Symptom Based Health Prediction System

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Abstract- *As the population of patients increases the medical databases so the increasing every day. Without the computer based analysis system. The transactions and investigation of these medical data is difficult Thethe mechanized medical diagnosis system is easy with computer based analysis system . support the medical practitioner to make good decision in treatment and disease This mechanized diagnosis system used.Data mining is the huge platform for the doctors to handle the huge amount of patient's datasets in many ways such as make sense of complex diagnostic tests, interpreting previous results, and combining the dissimilar data together.*

for providing appropriate medications through user friendly mobile applications. considering automatic and dynamic requirements healthcare system should be more efficient by predicting the disease providing appropriate medications through user friendly mobile applications.

the health concerns and the ones who want to be their own Doctor This study aims mainly for . health issues they are going through to know about what as per the symptoms. for users who wants It is an interactive service.

I. INTRODUCTION

Today's Healthcare organizations produce and collect large volumes of information on a daily basis. Looking at the need of patient's, the proposed system will be implemented to save the time of patients'. main reason for human death. is Human disease

As we know we are in the pandemic situation & on the daily bases there are many people suffering through some or the other health issues. There are few cases like if a person is suffering through normal cough they have been quarantine by saying they are suffering through coronavirus. And nowadays doctors are asking the symptoms, predicting the disease & treat accordingly.

If a person is suffering through headache &vomiting these disease by just knowing the symptoms, & recently had an accident then by knowing the disease is related to the nervous system he/she can concern the nearest neurologist. So considering this we thought of making a system which can predict the disease by entering the symptoms.

Our system allows the patient to enter the symptoms & the disease related to the symptoms are displayed to the the patient, the patient can also find the nearest Specialist related to the disease & take appointment if required. We know that Doctors are the specialist but due to the pandemic situations its risky tro wait in queue for the consultance.

In our system we are using Data mining algorithm like k-means for clustering & Data Mining to search unknown values from annormous of data. The proposed system able to predict disease by adding symptoms related to patients' condition and behavior, which is accomplished by data analysis. Raw data from healthcare are heterogeneous they need to collect and store in organized forms, this data used for early detection of human disease.

In the proposed system we enter symptoms, as per patients' condition, the system analyzes symptoms given by the patient and predicts diseases. This proposed system will not only predict the diseases but also recommend the appropriate doctors based on a particular disease. The list of doctors' datasets will be used for both the symptoms checking and prediction of diseases.

This proposed system will predict diseases like polio, dengue, lung disease, blood cancer. This system is user-friendly. Data mining also is known as Knowledge Discovery in databases refers to the nontrivial extraction of implicit, previously unknown and potentially useful information from data stored in databases.

KDD is an iterative process where evaluation measures can be enhanced, mining can be refined, new data can be integrated and transformed in order to get different and more appropriate results.

While data mining and knowledge discovery in databases are frequently treated as synonyms, data mining actually part of the Knowledge Discovery process. The following figure shows data mining as a step in the knowledge discovery process.

II. PROBLEM DEFINITION

" Health Care System Recommendation."

To design and develop data mining algorithm to cluster the symptoms dataset which helps to map into the corresponding disease.

To recommend the specialist doctors of the disease by the recommendation system for the corresponding symptoms given by the user.

To develop the web application which predicts the disease, recommends the specialist doctor and which helps to take appointment of doctor..

III. LITERATURE REVIEW

A Literature survey plays a very important role in project development. It represents a study of the previously existing system, the material on the topic of the report. These may include existing system theories about the topic, research done, challenging being faced and ongoing work. in project development and understanding the risk and feasibility of the project A Literature survey is the best practices. Literature Survey also gives light on various tools, platform and operating systems suitable for project development and research

1. In Subasish Mohapatra, Prashanta Kumar Patra "Smart Health Care System using Data Mining" the author shows extracting hidden information for datasets. The smart health care management system is a system that supports the end-user and also allows a user to guide health issues through an online system. This research doings in the field of medical sciences since there is a requirement of well-organized methodologies for analyzing, predict and detecting diseases. To detect and predict diseases Data mining applications are used for the management of smart healthcare.

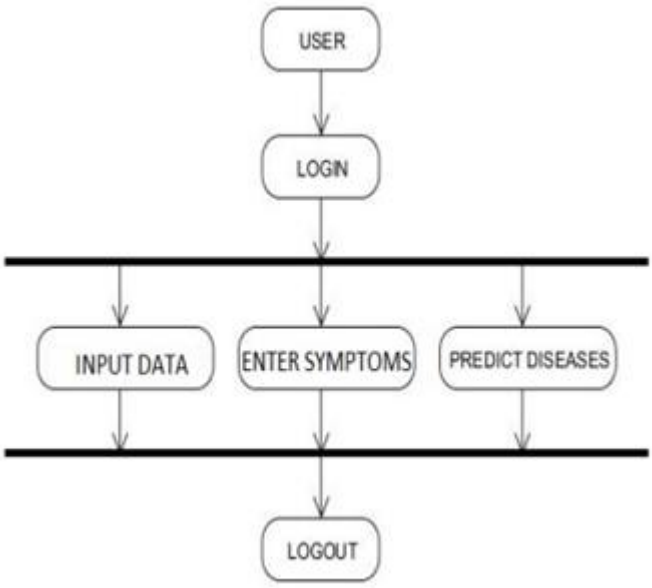
2. In Monika Gandhi, Dr.Shailendra Narayan Singh "Predictions in Heart Disease Using Techniques of Data Mining" focused on classification methods of data mining used in data discovery. The target of the present effort is to find out the aspects of the use of healthcare data for the aid of people by a method of data mining procedures. taking into account earlier information and data. The main aim is to suggest an automated system for diagnosing heart diseases by

3. In XiangxiangZeng , Senior Member, IEEE, Yinglai Lin, Yuying He, Linyuan L¨ u, Xiaoping Min_, and Alfonso Rodrıguez-Pat ´on "Deep collaborative filtering for prediction of disease genes "one of the most reliable models for its well-established framework Inductive Matrix Completion (IMC) is and its superior performance in predicting gene-disease associations. The satisfactory for ranking novel disease phenotypes as well as mining unexplored relationships. results show that DCF is still

4. In Here Electronic health records (EHRs), EHR data, LVAD implant, temporal mining can be used Temporal patterns, such as transitions between clinical events over time, can be extracted using temporal mining techniques. transforming large temporal data records into a clear and easily understandable This has the benefit of e. Extracting temporal patterns from large volumes of clinical data is challenging, but extremely valuable.

5. In this research work has identified three blood Cancer Classifiers, k-nearest neighbor (k-NN), decision tree (DS), and Support Vector Machine (SVM) for this study. In the area of health care, leukemia affects blood status and can be discovered by using the Blood Cell Counter (CBC). . This study aims to predict the leukemia existence by determining the relationships of blood properties and leukemia with gender, age.

IV. SYSTEM ARCHITECTURE



V. SCOPE AND FUTURE WORK

- The proposed system will take the symptoms and gives predicted disease as a result.
- Patient can also take appointment without stepping out of the house.
- This proposed system will work with small datasets because it requires less machine power

VI. CONCLUSION

By using this proposed system patient can know the disease without stepping out of the house, when user enters the symptoms the system will predict the disease related to the symptoms.

Our proposed system also provides/recommend the doctor based on that predicted disease.

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