Heart Attack Analysis

Introduction

A heart attack occurs when an artery supplying your heart with blood and oxygen becomes blocked. A blood clot can form and block your arteries, causing a heart attack. This Heart Attack Analysis helps to understand the chance of attack occurrence in persons based on varied health conditions.

Dataset

The dataset is Heart\_Attack\_Analysis\_Data.csv. It has been uploaded to canvas.

This dataset contains data about some hundreds of patients mentioning Age, Sex, Exercise Include Angia(1=YES, 0=NO), Chest Pain Type(Value 1: typical angina, Value2: atypical angina, Value 3: non-anginal pain, Value 4: asymptomatic), ECG Results, Blood Pressure, Cholesterol, Blood Sugar, Family History (Number of persons affected in the family), Maximum Heart Rate, Target -0=LESS CHANCE , 1= MORE CHANCE

Aim of the assignment is to

* Building a Predictive Model (Which features decide heart attack?)
* Evaluate the model.
* Refine the model, as appropriate

The students need to

1. Select a method for performing the analytic task
2. Preprocess the data to enhance quality
3. Carry out descriptive summarization of data and make observations
4. Identify relevant, irrelevant attributes for building model.
5. Perform appropriate data transformations with justifications
6. Generate new features if needed
7. Carry out the chosen analytic task. Show results including intermediate results, as needed
8. Evaluate the solutions
9. Look for refinement opportunities

Following are some points for you to take note of, while doing the assignment:

* Prepare a Report that will supplement the submitted codebase.
* State all your assumptions clearly
* List all intermediate steps and learnings
* Make the report structured and readable.