

1. What is the business problem?

Without knowing that a person has Heart Disease.

2. Who are the intended stakeholders, and why is this problem relevant to them?

Doctors - it will help the doctor's decision classifying heart disease thru data values.

Patients - thru Patients symptoms we can tell if there have heart problem and go to the doctor for second opinion.

3. Where are the datasets available from?

There are four available at

<https://archive.ics.uci.edu/ml/datasets/heart+disease>

4. Which one do you like the most?

Patients Classification of Heart Disease

5. What type of data science approach would you use?

Supervised Binary Classification

6. How many rows and how many columns does the dataset have?

It consist of 303 individuals row data and there are effectively 14 columns so, there are effectively 14 columns.

1. Age(age) : the age of the individual.

2. Sex(sex) : the gender of the individual using the following format :
1 = male 0 = female.

3. Chest-Pain type (cp): the type of chest-pain experienced by the individual using the following format :
1 = typical angina
2 = atypical angina
3 = non - anginal pain
4 = asymptotic

4. Resting Blood Pressure(trestbpd) : displays the resting blood pressure value of an individual in mmHg (unit)

5. Serum Cholesterol(chol): displays the serum cholesterol in mg/dl (Unit)

6. Fasting Blood Sugar(fbs): compares the fasting blood sugar value of an individual with 120mg/dl.
If fasting blood sugar > 120mg/dl then : 1 (True) else : 0 (False)

7. Resting ECG(restecg) : 0 = normal 1 = having ST-T wave abnormality 2 = left ventricular hyperthrophy
8. Max heart rate achieved(thalach): displays the max heart rate achieved by an individual.
9. Exercise induced angina(exang):
1 = yes
0 = no
10. ST depression induced by exercise relative to rest(oldpeak): displays the value which is integer or float.
11. Peak exercise ST segment(slope) :
1 = upsloping
2 = flat
3 = downsloping
12. Number of major vessels (0-3) colored by flourosopy(ca): displays the value as integer or float.
13. Thal : displays the thalassemia(thal) : 3 = normal 6 = fixed defect 7 = reversable defect
14. Diagnosis of heart disease(num) : Displays whether the individual is suffering from heart disease or not : 0 = absence 1,2,3,4 = present.

7. Is this project similar to the "Big Mountain Resort"? Yes, no, why?

No because BMR is asking 'How Much' and it's a supervised regression approach while this project is asking 'Do patients have heart disease' answerable by Yes or No, and this project will use Supervised Binary Classification.