

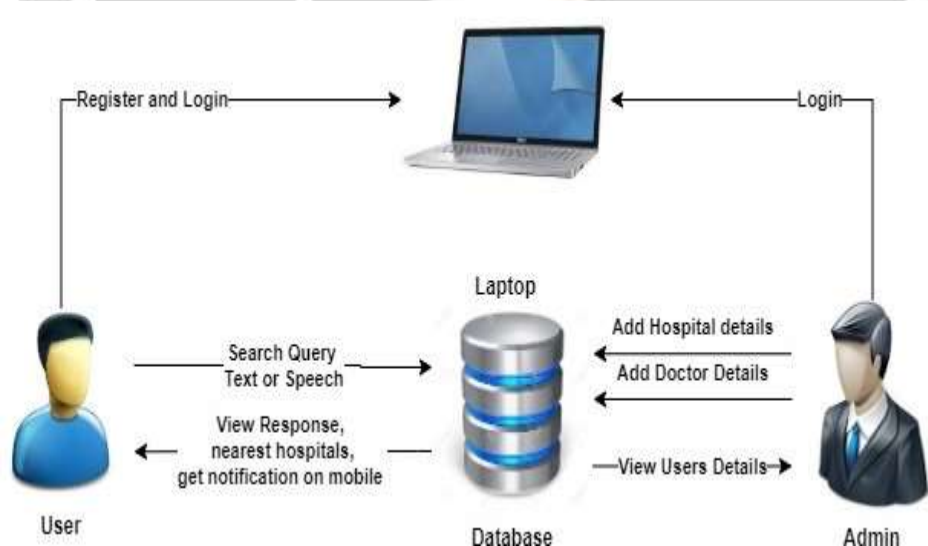
# DATA ANALYSIS IN HEALTH-CARE SYSTEM

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## I.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 ChatBot by giving proper guidance regarding healthy living. In this System we develop a web application which provides answer to the query of the user very effectively. Users just have to put their query to the bot which is used for chatting or speak. then user speech convert into text by using MFCC and the system will use the artificial intelligence algorithms to give appropriate answers to the user. If the answer is found invalid, then some system to declare the answer as invalid can be incorporated. These invalid answers can be deleted or modified by the admin of the system. The user will not have to go to the hospital for enquiring something. Users can use the chat bot to get the answers to their queries. Users can use this web based system for making enquiries at any point of time. This system may help users to stay updated with the doctor's information and nearest hospitals with disease predictions. Users can enter symptom or any query and get answer as disease name and what are the precautions and treatments should be follows. Also view Nearest hospitals and get notification on mobile about nearest hospitals.



## II.INTRODUCTION

The system allows computer To communication between human to computer by using natural language processing (NLP). There are three analyses which understand natural language i.e. identification of main linguistic relations is completed to parse subject into object of the sentences. After that description of the texts is done. The semantic interpretation uses knowledge of word meaning Chat bot is an Entity which imitate human discussion in its particular accepted set-up together with a text or vocal language with techniques such as Natural Language Processing (NLP). The aim of this system is to replicate a person's discussion. The development of chatbot application can be 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 medical chat-bots can be developed by using artificial algorithms that scrutinize user's queries and recognize it and give reply to related query. A big disease can start from small problems such as headache which feels normal but it may beginning of big disease such as brain tumor .most of the disease can be identified by common symptoms so the disease can be predicted if the patient body is analyzed periodically. The system give response by use of an efficient Graphical User Interface such that if actual person is chatting with the user. Chatter bot that can be used in various fields like education, healthcare, and route assistance The central part of the chat-bots includes MySQL.It is an interactive system solve users query regarding medicine.

## III.LITERATURE SURVEY

1] Chatbot Utilization for Medical Consultant System Author Name: Nudtaporn Rosruen and Taweesak Samanchuen Description: Medical services are basic needs for human life although they normally have limited resources. Modern technologies are utilized for increasing service capability and decreasing the operation cost. Auto-response system or chatbot, which is widely known in the field of online businesses, can be applied to the medical services. Therefore, the objective of this work is to implement the medical consultant system service by using chatbot Technology. It was implemented based on the information of the symptoms and treatment records gathered from the DoctorMe application. The test results show the capability of the proposed system. Moreover, it can be used as a guideline for future improvement and also a guideline for future study.

### 2] A Medical ChatBot

Author Name:Mrs. Rashmi Dharwadkar , Dr.Mrs. Neeta A. Deshpande

Description: 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 ChatBot by giving proper guidance regarding healthy living. The medical chatbots functioning depends on Natural language processing that helps users to submit their problem about the health. The User can ask any personal query related to health care through the chat-Bot without physically available to the hospital. By Using Google API for voice-text and textvoice conversion. Query is sent to ChatBot and gets related answer and display answer on android app. The System's major concern behind developing this web based platform is analysing customer's sentiment.

### 3] A Novel Approach for Medical Assistance Using Trained Chatbot

Author Name: Divya Madhu , Neeraj Jain C. J , Elmy Sebastain , Shinoy Shaji , Anandhu Ajayakumar

Description: There are lot of treatments that are available for various diseases. No human can possibly know about all the medicines and the diseases. So, the problem is that there isn't any place where anyone can have the details of the diseases or the medicines. What if there is a place where you can find your health problem just by entering symptoms or just scanning an ECG or you can check whether the prescribed medicine is supposed to be used the way you are told to. Then it will help us to deduce the problem and to verify the solution. The proposed idea is to create a system with artificial intelligence that can meet the requirements. The AI can predict the diseases based on the symptoms and give the list of available treatments. The System can also give the composition of the medicines and their prescribed uses. It helps them to take the correct treatment. Hence the people can have an idea about their health and can have the right protection.

## IV.SYSTEM ARCHITECTURE

This System will be a web application which provides answer to the query of the user very effectively. Users just have to put their query to the bot which is used for chatting or speck. then user speech convert into text by using MFCC and the system will use the artificial intelligence algorithms to give appropriate answers to the user. If

the answer is found invalid, then some system to declare the answer as invalid can be incorporated. These invalid answers can be deleted or modified by the admin of the system. The user will not have to go to the hospital for enquiring something. Users can use the chat bot to get the answers to their queries. Users can use this web based system for making enquiries at any point of time. This system may help users to stay updated with the doctor's information and nearest hospitals with disease predictions. Users can enter symptom or any query and get answer as disease name and what are the precautions and treatments should be follows. Also view nearest hospitals and get notification on mobile about nearest hospital.

## V.CONCLUSION

The implementation of Medical assistant heavily relies on AI algorithms as well as the training data as discussed in this paper. However, it is still in its early stage and levels and faces some challenges; some of which have a direct link to AI were discussed. However, Personalized chatbot does not only faces challenges; it does pose some challenges, as the accuracy of result and practice to the extent that some futurist think algorithms and machines could replace most of the jobs doctors do today. Here we get the location of user and send the notification of nearest location to users.

## VI.REFERENCE

- 1]Nudtaporn Rosruen and Taweesak Samanchuen , “Chatbot Utilization for Medical Consultant System ,” in The 2018 Technology Innovation Management and Engineering Science International Conference (TIMES-iCON2018)
- 2]Mrs. Rashmi Dharwadkar , Dr.Mrs. Neeta A. Deshpand, “A Medical ChatBot,” in International Journal of Computer Trends and Technology (IJCTT) – Volume 60 Issue 1 June 2018
- 3]Divya Madhu , Neeraj Jain C. J , Elmy Sebastain , Shinoy Shaji , Anandhu Ajayakumar,”A Novel Approach for Medical Assistance Using Trained Chatbot ” in International Conference on Inventive Communication and Computational Technologies
- 4]Lin Ni, Chenhao Lu, Niu Liu, and Jiamou Liu, “MANDY: Towards A Smart Primary Care Chatbot Application,” in Internal and emergency medicine, 10(2):171–175, 2017.