A PROJECT REPORT

ON

HEY BUDDY!

Submitted in partial fulfilment of the requirements

for the award of the Degree of B.C.A.

Submitted by

Name: MR. Rohan.V

Reg. No.: 91932314

Under the guidance of

Name: Smt. Anita.M

Submitted to

GULBARGA UNIVERSITY, KALABURAGI

Department of Computer Science

K.R.E SOCIETY'S

KARNATAK ARTS, SCIENCE AND COMMERCE COLLEGE, BIDAR -585401

2020-2021

CERTIFICATE

This is to certify that the project entitled **"HEY BUDDY"** submitted in partial fulfilment of the degree of Bachelor of Computer Application (BCA) to the Registrar Evaluation of Gulbarga University, Kalaburagi through Karnatak Arts, Science and Commerce College, Bidar done by **Mr. Rohan.V** having REG.NO **91932314** is an authentic work carried out under any Guidance. The matter embodied in the project work has not been submitted earlier for award of any degree or diploma to the best of my knowledge and belief.

Signature of the Guide

Smt. Anita.M

CERTIFICATE

KARNATAK ARTS, SCIENCE AND COMMERCE COLLEGE, BIDAR

This is to certify that the live project entitled **"HEY BUDDY"** submitted by **Mr. Rohan.V** having REG.NO **91932314** to the Gulbarga University, Kalaburagi for the award of the Degree of Bachelor of Computer Application, is a record of the work carried out under my guidance in the Department of Computer Science during the year 2020-2021.

Project Guide	Head of the Dept.	Principal
Smt. Anita.M	Sri. Srikant Doddamani	Dr. M . S. Chelva

Examiners:

1.

2.

AKNOWLEDGEMENT

In the current expression of rivalry, there is a race of presence where those are having will to approach succeed. Projects resembles a scaffold among hypothetical and pragmatic working in the current world.

With this willing, I started out this project with a tiny thought which struck me progressively. I gradually fired raising each one of the innovative thoughts that kept multiplying all the time.

As a result of the impact that these inventive ideas had made, I have attempted and gave my best to rejuvenate the project and it's my very own personal virtual voice assistant to make my life more operative in this automated advanced world.

It was an extraordinary joy for me to undertake this standalone project, I feel profoundly doing my own project entitled - 'Hey Buddy!'.

I would like to show my appreciation to our honourable Principal (**Dr. M. S. Chelva**) and Head of the Dept. (**Sri. Srikant Doddamani**) for supporting young minds.
Aside from my efforts, the success of this project relies largely upon the encouragement and guidelines of **Smt. Anita.M** (Project Guide)
I take this opportunity to express my gratitude to them who have been instrumental in the effective completion of this project.
This journey would not have been possible if not for them, and I dedicate this milestone to them.

At long last, my profound and sincere gratitude to my family for my upbringing and they have been providing me with such a great exposure that has helped me bloom.

I am forever indebted to my parents for offering me the chances and encounters that have made me who I am. They benevolently urged me to investigate new bearings throughout everyday life and seek my own destiny.

I will not cease to acknowledge the support of my friends for there on spot suggestions during my project research work.
Above all else, I would like to praise and thank the supreme force, the Almighty God for His countless blessings, knowledge, graces, strength, sustenance, opportunity and guidance in accomplishing my goal and to be fruitful.

His benevolence has made me shine and victorious in all my academic pursuits.

DECLARATION

This is to certify that the project report entitled **"HEY BUDDY"** is done by me is an authentic work carried out for the award of the degree of Bachelor of Computer Application (BCA) under the guidance of Smt. Anitha,M Assistant Professor. The matter embodied in the project work has not been submitted earlier for award of any degree or diploma to the best of my knowledge and belief.

Signature of the Student

Mr. Rohan.V

REG.NO: 91932314

HEY BUDDY!

Rohan. V

91932314

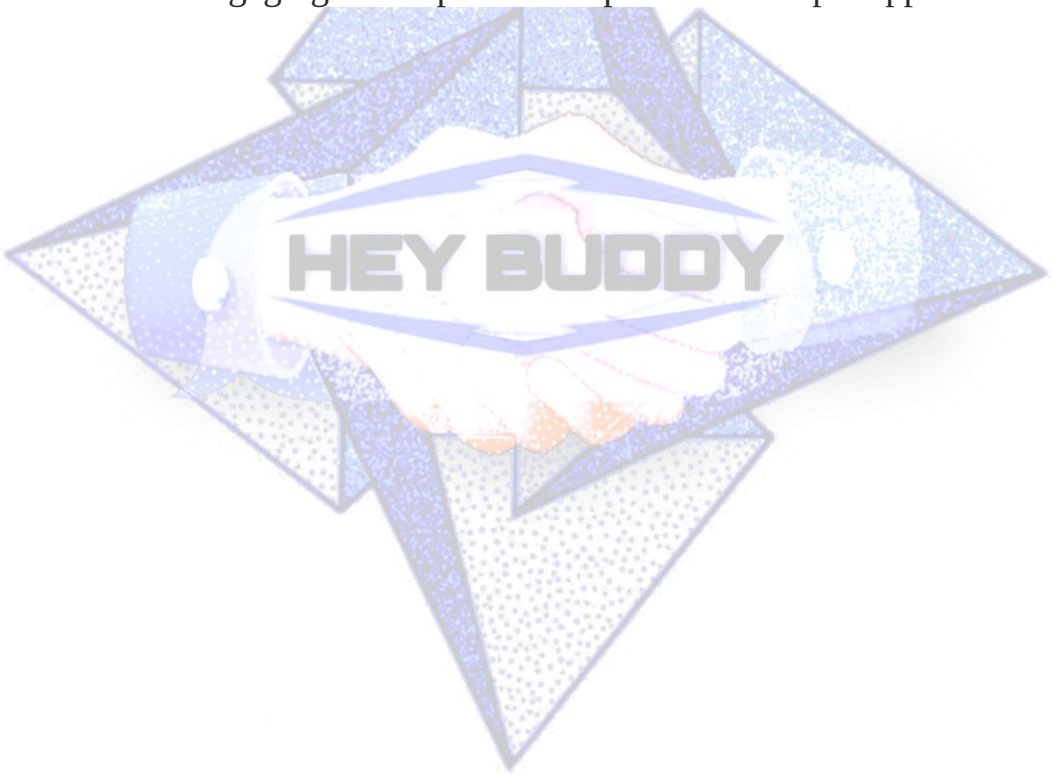
TABLE OF CONTENTS

ABSTRACT

The 21st century, being the science fiction dream of lazy people everywhere, innovation has advanced to oblige a more helpful way of life and address each issue that might actually require satisfaction. With the right technology in your home, you may not at any point need to leave your bed. Getting work done manually is a very tough and a time-consuming process.

The need for automation is much essential as it will save considerable time for people, who are interested in thinking on more important ideas. Automation provides unique opportunities for people to think more about many important things in their life than wasting time on rudimentary ideas.

'Hey Buddy!' is an interactive voice-controlled virtual assistant. Individual voice help innovation is staying put. Simply the thought considered conversing in order to finish a few assignments is an engaging development that presents multiple opportunities.



CHAPTER 1

INTRODUCTION

As a matter of fact, development has had a huge load of impact in our overall population, at this point it has additionally changed individuals into sluggish bones, also. Completing work actually is an amazingly exceptional and a monotonous connection. We will in general finish our work physically rather than just running a software which improves on the work.
The necessity for automation is a ton of key as it gives striking opportunities to people to mull over various critical things in their everyday presence than wasting energy on straightforward considerations. It will save broad time for people, who are enthusiastic about thinking on more huge musings.
'**Hey Buddy!**' is an instinctive voice-controlled virtual assistant. It is intended to be a conversational and two-way experience, and an including experience that loosens up across gadgets. It can viably play out these ordinary tasks with no botches. It will help the user get things done from scratch to an advanced level right away, saving time.

1.1 OBJECTIVE

One of the primary benefits of voice collaboration is their speed. Indeed, voice is presumed to be multiple times quicker than a composed correspondence. Though we can expound on 40 words each moment, we are equipped for talking around 150 during a similar time of time15. In this regard, the capacity of individual assistants to precisely perceive spoken words is a prerequisite for them to be taken on by users.
The main objective of building individual voice-controlled assistant is utilizing semantic information sources accessible on the web, user created content and giving information from information data sets. The primary purpose behind this smart virtual assistant is to make the user lead a more simple life by getting more advanced work done right away unlike the other existing voice assistants. ‘Hey Buddy!’ can colossally save you time, giving the user more chance to complete many tasks at a very short span of time.

1.2 MOTIVATION

It has become really difficult to achieve adequacy and relentless quality using manual work in the present world today. It requires more work to finish things physically. It might get difficult for people to stay aware of consistency in their work. This tedious cycle likewise add tension on individuals to finish the work without any errors. Individual voice help advancement is waiting. It opens up the human time and assets.

Furthermore, it can adequately play out all typical tasks with no bumbles. This will help people with achieving additionally created work achieving making lives more less complex in the state-of-the-art world.

1.3 PURPOSE, SCOPE AND APPICABILITY

PURPOSE

In truth, innovation has had a ton of effect in our general public, yet it has also changed people into lazy bones, as well. Nowadays, individuals don't have to get things done any longer. The functionalities being totally computerized to a voice-initiated individual right hand opens up the human time and assets.
In contrast to the other existing voice aides like Alexa, Google Assistant, and so on, this committed individual right hand assist individuals with accomplishing further developed work bringing about making lives more simpler in the cutting edge world.

SCOPE

Personal voice aides will keep on offering more individualized encounters as they improve at separating between voices. In any case, it's not simply designers that need to address the intricacy of creating for voice as brands likewise need to comprehend the capacities of every gadget and mix and on the off chance that it's a good idea for their particular image. They will also have to zero in on keeping a user experience that is reliable inside the coming a long time as intricacy turns out to be to a greater degree a worry. This is on the grounds that the visual interface with voice assistants is absent. Users essentially can't see or contact a voice interface.

APPLICABILITY

The mass reception of man-made brainpower in users' regular day to day existences is likewise energizing the shift towards voice. The quantity of IoT gadgets, for example, brilliant indoor regulators and speakers are giving voice aides greater utility in an associated user's life. Personal voice assistants help users lead an uncomplicated life, by helping them get things at ease right away.
Numerous industry specialists even anticipate that practically every application will incorporate voice innovation here and there in the following five years. The utilization of remote helpers can likewise improve the arrangement of IoT (Internet of Things). A long time from now, Microsoft and its rivals will offer individual advanced aides that will offer the administrations of a full-time worker typically saved for the rich and renowned.

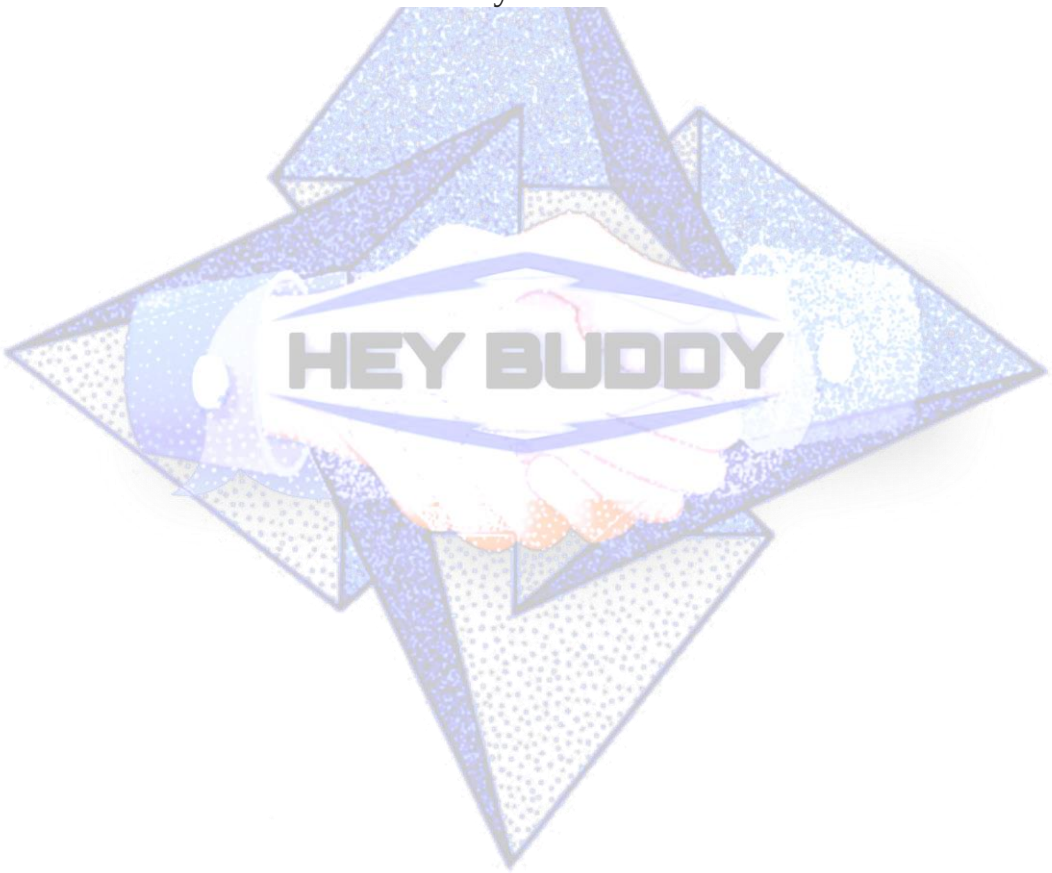
1.4 EXISTING SYSTEM

In India, it is hard to embrace the most recent innovation, yet its very truly challenging to accomplish effectiveness and unwavering quality utilizing manual work. Things are easy, we make them troublesome. We tend to get our work done manually instead of simply running a software which simplifies the work.

It takes more effort to get things done manually. It might get difficult for people to maintain consistency in their work. This time-consuming process also add pressure on people to get the work done error-free.

1.5 PROPOSED SYSTEM

'Hey Buddy!' is an interactive voice-controlled virtual assistant. It is intended to be a conversational and two-way experience, and an encompassing encounter that stretches out across devices. The functionalities being completely automated to a voice-activated personal assistant frees up the human time and resources. Additionally, it can effectively play out these commonplace errands without any blunders.
Unlike the other existing voice assistants (Eg: Alexa, Google Assistant, etc.), this dedicated personal assistant help people get more advanced work done resulting in making lives more easier in the modern-day world.



CHAPTER 2

SURVEY OF TECHNOLOGY

PYTHON

Python is an interpreted, object-arranged, undeniable level programming language with dynamic semantics. Its undeniable level underlying information structures, joined with dynamic composing and dynamic restricting, make it exceptionally alluring for Rapid Application Development, just as for use as a prearranging or paste language to associate existing parts together. Python's straightforward, simple to learn sentence structure underscores comprehensibility and in this way decreases the expense of program support. Python upholds modules and bundles, which empowers program particularity and code reuse. The Python interpreter and the broad standard library are accessible in source or binary structure without charge for every significant stage, and can be openly disseminated.

Frequently, coders fall in love with Python as a result of the expanded efficiency it gives. Since there is no arrangement step, the alter test-troubleshoot cycle is staggeringly quick. Troubleshooting Python programs is simple: a bug or awful info won't ever cause a division shortcoming. All things being equal, when the interpreter finds a blunder, it raises an exemption. At the point when the program doesn't get the special case, the interpreter prints a stack follow. A source level debugger permits examination of nearby and worldwide factors, assessment of subjective articulations, setting breakpoints, venturing through the code a line at an at once, on. The debugger is written in Python itself, vouching for Python's reflective force. Then again, regularly the speediest way of investigating a program is to add a couple of print articulations to the source: the quick alter test-troubleshoot cycle simplifies this methodology extremely successful.

CHAPTER 3

LITERATURE REVIEW

A computer basically based methodology for playing out an order through a voice purchaser interface on a subset of items. The subset is chosen from a items that are fixed, each having an item type. The arrangement of items is saved in the PC memory. An expression is procured from the individual. Receptive to the expression, at least one item is recovered from the arrangement of contraptions, the thing of the sort chose through the user. The item incorporates literary substance that is changed over to voice yield.

Nonetheless, discourse acknowledgment and machine becoming acquainted with have endured to be refined, and based records served through bundles and content suppliers have arisen. We concur with that as PC frameworks end up being more modest and more noteworthy, universal. The recognizer is intended to change a verbal explanation from a person into a substitute strategy for information (e.g., text).

This paper presents a intuitive voice-controlled remote assistant. It is planned to be a conversational and two-way experience, and an including experience that deliveries up across gadgets. It is intended to be easy to understand and can be effectively worked. It can sensibly play out standard undertakings with next to no screws up. It will help the users with completing things without any planning to a significant level quickly, saving time. It is featured by change of accuracy according to the user reactions.

This paper also presents the convenience of 'Hey Buddy!', voice-based personal virtual assistant. It can likewise read your messages, track your region, watch your history, if you empower it. It starts with the stray pieces, for instance, climate and informing, yet can go to a huge reach out from that point forward to help the user. The virtual associate is getting more capable reliably. By and by, the user can dispatch applications, and play music, answer questions, set updates, and many more. This significant conversational virtual assistant is fit at deciphering fundamental vernaculars.

It has been envisioned that someday the PCs will perceive normal language and rely on what we wanted, while and where we wanted it, and proactively entire obligations for our sake.

Virtual individual assistant, in present day, is acknowledged to be the brilliant progression of organizations to deal with the routinely extending request by the compact specialists for versatility and organization. As virtual assistants advance toward turning out to be more astute, there's a creating need to understand the security and assurance risks from this rising development. Every business visionary, multitasking proficient out there would adore to have a virtual assistant to go up against a part of the dull each day tasks that go with existing in the high level time.

CHAPTER 4

REQUIREMENT AND ANALYSIS

4.1 PROBLEM DEFINITION

Technology has made life easy, but it has made us all the more lazy. It requires more work to finish things manually. Humans tend to make simple things more problematic. The requirement for automation is much essential in the present world. Automation makes work less physically demanding, prompting quicker handling of voluminous errands and diminished turnaround timetables.

4.2 INFORMATION RETRIEVAL

This program includes various functions from scratch to an advance level in day-to-day life. The list below indicates the information about the functions(features) in several aspects of 'Hey Buddy' when asked by the user:

a) Self-Aspect:

- When Hey Buddy gets activated, the camera turns on, it then recognizes the user and greets the user by the name.
- Hey Buddy gives a brief introduction about itself.
- It tells its name when asked.
- It tells the user to which version it belongs to if asked.
- It asks the user if it has any work to do, if the user tells a 'no', then it exits from the system.
- The user need not keep addressing as 'Hey Buddy' for every service except the ones which are security concerned and at the time before the user's first command.
- It stops listening when asked to do so.
- Whenever the user thank the buddy, it tells 'You got it' with pleasure.
- It gets deactivated when said a 'Bye'.

b) Basic System Aspect:

- Hey Buddy does the Wikipedia search when asked for.
- It opens Stack Overflow if needed.
- It plays the downloaded songs if asked for offline music.
- It closes a program, window, tab, or document when needed.
- It opens Instagram if asked for.
- It opens personal or favourite websites when asked.
- It opens What's App web or What's App pc application if asked.

- It goes to the next song and plays it when needed.
- It mutes the media when asked for.
- It starts/stops typing and also performs enter, home, left, right, back, save, tab, caps lock, number lock functions when demanded.
- It goes back to the previous song/video if needed.
- It understands and performs all the different functions of the enter key accordingly when demanded.
- It does the page/desktop refresh when asked.
- It tells the time, day, week when demanded.
- It goes back to the previous/next page if needed.
- It performs the page up/page down when asked for.
- It takes the screenshot if asked.
- It scrolls the page frame when asked for move up/move down/move left/move right accordingly.
- It performs delete function when needed.
- It performs escape function if asked for.
- It opens the system notification when asked and also shows if the system is connected to WIFI and Bluetooth accordingly.
- It will minimize/maximize the applications when demanded.
- It creates a new folder when asked.
- It drags down all the opened application if demanded.
- It saves the image/song/video if asked for.
- It performs undo/redo function when needed.
- It opens the downloads in browser if asked.
- It activates/releases the alt button in order to go to the next tab when asked for.
- It also activates/release tab if needed.
- It performs the function of the space bar.
- It will minimize/maximize the current tab when demanded.
- It opens the PC when asked for.
- It opens a new tab if needed.
- It shutdown/restart the system when demanded.
- It opens the numbered tab when needed.
- It opens next/previous tab if asked.
- It closes the previous tab when demanded.
- It renames the folder when asked for.
- It clears all the content if demanded.
- It selects all the content when needed.
- It performs the functions of cut/copy/paste/print if asked for.
- It tells the internet speed of the system both in terms of megabyte and string when demanded.
- It opens Visual Studio Code when asked.
- It opens cmd when needed.
- It opens Firefox browser if asked.
- It opens the personal IP address of the system when demanded.

- It provides the options like project PC screen only/project duplicate screen/project extended screen/project second screen only and shares the screen according to the user's interest when asked for.
- It shows the QR Code of a particular page to the user if asked. When the user scans the provided QR Code, the user will be able to open that particular website.
- It opens the DuckDuckGo browser when asked.
- It clears the recycle bin if asked.
- It deletes the temporary files that the RAM holds when demanded.
- It will write down the notes when the user dictates.
- It will ask the filename in return to the user and read out that particular file when the user ask 'Open my notes'.
- It saves the note with the name of the user's choice.
- It will ask the filename in return to the user and deletes that particular file when the user demands 'Clear my notes'.
- It locks the PC when the user ask for.
- DuckDuckGo is the default browser.

c) Windows Aspect:

- Hey Buddy opens a full window, makes it a small window, goes to left/right when asked for.
- It completely closes the application that the user is currently using on the computer if asked.
- It opens window explorer when asked for.
- It opens a new window when needed.
- It opens next/previous window if demanded.
- It opens 'run' where we can view the inbuilt window features if asked.

d) Google/Chrome Aspect:

- Hey Buddy opens google if needed.
- It open/close chrome when needed
- It opens the chrome history when asked for.
- It clears the history if demanded.
- It goes to the home page when asked for.
- It takes the comment and does a quick search on that particular topic when needed.
- It opens the comment in the browser that the user has commented when the user ask 'Buddy, What should I search in Google?'.
- It opens incognito mode and can also open another tab in he same mode if demanded.
- Goes to the search bar when asked for.
- It will search for the topic when the user directly ask Google to do so.
- Google recognizer is being used.

e) YouTube Aspect:

- Hey buddy opens YouTube in browser when needed.
- It directly plays the song that the user wanted to.
- It does open/close of full screen when needed.
- It goes to the YouTube home page if asked.
- It copies the URL if needed.
- It will raise/reduce the volume when asked.
- It Auto plays the video if the user wanted to.
- It turns on the caption if needed.
- It opens the YouTube settings when demanded.
- It goes to the YouTube search bar if asked.
- It skips the ads if needed.
- It also removes screen ads and banner ads when in full screen if the user wanted to.
- It likes, dislikes, shares the video when demanded.
- It open/close the YouTube menu when needed.
- It opens the YouTube notification and turns on the bell icon when asked for.
- It logs out from YouTube if asked.
- It shows all the subscribed channels on the same page when asked and help the user in managing them.
- It sets the screen to mini screen mode or theatre mode if asked.
- It turns on the YouTube voice search when demanded.
- It saves the video to 'Watch Later' play list when asked.
- It opens the YouTube history and shows all the videos in the history if needed.
- It opens YouTube lite video when demanded.
- It opens all the trending videos along with their categories when needed.
- It opens the YouTube music page if asked.
- It opens YouTube, search for the user's interested topic and shows the result to the user when demanded.
- It will subscribe/unsubscribe to that particular YouTube channel if asked for.
- It opens the comment bar selecting the comment button, types the comment and post it if the user wanted to.
- It also cancels the comment if wanted to.
- It will open/close the video description when asked for show more/show less respectively.
- It directly downloads the video which is currently playing when asked for.
- It primarily converts the currently opened video into Mp3 format and then downloads it, when the user wants to download the video in Mp3 format.

f) Smart Book Aspect:

- Hey Buddy opens the personal Qinter tab in the system if demanded, where it loads PDFs in the choose PDF bar, extract the information and read out the details in terms of author name, creator name, producer name, subject details, title name and also the no of pages of that particular PDF when asked for.

4.3 HARDWARE AND SOFTWARE REQUIREMENTS

4.3.1 Hardware System Configuration:

- Processor - Intel Core i3
- Speed - 2.00GHz
- RAM - 8.00 GB
- Hard Disk - 500GB

4.3.2 Software System Configuration:

- Operating System - Windows 10
- Programming Language - PYTHON
- Database - MySQL

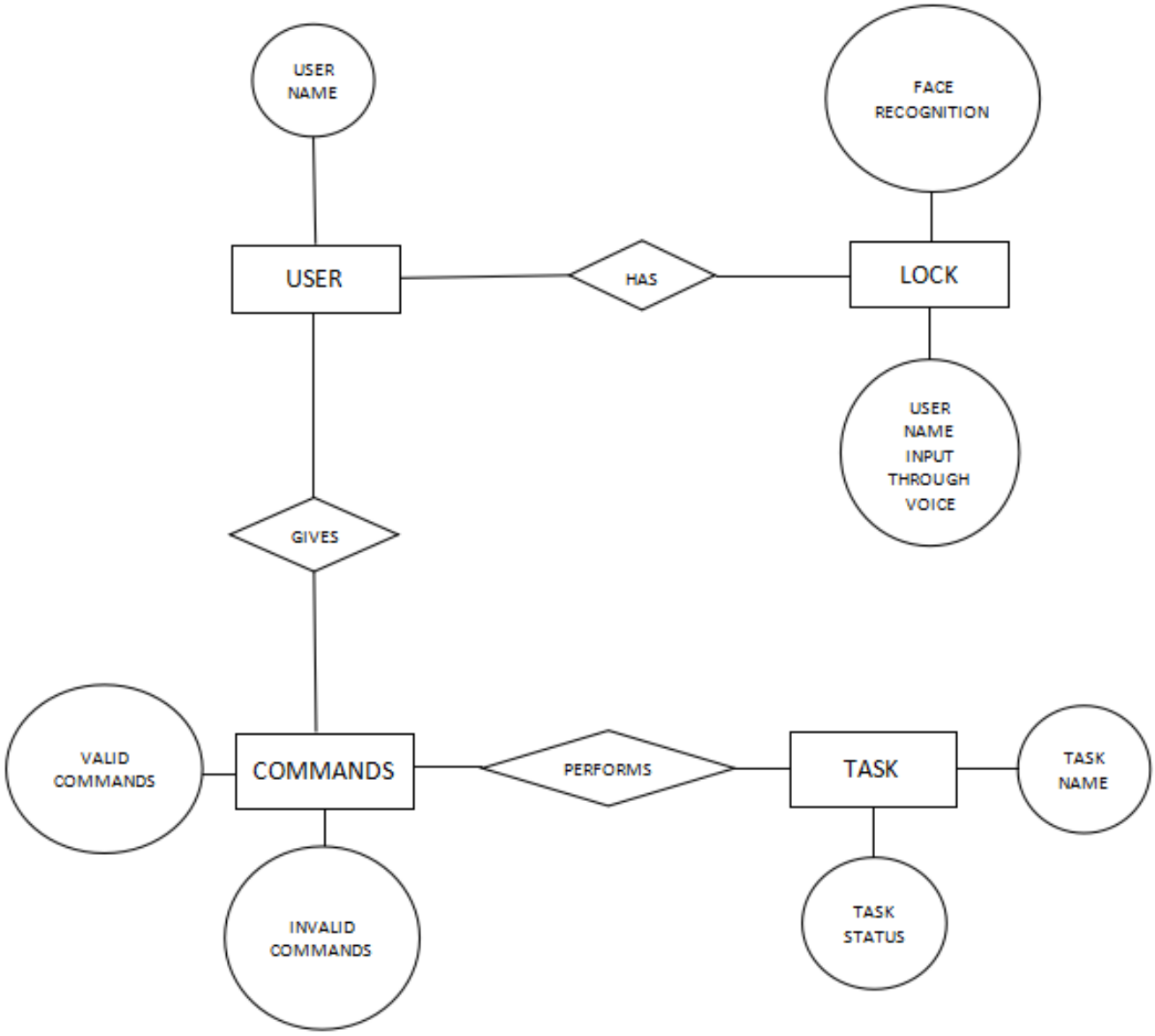
4.4 IMPLEMENTATION

The proposed model comprises of user input through microphone to acknowledge commands from the user. These commands then go through speech recognition, which is the ability of a machine or program to distinguish words and expressions in spoken languages and convert them to a machine-discernible format. 'Hey Buddy!', then checks whether it is an inquiry or an activity, in case it is an activity than the activity is performed by the voice associate and affirmation is given to the user through voice or on the other hand, in case it is an inquiry then it will search in dialog box or database and then respond by means of voice to the user. This dedicated voice assistant understands all the words expressed by the user, and in view of specific conditions that fulfill being a command, and sends the response to the user.

CHAPTER 5

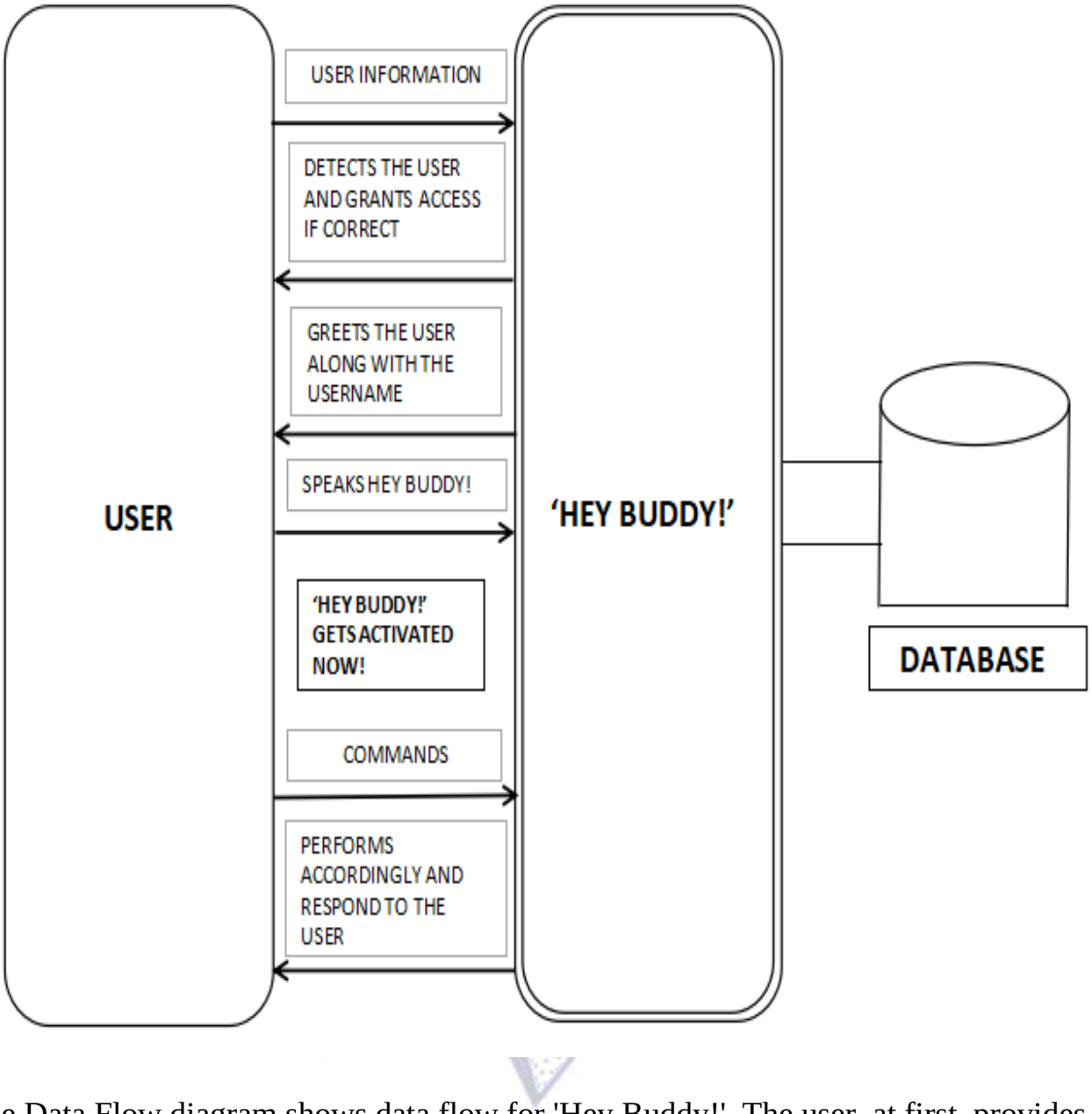
SYSTEM DESIGN

5.1 ER DIAGRAM



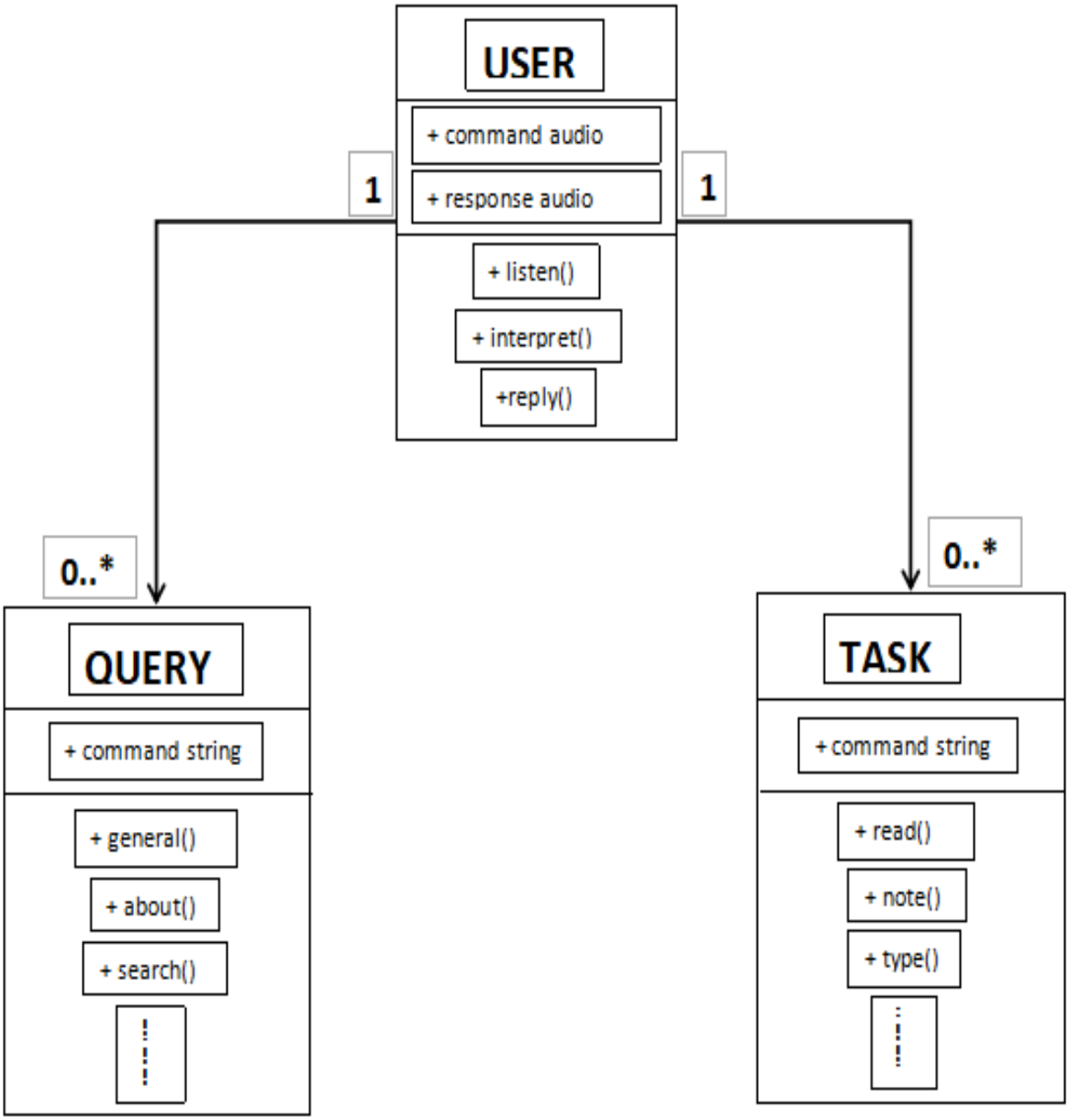
The ER diagram shows entities and their relationship for 'Hey Buddy!'. We have a user who has the username. It can be used to unlock the user using the face recognition lock and voice input of the username. The user gives commands to the virtual assistant which can be both valid and sometimes invalid. Based on the commands given by the user, the personal voice assistant performs tasks which has individual task name and task status and the respond to the user.

5.2 DATA FLOW DIAGRAM



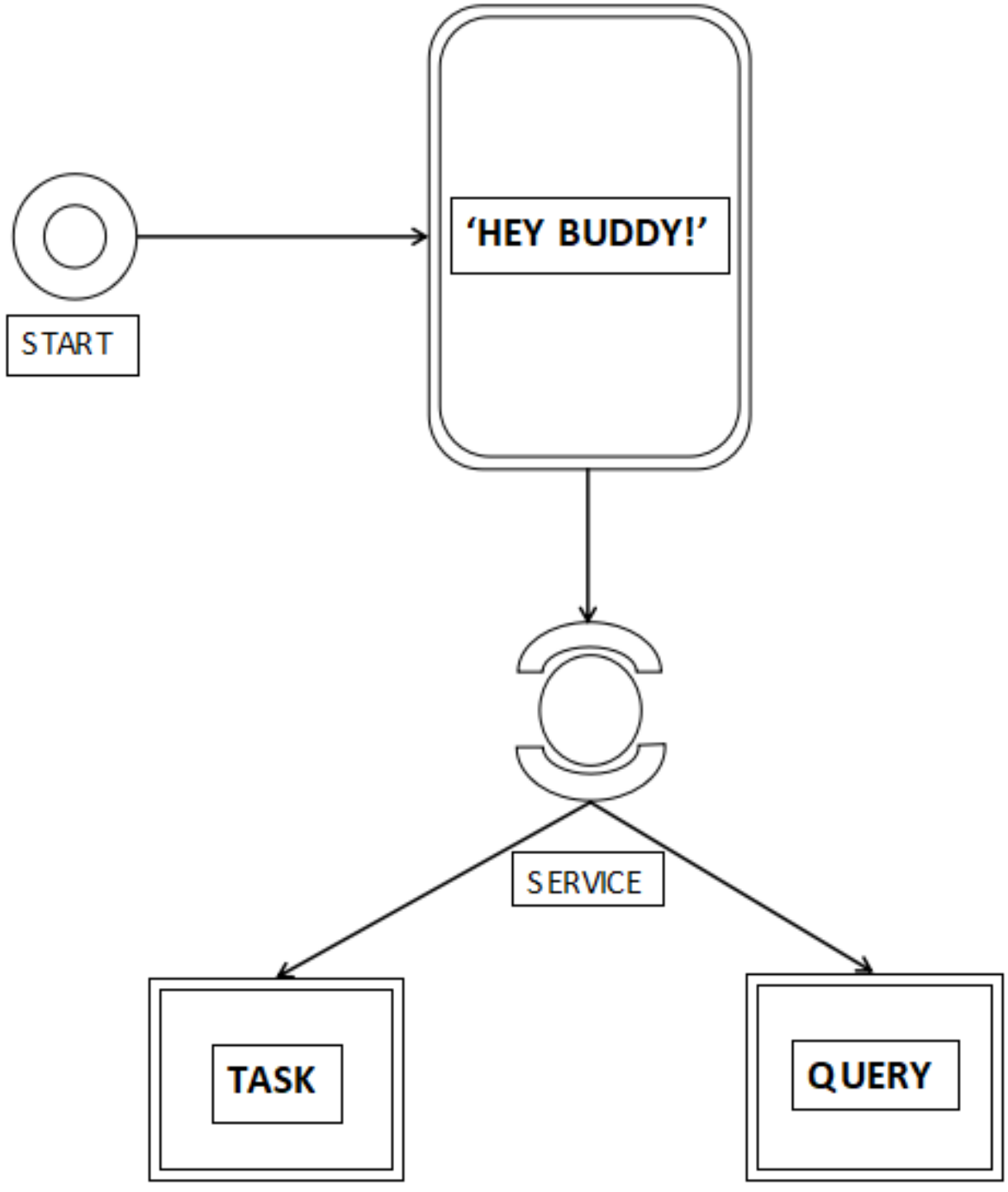
The Data Flow diagram shows data flow for 'Hey Buddy!'. The user, at first, provides the username to 'Hey Buddy!'. The virtual assistant detects the username and then grants access to the user if the username provided is correct. Once the access is being granted, the voice associate greets the user along with the provided username. At start, the user has to speak out 'Hey Buddy!' to activate our virtual voice aide. The personal virtual assistant now gets activated. The user can start shooting the command at this point and our personal virtual assistant performs accordingly.

5.3 CLASS DIAGRAM



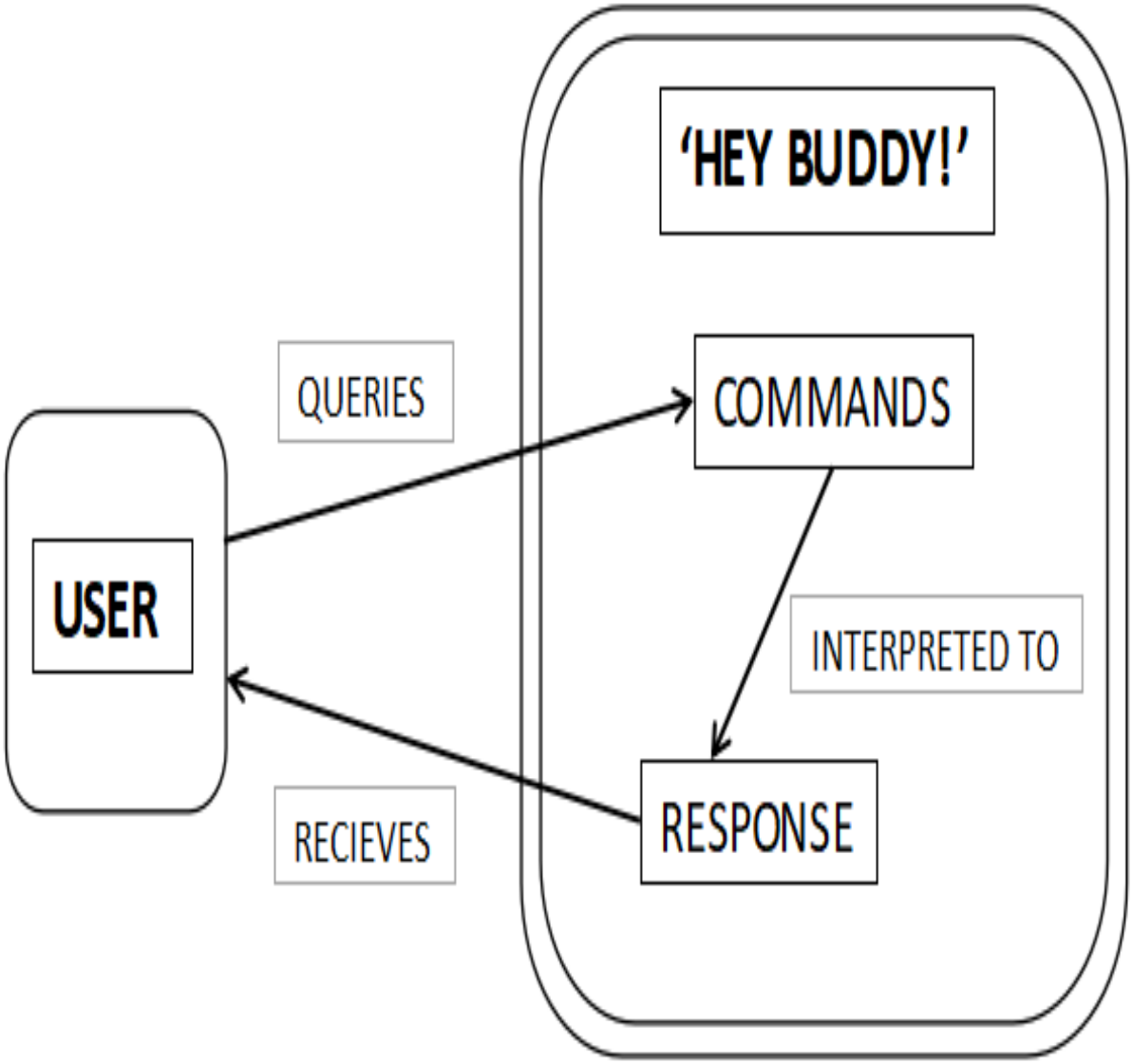
The Class diagram inform us that the class user has two attributes: commands that it sends in audio and the reaction it gets which is likewise audio. It performs function to listen the user command, interpret it and then answer or sends back reaction as needs be. Query class has the command in string structure as it is deciphered by interpreter class. It sends it to general or about or search function based on its identification. The task class likewise has deciphered order in string design. It has different capacities like read, note, type and henceforth forward.

5.4 COMPONENT DIAGRAM



The Component diagram disclose us that the principle component here is 'Hey Buddy!'. It offers two explicit assistance, executing tasks or answering the queries as per the user's needs.

5.4 USE CASE DIAGRAM



In this project, there is just a single user. The Use Case diagram illustrate us that the user queries commands to the framework. The virtual assistant then, at that point, deciphers and gets the appropriate response. The reaction is sent back to the user.

CHAPTER 6

RESULTS AND DISCUSSION

6.1 OPERATION

The means of operation for 'Hey Buddy!' will be through a set of commands that the user gives and it performs accordingly.
The following list consist of the commands and the respective functions that are performed by 'Hey Buddy!':

Basic commands:

- Command: Hey Buddy!
  Function: It's a wake-up keyword for this application. (App Activates)

- Command: Tell me about yourself.
  Function: Gives a brief introduction about itself.

- Command: what's your name?
  Function: Tells its name.

- Command: What's your version?
  Function: Tells which version it belongs to.

- Command: Don't listen or stop listening.
  Function: Stops listening.

- Command: Shut up or Sleep.
  Function: Gives a brief introduction about itself.

- Command: hey buddy.
  Function: This command is used to check whether hey buddy is still active or not.

- Command: Bye Buddy
  Function: Gets Deactivated.

OS Commands (Windows):

- Command: Open this PC
- Command: Close window
- Command: What's the time
- Command: What's the day
- Command: What's the date
- Command: What's the Week
- Command: Refresh
- Command: Open Downloads file
- Command: Open Documents file
- Command: Open Music file
- Command: Open Image file
- Command: Open Desktop file
- Command: Create new folder
- Command: Open windows (Explorer)
- Command: Cut
- Command: Copy
- Command: Paste

- Command: Save this
- Command: Find
- Command: Undo
- Command: Redo
- Command: Delete
- Command: Escape
- Command: move right
- Command: move left
- Command: move up
- Command: move down
- Command: page up
- Command: page down
- Command: next page
- Command: previous page
- Command: Select all
- Command: Clear all
- Command: Rename this folder
- Command: Next window

- Command: Minimize apps
- Command: Minimise current tab
- Command: Maximize current tab
- Command: Open new window
- Command: maximize apps
- Command: open system notification
- Command: Full volume
- Command: drag down all apps
- Command: Reduce volume
- Command: open run
- Command: open cmd
- Command: Project pc screen only
- Command: project duplicate screen
- Command: project extend screen
- Command: project second screen only
- Command: delete temporary files
- Command: open camera
- Command: Record video

- Command: Take a screenshot
- Command: open vscode
- Command: Hide this file
- Command: Open hidden files
- Command: read pdf
- Command: Full screen window
- Command: Full window
- Command: Half window
- Command: Left window
- Command: Right window
- Command: mute
- Command: type
- Command: Empty recycle bin
- Command: open settings
- Command: Lock my system
- Command: open task manager
- Command: shutdown the system
- Command: restart the system

Web Browser Commands:

- Command: open google
- Command: open chrome
- Command: open brave
- Command: open Firefox
- Command: open YouTube
- Command: open Instagram
- Command: open my college website
- Command: open whats app web
- Command: open full screen
- Command: close full screen
- Command: media on
- Command: media off
- Command: media next
- Command: refresh
- Command: open new tab
- Command: open previous tab
- Command: open next tap

- Command: open specific tab (e.g.: open tab number 4)
- Command: close tab
- Command: open new incognito
- Command: open new window
- Command: close window
- Command: open YouTube homepage
- Command: copy URL
- Command: auto play on /off
- Command: turn on caption/ turn off caption
- Command: open YouTube notifications
- Command: comment on this video
- Command: okay post this comment
- Command: No don't post this comment
- Command: Subscribe this channel
- Command: cancel the subscription
- Command: save this video (playlist)
- Command: remove screen ads / skip ads
- Command: give like to this video

- Command: dislike this video
- Command: change caption background
- Command: decrease font size
- Command: increase font size
- Command: open chrome search
- Command: next YouTube video
- Command: previous YouTube video
- Command: forward this video 5 seconds
- Command: rewind this video 5 seconds
- Command: video play
- Command: increase video volume
- Command: decrease video volume
- Command: skip 50% of this video
- Command: play again
- Command: skip to the end of this video
- Command: increase YouTube video speed
- Command: decrease YouTube video speed
- Command: change caption brightness

- Command: open subscribed channels
- Command: mini screen
- Command: theatre mode
- Command: exit theatre mode
- Command: turn on YouTube voice search
- Command: turn off YouTube voice search
- Command: open YouTube watch playlist
- Command: open YouTube history
- Command: open liked videos
- Command: open trending videos in YouTube
- Command: open YouTube music page
- Command: open Gmail
- Command: open colors kannada channel
- Command: hey google
- Command: ok google

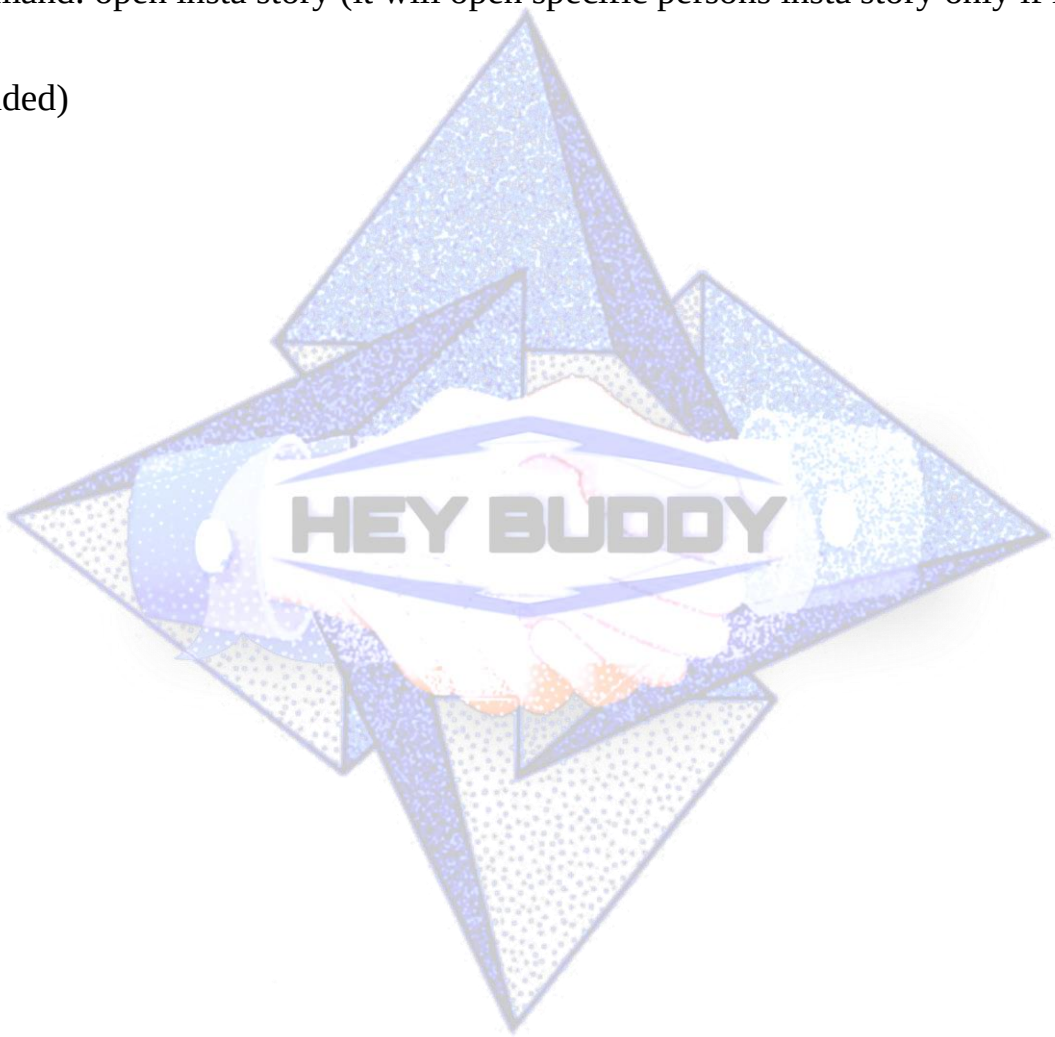
Special Commands:

- Command: Wikipedia search (and the topic)
- Command: open stack overflow
- Command: Download this video
- Command: I want this video in mp3 format
- Command: play [+ content] (online YouTube player audio or video)
- Command: open QR code of this page
- Command: close QR code
- Command: Search + [anything] +YouTube
- Command: search + [anything] + in google
- Command: [any song name] + in jio saavn
- Command: map from + [place1] + to +[place2]
- Command: Spotify play +[any song name]
- Command: what's my internet speed
- Command: what's the weather condition in [place name]
- Command: what's the petrol price. (Only Karnataka state price will be fetched)

Gets the information from **Economic-times** website.

- Command: favourite songs in jio saavn
- Command: get latest news updates (options: kannada or english)

  Gets the information from 60secondsnow.com website.
- Command: get some news updates (options: Kannada or English)
- Command: open insta story (it will open specific persons insta story only if its uploaded)



Phone Call commands:

- Command: call + [person name]
- Command: end call
- Command: mute call
- Command: on loudspeaker
- Command: unmute call
- Command: dial + [any Phone-No]
- Command: off loudspeaker
- Command: connect Bluetooth
- Command: disconnect Bluetooth
- Command: put the call on hold
- Command: Remove hold
- Command: Add call (conference call)
- Command: remove hold

Note:

If any bugs found in the current version **v1.0** will be fixed soon and more features will be added up soon in the upcoming versions **v2.0** of ***Hey Buddy!***

6.2 TEST CASE COMPOSITION

- **Test Case:** 1
- **Test Title:** Accuracy
- **Test Priority:** High
- **Test Objective:** To guarantee that answers retrieved by system are precise according to accumulated information.
- **Description:** A virtual associate is predominantly used to find exact solutions to any inquiry posed. Getting reply in a second is of no utilization if the appropriate response isn't right. Precision is of most extreme significance in a virtual assistant framework.

- **Test Case:** 2
- **Test Title:** Response Time
- **Test Priority:** High
- **Test Objective:** To ensure that the framework react back time is productive.
- **Description:** Time is exceptionally basic in a voice-based framework. As we are not composing inputs, we are talking to them. The framework should likewise answer in a second. User should get moment reaction of the inquiry made.

NOTE: There may incorporate a couple of more test cases and these test cases are likewise liable to change with the final programming improvement.

6.3 SUMMARY

Technology has made us lazy and unproductive due to its additional accommodations, holding us back from opening our maximum capacity. Finishing work physically is an extremely intense and a monotonous cycle. Automation, being a vital component is progressively planned in light of what individuals need.
‘Hey Buddy!', an instinctual voice-controlled assistant, can gigantically save you time, allowing the user greater opportunity to wrap up many tasks at an extremely limited capacity to focus time. One can depend on ‘Hey Buddy!’ without any second thoughts to finish your things without any preparation to a high level immediately, bringing about making life more simpler.

CHAPTER 7

ASSETS

Odds are good that we have all caught wind of or perhaps utilized voice assistant innovation in some structure. Driving tech-monsters have all dispatched items that help voice innovation. Some examples include Google's Assistant, Amazon's Alexa, Microsoft's Cortana, and, obviously, Apple's Siri.
As indicated by research on Juniper, about 3.25 billion voice associates being used currently and the numbers are ready to get to 8 billion individual voice collaborators being used by 2023. Presently with forward leaps in man-made consciousness assistive innovation, these voice collaborators are progressively helpful in big business settings In the beyond couple of years, more organizations have been investigating individual voice aide innovation for application advancement and tech-business. Incorporating the benefits, this has converted into an increment in use and mindfulness from shoppers. Worldwide reviewing company PwC, in ongoing exploration, expresses that from the 1000 shoppers (aged 18–64) addressed, the information about voice innovation was at 90% of the subjects, and a greater part (72%) had additionally utilized a voice assistant.

More entrepreneurs need to consider the different advantages they can get from the benefits of voice-actuated individual associate that are discussed underneath:

Offers 24/7 User Support

Users demand for round the clock support. Now and then there are occurrences when they need support at odd hours, and when help isn't free, it turns into a baffling encounter. To keep away from such circumstances, ‘Hey Buddy!’ prove to be useful. An advanced talking associate doesn't need any off days or wiped out leaves that intrude on client care and encounters.

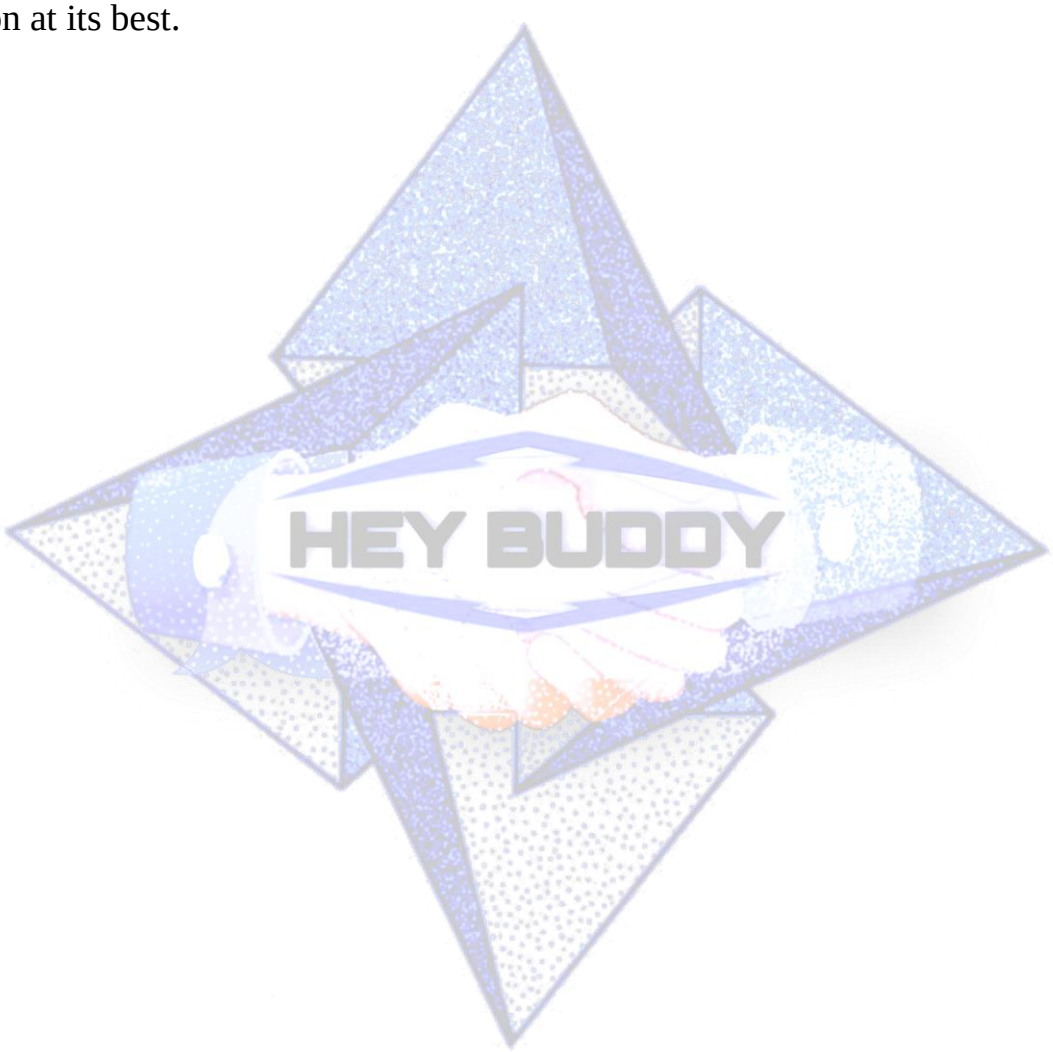
Saves Time via Automating Repetitive Tasks

Mechanizing rehashed undertakings to a voice-actuated individual aide opens up the human time and assets. Additionally, ‘Hey Buddy!’ can proficiently play out these unremarkable assignments without any mistakes, which regularly prompts an improvement in user satisfaction. While voice aides are passed on to manage routine undertakings, people can commit more opportunity to obligations where human intercession is needed for fruitful business arrangements and administrations.

Supports Hand-free Operation

Voice talking gives purchasers without hands admittance to many capacities since we just need the voice to actuate them. So it makes it simpler and quicker to do specific things. The research from PwC shows that users frequently utilize individual voice associates while doing different undertakings like cooking, staring at the TV, driving, and so forth.

The exploration additionally shows that few segment bunches think that it is not difficult to utilize voice help. Subsequently the high reception pace of voice innovation presents incredible potential and ‘Hey Buddy!’ assist the users with using the innovation at its best.



CHAPTER 8

THE SPOTLIGHT ZONE

'Hey Buddy!' is an intuitive voice-controlled virtual aide. It is proposed to be a conversational and two-way experience. The functionalities being totally computerized to a voice-actuated individual assistant opens up the human time and assets. Furthermore, it can viably play out these ordinary tasks with no botches.
In contrast to the other existing voice assistants (Eg: Alexa, Google Assistant, and so on), this committed individual assistant will make sure the user with finishing things without any preparation to a high level immediately, saving time. It assist the user with accomplishing further developed work bringing about making lives more straightforward in the cutting edge world.

'The Spotlight Zone' throws light on the highlights that makes 'Hey Buddy!' stand out from the rest of the existing virtual voice assistants which are as follows:

- ✧ 'Hey Buddy!' provides the user with the list of the short news both in English and Kannada languages that has been updated latterly. It reads out the latest news that is been updated and also provide the user with the information about how recently the news has been updated.

- ✧ 'Hey Buddy!' opens the status of any Instagram user that the user demands and can also open any Instagram user's profile and download the profile image or all the images uploaded in the profile based on the user's choice.

- ✧ 'Hey Buddy!' fetches the data from 'The Economic Times' and can provide the users with the latest petrol price.

- ✧ 'Hey Buddy!' opens the camera and can capture a photo or record a video as per the user's choice. It also provides the users with the countdown for few seconds before capturing the photo or recording the video.

- ✧ 'Hey Buddy!' has a Chat bot which understands the users queries when spoken and can answer accordingly.

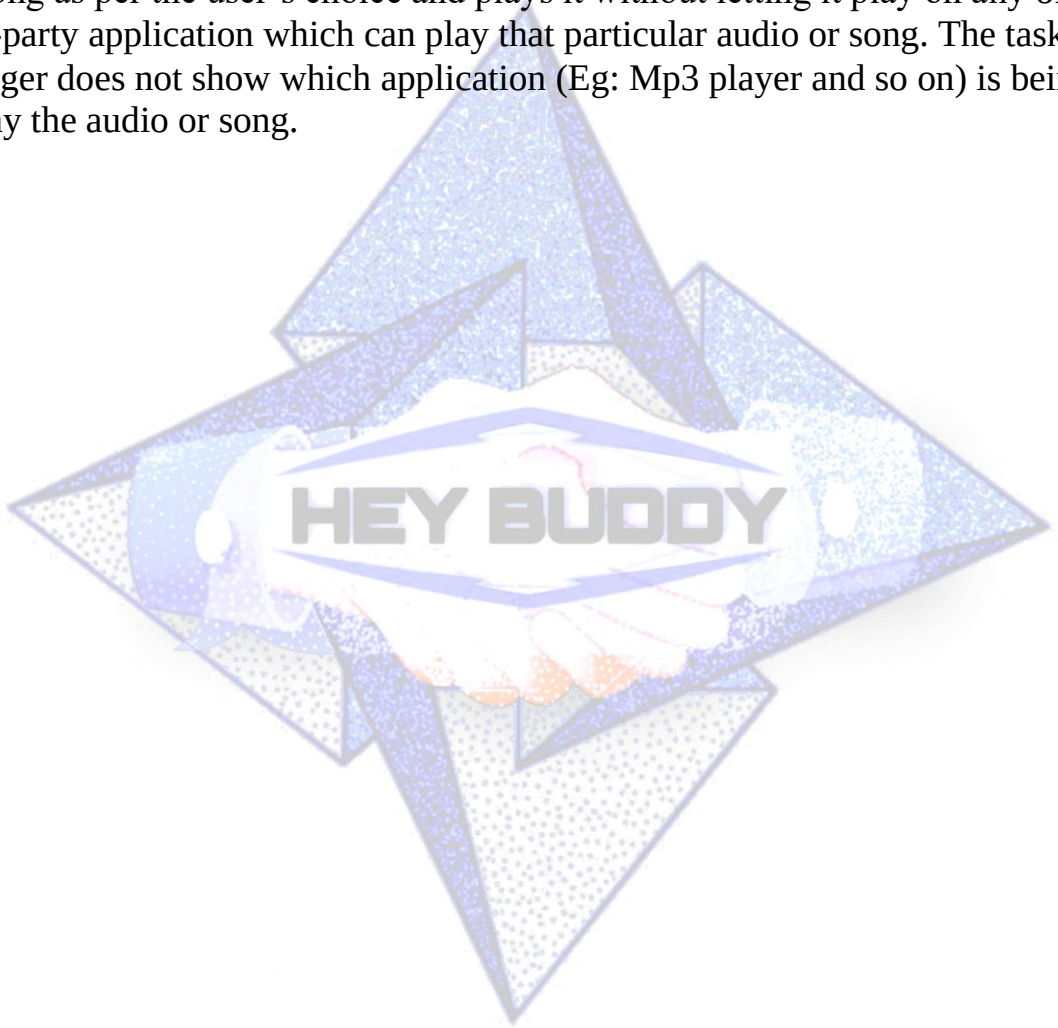
- ✧ 'Hey Buddy!' allows its users to send messages both on Whats App application and on Whats App web when needed.

- ✧ 'Hey Buddy!' sends good morning text through Whats App at allotted time in the morning to all the contacts on the user's mobile. (Only for Whats App Beta version users).

- ‘Hey Buddy!’ can transfer file of the user’s choice when the Bluetooth is on without scanning. The functionality being automated, it sends the file directly to the mobile when the user demands.

- ‘Hey Buddy!’ provides its users with the facility of dialling the contact of the user’s choice automatically from the mobile, when the command is given to the system by the user. The input and output of the call can be controlled by the user over the system through voice.

- ‘Hey Buddy!’ directly opens the terminal, provides the details about the audio or the song as per the user’s choice and plays it without letting it play on any of the third-party application which can play that particular audio or song. The task manager does not show which application (Eg: Mp3 player and so on) is being used to play the audio or song.



CHAPTER 9

‘HEY BUDDY!’ - THE FUTURE

Voice search is carried out as a two-stage search methodology where string competitors produced by an Automatic Speech Recognition (ASR) framework are re-scored to recognize the best coordinating with passage from a possibly exceptionally huge application explicit database. Study gives a genuine illustration of how extra space explicit information sources can be utilized with an area free ASR framework to work with voice admittance to online hunt files. As more information opens up for a given discourse acknowledgment task, the normal way of further developing acknowledgment International Journal of Engineering Research and Technology. Exactness is to prepare bigger acoustic models. There is a non-parametric experimental model that takes advantage of bountiful preparing information to straightforwardly learn articulation variation. Interpolating the observational model with a parametric model yields the best presentation, with a general improvement of 5.2% in WER over the standard.

There are various manners by which this work could be broadened. In the first place, closer integration with acoustic model preparing is probably going to yield sharper distributions and a more tight fit to the information. Second, assessing word elocution co-event includes in semi-regulated design (for example, through word acknowledgment rather than constrained arrangement) would expand its applicability to a wide scope of discourse types and assignments.

9.1 FUTURE SCOPE

Hey Buddy!'s version which is at present accessible is quick and responsive yet we actually need to go a long way. The agreement and unwavering quality of the current framework can be worked on a great deal. The voice assistant accessible may not be dependable in critical situations. The future will have the virtual assistants consolidated with Artificial Intelligence which incorporates Machine Learning, Neural Networks, and so forth and IoT. With the consolidation of these innovations, we will actually want to accomplish new statures. What the virtual assistants can accomplish is much beyond what we have accomplished till now. Most of us have seen Jarvis, that is a virtual assistant created by iron man which is albeit anecdotal yet this has set new standards of what we can accomplish utilizing voice-actuated virtual assistants.

9.2 PROPOSALS FOR FUTURE WORK

The present version of 'Hey Buddy!' is 1.0. Furthermore, we can implement new capabilities according to the demands of the world to come that polish up the performance. We can have the upcoming versions that includes various other functionalities like making new advancements in the design, optimizing the interface, expanding the database capacity, adding up additional features, enlightening the voice recognition and many more in order to make the user's life more effortless.

9.2.1 DESIGN ENHANCEMENT

No program has an ideal plan with no defects; it is something similar here in this program. Indeed, however the program is finished with every one of the essential functions carried out and work appropriately, there are as yet numerous things that should be possible with this program. As the future improvement, the potential work that can be implemented ranging from adding more functions to offering the user a more exhaustive, advantageous program, refining the logic to make the program more refined and simpler to utilize, increment the database capacity and add more potential keywords, responses and data in this program, interface optimization and so forth.

9.2.2 INTERFACE OPTIMIZATION

Interface enhancement, the interface can be further improved to make it pleasant to the users. As of now the interface configuration meets the fundamental necessity to present everything for this program, what's more, the users can interact with the program through this interface, however the interface can continuously be enhanced and more appropriately developed.

9.2.3 DATABASE LIMIT

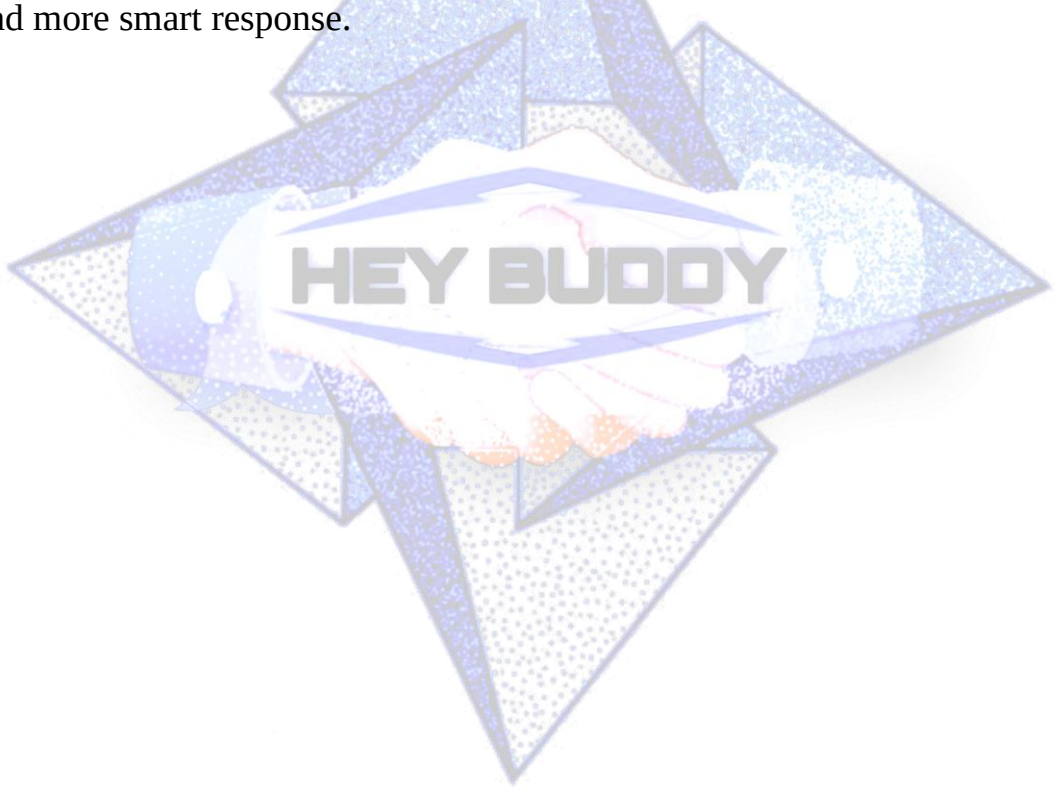
Add database limit and more adapted coherent plan; the program has a predefined logic to make it work with the corresponding commands. Subsequently, the user need to follow the design of the commands, contain the dedicated keywords and well formalize the commands to work with each of the functions. At the end of the day, the program is restricted by the database limit and no solution will be found if the user gives commands that are not comprehensible by the program. Regardless of whether two commands have a similar significance and ought to get precisely same outcome set, the outcome may be that of one is working and the other one falls flat. Thus, the program is somewhat restricted by the vocabulary and can be further optimized.

9.2.4 ADDITIONAL ASSIGNMENTS

Add more functions: in spite of the fact that there have been enough typical functions that are actually utilized regularly with the mobile phone, there can be more functions which simplify our daily life and make it convenient to use. Functions as playing films, checking stocks, installing applications and so on, these can be the potential functions that make the program more extensive and individuals can enjoy more services in this program.

9.2.5 VOICE RECOGNITION REFINEMENT

The more adapted the program is, more simpler the user can utilize it. Individuals ought to acknowledge that regardless of whether developers constantly attempt to add more predefined commands, more responses to it, to examine and respond to the command all the more shrewdly, the program will never be totally comprehensive and contains all possible conditions that the user meets. By and by, the program will surely be improved and be more user-friendly if there can be more legible commands, more humanized design and more smart response.



CHAPTER 10

CONCLUSION

Over the years and even presently, technology is making us lazy. It has made us apathetic and unproductive due to its additional comforts, holding us back from opening our maximum capacity. Essentially every part of our life has been encircled by the utilization of innovation and its advancements. Individuals are increasingly depending an excessive amount of on technology to thoroughly take care of them. Technology invention has also diminished our actual work which is making us languid. Manual errands squander your time to an extreme. Getting things done manually put squeeze on individuals to be right in all details of their work consistently. An individual's physical capabilities likewise account for human errors at work in a few instances. Automation takes the weight of repetitive, manual tasks off your hands. It frees up mankind to perform higher worth added work. This opens up individuals to zero in on the errands that require their consideration, rather than investing their energy doing monotonous things that can be better completed by a PC.

'Hey Buddy!' is an intuitive voice-controlled virtual assistant. It is planned to be a conversational and two-way experience, and an including experience that releases up across devices. It is designed to be user-friendly and can be easily operated. It can reasonably play out standard tasks without any bungles. It will assist the users with finishing things without any preparation to a high level immediately, saving time. It can hugely save you time, allowing the users to have greater opportunity to finish many assignments at an exceptionally limited ability to focus time, helping the users have a simple existence. This devoted individual aide assist individuals with accomplishing further developed work bringing about making lives more simpler in the advanced world.

CHAPTER 11

REFERENCES

- Beyond the Basic Stuff with Python by Al Sweigart
- Mastering Python by Rick van Hattem
- Advanced Python Development: Using Powerful Language Features in Real-World Applications by Matthew Wilkes
- Designing Personal Assistant Software for Task Management using Semantic Web Technologies and Knowledge Databases by Botla, Purushotham
- Python code for Artificial Intelligence: Foundations of Computational Agents by David L. Poole and Alan K. Mackwort
- JSON at Work by Tom Marrs
- JSON Book by Stevan Kellar
- PHP Black Book by Peter Moulding
- Modern PHP: New Features and Good Practices by Josh Lockhart.
- Expert MySQL by Charles Bell