

Description

The dataset contains several medical predictor (Independent) variables and one target variable, (Outcome). Predictor variables include:

1. age
2. sex
3. chest pain type (4 values)
4. resting blood pressure
5. serum cholestoral in mg/dl
6. fasting blood sugar > 120 mg/dl
7. resting electrocardiographic results (values 0,1,2)
8. maximum heart rate achieved
9. exercise induced angina
10. oldpeak = ST depression induced by exercise relative to rest
11. the slope of the peak exercise ST segment
12. number of major vessels (0-3) colored by flourosopy
13. thal: 0 = normal; 1 = fixed defect; 2 = reversable defect

Dataset url: <https://www.kaggle.com/datasets/johnsmith88/heart-disease-dataset>

Step 1: Importing the Libraries

```
import numpy as np
import pandas as pd
from sklearn.model_selection import train_test_split
from sklearn.metrics import accuracy_score
```

Step 2: Load the dataset

```
# Loading the csv data to a Pandas DataFrame
heart_data = pd.read_csv('/content/heart.csv')
```

Step 3: Exploratory Data Analysis

Exploratory Data Analysis (EDA), also known as Data Exploration, is a step in the Data Analysis Process, where a number of techniques are used to better understand the dataset being used.

3.1) Understanding Your Variables

- 3.1.1) Head of the dataset
- 3.1.2) The shape of the dataset
- 3.1.3) List types of columns