Objective:

The main objective of this research is to develop a heart prediction system. The system can discover and extract hidden knowledge associated with diseases from a historical heart data set Heart disease prediction system aims to exploit data mining techniques on medical data set to assist in the prediction of the heart diseases. The objective of this project is to check whether the patient is likely to be diagnosed with any Cardiovascular heart disease based on their medical attributes such as gender , age, chest pain, fasting sugar level, etc.. A dataset is selected from the UCI repository with patient's medical history and attributes.

The goal of our 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, the patient will not be diagnosed with heart disease. The studies of the past are mainly based on a 13-feature dataset. The classification is common in every study to predict if a patient has heart disease or not, and also one most common pattern which can be seen is that the dataset commonly used is of Cleveland . The results obtained achieved great accuracies like random forest with 89.2 percent accuracy ; decision tree with 89.1 percent accuracy ; ANN with 92.7 percent accuracy , 89 percent , and 89.7 percent accuracy ; and SVM accuracy with 88 percent .