***Prediction of Heart Disease Using Machine Learning Algorithms***

***Abstract:***

***Health care field has a vast amount of data, for processing those data certain techniques are used. Data mining is one of the techniques often used. Heart disease is the Leading cause of death worldwide. This System predicts the arising possibilities of Heart Disease. The outcomes of this system provide the chances of occurring heart disease in terms of percentage. The datasets used are classified in terms of medical parameters. This system evaluates those parameters using data mining classification technique. The datasets are processed in python programming using two main Machine Learning Algorithm namely Decision Tree Algorithm and Naive Bayes Algorithm which shows the best algorithm among these two in terms of accuracy level of heart disease.***

**1.introduction:**

Data mining is extracting information from the data sets.Data mining can be done from online data and offline data and from data bases. From data sets we can mainly do clustering, classification and regression using Machine Learning Algorithms.

**2.Data Source & Data Set:**

From the IEEE test papers I took data set from UCI Machine Learning respiratory. And the data contains details of the patients suffering from the cardio problems based on their age and their health problems.

**3.Description of Algorithm:**

Here based on the data I had use Decision Tree Algorithm because it handles the categorial and numerical data. And on certain conditions it gives the results in the form of binary format(either 0 or 1).

**4.Steps Followed in algorithm:**

Firstly importing the required libraries and also for plotting we will use matplot library to project the results. Then splitted the data into testing and training. After that import the Decision Tree from the sklearn. By using Standard Scalar which is used to normalize the data and by using it fitting the X\_train and X\_test. Then after using the confusion matrix it shows the data classified. By using the matplot library projected the training and testing results based on the categorial variable.

***PRUDHVI RAJ MALLADI***