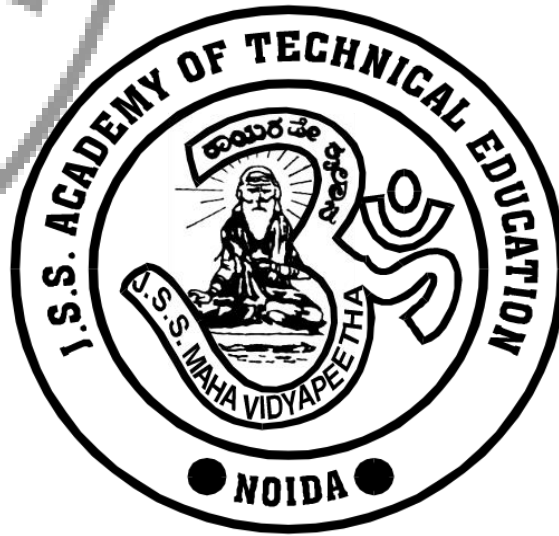


JSS MAHAVIDYAPEETHA



Mini Project / Internship Assessment

Subject Name: Mini project / Internship Assessment

Subject Code : KCS-354

COURSE: B.Tech.

SEMESTER: IIIrd

by

Sakshi Mishra (2000910100153)

**Department of Computer Science and Engineering
JSS ACADEMY OF TECHNICAL EDUCATION
C-20/1, SECTOR-62, NOIDA**

VISION AND MISSION

VISION OF THE INSTITUTE

JSS Academy of Technical Education Noida aims to become an Institution of excellence in imparting quality Outcome Based Education that empowers the young generation with Knowledge, Skills, Research, Aptitude and Ethical values to solve Contemporary Challenging Problems.

MISSION OF THE INSTITUTE

Develop a platform for achieving globally acceptable level of intellectual acumen and technological competence

Create an inspiring ambience that raises the motivation level for conducting quality research

Provide an environment for acquiring ethical values and positive attitude

VISION OF THE DEPARTMENT

“To spark the imagination of the Computer Science Engineers with values, skills and creativity to solve the real-world problems.”

MISSION OF THE DEPARTMENT

To inculcate creative thinking and problem-solving skills through effective teaching, learning and research.

To empower professionals with core competency in the field of Computer Science and Engineering.

To foster independent and lifelong learning with ethical and social responsibilities.

PROGRAM OUTCOMES (POs)

Engineering Graduates will be able to:

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM EDUCATIONAL OUTCOMES (PEOs)

PEO1: To empower students with effective computational and problem-solving skills.

PEO2: To enable students with core skills for employment and entrepreneurship.

PEO3: To imbibe students with ethical values and leadership qualities.

PEO4: To foster students with research-oriented ability which helps them in analyzing and solving real life problems and motivate them for pursuing higher studies.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: An ability to apply foundation of Computer Science and Engineering, algorithmic principles and theory in designing and modeling computation-based systems.

PSO2: The ability to demonstrate software development skills.

COURSE OUTCOMES (COs)

C224.1	Undertake problem identification, formulation and design a solution
C224.2	Solve the real-world problems effectively and adapt with real life working environment.
C224.3	Acquire skills and knowledge on latest tools and technologies
C224.4	Develop effective communication skills for presentation of project related activities
C224.5	Effectively communicate solution to problems through technical reports

CO-PO-PSO MAPPING

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
C224.1	3	3	3	3	2	3	3	3	3	3	2	3	3	3
C224.2	3	3	3	3	3	3	3	3	3	2	3	3	3	3
C224.3	2	2	3	3	3	2	3	3	3	1	2	3	3	3
C224.4	2	2	2	2	2	2	2	2	2	3	2	3	2	2
C224.5	2	2	2	2	2	2	2	2	2	3	2	3	2	2
C224	2.40	2.40	2.60	2.60	2.40	2.40	2.60	2.60	2.60	2.40	2.20	3.00	2.60	2.60

DECLARATION

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgment has been made in the text.

Signature:

Name : Sakshi Mishra

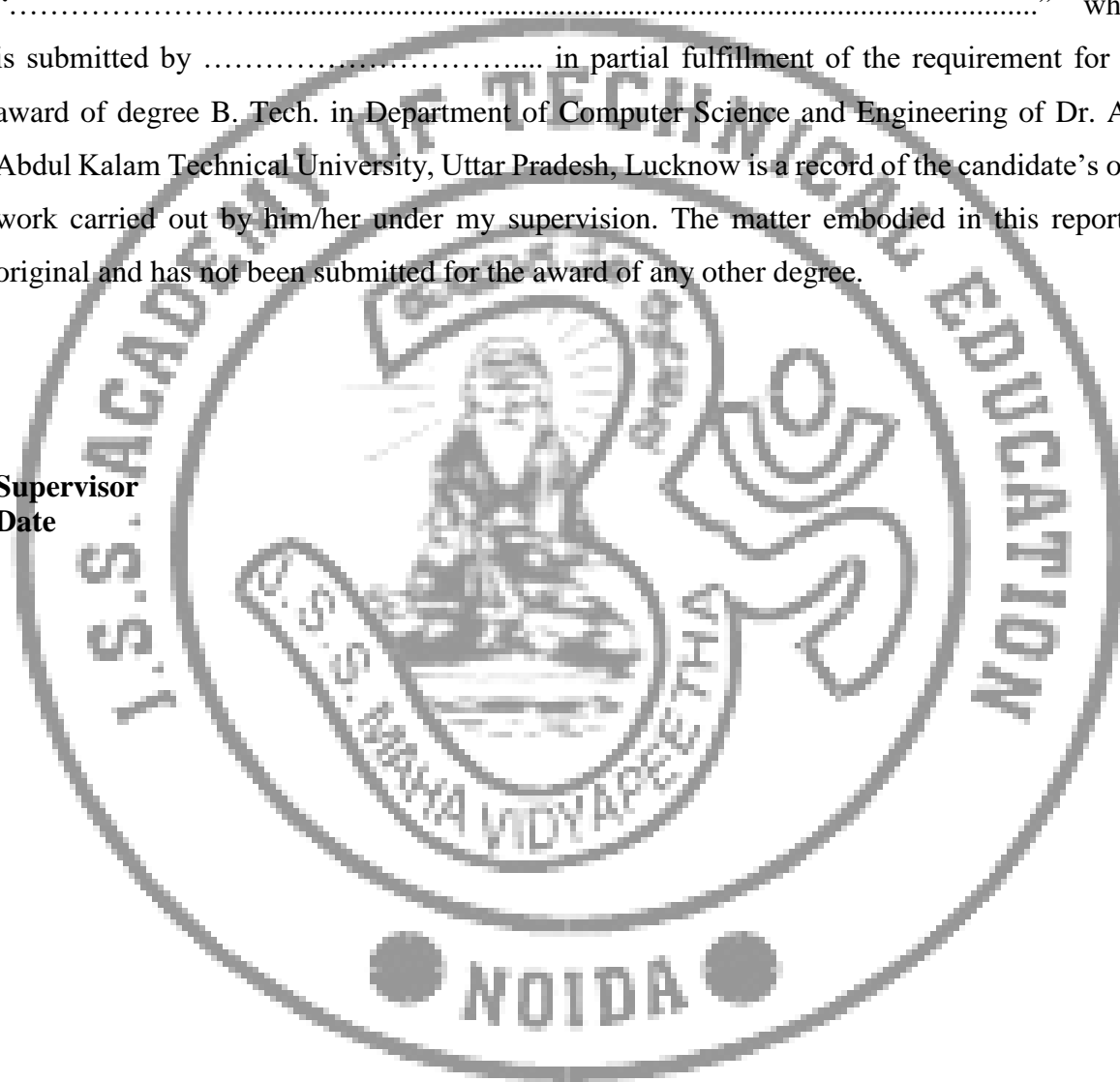
Roll No.: 2000910100153

Date : 16. February. 2022

CERTIFICATE

This is to certify that Mini Project/Internship Assessment Report entitled “.....” which is submitted by in partial fulfillment of the requirement for the award of degree B. Tech. in Department of Computer Science and Engineering of Dr. APJ Abdul Kalam Technical University, Uttar Pradesh, Lucknow is a record of the candidate’s own work carried out by him/her under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

**Supervisor
Date**



Guidelines For Preparing Mini Project / Internship Assessment Report

The following guidelines must be followed while preparing the Mini Project/Internship Assessment report:

1. The report should not exceed 20 to 25 pages and should be spiral bound.
2. Photocopy of Training Certificate must be attached in the report and its original must be carried in person at the time of presentation.
3. The report must be printed on A-4 sheet.
4. The report should have the following page margins:
 - i. Top Margin: 3.5 cm Bottom margin: 2 cm
 - ii. Left Margin: 3 cm Right Margins: 2 cm
5. The report should be typed in Times New Roman with all headings in font size 14 (Bold), subheadings in Font size 12 (Bold) and running matters in font Size 12, typed neatly on one side of the page with 1.5 line spacing & justified, with page numbers on the bottom center of the page.
6. Font size of the figure and tables captions must be 10 points
2. Each chapter must begin on a new page and be centered using the Font Size 16 with Bold Face and uppercase letter.
3. The title of the Chapter must reflect the content of the text that follows.
4. Provide three blank lines after the chapter name.

Second Headings must be towards left margin and be typed in Sentence case letters; i.e., the first letter of each word except conjunctions, prepositions, and articles must be a capital letter.
5. All figures should be numbered and cited consecutively in the text as Figure 2.1, Figure 2.2, to indicate the first and second figures in Chapter 2 respectively with title **below** the figure. Similarly, it is the case with tables such as Table 3.1, Table 3.2, etc with title **above** the table. Figures and tables must be center aligned.
6. The preliminary section, including the title page; copyright page, if any; foreword, preface, or acknowledgements; table of contents; etc., should be numbered, using lower case Roman Numerals, e.g., i, ii, iii, etc. The title page counts as Page i, but the number does not appear.

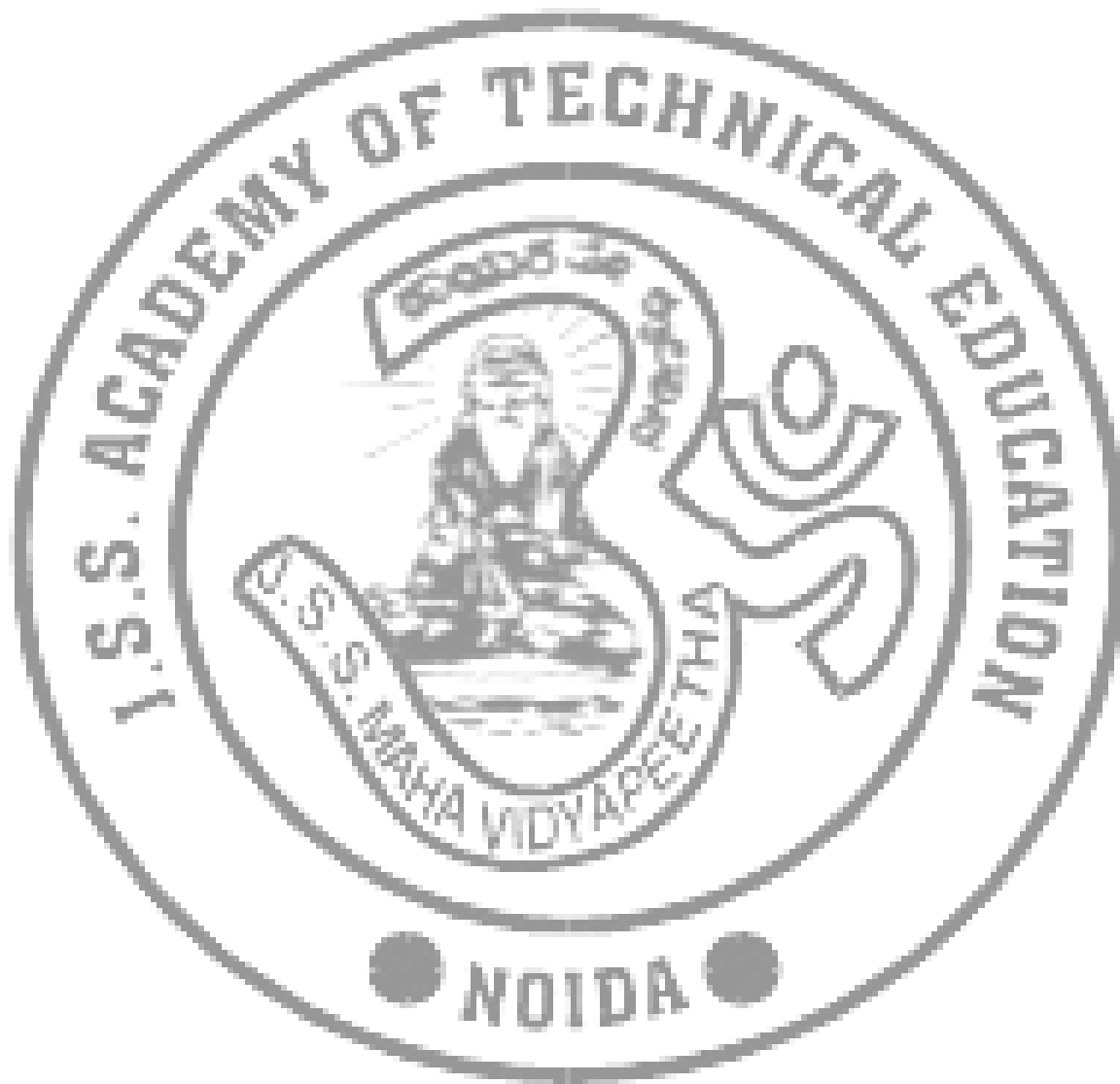
The sequence of the preliminary section is as follows:

1. Cover Page
2. Preliminary Pages
 - i. Certificate by Company/Industry/Institute
 - ii. Declaration by student
 - iii. Acknowledgement
 - iv. Abstract
3. About Company/Industry/Institute
4. Table of Contents
5. List of Tables
6. List of Figures
7. Abbreviations and Nomenclature (If any)
8. Chapters
 - 1 **Introduction: Following content points are to be specified:** at least 5-8 pages
 - ✓ Summary of the training and/or the project done at the company.
 - ✓ Specify your role in the training project (if any).
 - ✓ Information regarding Project background and project goals are to be elaborated.
 - 2 **Tools & Technology Used:** at least 5-8 pages
 - ✓ Explain about the tools and technology learned in the training incorporating the following queries.
 - ✓ Is there any alternative technology/tool that could have been used?
 - ✓ Why the technology was preferred?
 - ✓ Briefly layout a comparative study of the various technologies.
 - 3 **History and features of the technology:** at least 7-10 pages
 - ✓ History of the technology used.
 - ✓ Features of the technology.
 - ✓ Discuss the paradigm shift (need and the added features).
 - 4 **Work Done:** at least 10 pages
 - ✓ Diagrammatic Representation of the Project
 - ✓ Use Case Diagram
 - ✓ Data Flow Diagram (Level 0, Level 1, Level 2 DFD)
 - ✓ Module Information
 - ✓ Share the screenshots of the actual work done during the course of training.
 - ✓ Each screenshot should be accompanied with an elaborate discussion pertaining to:
 - ◆ Feature of the technology/tool.
 - ◆ Application of the tool/module in the project.
 - ◆ Integration with other modules of the project.
 - ◆ Inputs and Outputs.
 - 5 **Conclusions and Future Scope:** at least 3 pages
 - ✓ Conclude with explaining how the learned technology/tools shall be used in the scope of your final year major project.
 - ✓ Specify the Industrial Relevance of the Technology used.

- ✓ Specify the Societal Relevance and Impact of the Project.
- ✓ Future Scope of the Project.

9. References

10. Appendices (If any)



ACKNOWLEDGEMENT

It is indeed a great pleasure to express our sincere thanks to our august supervisor Mr. Harsha KG , Department of Computer Science Engineering of JSS Academy of Technical Education, Noida for his continuous support in this project. He was always there to listen and to give advice. He showed us different ways to approach a research problem and the need to be persistent to accomplish any goal. He taught us how to write academic paper, had confidence in us when we doubted ourselves, and brought out the good ideas in us. He was always there to meet and talk about our ideas, to proofread and mark up our paper, and to ask us good questions to help us think through our problems. Without his encouragement and constant guidance, we could not have finished this project.

We are thankful to our family whose unfailing love, affection, sincere prayers and best wishes had been a constant source of strength and encouragement.

Last, but not least, we thank our parents, for giving us life in the first place, for educating us with aspects from both arts and sciences, for unconditional support and encouragement to pursue our interests. We dedicate this work to our parents who will feel very proud of us. They deserve real credit for getting us this far, and no words can ever repay for them.

Table of Content

1. Introduction

Summary of the training and/or the project done at the company.
Information regarding Project background and project goals are to be elaborated.

2. Tools & Technology Used

About the tools and technology learned
Alternative technology/tool that could have been used
Why the technology was preferred?
Briefly layout a comparative study of the various technologies.

3. History and features of the technology

History of the technology used.
Features of the technology.

4. Work Done: at least 10 pages

Diagrammatic Representation of the Project
Data Flow Diagram
Module Information
Screenshots of the actual work done
Each screenshot should be accompanied with an elaborate discussion pertaining to:

- ◆ Feature of the technology/tool.
- ◆ Application of the tool/module in the project.
- ◆ Integration with other modules of the project.
- ◆ Inputs and Outputs.

5. Conclusions and Future Scope

Conclusion
Industrial Relevance of the Technology used.

6. Future Scope of the Project.

7. References

Introduction

The healthcare sector is very much associated with human interaction, and it seems contrary to intuition that conversational AI applications like chatbots are more prevalent. Hospital administrators are spending their day in appointment scheduling and answering routine questions of patients. Continuing or repeating the same actions and words is neither necessary nor productive. Such jobs can be easily done with bot applications. It is obvious that patient feedback assessments are also possible by collecting user responses to maintain good patient flow. In the occurrence of serious pandemics like novel Coronavirus (COVID-19), health bots are beneficial as a supplement to personal clinical care or immediate medications.

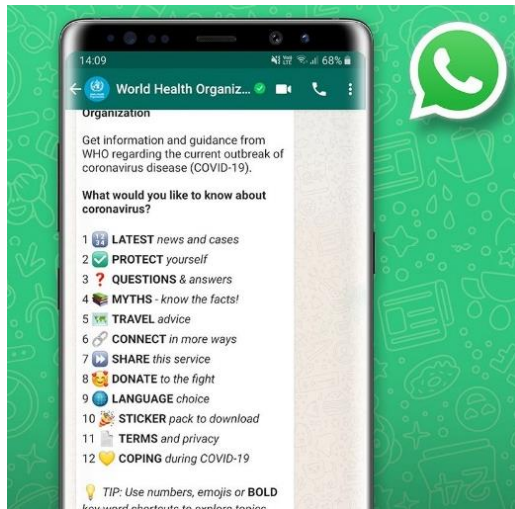


1.1 Purpose

Therefore, our proposed personal health chatbot for rural patients will act as a medical consultant, and also provides simple and relevant measures of not being infected by COVID-19. Another advantage of this bot includes 24/7 accessibility and assesses the patient's condition in a more human-like way.

1.2 Previous work

There are many established organisations working on these technology since the rise of COVID-19. The World Health Organization (WHO) has launched a dedicated messenger app in seven languages to keep the public safe from coronavirus infection^[1]. Similarly the German government developed a 'fight COVID messenger bot', the Bangladesh based SAJIDA Foundation developed an COVID-19 information bot with a symptom checker and explanations of preventive measures^[2]. In India, the Aarogya Setu mobile app has been recently developed to create awareness of COVID-19 with the parallel connection of a chatbot^[3].



The World Health Organization (WHO) messenger app and the Aarogya Setu mobile app

1.3 Functional Requirements

The Chatbot should be able to:

- Help people understand and accept the coronavirus quarantine in order to limit the quickly spread of the viral disease
- Raise awareness but also share reassuring messages to take the required precaution actions
- Tell both uninfected and infected people what to do to protect themselves and their entourage from more infections.
- Answer all queries/FAQ related to COVID-19.
- Show statistics worldwide, Country wise, Indian State.
- Give helpline number regarding COVID-19.

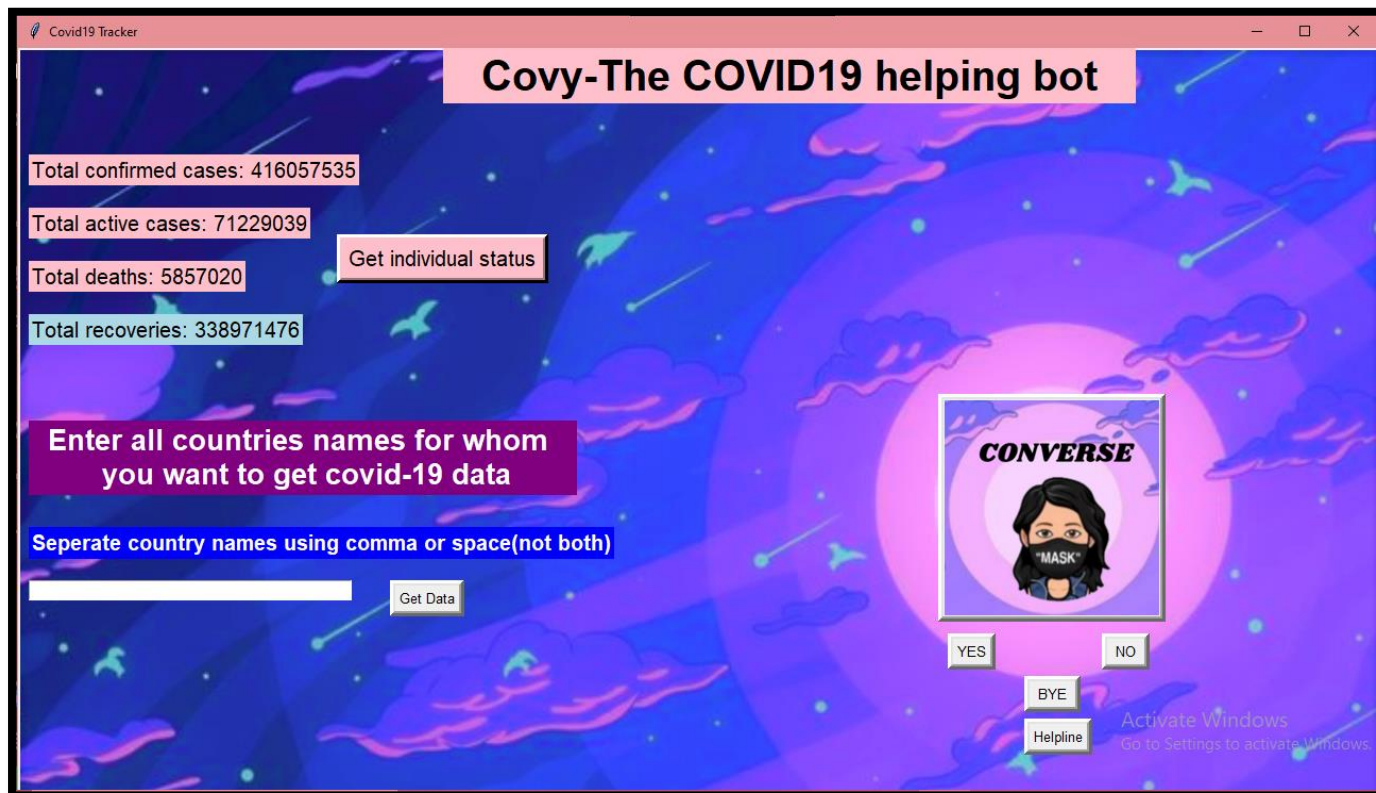
1.4 Non-functional Requirements

- Reliability :- The reliability of the overall program depends on the reliability of the separate components.
- Availability :- The system should be available at all times, meaning the user can access it using a web browser, only restricted by the down time of the server on which the system runs.
- Security – No loss of privacy or other information of the user.
- User Friendly- The GUI should be very user friendly and understandable by any age use.

1.5 COVY- The COVID 19 helping bot (Self designed)

A name is more than just a word, naming your own designed stuff brings a feeling of affinity. All the projects till date have a specific name according to their native language, their capabilities or purpose they serve. While designing the this bot I came up with the name COVY. The name is actually of Irish origin meaning "**victorious**". Variously spelled Covy and Covey. Also the named sounds similar to the COVID 19 pandemic hence reflecting the need to be designed.

Covy- The COVID helping Bot, is a technology designed for the Covid 19 virus awareness. The software takes user input through the keyboard , while the voice output takes place at the speaker. It is a combination of several different technologies: Graphical User Interface, voice analysis and text to speech conversion.



2.Tools & Technology Used

- Python
- Python Libraries
 - Tkinter
 - Matplotlib
 - Pytsx3
 - Covid

What is a Graphical User Interface?

A **GUI** (graphical user interface) is a system of interactive visual components for computer software. A GUI displays objects that convey information, and represent actions that can be taken by the user. The objects change color, size, or visibility when the user interacts with them.^[5]

Python provides various options for developing graphical user interfaces (GUIs). Most important are listed below.

- **Tkinter** – Tkinter is the Python interface to the Tk GUI toolkit shipped with Python. We would look this option in this chapter.
- **wxPython** – This is an open-source Python interface for wxWindows
- **JPython** – JPython is a Python port for Java which gives Python scripts seamless access to Java class libraries on the local machine
-

Comparison with other technology

Properties	wxPython	tkinter
Features	Externalizes the layout classes in its sizer hierarchy, whereas tkinter internalizes layout so that each widget manages its own children using a variety of policies, of which grid is just one.	Does away with all that by hiding layout policy behind the widget interface. You just add children to their parent's grid. You don't have to create the grid sizer, add the children to it, and then set it as the sizer on the parent.
Speed comparison	6 seconds	1 second

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.

Tkinter Widgets- Tkinter provides various controls, such as buttons, labels and text boxes used in a GUI application. These controls are commonly called widgets.

Geometry Management

All Tkinter widgets have access to specific geometry management methods, which have the purpose of organizing widgets throughout the parent widget area. Tkinter exposes the following geometry manager classes: **pack, grid, and place**^[6]

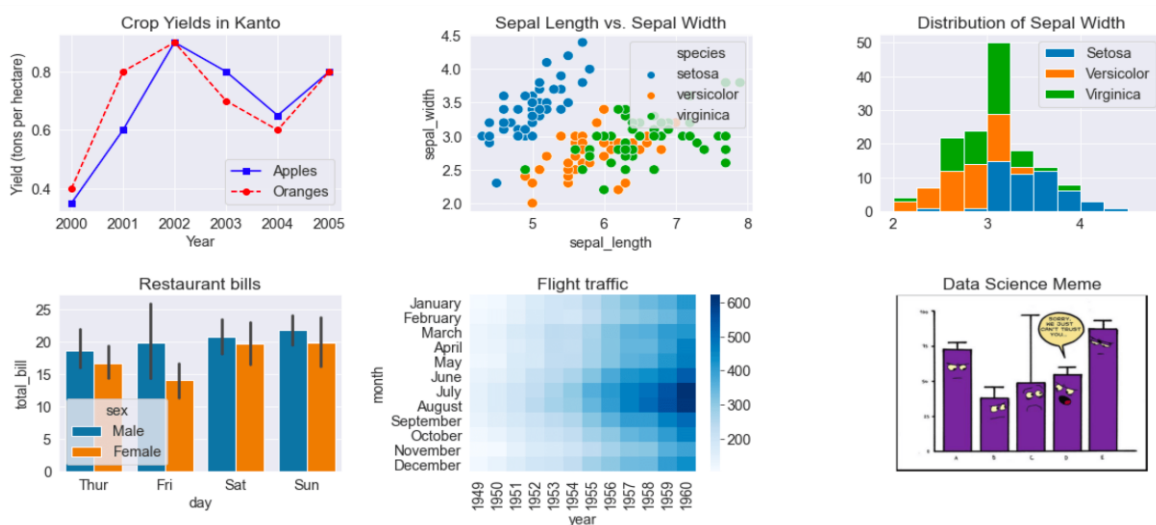
Standard attributes

Some common attributes such as sizes, colors and fonts are specified.

- Dimensions
- Colors
- Fonts
- Anchors
- Relief styles
- Bitmaps
- Cursors

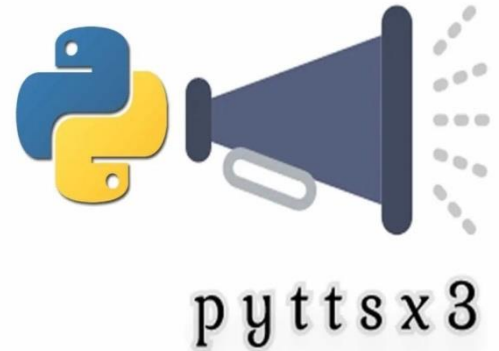
Matplotlib: Visualization with Python

Matplotlib is a comprehensive library for creating static, animated, and interactive visualizations in Python. Matplotlib makes easy things easy and hard things possible.^[7]



Pyttsx3

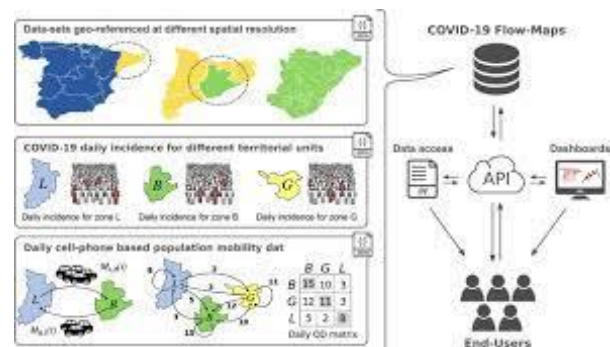
pyttsx3 is a text-to-speech conversion library in Python. Unlike alternative libraries, it works offline and is compatible with both Python 2 and 3. An application invokes the `pyttsx3.init()` factory function to get a reference to a `pyttsx3`. Engine instance. it is a very easy to use tool which converts the entered text into speech. The `pyttsx3` module supports two voices first is female and the second is male which is provided by “sapi5” for windows. It supports three TTS engines :^[8]



- *sapi5* – SAPI5 on Windows
- *nsss* – NSSpeechSynthesizer on Mac OS X
- *espeak* – eSpeak on every other platform

Covid Library in Python

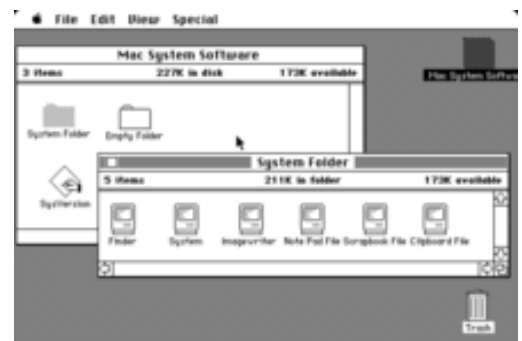
It is a Python package to get information regarding the novel corona virus provided by Johns Hopkins university and worldometers.



History and features of the technology

Graphical User Interface

The history of the graphical user interface, understood as the use of graphic icons and a pointing device to control a computer, covers a five-decade span of incremental refinements, built on some constant core principles. Several vendors have created their own windowing systems based on independent code, but with basic elements in common that define the WIMP "window, icon, menu and pointing device" paradigm.



There have been important technological achievements, and enhancements to the general interaction in small steps over previous systems. There have been a few significant breakthroughs in terms of use, but the same organizational metaphors and interaction idioms are still in use. Desktop computers are often controlled by computer mice and/or keyboards while laptops often have a pointing stick or touchpad, and smartphones and tablet computers have a touchscreen. The influence of game computers and joystick operation has been omitted.^[9]

Python History and Versions

Python laid its foundation in the late 1980s. The implementation of Python was started in December 1989 by **Guido Van Rossum** at CWI in Netherland. In February 1991, **Guido Van Rossum** published the code (labeled version 0.9.0) to alt.sources. In 1994, Python 1.0 was released with new features like lambda, map, filter, and reduce. Python 2.0 added new features such as list comprehensions, garbage collection systems. On December 3, 2008, Python 3.0 (also called "Py3K") was released. It was designed to rectify the fundamental flaw of the language. *ABC programming language* is said to be the predecessor of Python language, which was capable of Exception Handling and interfacing with the Amoeba Operating System. The following programming languages influence Python:^[10]

- ABC language.
- Modula-3

Text To Speech Conversion

Using computers to synthesize speech isn't new. The first successful use case of Text To Speech synthesis occurred using a hulky room sized IBM computer at Bell Labs in the late 1960s when researchers recreated the song "Daisy Bell," but the audio quality remained an issue for decades. It wasn't until the modern revolution of Machine Learning and advances in Deep Neural Networks (DNNs) that this domain was transformed, and algorithms could give rise to human-sounding synthetic speech. A host of new audio use cases is now possible and scalable.^[11]

Text To Speech Use Cases

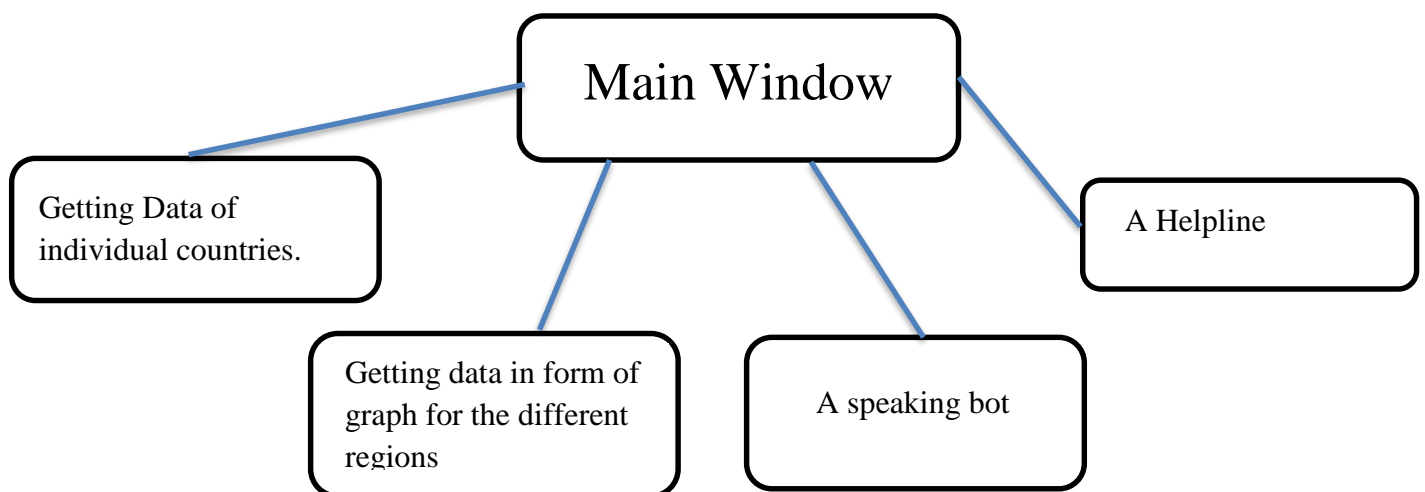
- Personal Virtual Assistant
- Creating your own audiobook/podcast
- Speech-enabled websites
- Unique NPC Game Player Voices
- Free open source way to help users with speech disabilities communicate freely
- Computer Literacy Support Tools

Work Done

This project is a GUI inbuilt with a text to speech convertor using pyttsx3 (text to speech convertor) That can be installed in a bot. The program converts the Covid 19 spread prevention instruction in text format into speech.

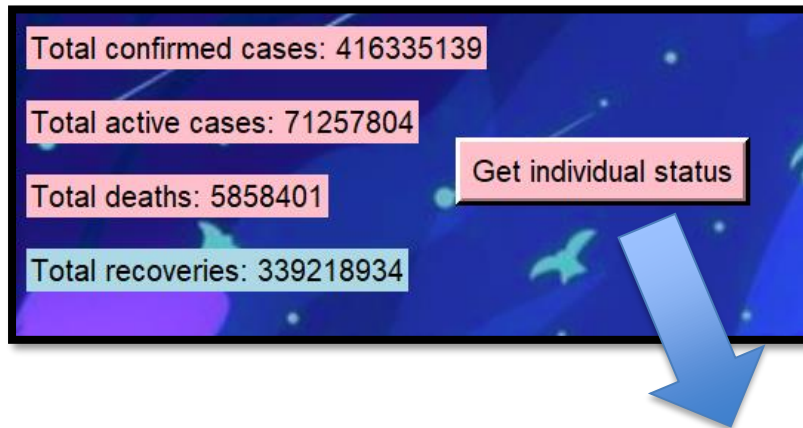
The overall Interface is divided into three sections:

- Getting Data of individual countries.
- Getting data in form of graph for the different regions
- A speaking bot.
- A helpline

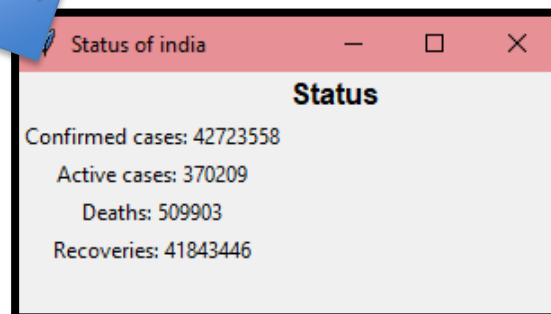
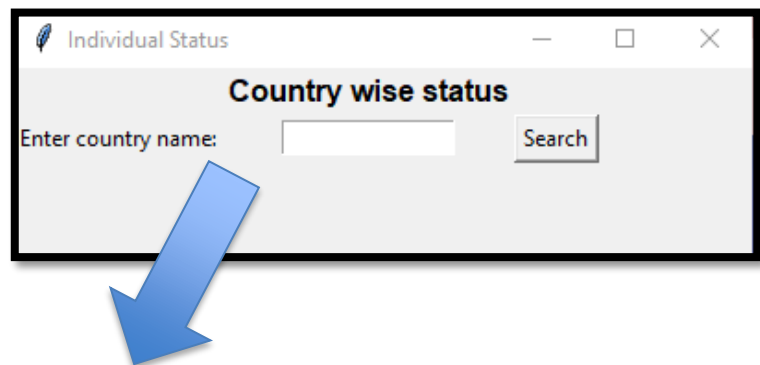


Getting Data of individual countries

Output screenshots of the interface.



Pop-up window opens up for entering the name of the country for which the user wants to see the data.



Getting data in form of graph for the different regions

The section below takes the names of country in form of comma or space separated form list and the gives output of a graph showing the data visualizing form.



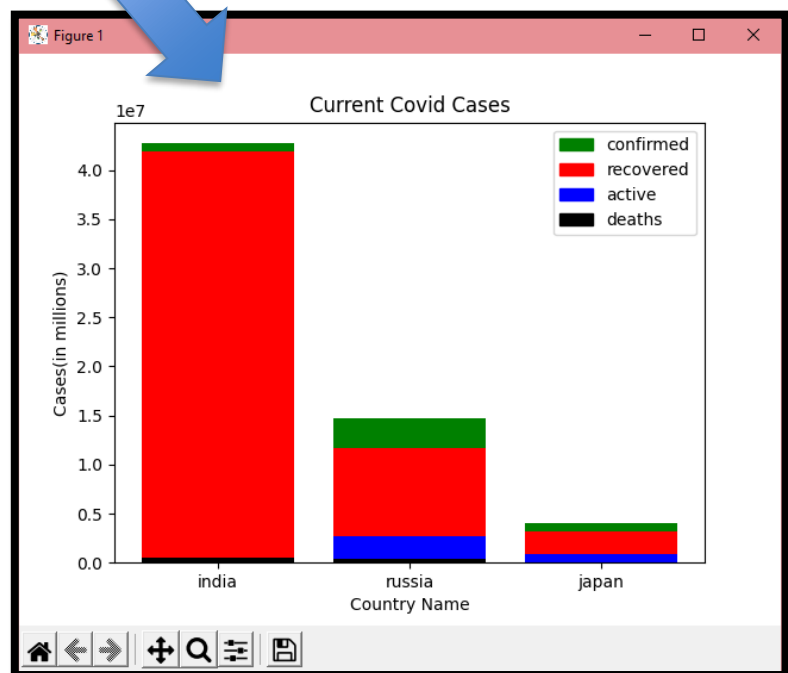
Enter all countries names for whom you want to get covid-19 data

Seperate country names using comma or space(not both)

india,russia,japan

Get Data

This graph shows a plot of confirmed cases, recovered patients, active cases and deaths during the pandemic. The graphs represents the data in an easy format and also gives the user a clear idea about the increasing spread of the virus.



A Speaking Bot



This button is the converse button.

It is an interesting feature of the gui. It makes the GUI more interactive for the user.

When it is pressed there is a voice message output telling about covid19 spread and the precautions needed for that.

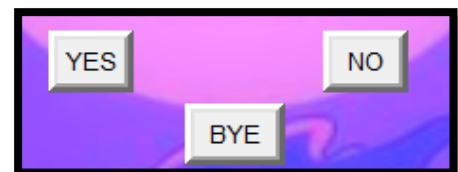
It also asks question from the user about any symptoms showing fever cough cold etc.

What does it speaks ?—

"Hi, I am Glow. I am here to talk to you and aprise you about covid nineteen. Covid nineteen is an infectious disease caused by the SARS-CoV-2 virus. Most people infected with the virus will experience mild to moderate respiratory illness and recover without requiring special treatment. However, some will become seriously ill and require medical attention. Older people and those with underlying medical conditions like cardiovascular disease, diabetes, chronic respiratory disease, or cancer are more likely to develop serious illness. Anyone can get sick with COVID-19 and become seriously ill or die at any age."

It takes response in YES or NO for the question -- "If you have a fever, cough and difficulty breathing, press yes and , if not press No"

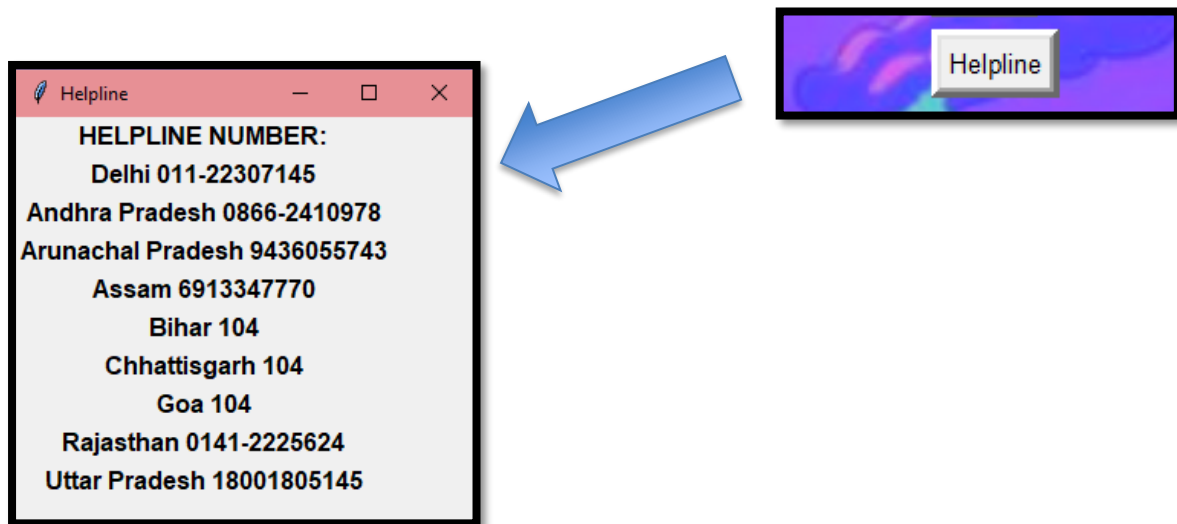
For YES the the voice output is given. It tells the user to follow all the precaution and stay at hote to prevent the further spread of the covid19 virus.



If the user selects the NO button the voice output is to be save and avoid being contact with positive people. The last button which is BYE when pressed, thanks the user for using the interface and greets him/her Have a nice day.

The Helpline

The helpline button provide the information for the different helpline numbers all over the country. When this button is pressed it pops up a small window which displays a list for helpline numbers for all over the country.



Code Screenshots-

```
1  from turtle import color, width
2  from covid import Covid
3  import tkinter
4  from tkinter import *
5  from tkinter import ttk
6  from tkinter import messagebox
7
8  #####
9
10 import pytsx3
11 engine = pytsx3.init()
12 voices = engine.getProperty('voices')
13 engine.setProperty('rate', 150)
14 engine.setProperty('voice', voices[1].id)
15
16 #####
17
18 covid = Covid(source="worldometers")
19
20 #####
21
22 # function which will get covid data and will show it
23 def showdata():
24     # importing matplotlib which will be used to show data graphically
25     from matplotlib import pyplot as plt
26     # to scale the data we are importing patches
27     import matplotlib.patches as mpatches
28     # importing covid library
29     from covid import Covid
30     # initializing covid library
31     covid = Covid(source="worldometers")
32     # declaring empty lists to store different data sets
```



```
30 # initializing covid library
31 covid = Covid(source="worldometers")
32 # declaring empty lists to store different data sets
33 cases = []
34 confirmed = []
35 active = []
36 deaths = []
37 recovered = []
38 # using try and except to run program without errors
39 try:
40     # updating root
41     main.update()
42     # getting countries names entered by the user
43     countries = data.get()
44     # removing white spaces from the start and end of the string
45     country_names = countries.strip()
46     # replacing white spaces with commas inside the string
47     country_names = country_names.replace(" ", ",")
48     # splitting the string to store names of countries
49     # as a list
50     country_names = country_names.split(",")
51     # for loop to get all countries data
52     for x in country_names:
53         # appending countries data one-by-one in cases list
54         # here, the data will be stored as a dictionary
55         # for one country i.e. for each country
56         # there will be one dictionary in the list
57         # which will contain the whole information
58         # of that country
59         cases.append(covid.get_status_by_country_name(x))
60     # updating the root
61     main.update()
```

```
62 # for loop to get one country data stored as dict in list cases
63 for y in cases:
64     # storing every Country's confirmed cases in the confirmed list
65     confirmed.append(y["confirmed"])
66     # storing every Country's active cases in the active list
67     active.append(y["active"])
68     # storing every Country's deaths cases in the deaths list
69     deaths.append(y["deaths"])
70     # storing every Country's recovered cases in the recovered list
71     recovered.append(y["recovered"])
72 # marking the color information on scaling patches
73 confirmed_patch = mpatches.Patch(color='green', label='confirmed')
74 recovered_patch = mpatches.Patch(color='red', label='recovered')
75 active_patch = mpatches.Patch(color='blue', label='active')
76 deaths_patch = mpatches.Patch(color='black', label='deaths')
77 # plotting the scale on graph using legend()
78 plt.legend(handles=[confirmed_patch, recovered_patch, active_patch, deaths_patch])
79 # showing the data using graphs
80 # this whole for loop section is related to matplotlib
81 for x in range(len(country_names)):
82     plt.bar(country_names[x], confirmed[x], color='green')
83     if recovered[x] > active[x]:
84         plt.bar(country_names[x], recovered[x], color='red')
85         plt.bar(country_names[x], active[x], color='blue')
86     else:
87         plt.bar(country_names[x], active[x], color='blue')
88         plt.bar(country_names[x], recovered[x], color='red')
89     plt.bar(country_names[x], deaths[x], color='black')
90 # setting the title of the graph
91 plt.title('Current Covid Cases')
92 # giving label to x direction of graph
93 plt.xlabel('Country Name')
```

```

125     st=Toplevel()
126     st.geometry('400x100')
127     st.title('Individual Status')
128     Label(st,text='Country wise status',font='Helvetica 12 bold').grid(row=1,column=2)
129     Label(st,text='Enter country name:').grid(row=2,column=1)
130     Entry(st,width=15,textvariable=ctname).grid(row=2,column=2)
131     Button(st,text='Search',command=search).grid(row=2,column=3)
132
133     #####
134
135     def hlp():
136         ss=Toplevel(main)
137         ss.geometry('300x300')
138         ss.title('Helpline')
139         Label(ss,text='HELPLINE NUMBER:',font='Helvetica 12 bold').grid(row=1,column=2)
140         Label(ss,text='Delhi 011-22307145',font='Helvetica 12 bold').grid(row=2,column=2)
141         Label(ss,text='Andhra Pradesh 0866-2410978',font='Helvetica 12 bold').grid(row=3,column=2)
142         Label(ss,text='Arunachal Pradesh 9436055743',font='Helvetica 12 bold').grid(row=4,column=2)
143         Label(ss,text='Assam 6913347770',font='Helvetica 12 bold').grid(row=5,column=2)
144         Label(ss,text='Bihar 104',font='Helvetica 12 bold').grid(row=6,column=2)
145         Label(ss,text='Chhattisgarh 104',font='Helvetica 12 bold').grid(row=7,column=2)
146         Label(ss,text='Goa 104',font='Helvetica 12 bold').grid(row=8,column=2)
147         Label(ss,text='Rajasthan 0141-2225624',font='Helvetica 12 bold').grid(row=9,column=2)
148         Label(ss,text='Uttar Pradesh 18001805145',font='Helvetica 12 bold').grid(row=10,column=2)
149
150     #####
151
152     def speak():
153         engine.say("Hi, I am Glow. I am here to talk to you and apribe you about covid nineteen.")
154         "Covid nineteen is an infectious disease caused by the SARS-CoV-2 virus. Most people infected with
155         "the virus will experience mild to moderate respiratory illness and recover without requiring spec
156         "treatment. However, some will become seriously ill and require medical attention. Older people ar

```

```

96     # showing the full graph
97     plt.show()
98     except Exception as e:
99         # asking user to enter correct details
100         # during entering the country names on GUI
101         # please differentiate the country names
102         # with spaces or comma but not with both
103         # otherwise you will come to this section
104         data.set("Enter correct details again")
105
106     #####
107
108     def indv():
109         def search():
110             cname=ctname.get()
111             if cname=='':
112                 return messagebox.showerror('Error','Enter country name')
113             else:
114                 data=covid.get_status_by_country_name(cname)
115                 sta=Toplevel()
116                 sta.geometry('300x300')
117                 sta.title('Status of '+cname)
118                 Label(sta,text='Status',font='Helvetica 12 bold').grid(row=1,column=2)
119                 Label(sta,text='Confirmed cases: '+str(data['confirmed'])).grid(row=2,column=1)
120                 Label(sta,text='Active cases: '+str(data['active'])).grid(row=3,column=1)
121                 Label(sta,text='Deaths: '+str(data['deaths'])).grid(row=4,column=1)
122                 Label(sta,text='Recoveries: '+str(data['recovered'])).grid(row=5,column=1)
123                 st.destroy()
124             ctname=StringVar()
125             st=Toplevel()

```

Conclusions and Future Scope

The Idea behind this project is to spread awareness among the people and help them during this pandemic situation. This COVID-19 Chatbot will have large impact on patients' life during this pandemic. This bot includes FAQ, total numbers of COVID cases, precautions, data representation, and a voice assistant.



The WHO Director-General recently called for innovative pandemic responses. To this aim, chatbots are already being deployed in the fight against COVID-19. If designed effectively, chatbots may help prevent misinformation, aid in symptom detection, engender infection-limiting behaviors, and lessen the mental health burden of pandemic response. In a pandemic, no group of people remains unaffected for long. Together, patients, healthcare workers, academics, technology companies, NGOs, and governments can ensure chatbots say the right thing.

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