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Hospital Management System and Chatbot for COVID Patients

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ABSTRACT: Since the discovery of the Coronavirus, it has become a global pandemic. At the same time, it has been a great challenge to hospitals or healthcare staff to manage the flow of the high number of cases. Especially in remote areas, it is becoming more difficult to consult a medical specialist when the immediate hit of the epidemic has occurred. Thus, it becomes obvious that if effectively designed and deployed chatbot can help patients living in remote areas by promoting preventive measures, virus updates, and reducing psychological damage caused by isolation and fear. This study presents the design of a sophisticated artificial intelligence (AI) chatbot for the purpose of diagnostic evaluation and recommending immediate measures when patients are exposed to coronavirus. There aren't many people who have the right information of covid-19 and there is a lot of fake news & information spreading all over. We are using machine learning and webscrapping to answer the questions of people's.The webapp is being used for hospital management wherein the patients can log in to the account and then get information regarding the services of hospital.

KEYWORDS: covid 19 Chatbot, Hospital management

I. INTRODUCTION

After the rise of the web and mobile apps, virtual chatbot applications are the latest inventions of digital design. These applications are well known for automatic conversational agents that run on computer programming or a kind of artificial intelligence (AI) interaction between the users and machines with the intervention of natural language processing (NLP). Chatbots are potentially referred to as the most promising and advanced form of human-machine interactions. Eventually, these virtual agents are getting involved in the main global sectors such as healthcare, banking, education, agriculture, etc.

The healthcare sector is closely associated with human interaction, and it seems counterintuitive 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 (nCOV-19), health bots are beneficial as a supplement to personal clinical care or immediate medications.

After nCOV-19 spread beyond China, it spread globally at a rapid pace and about six million cases have been confirmed. Because of continuous patient flow, it has been a great challenge for national governments to supply enough medical specialists, resources, and equipment to hospitals or healthcare centers. There are some established nCOV-19 virtual agents integrated with messenger applications. The World Health Organization (WHO) has launched a dedicated messenger app in seven languages to keep the public safe from coronavirus infections. 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 nCOV-19. Another advantage of this bot includes 24/7 accessibility and assesses the patient's condition in a more human-like way. Due to the built-in backend logic function, it will detect the virus's intensity and provide live interactions with doctors in the handling of dangerous conditions.

II. LITERATURE REVIEW

There are various methods to create an application for Chatbot by using machine learning and webscrapping and by artificial intelligence.

Frontend: Language: Javascript ,CSS,HTML

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Backend(servers)-

- Language: PHP

There will be three main module in the app

Admin module:-

Where the doctors or the admin can submit the data for the patients to know the availability of bed , and to keep the data of patients.

Patients module:-

Where the patients can simply login and get the information about beds . To get the right information about covid 19 virus and in that Chatbot will help them to get the right information.

Chatbot module :-

It will help the patients to get the right information what they need and help the doctors by saving their time .

Except the three main module their will be feedback module to give feedback, to find a doctor and many other module's to help patients.

III. METHODOLOGY

The algorithm aims to stop the fake news about covid 19 virus by giving the right symptoms and by giving the information about hospital related data of beds and the patients. Along with it the patient can make appointments to the doctor after making correct symptom recognition and get to know the disease he/she is suffering from. Along with there is a login page and the contact page. The feedback form helps to collect information regarding the patients and we can use that as a dataset for training and implementing the machine learning algorithm. Also, it consists of a dashboard for the hospital staff to collect information about the patients, their mails and the reports of their illness located at one server to get the information easily and quickly. The chatbot addresses the problems asked by the patients and then keeps a check on the fake news and then we can keep control over the mental well-being of the patients along with their physical health, Hence this is the complete project for the benefit of COVID patients worldwide.



IV. RESULT AND DISCUSSION

Chatbots' scalability, wide accessibility, ease of use, and fast information dissemination provide complementary functionality that augments public health workers in public health response activities, addressing capacity constraints, social distancing requirements, and misinformation. Additional use cases, more sophisticated chatbot designs, and opportunities for synergies in chatbot development should be explored.

V. CONCLUSION AND FUTURE WORK

The scope of the project is to develop a software which would be helpful to the patients and doctors in the hospital .Which aims to prevent the spread of fake news among the patients .The webapp is being used for hospital management wherein the patients can log in to the account and then get information regarding the services of hospital.

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REFERENCES

- 1. Gray M. WHO reverses position on face masks as coronavirus cases climb. New York Post.June 6, 2020
- HealthConnect for COVID-19. Secondary HealthConnect for COVID 19. <u>https://www.praekelt.org/healthconnect</u>. Accessed August 25, 2020.
- 3. Eaton M, King AB, Dalmayne E, Seigler A. Trump suggested 'injecting' disinfectant to cure coronavirus? We're not surprised. New York Times. 2020.











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