

Health Care Chatbot on Covid-19 using PHP

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Abstract

Normally Users are not aware about all the treatment or symptoms regarding the particular disease. For small problem user have to go personally to the hospital for check-up which is more time consuming. Also handling the telephonic calls for the complaints is quite hectic. Such a problem can be solved by using medical Chabot by giving proper guidance regarding healthy living

The Chatbots are the computer programs that interact with the user. The unprecedented outbreak of the 2019 novel coronavirus, termed as COVID-19 by the World Health Organization (WHO). The impact of the COVID-19 outbreak, earlier witnessed by the citizens of China alone, has now become a matter of grave concern for virtually every country in the world. People who are overweight and obese have a greater risk of developing serious diseases and health conditions. A steadily increasing trend of obesity is not only limited to developed countries, but to developing nations as well. Based on the user data acquired from healthcare chatbot the healthcare chatbot can provide the accurate medical advice to user. This chatbot contains modules such as interactive chatbot, Body mass ratio, Age calculator, corona tracker

Keywords- healthcare Chatbot, age calculator

I. INTRODUCTION

Today's people are more likely addicted to internet but they are not concern about their personal health. They avoid to go in hospital for small problem which may become a major disease in future. Establishing question answer forums is becoming a simple way to answer those queries rather than browsing through the list of potentially relevant document from the web.

A big disease such as covid-19 can start from small problems such as cold, fever,cough, headache which feels normal but it may beginning of big disease called covid-19. this disease can be identified by common symptoms so the disease can be predicted if the patient body is analyzed periodically

The increasing demand for healthcare service challenges healthcare providers as particularly the

shortage of healthcare professional cause that they have to overcome geographical, temporal, and organizational barriers to provide a good healthcare service to patients.

The development of chatbot application canbe done with making a user interface to send input and receive response. It is a system that interact with user by keeping the track of the state of interaction and recollecting the preceding commands to give functionality.

The central part of the chat-bots includes MySQL. It is an interactive system solve users query regarding medicine. so they can get correct guidance for treatment. The aim of this paper is to discuss the need and usage of chatbots in the healthcare domain.

There are a lot of existing chatbots for healthcare domain serving different functionalities.

To know what the patient is suffering from, the system should be friendly to the user, so that the user can communicate all the problems faced by him to the system. The paper aims at proposing a chatbot system, which is capable of establishing a smart communication.

II. LITERATURE REVIEW

The paper gives the information regarding products which is useful for consumers to obtain what they want exactly.

The system takes a plain text as input and answering all type of questions output by qualified user is the output . The purpose is to provide a generic solution to this problemThe database used in the project is MySQL. The illustration and execution of SQL in the pattern-matching operation is required. The conversation can be done so that it can add some knowledge to the database as it has not been modeled before. If in case the input sentences in the database did not match then it will be remodeled

III. PROPOSED SYSTEM

This system helps users to submit their complaints and queries regarding the health. Customer satisfaction is the major concern for developing this system. The actual welfare of the chatbot is to facilitate the people by giving proper guidance regarding the good and healthy living. For the reason that many of the people do not have fundamental awareness of physical condition. Some people live for years with debilitating but they do not pay attention to symptoms simply because they think they don't require a doctor. The working of the system is as follows

1. Ask some Questions :

You can ask some questions regarding some healthcare. And it's related to voice-text and text-voice conversation. Using Google API for inter conversion of text-voice and vice versa.

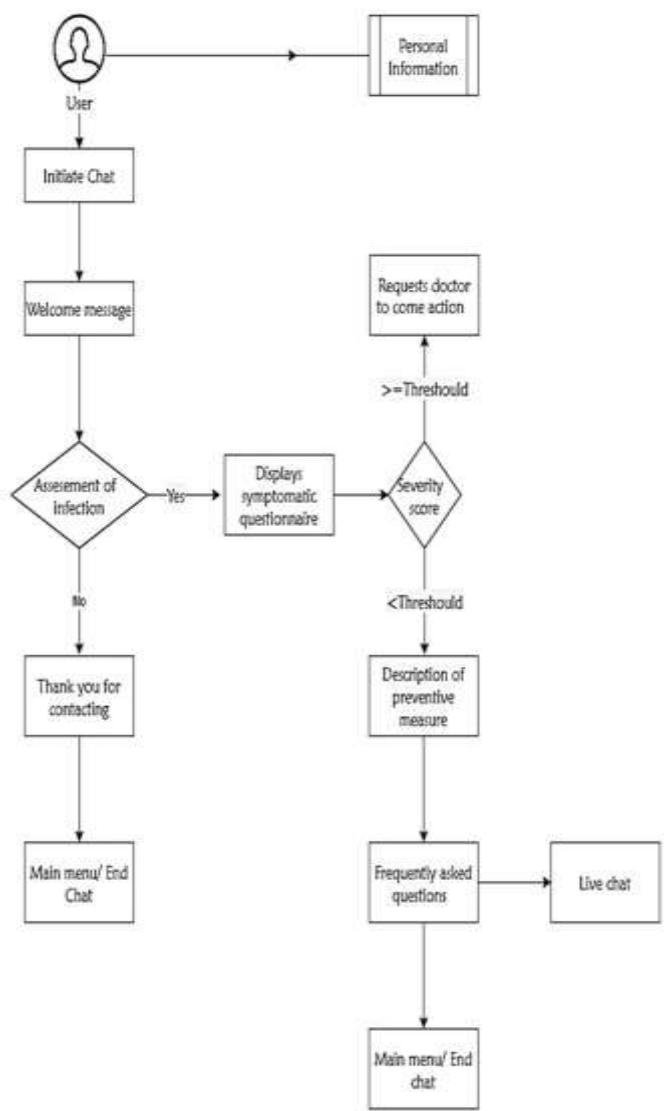
2. Age calculator:

You can calculate your age,

Where we need to know Risk for severe illness with COVID-19 increases with age, with older adults at highest risk.

3. Body mass ratio:

BMI plays a significant role in COVID-19 severity in all age groups. Obesity is an emerging independent risk factor for susceptibility to and severity of coronavirus disease



Challenges posed by pandemics:-

On 11 March 2020, the WHO Director-General “rang the alarm bell loud and clear” by calling COVID-19 a pandemic¹⁰. Globally and locally, control and prevention measures have been frustrated by myriad challenges. First, accurate information is crucial, but often unknown, or obscured by misinformation. Second, disease fear and confusion contribute to under-reporting of symptoms. Third, preventative strategies such as hand washing or social distancing are costly to disseminate and enforce. Fourth, infection countermeasures (e.g., social distancing and quarantine) are psychologically damaging¹³. In this light, the WHO has called for “large-scale implementation of high-quality, non-pharmaceutical public health measures (p. 20)” to help limit new cases, and safely triage those who may be infected¹⁵. Normally, resources such as clinician attention or emergency department waiting areas are used at a rate the healthcare system can handle. In a pandemic, the cost of these resources being spent inefficiently or contaminated can be catastrophic.

Special features of pandemics

Pandemics have unique characteristics that make them amenable to tailored interventions deliverable via chatbots. In particular, pandemics differ from other natural disasters in three key ways. First, individual actions can significantly worsen outcomes in a pandemic, given that a single person may infect many others depending on their behavior. Second, the fear of infecting others, especially loved ones or healthcare workers, makes infectious diseases more insidious through disease-related stigma. As a result, people can feel personally responsible for bad outcomes during a pandemic and also hide symptoms from others. Third, the physical gatherings typically used to connect with others in difficult times (e.g., family meals, community centers, sports, spiritual and religious events) are exactly what we are supposed to avoid during a pandemic, worsening the risk for future mental health problems. Chatbots have unique affordances, outlined below, which may mitigate short- and long-term disease burden during infectious disease pandemics.

Most Common Symptoms	
Fever	87.9%
Dry Cough	67.7%
Fatigue	38.1%
Sputum Production	33.4%
Less Common Symptoms	
Shortness of Breath	18.6%
Myalgia / Arthralgia	14.8%
Sore Throat	13.9%
Headache	13.6%
Chills	11.4%
Rare Symptoms	
Nausea	5.0%
Nasal Congestion	4.8%
Diarrhea	3.7%
Hemoptysis (coughing up blood)	0.9%
Conjunctival Congestion	0.8%

Source: WHO

CONCLUSION:

A chatbot is a great tool for conversation. Here the application is developed to provide quality of answers in a short period of time. It removes the burden from the answer provider by directly delivering the answer to the user using an expert system. The project is developed for the user to save the user their time in consulting the doctors or experts for the healthcare solution.

These shows us how the chatbots are improving the state of healthcare in India and will be going very far with its use in more number of tasks. It will increase reliability and cost effectiveness to the current scenario of health which proves chatbots to be a boon to mankind.

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