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Healthcare Disease Prediction System and Alternative Medicine for Users

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ABSTRACT: At present, when someone suffers from particular disease, then the person has to visit to doctor which is time consuming and costly too. Also if the user is out of reach to the doctor and hospitals, it may be difficult for the user as the disease cannot be identified. So, if the above process can be completed using a automated program which can save time and money, it could be easier to the patient which can make the process easier. There are prediction system available using data mining techniques that analyzes the risk level of the patient. Healthcare Disease Prediction System is a web application that predicts the disease of the user with respect to the symptoms given by the user. This application provides us convenient and portable healthcare solution.

I. INTRODUCTION

The project is based on disease prediction from all the symptoms given by the patients. In our project we have proposed a system that is user favourable to get a guidance on health issue instantly through online healthcare disease prediction system. With the help of disease prediction the user will be able to know the probability of the disease with the given symptoms. As the use of internet is growing everyday, people are always curious to know about different new things. People usually try to refer to the internet if any problem arises. People have an easy access to the internet than hospitals and doctors. People do not have immediate option when the suffer with particular disease. So, this Healthcare Disease Prediction System can be helpful to the people as they have access to internet 24 hours. In our project we are also providing the medicine option in our application.

This application is accessible from anywhere for all users at desktop or tablet etc. Our project Healthcare Disease Prediction System includes registration of users, storing the data of users into the system. This Healthcare Disease Prediction System has two modules namely, Admin and Users. Admin can also delete, update and add new disease's information.Users can ask question regarding a particular disease and get the proper information to the disease.

Our software has the facility to give a unique id for every user automatically. User can login into the Healthcare DiseasePrediction System using a username and password. To develop a Healthcare Disease Prediction System, we take care of patient registration. It is accessible either by an admin or user. Only admin can add data into the database. The main function of the system is to store the details of patient and retrieve this details when it required. The data of users are well protected for personal use and make the data processing very fast.

II. RELATED WORK

Our project is based on data mining and before this various projects related to disease prediction system has been already done, as this provides good accuracy level to our prediction. For a better case study we've also gone through some of the references like APRIORI algorithm of gitanjali, a case study of mining clinical data with a temporal dimension of Michel Berlingeri and also a comparative analysis of discretization methods for medical data mining of Ranjit Abraham .Many researchers are developing new approaches and techniques for using Big Data machine learning algorithms are used prevent health issues at the very early stages of diseases. There are so many different types of research available on how to get the perfect out of health care results . The challenge nowadays is to evaluate healthcare issues to prevent diseases, there are many scientists and researchers in different areas who worked on the value of data availability nowadays .

Whenever a person suffers from any particular disease then he visits the hospital which obviously makes it difficult for him. This application helps the patients to get to know the disease he's suffering from before actually visiting the hospital. In today's purchasing medicine is very difficult because of its high cost. In this app, medicine options are also available . Also there are alternative medicine options where the composition medicine will be same but the cost will be less and easily affordable to the patients. International Journal of Innovative Research in Computer and Communication Engineering

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III. SIMULATION RESULTS

The result of the system created will consist of the diseases and its respective accuracy level the patient is currently suffering from the data being analysed following the steps of process of Knowlegde Discovery . The accuracy level of a specific disease will be based on the various factors such as the patient's medicalage, history, gender and many more . The result from the following data mining will be used to help the clinical doctors for them to be able to cure the patient depending on the diseases that have higher accuracy.

IV. CONCLUSION AND FUTURE WORK

A healthcare prediction system has been proven to be resourceful and beneficial for all the doctors and medical experts. As it will eliminate the time consumption and various troubles which they all face in their decision-making process while diagnosing patient. The implementation of a healthcare prediction system will allow doctors and staff of medical to relieve their efforts on their clinical decision-making process by simply adding the users health data and symptoms that they are expressing. The system will be implemented with data mining that may deduce that they bear by correlating the information given by the patient with the health information the doctors and medical professional provide and that is stored in database. The entire process would efficiently reduce the challenging efforts that doctors put themselves into making a decision. The system will also encourage patient and doctors to communicate y recommending patient to the doctors that are suitable to handle their diagnosis and are relevant in their specific medical fields. This project's intent is to deliver a user-friendly system for patients to provide suitable guidance on their current health issue that they are facing. The software itself will only be suited and installed on android phones.

There are many possible improvements that could be explored to improve the accuracy of our prediction system. As we have developed a generalized system, in future we can use this system for the analysis of different datasets. The performance of the health's diagnosis can be improved significantly by handling numerous class labels in the prediction process and it can be another positive direction of research.

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