## **HCL INTERNSHIP-MINI PROJECT**

Project Title: Heart Disease Prediction and Reporting

Name: S.vvSatyanarayana

Reg no: 39110908

**ABSTRACT**

The health care industries collect huge amounts of data that contain some hidden information, which is useful for making effective decisions. For providing appropriate results and making effective decisions on data, some advanced data mining techniques are used. In this study, a Heart Disease Prediction System (HDPS) is developed using Logistic Regression algorithms for predicting the risk level of heart disease. The system uses 15 medical parameters such as age, sex, blood pressure, cholesterol, and obesity for prediction. The HDPS predicts the likelihood of patients getting heart disease. It enables significant knowledge. E.g., Relationships between medical factors related to heart disease and patterns, to be established. We have employed the multilayer perceptron neural network with backpropagation as the training algorithm. The obtained results have illustrated that the designed diagnostic system can effectively predict the risk level of heart diseases.

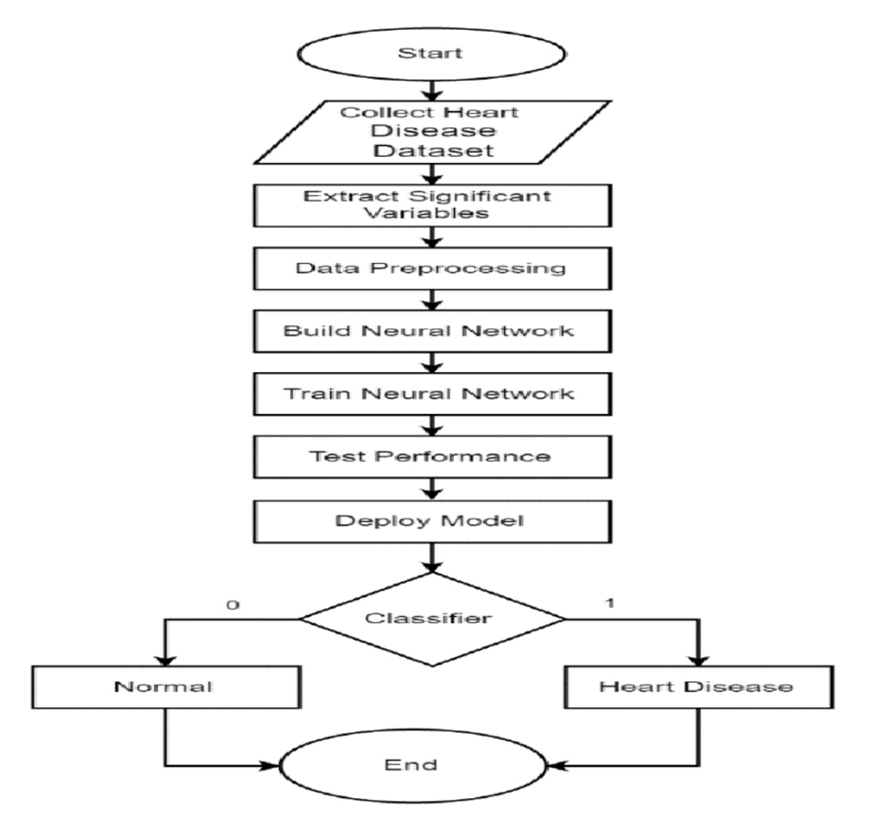
## **AIM OF THE PROJECT**

The main aim of the heart disease prediction project is to determine if a patient should be diagnosed with heart disease or not. Which is a binary outcome, so: Positive result =1, the patient will be diagnosed with heart disease. Negative result =0, patient will not be diagnosed with heart disease.

**SCOP OF THE PROJECT**

Here the scope of the project is that integration of clinical decision support with computer-based patient records could reduce medical errors, enhance patient safety, decrease unwanted practice variation, and improve patient outcome. This suggestion is promising as data modelling and analysis tools, e.g., data mining, have the potential to generate a knowledge-rich environment which can help to significantly improve the quality of clinical decisions

**FLOW DIAGRAM**

****