Batch No:

NARASAROAPETA ENGINEERING COLLAGE
(AUTONOMOUS)
DEPARTMENT OF CSE
Academic Year:: 2020-21 :: III Year II Semester

B.Tech. MINI PROJECT -II:: ABSTRACT

Name of the Class / Section	III-CSE D		
Batch Number	11		
Project Domain / Technology	Machine Learning		
Project Title	Heart disease prediction using Machine learning		
Guide Name	Asst. Prof. M Sirisha		
Students Registered	**Registered Number**	**Student Name**	**Student Signature**
	19475A0504	Kotha Sampath Kumar	
	18471A05J2	CH Sai Ganesh	
	18471A05N5	V Raju	

Signature of Guide	**Signature of Coordinator**	**Signature of Head of the Department**

Batch No:

Abstract of the Project (In 200 words)

Heart disease is one of the most significant causes of mortality in today's world. Heart disease proves to be the leading cause of death for both men and women. This affects the human life very badly. The diagnosis of heart disease in most cases depends on a complex combination and huge volume of clinical and pathological data. Accurate and on time diagnosis of heart disease is important for health failure prevention and treatment.

Machine learning has been shown to be effective assisting in making decisions and predictions from the large quantity of data produced by the health care industry. Various traditional machine learning algorithms were available that aims in improving the accuracy of heart disease prediction.

To address this issue, surrogate data is generated from kaggle dataset .The datasets used are classified in terms of medical parameters. The datasets are processed in python programming using Machine learning algorithms namely logistic regression , Decision Tree, Naïve Bayes. This project gives us significant Knowledge that can help us predict patients with heart disease.

Existing System (If any) – Features & Drawbacks

The previous system uses logistic regression which is not so accurate.

In this system, the input details are obtained from the patient. Then from the user inputs, using ML techniques heart disease is analyzed. Now, the obtained results are compared with the results of existing models within the same domain and found to be improved. The data of heart disease patients collected from the Kaggle is used to discover patterns with KNN , DT, Support Vector machines SVM, and NaiveBayes. The results are compared for performance and accuracy with these algorithms.

Batch No:

Proposed System – Features
List of objectives/features that are planned to implement.

The objective of this project is to check whether the patient is likely to be diagnosed with any cardiovascular heart diseases based on ther medical attributes such as gender, age, chest pain, fasting sugar level, etc. A dataset is selected from Kaggle with patients medical history and attributes. By using this dataset, we predict whether the patient can have a heart disease or not. To predict this, we use 14 medical attributes of a patient and classify him if the patient is likely to have heart disease. These medical attributes are trained under three algorithms: Logistic Regression K Nearest Neighbors and Bayes Classifier. And finally we classify patients who are at risk of getting a heart disease or not.

Software & Hardware Requirements

Software Requirements

Google colab

Language : Python

Hardware Requirements

Processor : I3,I5,I7

RAM : 4GB,6GB

Space on Hard Disk : 1TB