VOICE SUPPORT FOR COVID-19

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Abstract - The new normal after the pandemic COVID-19 is not so normal. To overcome the new normal people, have many questions related to COVID-19 virus and vaccination program. But the lack of availability of a proper platform has left many questions unanswered. An appropriate FAQ page might help with the same. Right to Information, a fundamental right would let the page resolve every query of the common man, making them conscious, and reducing the number of cases.

However, researchers and analysts say that half of the people do not read the answer they skip them for many reasons like – they are busy, traveling, etc. Over and above, studies had shown that verbal communication is preferred by most people to the text form of communication.

If there would be a system/page that could verbally answer for them, everyone can easily be aware of the facts and precautions of COVID-19. This has an additional advantage for the people who have difficulty reading the pre-written text.

Futuristically seeing its implication and impact on COVID-19, it can help in handling various health-related doubts and direct us to the right path in curing it.

Key Words: FAQ, COVID-19, voice assistant

1. INTRODUCTION

COVID-19 has evolved itself in various mutant forms like alpha, beta, gamma, delta, lambda, and kappa which is now considered a matter of concern with different mortality rates. Nowadays, the number of people getting infected by this virus is increasing daily. COVID-19 is a highly communicable and contagious disease. COVID-19 virus travels through our respiratory tract i.e., nose, mouth, throat, and lungs can cause flu eventually affecting the lungs, liver, kidneys, and brain. Symptoms: fever, dry cough, tiredness, aches and pains, sore throat, diarrhea, conjunctivitis, headache, loss of taste or smell, Rash on the skin, difficulty in breathing or shortness of breath, chest pain or pressure, loss of speech or movement.

On average, it takes about 5-6 days and a maximum of 14 days for the virus to affect the body and show the symptoms.

To fight this biological war, the spread of awareness through the FAQ page could be an effective tool. However, Conventional FAQ are not as user-friendly as compared to voice FAQ's. Though many companies had devised many solutions like WhatsApp chat support, telegram channels, etc. they are not that much effective as they were desired to be. A slightly different solution to this modern problem is required and that is a FAQ with a voice assistant and almost 60+ questions with multiple color modes.

In this case, this website comes as a virtual aid for resolving the issues faced by any individual.

2. LITERATURE REVIEW

Conventional FAQs are not as user-friendly as compared to voice-over faqs. Though many companies have devised many solutions like Chabot, WhatsApp chat support, telegram channel, etc. they are not as effective as they were desired. So, in our project, we have devised a slightly different solution to this problem, i.e., a voice-over FAQ support, and have checked the effectiveness of that solution in comparison with the conventional FAQs.

2.1. PROBLEM DEFINITION

In this pandemic time, where 19 percent of people are still illiterate and almost half of the literates are not proficient in English, this application of voice assistant comes to the rescue. This can be used by any type of people, literate or illiterate. Voice assistant features on significant these days, especially for elderly people who have difficulty seeing write. Even MNCs like Google and Apple have enabled their voice assistant for multi-purpose use.

2.2. IMPORTANCE OF THE PROJECT TO THE SOCIETY

Time-saving – scrolling time reduced. Time required to find one question among the different questions was reduced using voice assistance support or microphone support.

Aged people are not that friendly with mobile so voice-over will help them. They will just ask the question and get the answer. It automatically scrolls down to the answer to the question asked.

Any doubt as basic as symptoms of COVID-19 to as difficult as benefits of getting vaccinated will be answered in this FAQ App.

We are providing various color modes which the user can set according to their readability.

The availability of information through voice, and text make the app user-friendly.

3. OBJECTIVE

To improvise a normal frequently asked questions website, for the COVID-19 vaccination program. This can be achieved by making it more user-friendly and converting the usual site into a voice-over FAQ App with multiple color modes. The App will contain major doubts related to Covid 19 virus and the COVID-19 vaccination program.

4. TOOLS AND TECHNOLOGIES

The following tools and technologies are used:

4.1. REACT JS

It is the JavaScript library utilized for UI. ReactJS is a JavaScript library utilized for building reusable UI parts. As per React official documentation, the following is the definition − React is a library for building composable UI. It energizes the production of reusable UI segments, which present information that changes after some time. Bunches of individuals use React as the V in MVC. Respond abstracts away the DOM from you, offering an easier programming model and better execution. Respond can likewise deliver on the worker utilizing Node, and it can control local applications utilizing React Native. Respond executes single direction receptive information stream, which decreases the standard and is simpler to reason about than conventional information restricting.

4.2. CHAKRA UI

It is the part library. Chakra UI is an advanced part library for React made by Segun Adebayo. It gives a bunch of open, reusable, and composable React segments that you need to fabricate front-end applications. Its straightforwardness, seclusion, and availability make it amazing. You can utilize it to fabricate available React applications and to accelerate the structure cycle. Chakra UI utilizes Emotion and Styled System. Style frameworks are extraordinary sorts of foundations that can be utilized to assemble a UI segment library. They make countless things a lot simpler. Besides, Chakra UI is worked with TypeScript, and it accompanies 49 parts and three utility snares. Regardless of being an open-source apparatus, Chakra UI has extraordinary documentation.

4.3. ALAN AI

It is the voice's right hand that we have coordinated. Alan is a high-level Voice AI Platform that permits you to add a voice interface to your application without the overhead. Alan gives a total serverless climate to fabricate vigorous and solid in-application voice colleagues and chatbots. There is no compelling reason to make communication in language models, train the discourse acknowledgment programming, send and have voice parts — the Alan AI backend does the majority of work. The voice insight for your application can be fabricated and created by a solitary designer, instead of a group of Machine Learning and Dev Ops specialists. With Alan, you can go past the capacities of touch and type interfaces and voice empower any unpredictable work process or capacity in your application. Voice scripts are written in JavaScript, which makes them exceptionally adaptable and adaptable. Voice interfaces made with Alan are assembled once and conveyed anyplace — you won't need to reconstruct them for explicit stages. Alan offers simple SDKs to integrate with: Web, iOS, Android, Flutter, Ionic, Apache Cordova, React Native, and Microsoft Power Apps.

4.4. DIFFERENT COLOUR MODES

As Chakra UI supports different color modes, implementing and using it is extremely easy. Maximum components in this library are compatible with this mode. Chakra UI provides a hook called useColorMode, with the help of which you can implement different color modes in the application. To enable the color mode, you have to use ColorModeProvider within your application and wrap it in a ColorModeProvider.

5. METHODOLOGY

The project is a response page to the questions related to COVID 19, where users can get their answers by various methods that elaborate.

The page is categorized into various subheadings like children, symptoms, funeral, emergency, etc., and user can accordingly navigate through it.

The project also provides the provision of voice assistance; responses can be read as well as heard. This feature can be used by clicking on the icon having the symbol of a microphone. To understand the working refer Fig. 1. User can also change the mode by "toggle color mode" or "change color mode" option.
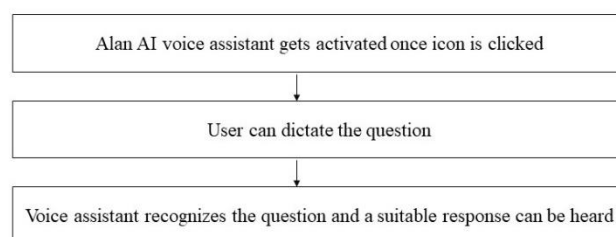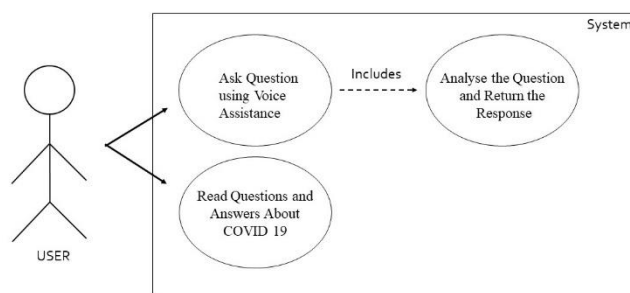
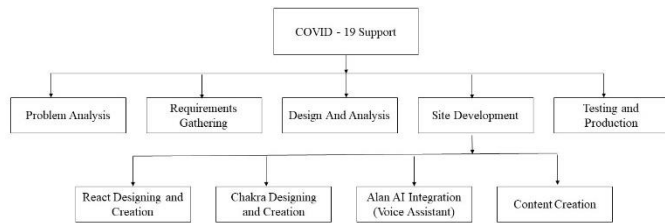**Fig -1**: Working

Fig -2: Use-Case Diagram

Fig -3: Work Breakdown Structure

6. FEATURES

- Simple and easy to use
- Good UI design
- Questions related to COVID 19 are categorized under various subheadings.
- Voice assistant support
- Switch to Dark or light mode using the button as well as a voice assistant
- Once the user asks the question using voice assistance and would it automatically scrolls to the respective response.

7. CONCLUSION

After several speculation and tests, we can conclude that this application is excellent first aid assistance in the need of the hour.

Since many of the suggestions and advice are given by Doctors and Practitioners around the country, lowering the severity of this fatal virus can be reduced very much, especially for those people living in the slums of the country where it is difficult to maintain social distancing.

8. FUTURE SCOPE

In the future, this application can be further upgraded to many more diseases and injuries requiring first aid. And since it's a website, it can be easily accessible.

We can also add a question-adding page that can only be accessed by the admins. By this, we can add new question answers and at the same time maintain the authenticity of the page.

We can also add information about the hospitals with the number of beds available. As well as we can all add the quantity

of medicine used in COVID-19 available at the nearest shop.

We can also add the lists of vaccination centers which will help the user to get vaccinated more quickly and will be easy for him to find the center nearest, to his locality.

ACKNOWLEDGEMENT

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