOTS 4 (SS) Pg. No. – 27
- SCREEN SHOTS 5 (SS) Pg. No. – 28

## **LIST OF ABBREVIATIONS**

PVA	Personal Voice Assistant
AI	Artificial Intelligence
API	Application Programming Interface
DFD	Dataflow Diagram
SS	Screen Shots

## **ABSTRACT**

The project aims to develop a personal-assistant for windows and Linux-based systems. Joy draws its inspiration from virtual assistants like Cortana for Windows, and Siri for iOS. It has been designed to provide a user-friendly interface for carrying out a variety of tasks by employing certain well-defined commands. Users can interact with the assistant through voice commands input.

As a personal assistant, Jarvis assists the end-user with day-to-day activities like general human conversation, searching queries in google, Bing or Yahoo, searching for videos, retrieving images, live weather conditions, word meanings, searching for medicine details, health recommendations based on symptoms and reminding the user about the scheduled events and tasks. The user statements/commands are analysed with the help of machine learning to give an optimal solution.

# Table of Contents

## CHAPTER I : INTRODUCTION

1.1	Purpose	10
1.2	Product goals and objectives	10
1.3	Product description	10
1.4	Modules used	11

## CHAPTER II

2.0	Literature survey for problem identification and specification:	13-14
-----	---	-------

## CHAPTER III

3.0	scope of project	16
-----	------------------	----

## CHAPTER VI

4.0	Proposed methodology for solving identified problem	18
-----	---	----

## CHAPTER V

5.0	Data Flow Diagram	20
5.1	Code of Project	21-23
5.2	Screen Shots	24-28
5.3	Action Plan	29
5.4	Resources Required	30

## CHAPTER VI

6.0	Result and Applications	32-33
-----	-------------------------	-------

## Chapter VII

7.1	Conclusion	35
7.2	Future scope	36
7.3	Reference	37
7.4	Group members	38



# **CHAPTER -1**

**(INTRODUCTION AND PROBLEM DEFINATION )**

## **1.1 PURPOSE:**

The purpose of this project is to build a program that will be able to service to humans like a personal assistant. This is an interesting concept and many people around the globe are working it. Today, time and security are the two main things to which people are more sensitive, no one has the time to spoil; nobody would like their security breach, and this project is mainly for those kinds of people.

## **1.2 PRODUCT GOALS AND OBJECTIVES:**

Currently, the project aims to provide the windows Users with a Virtual Assistant that would not only aid in their daily routine tasks like searching the web, extracting weather data, vocabulary help and many others but also help in automation of various activities.

In the long run, we aim to develop a complete server assistant, by automating the entire server management process - deployment, backups, auto-scaling, logging, monitoring and make it smart enough to act as a replacement for a

general server administrator.

## **1.3 PRODUCT DESCRIPTION:**

As a personal assistant, Joy assists the end-user with day-to-day activities like general human conversation, searching queries in various search engines like Google, Bing or Yahoo, searching for videos, retrieving images, live weather conditions, word meanings, searching for medicine details, health recommendations based on symptoms and reminding the user about the scheduled events and tasks. The user statements/commands are analysed with the help of machine learning to give an optimal solution.

## 1.4 Modules required:

- **Pytttsx3:-** This module is used for conversion of text to speech in a program it works offline. To install this module type the below command in the terminal.

`pip install pyttsx3`

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

`Pip install wikipedia`

- **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.

`Pip install Speech Recognition`

- **Web browser:-** To perform Web Search. This module comes built-in with Python.
- **Pyjokes:-** Pyjokes is used for collection Python Jokes over the Internet. To install this module type the below command in the terminal.

`pip install pyjoke`

- **Datetime:-** Date and Time is used to showing Date and Time. This module comes built-int with Python.
- **Pywhatkit:-**Pywhatkit is one of the popular python libraries for sending messages automatically to someone's WhatsApp mobile number and opening the youtube application. To install this module type the below command in the terminal.

`Pip install Pywhatkit`

## **CHAPTER-2**

## 2.0] Literature survey for problem identification and specification:-

AbhayDekate (2016) et al. presented in the Modern Era of fast moving technology we can do things which we never thought we could do before but, to achieve and accomplish these thoughts there is a need for a platform which can automate all our tasks with ease and comfort. Thus we need to develop a Personal Assistant having brilliant powers of deduction and the ability to interact with the surroundings just by one of the materialistic form of human interaction i.e. Human Voice. The Hardware device captures the audio request through microphone and processes the request so that the device can respond to the individual using in-built speaker module. For Example, if you ask the device 'what's the weather?' or 'how's traffic?' using its built-in skills, it looks up the weather and traffic status respectively and then returns the response to the customer through connected speaker.

Dr.Kshama V. Kulhalli (2017) et al. proposed the Most famous application of iPhone is "SIRI" which helps the end user to communicate end user mobile with voice and it also responds to the voice commands of the user. Same kind of application is also developed by the Google that is "Google Voice Search" which is used for in Android Phones. But this Application mostly works with Internet Connections. But our Proposed System has capability to work with and without Internet Connectivity. It is named as Personal Assistant with Voice Recognition Intelligence, which takes the user input in form of voice or text and process it and returns the output in various forms like action to be performed or the search result is dictated to the end user. In addition, this proposed system can change the way of interactions between end user and the mobile devices. The system is being designed in such a way that all the services provided by the mobile devices are accessible by the end user on the user's voice commands.

Kishore Kumar R1 (2018) et al. presented to develop an economically effective and performance wise efficient virtual assistant using Raspberry Pi for home automation based on the concepts of Internet of Things, Speech Recognition, Natural Language Processing and Artificial Intelligence. People who are using it can give voice inputs and the device itself responds through voice commands by itself. It can fetch the date, time, weather, play your favourite music and fetch search results from the internet along with controlling the home appliances. NodeMCU chips are used to control the appliances which receives the command from the Raspberry Pi. The Raspberry Pi processes the speech inputs online given by the user through the mic and converts it into text and executes the command. The whole project is put in action through a python script which includes online Speech to Text conversion and Text to Speech conversion codes written.

The NodeMCU is coded separately using the Arduino IDE to make it control the appliances and allow it to be accessed through its IP address. The device will respond to the user in a casual manner so that the user has a friendly experience with the device and feels it like his or her own assistant. This device makes the day by day processes easier.

Rutuja V. Kukade (2018) et al. proposed there are various communication barriers for people who are blind , and they have to face various challenges. In this paper, we have discussed the implementation of a personal virtual assistant which can take the human voice commands to perform tasks which otherwise would need the dependence on others. It enables user to receive and send emails, know the weather forecast report, maintain a personal diary/Online Blog, recognize image etc, using Speech to Text Engine,

Text to speech Engine, OCR (Optical character recognition) using microphone for the input and speakers for the output.

VetonKëpuska (2018) proposed one of the goals of Artificial intelligence (AI) is the realization of natural dialogue between humans and machines. In recent years, the dialogue systems, also known as interactive conversational systems are the fastest growing area in AI. Many companies have used the dialogue systems technology to establish various kinds of Virtual Personal Assistants (VPAs) based on their applications and areas, such as Microsoft's Cortana, Apple's Siri, Amazon Alexa, Google Assistant, and Facebook's M. However, in this proposal, we have used the multi-modal dialogue systems which process two or more combined user input modes, such as speech, image, video, touch, manual gestures, gaze, and head and body movement in order to design the Next- Generation of VPAs model. The new model of VPAs will be used to increase the interaction between humans and the machines by using different technologies, such as gesture recognition, image/video recognition, speech recognition, the vast dialogue and conversational knowledge base, and the general knowledge base. Moreover, the new VPAs system can be used in other different areas of applications, including education assistance, medical assistance, robotics and vehicles, disabilities systems, home automation, and security access control. In this proposal, we have tested the new VPAs model by using IBM Watson cloud server with Python, Node Red.

## **CHAPTER-3**

### 3.0 scope of project :

Voice assistants will continue to offer more individualized experiences as they get better at differentiating between voices. However, it's not just developers that need to address the complexity of developing for voice as brands also need to understand the capabilities of each device and integration and if it makes sense for their specific brand. They will also need to focus on maintaining a user experience that is consistent within the coming years as complexity becomes more of a concern. This is because the visual interface with voice assistants is missing. Users simply cannot see or touch a voice interface

Presently, Joy is being developed as an virtual assistant. Among the Various roles played by Joy are:

1. Search Engine with voice interactions
2. playing music and videos.
3. Reminder and To-Do application.
4. Vocabulary App to show meanings and correct spelling errors.
5. Weather Forecasting Application.
6. display latest news.
7. Use regular conversations.
8. Click the pictures.
9. Do OS functions like shutdown,lockwindow,etc.



## **CHAPTER-4**

#### 4.0] Proposed methodology for solving identified problem :-

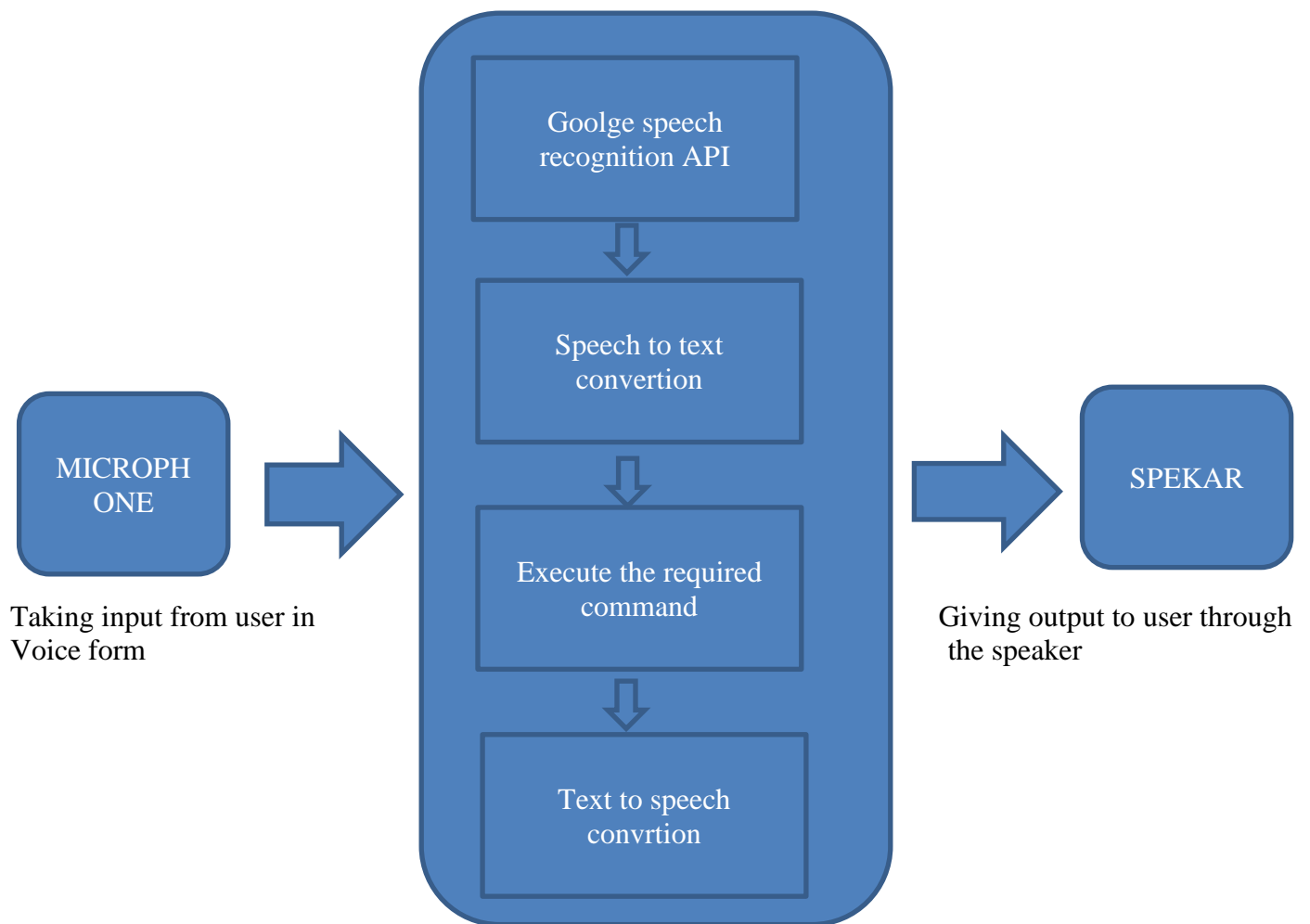
The part where I tell you what are the basic requirement for this project. You'll need Python 3.6. We'll be using the pyttsx3 package which is a text-to-speech library for Python. The basic reason why we use this is because it works offline. Another basic requirement of this project will be Python's Speech Recognition library. There are other requirements for the project which are listed below; we'll understand them as we go ahead. Inappropriate college description is also conveyed as all terms and conditions of college are not known to students. The overall system design consists of following phases:

The proposed system will have the following functionality:

- (a) The system will keep listening for commands and the time for listening is variable which can be changed according to user requirements.
- (b) If the system is not able to gather information from the user input it will keep asking again to repeat till the desired no. of times.
- (c) The system can have both male and female voices according to user requirements
- (d) Features supported in the current version include playing music, emails, texts, search on Wikipedia, or opening system installed applications, opening anything on the web browser, etc.

## **CHAPTER-5**

## 5.0] DATA FLOW DIAGRAMS :



## 5.1) Code of Project:-

```
from cmath import inf
from distutils.log import info
from tracemalloc import stop
#import imp
import speech_recognition as sr
import pyttsx3
import pywhatkit
import datetime
import wikipedia
import pyjokes
import webbrowser

#import wolframalpha

Listener = sr.Recognizer()
engine = pyttsx3.init()

#client = wolframalpha.Client('V52L94-7KR7L5U738')
voices = engine.getProperty('voices')
engine.setProperty('voice', voices[1].id)

def talk(text):
    engine.say(text)

    engine.runAndWait()

def take_command():
    try:
        with sr.Microphone() as source:
            print('listening..')
            voice = Listener.listen(source)
            command = Listener.recognize_google(voice)
            command = command.lower()
            if 'joy' in command:
                command = command.replace('joy', '')
                print(command)

    except:
        pass
```

```

    return command

while True:
    def run_joy():
        command = take_command()
        print(command)

        if 'play ' in command:
            song = command.replace('play', '')
            talk('playing ' + song)
            pywhatkit.playonyt(song)

        elif 'why' in command:
            person1 = command.replace('why', '')
            info = wikipedia.summary(person1, 2)
            print(info)
            talk(info)

        elif 'which' in command:
            person2 = command.replace('which', '')
            info = wikipedia.summary(person2, 2)
            print(info)
            talk(info)

        elif 'where' in command:
            person3 = command.replace('where', '')
            info = wikipedia.summary(person3, 2)
            print(info)
            talk(info)

        elif 'what' in command:
            person4 = command.replace('what', '')
            info = wikipedia.summary(person4, 2)
            print(info)
            talk(info)

        elif 'news' in command:
            person5 = command.replace('news', '')
            info = wikipedia.summary(person5, 2)
            print(info)
            talk(info)

        elif 'joke' in command:

```

```
    talk(pyjokes.get_joke())

elif 'start youtube' in command:
    webbrowser.open('www.youtube.com')

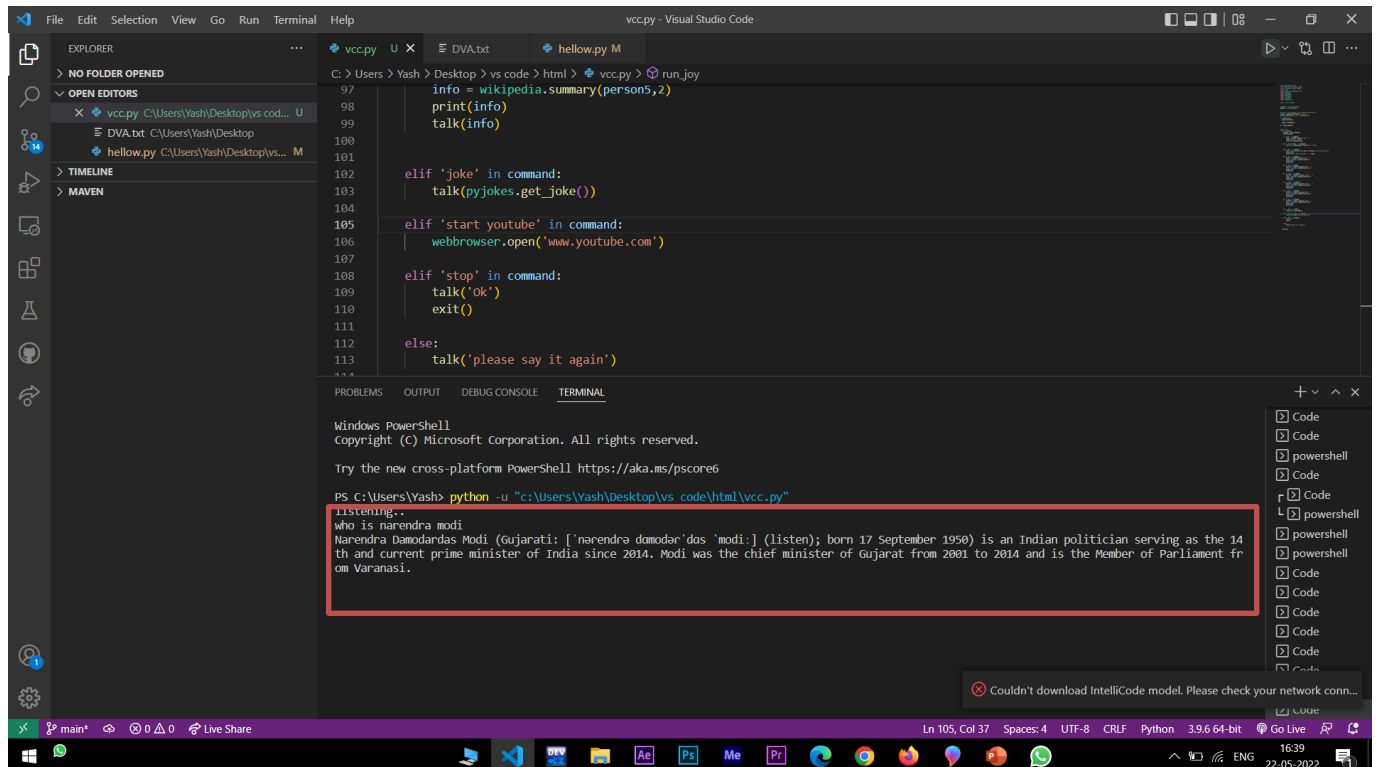
elif 'stop' in command:
    talk('Ok')
    exit()

else:
    talk('please say it again')

run_joy()
```

## 5.2) SCREEN SHOTS

Que) Who is Narendra modi ?



The screenshot shows the Visual Studio Code interface. The Explorer panel on the left shows a project with files `vcc.py`, `DVA.txt`, and `hellow.py`. The main editor displays the `vcc.py` file, which contains a Python script that uses the `wikipedia` and `pyjokes` libraries. The script is designed to respond to specific commands. The TERMINAL panel at the bottom shows the execution of the script using `python -u "c:\Users\Yash\Desktop\vs code\html\vcc.py"`. The output of the script is displayed in the terminal, providing information about Narendra Damodardas Modi.

```
File Edit Selection View Go Run Terminal Help
vcc.py - Visual Studio Code

EXPLORER
> NO FOLDER OPENED
> OPEN EDITORS
  vcc.py C:\Users\Yash\Desktop\vs cod... U
  DVA.txt C:\Users\Yash\Desktop
  hellow.py C:\Users\Yash\Desktop\vs... M
> TIMELINE
> MAVEN

vcc.py
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
...

C:\Users\Yash\Desktop\vs code> html > vcc.py > run_joy
info = wikipedia.summary(person5,2)
print(info)
talk(info)

elif 'joke' in command:
    talk(pyjokes.get_joke())

elif 'start youtube' in command:
    webbrowser.open('www.youtube.com')

elif 'stop' in command:
    talk('ok')
    exit()

else:
    talk('please say it again')
```

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

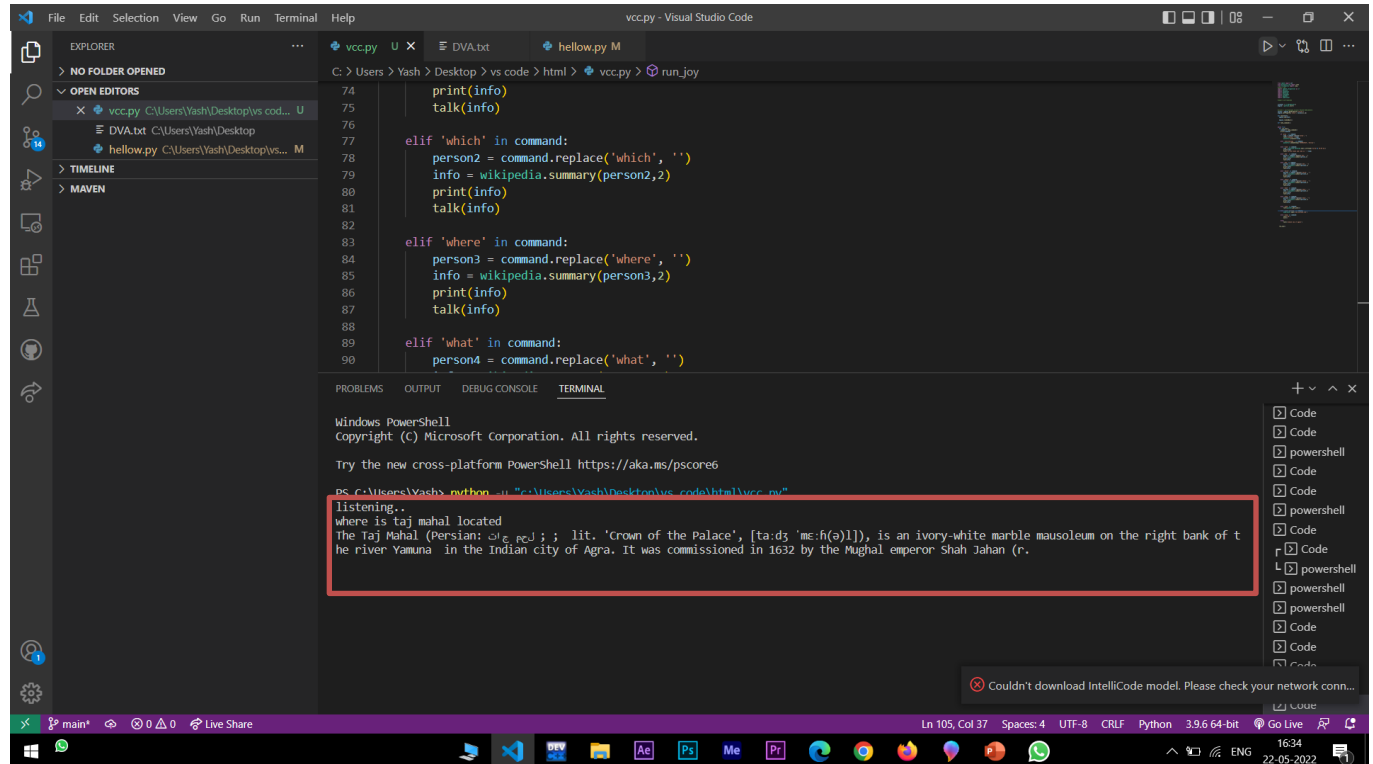
PS C:\Users\Yash> python -u "c:\Users\Yash\Desktop\vs code\html\vcc.py"
listening..
who is narendra modi
Narendra Damodardas Modi (Gujarati: ['narendra damodər'das 'modi:] (listen); born 17 September 1950) is an Indian politician serving as the 14
th and current prime minister of India since 2014. Modi was the chief minister of Gujarat from 2001 to 2014 and is the Member of Parliament fr
om Varanasi.
```

Couldn't download IntelliCode model. Please check your network conn...

Ln 105, Col 37 Spaces: 4 UTF-8 CRLF Python 3.9.6 64-bit Go Live 1639 22-05-2022



Que) Where is Taj Mahal located ?



The screenshot shows the Visual Studio Code interface. The Explorer pane on the left shows a project with files `vcc.py`, `DVA.txt`, and `hellow.py`. The main editor displays the `vcc.py` file, which contains a Python script that listens for commands and uses the `wikipedia.summary` function to provide information. The script has three branches: one for 'which', one for 'where', and one for 'what'. The output window at the bottom shows the script running in a Windows PowerShell terminal. The command `python -u "c:\Users\Yash\Desktop\vs_code\html\vc.py"` was executed, and the output shows the script listening for input. The user entered `where is taj mahal located`, and the script responded with a Wikipedia summary of the Taj Mahal. The summary states that the Taj Mahal is an ivory-white marble mausoleum on the right bank of the river Yamuna in the Indian city of Agra, commissioned in 1632 by the Mughal emperor Shah Jahan.

```
74 print(info)
75 talk(info)
76
77 elif 'which' in command:
78     person2 = command.replace('which', '')
79     info = wikipedia.summary(person2,2)
80     print(info)
81     talk(info)
82
83 elif 'where' in command:
84     person3 = command.replace('where', '')
85     info = wikipedia.summary(person3,2)
86     print(info)
87     talk(info)
88
89 elif 'what' in command:
90     person4 = command.replace('what', '')
```

Windows PowerShell  
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell <https://aka.ms/pscore6>

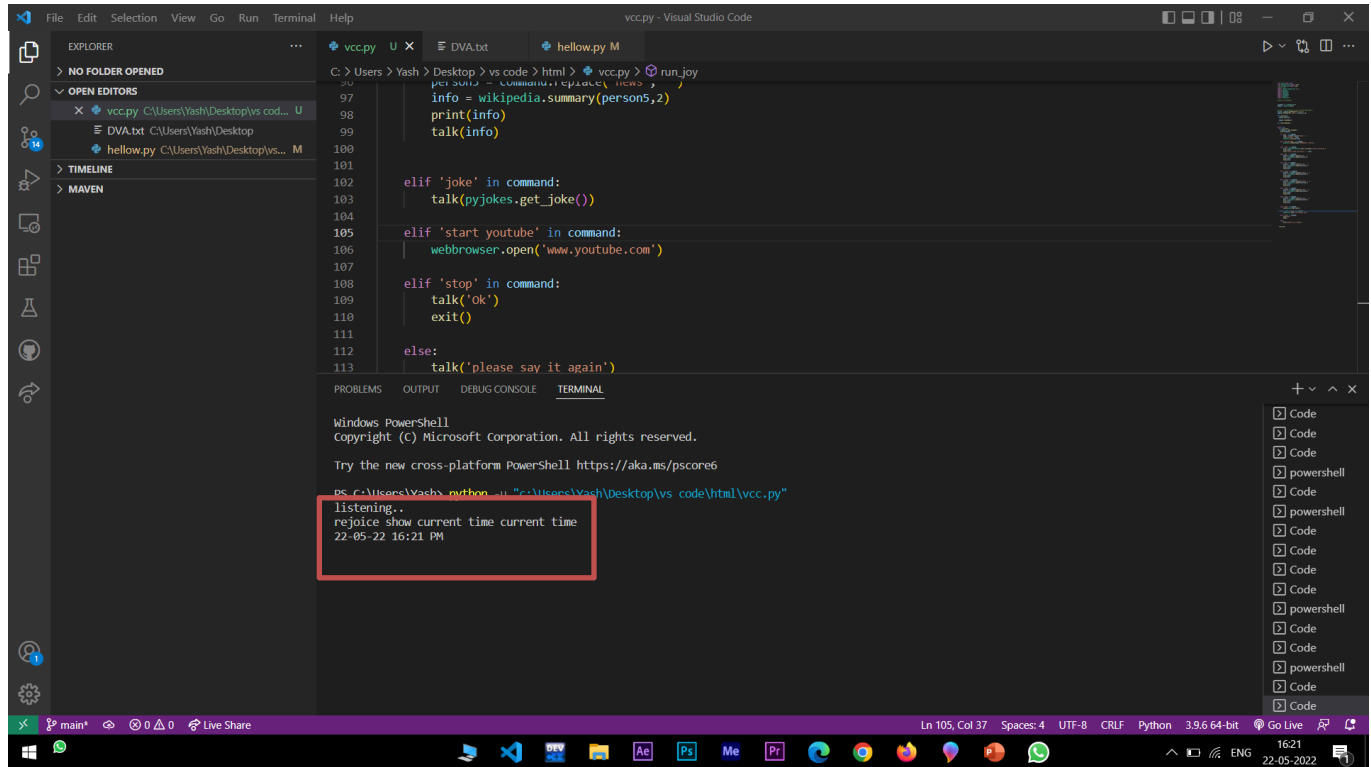
PS C:\Users\Yash> python -u "c:\Users\Yash\Desktop\vs\_code\html\vc.py"

listening..

where is taj mahal located

The Taj Mahal (Persian: تاج محل; lit. 'Crown of the Palace', [taːdʒ ˈmeːh(ə)l]), is an ivory-white marble mausoleum on the right bank of the river Yamuna in the Indian city of Agra. It was commissioned in 1632 by the Mughal emperor Shah Jahan (r.

Que) Show current time ?



The screenshot shows the Visual Studio Code interface with a Python file named `vcc.py` open. The code is a simple chatbot that responds to specific commands. The terminal window at the bottom shows the command `python -u "C:\Users\Yash\Desktop\vs code\html\vcc.py"` being executed, and the output shows the chatbot listening and responding to the command `rejoice show current time current time` with the current date and time.

```
File Edit Selection View Go Run Terminal Help
vcc.py - Visual Studio Code

EXPLORER
NO FOLDER OPENED
OPEN EDITORS
vcc.py C:\Users\Yash\Desktop\vs cod... U
DVA.txt C:\Users\Yash\Desktop
hellow.py C:\Users\Yash\Desktop\vs... M
TIMELINE
MAVEN

vcc.py
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113

C:\Users\Yash\Desktop\vs code\html\vcc.py
person = CommandInterpreter()
info = wikipedia.summary(person,2)
print(info)
talk(info)

elif 'joke' in command:
    talk(pyjokes.get_joke())

elif 'start youtube' in command:
    webbrowser.open('www.youtube.com')

elif 'stop' in command:
    talk('ok')
    exit()

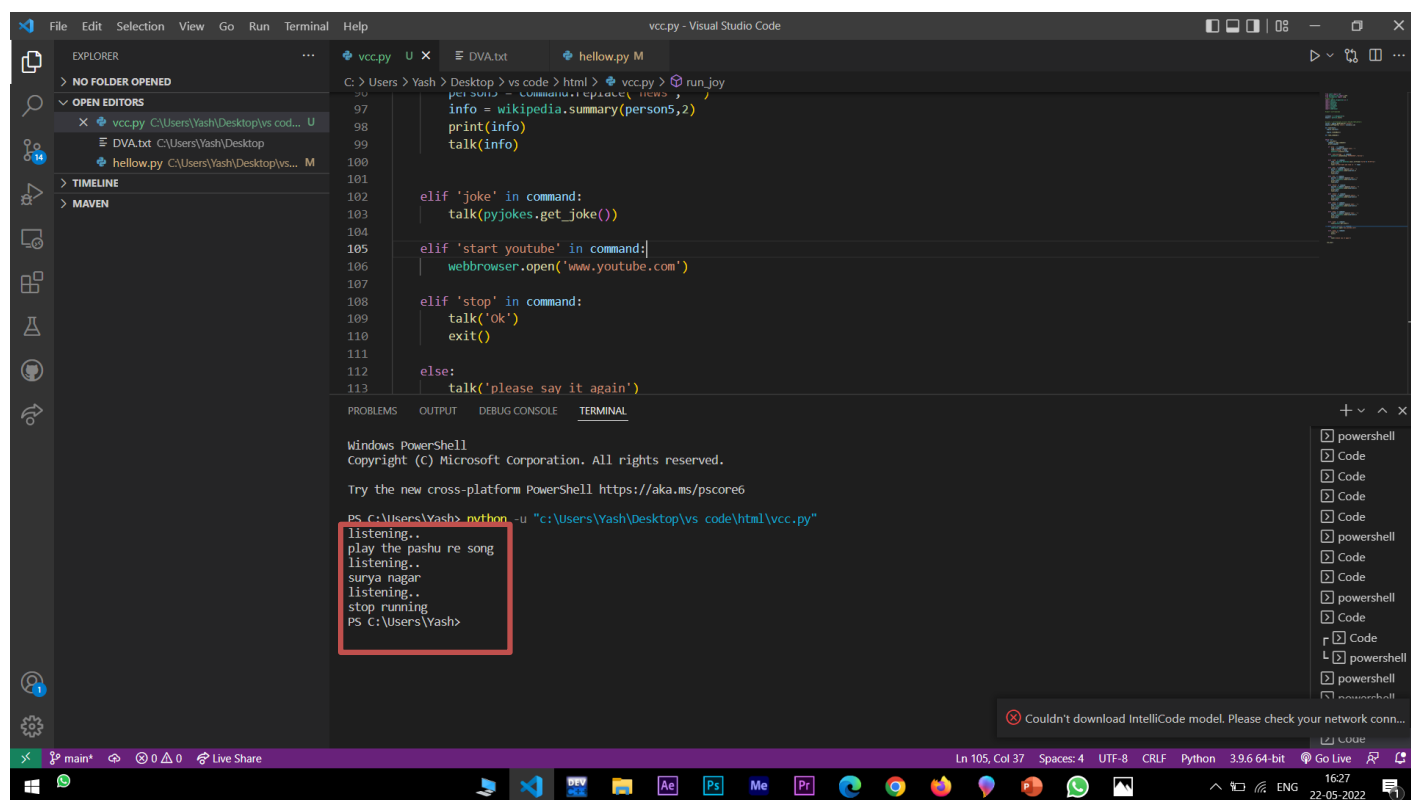
else:
    talk('please say it again')

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\Yash> python -u "C:\Users\Yash\Desktop\vs code\html\vcc.py"
listening..
rejoice show current time current time
22-05-22 16:21 PM
```

Que) Play the song pasoori ?



The screenshot shows the Visual Studio Code interface with a Python file named `vcc.py` open. The script defines a function `run_joy` that takes a command and performs actions based on it. The terminal shows the execution of the script, which outputs a series of messages related to playing a song.

```
File Edit Selection View Go Run Terminal Help
vcc.py - Visual Studio Code

EXPLORER
> NO FOLDER OPENED
> OPEN EDITORS
  vcc.py C:\Users\Yash\Desktop\vs cod... U
  DVA.txt C:\Users\Yash\Desktop
  hellow.py C:\Users\Yash\Desktop\vs... M
> TIMELINE
> MAVEN

C:\Users\Yash\Desktop\vs code\html> vcc.py > run_joy
20
97 person = Command.replace('news', ' ')
98 info = wikipedia.summary(person, 2)
99 print(info)
100 talk(info)
101
102 elif 'joke' in command:
103     talk(pyjokes.get_joke())
104
105 elif 'start youtube' in command:
106     webbrowser.open('www.youtube.com')
107
108 elif 'stop' in command:
109     talk('Ok')
110     exit()
111
112 else:
113     talk('please say it again')

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\Yash> python -u "C:\Users\Yash\Desktop\vs code\html\vcc.py"
listening..
play the pashu re song
listening..
surya nagar
listening..
stop running
PS C:\Users\Yash>
```

Couldn't download IntelliCode model. Please check your network conn...


main\* 0 0 Live Share Ln 105, Col 37 Spaces: 4 UTF-8 CRLF Python 3.9.6 64-bit Go Live 16:27 22-05-2022

(35) Coke Studio | Season 14 x

https://www.youtube.com/watch?v=5Eqb\_j3FDA

Apps CandidateAssessme... Shanes Tools New Tab 964- Need for Spee... 1246- God of War (...)

YouTube IN Search



#Pasoori #RealMagic #CokeStudioSeason14  
Coke Studio | Season 14 | Pasoori | Ali Sethi x Shae Gill  
135,517,812 views • Feb 7, 2022

3M DISLIKE SHARE CLIP SAVE ...

Coke Studio 12M subscribers SUBSCRIBE

Take Adobe Acrobat Try FREE

All Coke Studio Pop Music Related

Ranjha x Waalian (ACV Mashup) | Shershaah | Harnoor | Jaslee...  
ACV 2.4M views • 2 months ago

Mix - Coke Studio | Season 14 | Pasoori | Ali Sethi x Shae Gill  
YouTube

Bollywood Love Aaj Kal  
YouTube Music Updated today

Excuses (Official Video) | AP Dhillon | Gurinder Gill | Intense  
Intense 205M views • 1 year ago

Falak Tak Chal Sath Mere (Slowed + Reverb) - ...

1625 22-05-2022

### 5.3] Action Plan:-

<b>Sr. No.</b>	<b>Details of activity</b>	<b>Planned start date</b>	<b>Planned end date</b>	<b>Name of responsible team member</b>
1.	Project is distributed by our teacher and our group gets the Project.			All group members.
2.	Group members appointed meeting and project work is distributed to all group members.			All group members.
3.	Collection for information about project and preparing project.			All group members.
4.	The collected information is written in the form of hard copy.			All group Member.
5.	Proposal for project is prepared.			All group Member.
6.	Final report of project is prepared.			All group members.
8.	Project is submitted.			All group Members

#### 5.4] Resources required:-

<b>Sr. No.</b>	<b>Name of Resources</b>	<b>Specification</b>	<b>Quantity</b>
<b>1.</b>	Computer System	Computer i5 11 <sup>th</sup> generation 8GB RAM	<b>1</b>
<b>2.</b>	Computer network and internet connection	-	-
<b>3.</b>	Operating System	Windows	<b>1</b>
<b>4.</b>	Development Software	Python 2.7 onward	<b>1</b>
<b>5.</b>	IDE	visual code,etc	<b>1</b>

## **CHAPTER-6**

# Result and Applications

## 1.Queries from the web:

Making queries is an essential part of one's life, and nothing changes even for a developer working on Windows/Linux. We have addressed the essential part of a citizen's life by enabling our voice assistant to search the web. Here we have used Node JS and Selenium framework for extracting the result from the web as well as displaying it to the user. Jarvis supports a plethora of search engines like Google, Bing and Yahoo and displays the result by scraping the searched queries.

## 2.Accessing youtube videos:

Videos have remained as a main source of entertainment, one of the most prioritized tasks of virtual assistants. They are equally important for entertainment as well as educational purposes as most teaching and research activities in present times are done through Youtube. This helps in making the learning process more practical and out of the four walls of the classroom.

Joy implements the feature through a subprocess module which is handled by the main Golang service. This service initiates the subprocess for Node JS which serves the Selenium WebDriver, and scraps the searched YouTube query.

## 3.Dictionary meaning:

One of the usages of the web is to find word meaning and its usage in our day to day life. Instead of going through the bulky books, our users can simply search for it using the voice assistant and get the meaning within a fraction of seconds.

## 4. It can be used for daily conversations:

Joy can start the normal conversation with the user like greeting user, can reply user for simple quires



### **5. Play music:**

Joy can play the music present in the system as well as software has access to the softwares like Spotify , etc which allows the Joy to play the music.

### **6. It access news:**

Joy has the access to the web from where the software retrieve the latest news from the sites like Times of India. It give the latest news available.

## **CHAPTER-7**

## **Conclusion and Future Scope**

### **7.1 Conclusion**

The main aim of the project was to develop an Desktop Assistant that will be used to identify answers related to user submitted questions. To provide with sufficient information that is required by the user. A background research took place, which included an overview of the conversation procedure and any relevant desktop Assistant available.

A desktop Assistant already in user were excellent service that is provided. The developed system is made on python programming language to be more specific Python 3.8. Different libraries where used such as Speech Recognition, Text to Speech convertor, Short Mail Transferring Protocols (SMTP). It provides information regarding the weather, News, it can play music, it can search for topics on Wikipedia, can setup an alarm, Display the current date and time.

User can collect information through this application. It reduces both man power and time. Due to support of NLP user can ask queries in very formal way. No need ask queries in very strict and specific way. The user should aware of general rules of English Language. The goal is to provide people a quick and easy way to have their questions answered

## **7.2 Future Scope:**

Of course, one have to look at the human interaction that humans provide in chat service. This isn't an issue with Desktop Assistants because of the wide range of services it provides and it is available 24\*7. It would be wrong to say that Desktop Assistant is evolving. Desktop Assistant are more intelligent. Even there are reports that 80- 85% of businesses will be giving out more enhanced Desktop Assistants by 2020. Natural Language Programming (NLP) helps in giving a raised human involvement, hence making the Desktop Assistants more communicative. Undoubtedly, Desktop Assistants are a great help for e-commerce stores. The goal is to provide people a quick and easy way to have their questions answered. It can also be incorporated with the college's website so that we can give user a better experience. Then users do not want to install this application they can use this application via college website on any system.

## ➤ Reference and bibliography :

- 1)<https://pypi.org/project/SpeechRecognition/>
- 2) <https://pypi.org/project/pyttsx3/>
- 3)<https://pypi.org/project/wikipedia/>
- 4)Dr.Kshama V. Kulhalli, Dr.KotrappaSirbi, Mr.AbhijitJ. Patankar, “Personal Assistant with Voice Recognition Intelligence”, International Journal of Engineering Research and Technology. ISSN 0974-3154 Volume 10, Number 1 (2017).
- 5)AbhayDekate, ChaitanyaKulkarni, RohanKilledar, “Study of Voice Controlled Personal Assistant Device”, International Journal of Computer Trends and Technology (IJCTT) – Volume 42 Number 1 – December 2016.
- 6)M. A. Jawale, A. B. Pawar, D. N. Kyatanavar, “Smart Python Coding through Voice Recognition”, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-10, August 2019.
- 7)TusharGharge, ChintanChitroda, NishitBhagat, KathapriyaGiri, “AI-Smart Assistant”, International Research Journal of Engineering and Technology (IRJET), Volume: 06 Issue: 01, January 2019.
- 8)VetonKëpuska, “Next-Generation of Virtual Personal Assistants (MicrosoftCortana, Apple Siri, Amazon Alexa and Google

## **GROUP MEMBERS:-**

- 1) Vicky Patle (18)**
- 2) Saurabh Dahake (12)**
- 3) Vishveshwar Kathane (13)**
- 4) Tejas Gujarkar (23)**
- 5) Yashkumar Kore (24)**
- 6) Mahesh Bawane (29)**