

# Detect Heart Disease using patient data.

## Objective

Build a system that can predict if a patient has heart disease. Explore the data, understand the features, and figure out an approach.

## Dataset

This dataset contains data about patient vitals and heart disease(if any) of the same.

Description of columns:

| Attribute                                 | Code given          | Unit  | Data type |
|---|---------------------|---|-----------|
| age                                       | Age                 | in years  | Numeric   |
| sex                                       | Sex                 | 0 = female,<br>1 = male   | Binary    |
| chest pain type                           | chest pain type     | 1 = typical angina,<br>2 = atypical angina,<br>3 = non-anginal pain,<br>4 = asymptomatic  | Nominal   |
| resting blood pressure                    | resting bp s        | in mm Hg  | Numeric   |
| serum cholesterol                         | cholesterol         | in mg/dl  | Numeric   |
| fasting blood sugar                       | fasting blood sugar | 1 = sugar > 120mg/dL<br>0 = sugar < 120mg/dL  | Binary    |
| resting electrocardiogram results         | resting ecg         | 0 = normal,<br>1 = ST-T wave abnormality (T wave inversions and/or ST elevation/depression of > 0.05 mV),<br>2 = Probable or Definite Left Ventricular hypertrophy by Estes' criteria | Nominal   |
| maximum heart rate achieved               | max heart rate      | 71–202  | Numeric   |
| exercise induced angina                   | exercise angina     | 0 = no,<br>1 = yes  | Binary    |
| oldpeak =ST                               | oldpeak             | depression  | Numeric   |
| the slope of the peak exercise ST segment | ST slope            | 1 = upward<br>2 = flat,<br>3 = downward   | Nominal   |
| class                                     | target              | 0 = Normal,<br>1 = Heart Disease  | Binary    |

