ABSTRACT

DECISION TREE BASED HEART DISEASE PREDICTION USING ML ALGORITHMS

Heart disease is a commonly occurring disease and is the major cause of sudden death now a days. This disease attacks the person instantly. Most people are not aware of the symptoms of heart disease. Timely attention and proper diagnosis of heart disease will reduce the mortality rate. Medical data mining is to explore hidden patterns from the data sets. In this project, we have applied five machine learning algorithms namely KNN, Logistic Regression, Decision Tree, Random Forest, and Navie Bayes predict the heart disease. Result shows that DT gives high accuracy score with 96% compare to other algorithms LR is 86%, RF is 90%, NB is 83%and KNN is 95%.

In order to improve the accuracy we have done Feature Selection. Feature selection measure discards redundant features to improve the accuracy of the classifier. Our proposed method effectively identifies the redundant features compared to other existing features to effectively predict heart disease. This project helps to predict the future possibility of heart disease in patients.

This project develops a machine learning model to predict future possibility of heart disease by implementing KNN, LR, DT, RFC and NB Algorithm. This project mainly consists of two modules. In the first module, Processing and Feature selection is applied for understanding distribution of different features and drawing correlation between data in the dataset. This part selects only predominant features for further process.

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