Heart Disease Prediction

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Introduction

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- Point 1 - Heart diseases is a term covering any disorder of the heart. Heart diseases have become a major concern to deal with as studies show that the number of deaths due to heart diseases have increased significantly over the past few decades in India, in fact it has become the leading cause of death in India.
- Point 2 - A study shows that from 1990 to 2016 the death rate due to heart diseases have increased around 34 per cent from 155.7 to 209.1 deaths per one lakh population in India.
- Point 3 - Thus preventing Heart diseases has become more than necessary. Good data-driven systems for predicting heart diseases can improve the entire research and prevention process, making sure that more people can live healthy lives. This is where Machine Learning comes into play. Machine Learning helps in predicting the Heart diseases, and the predictions made are quite accurate.

Problem Statement

- A dataset is formed by taking into consideration some of the information of individuals. The problem is : based on the given information about each individual we have to calculate that whether that individual will suffer from heart disease.

Motivation Of Project

- The main motivation of doing this research is to present a heart disease prediction model for the prediction of occurrence of heart disease.
- And this research work is aimed towards identifying the best classification algorithm for identifying the possibility of heart disease in a patient.

Technical Keywords

- Classification
- Machine Learning
- Heart Disease Prediction
- Training and Testing

Literature Survey

- According to Ordonez,Heart Disease prediction is done using Patients attributes such as Sex,Blood Pressure,Cholestrol etc.
- According to Duff,et al.have done a research work involving five hundred and thirty-three patients who had suffered from cardiac arrest and they were integrated in the analysis of Heart Disease Prediction.

Goals and Objectives

- The Goals and Objective of this project is to create a model that can predict the patient's heart disease status.Another Objective is to explore the data we have been given and find key insights into Heart Disease that could be helpful for the Medical community going forward.

Methodology

- There are four phases that involve in the spiral model:
- Planning phase - Phase where the requirement are collected and risk is assessed.
- Risk analysis Phase - Phase where the risk and alternative solution are identified.
- Engineering phase - At this phase, a software are created and testing are done at the end this phase.
- Evaluation phase - At this phase, the user do evaluation toward the software.

Outcomes

1] It is very helpful to medical Community to Predict Accurate results.

2]By using classification models user can analyze the Dataset.

3]Then Software will display overall feature wise user opinion in the form of graphs.

Applications

1] In Medical Community.

2] Analysis of Heart Disease.

Constraints

Data Mining techniques does not help to provide effective decision making.

S/W Resources

1]Platform : Operating System: Windows 7 or above,Ubuntu 12 or above.

2]IDE: Jupyter Notebook,Google Colab Notebook.

3] Programming Language : Python

Thanking You Slide

We hope that our project on Heart Disease Prediction will help the society by knowing the disease before only and cure the disease accordingly.

The End