Heart Attack Identification Method Using Machine Learning Classification In E-Healthcare

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Abstract- *The healthcare domain is one of the prominent research fields in the current scenario with the rapid improvement of technology and data. It is difficult to handle the huge amount of data of the patients. It is easier to handle this data through Big Data Analytics. There are a lot of procedures for the treatment of multiple diseases across the world.*

Keywords- Machine Learning, KNN System, Accuracy, ML Model

I. INTRODUCTION

At present, when one 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 of 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 an automated program which can save time as well as money, it could be easier to the patientwhich can make the process easier. There are other Heart related Disease Pre-diction System using data mining techniques that analyzes the risk level of the patient. Heart Disease Predictor is a web based application that predicts the heart disease of the user with respect to the symptoms given by the user. Heart disease Prediction system has data sets collected from different health related sites. With the help of heart Disease Predictor the user will be able to know the probability of the disease with the given symptoms. As the use of internet is growing every day, people are always curious to know different new things. People always try to refer to the internet if any problem arises. People have access to internet than hospitals and doctors. People do not have immediate option when they suffer with particular disease. So, this system can be helpful to the people as they have access to internet 24 hours.

II. LITERATURE SURVEY

1. Paper Name: Design And Implementing Heart Disease Prediction Using Naïve-Bayesian

Author: Anjan Nikhil Repaka,Sai Deepak Ravikanti.

Abstract: Data mining, a great developing technique that revolves around exploring and digging out significant information from massive collection of data which can be further beneficial in examining and drawing out patterns formaking business related decisions. Talking about the Medical domain, implementation of data mining in this field can yield in discovering and withdrawing valuable patterns and information which can prove beneficial in performing clinical diagnosis. The research focuses on heart disease diagnosis by considering previous data and information. To achieve this SHDP (Smart Heart Disease Prediction) is built via Navies Bayesian in order to predict risk factors concerning heart disease. The speedy advancement of technology has led to remarkable rise in mobile health technology that being one of the web application. The required data is assembled in a standardized form. For predicting the chances of heart disease in a patient, the following attributes are being fetched from the medical profiles, these include: age, BP, cholesterol, sex, blood sugar etc... The collected attributes acts as input for the Navies Bayesian classification for predicting heart disease. The dataset utilized is split into two sections, 80% dataset is utilized for training and rest 20% is utilized for testing. The proposed approach includes following stages: dataset collection, user registration and login (Application based), classification via Navies Bayesian, prediction and se- cure data transfer by employing AES (Advanced Encryption Standard). There-after result is produced. The research elaborates and presents multiple knowledge abstraction techniques by making use of data mining methods which are adopted for heart disease prediction. The output reveals that the established diagnostic system effectively assists in predicting risk factors concerning heartdiseases.

III. PROBLEM STATEMENT

We are developing this machine learning based model on given information to predict whether a patient is suffering from heart diseases or not.

IV. PROPOSED SYSTEM SOLUTION

The main Objective of this project is to match symptoms associated with heart diseases with relevant databases which are useful for prediction of heart diseases in people. To determine significant risk factors associated, based on medical datasets which may lead to heart diseases. To implement Naïve Bayes Classifier that classifies the diseases as per the input of the user To give immediate output to user

V. METHODOLOGY

1. Pre-Processing and Data Cleaning

Data preprocessing is an integral step in Machine Learning because the standard of data and also the useful information which can be derived from it directly affects the ability of our model to learn; therefore, it's extremely important that we preprocess our data before feeding it into our model.

2. Feature Engineering

Feature engineering is that the method of using domain knowledge of the information to create features that make machine learning algorithms work. If feature engineering is finished correctly,

VI.CONCLUSION

In the study , an efficient machine learning based diagnosis system has been developed for diagnosis of heart disease. Machine Learning Classifier includes LR , K-NN , ANN , SVM , NB and DT are used in designing the system Developing a decision support system through a machine learning algorithm it will be more suitable for diagnosis of heart diseases .Irrelevant Feature also degrade the performance of diagnosis system and increases the computational time

VII. ACKNOWLEDGMENT

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