Heart attacks data visualization

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M2 IASD

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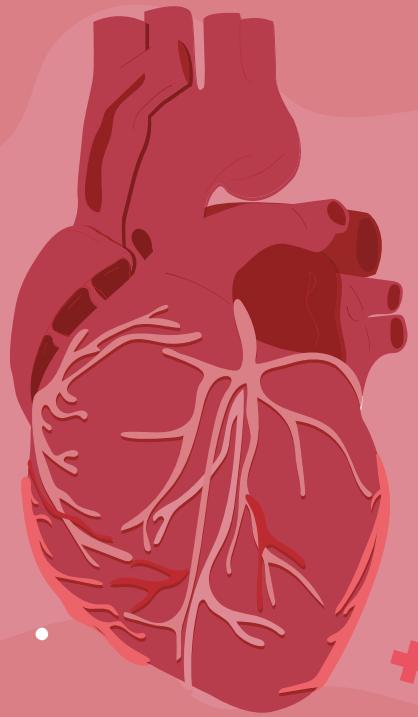


Introduction

A heart attacks occurs when the flow to the heart is blocked.

The blockage is often due to fat, cholesterol and can interrupt the blood flow and destroy the heart muscle.

The incidence rate is 190 by 10 000 people who are over 85.

Used libraries

Pandas

Seaborn+Matplotlib

Plotly

The dataset: Heart attack analysis & Prediction [Heart]

303

rows

15

Columns: 13 Integers & 2 Decimals

The dataset: Heart attack analysis & Prediction [O2 Saturation]

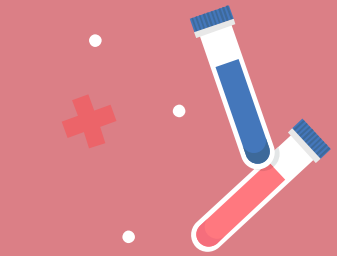
3584

rows

1

Column of doubles

Example of features



1
Maximum heart achieved [thalach]

2
Fasting blood sugar

1 if >120 mg/dl, 0 otherwise

3
Resting electrocardiagraphic

0: normal
1: anomalie
2: Probable left ventricular hypertrophy

4
Resting blood pressure

In mm/Hg

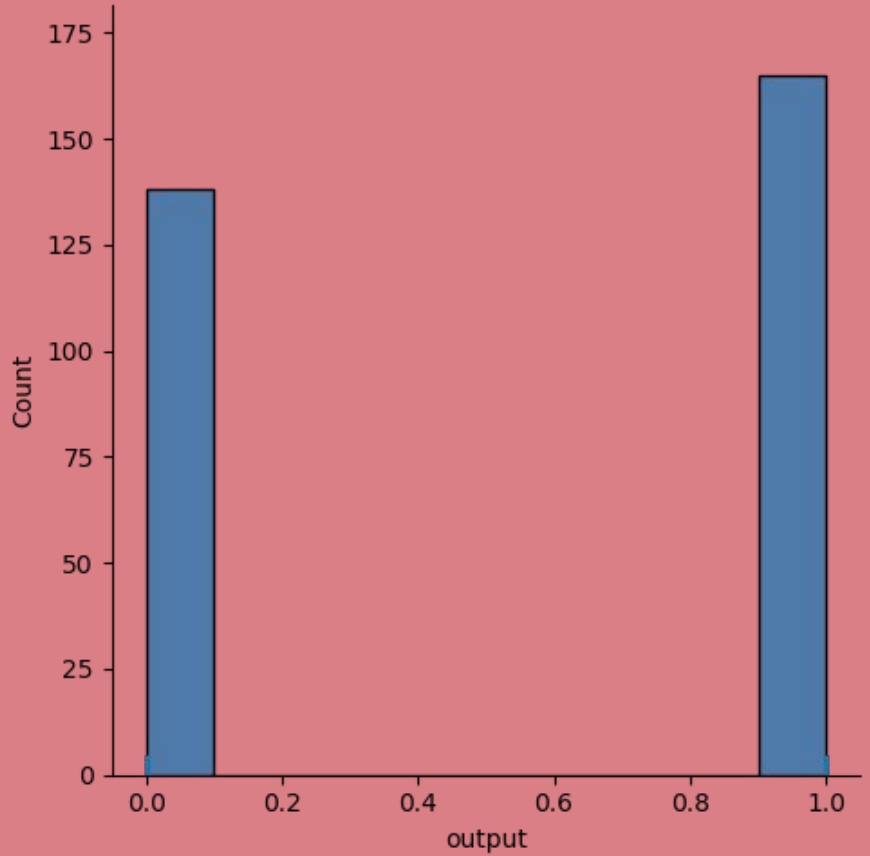
5
Chest pain category

1: Typical angina
2: Atypical angina
3: Non-anginal pain
4: Asymptomatic

6
Cholesterol blood rate

In mg/dL

Distribution of the outcome

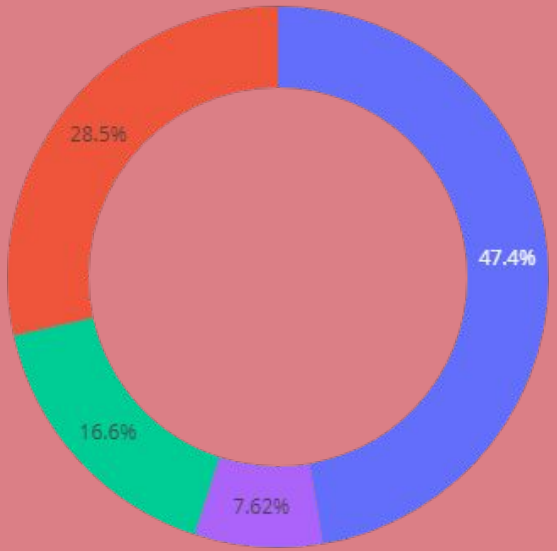


Presence of heart disease

0: No

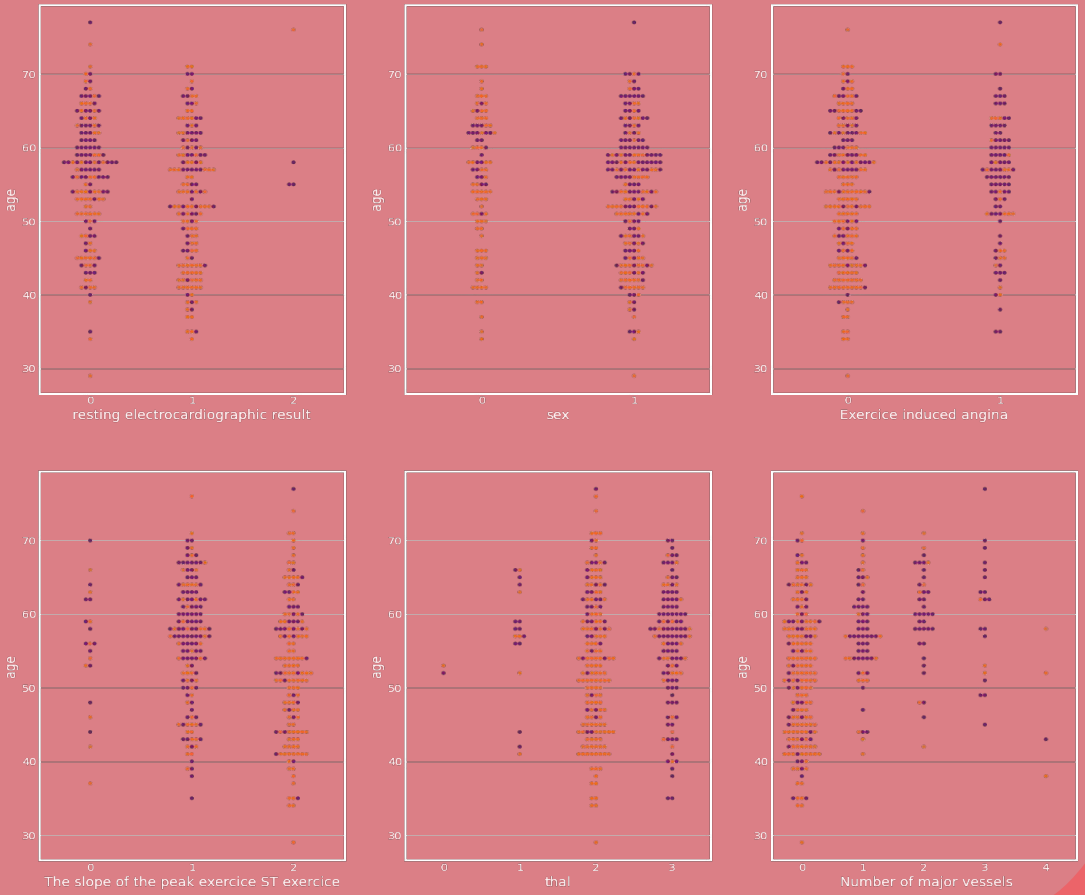
1: Yes

Chest pain

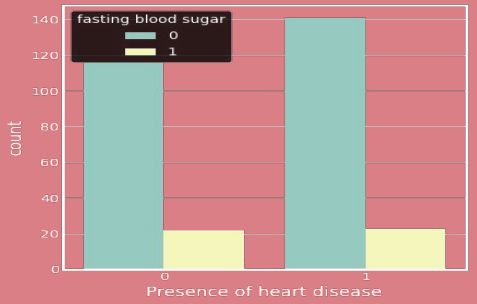


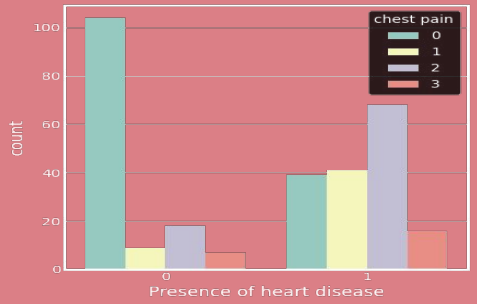
0 Typical angina
2 Non-anginal pain
1 Atypical angina
3 Asymptomatic

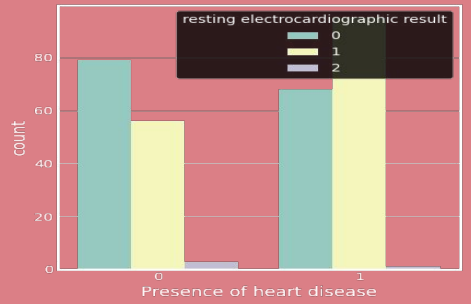
Distribution of data by categorical variable

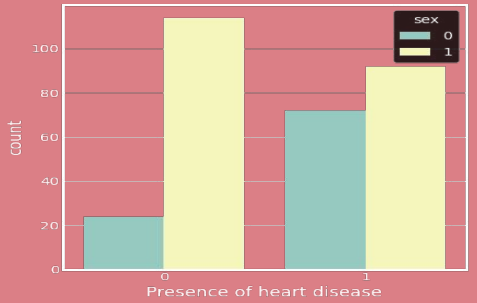


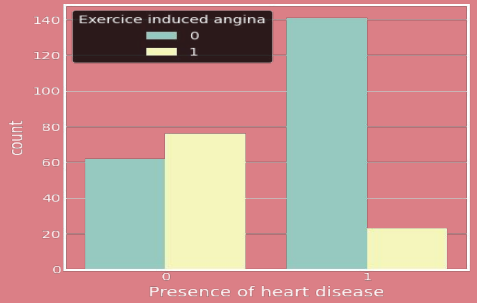
Distribution of outcomes by variable

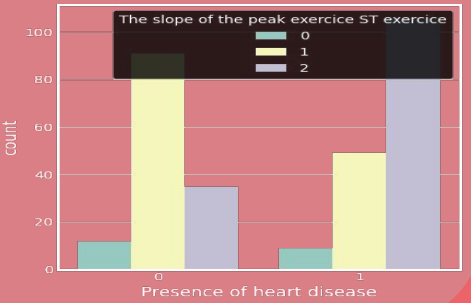






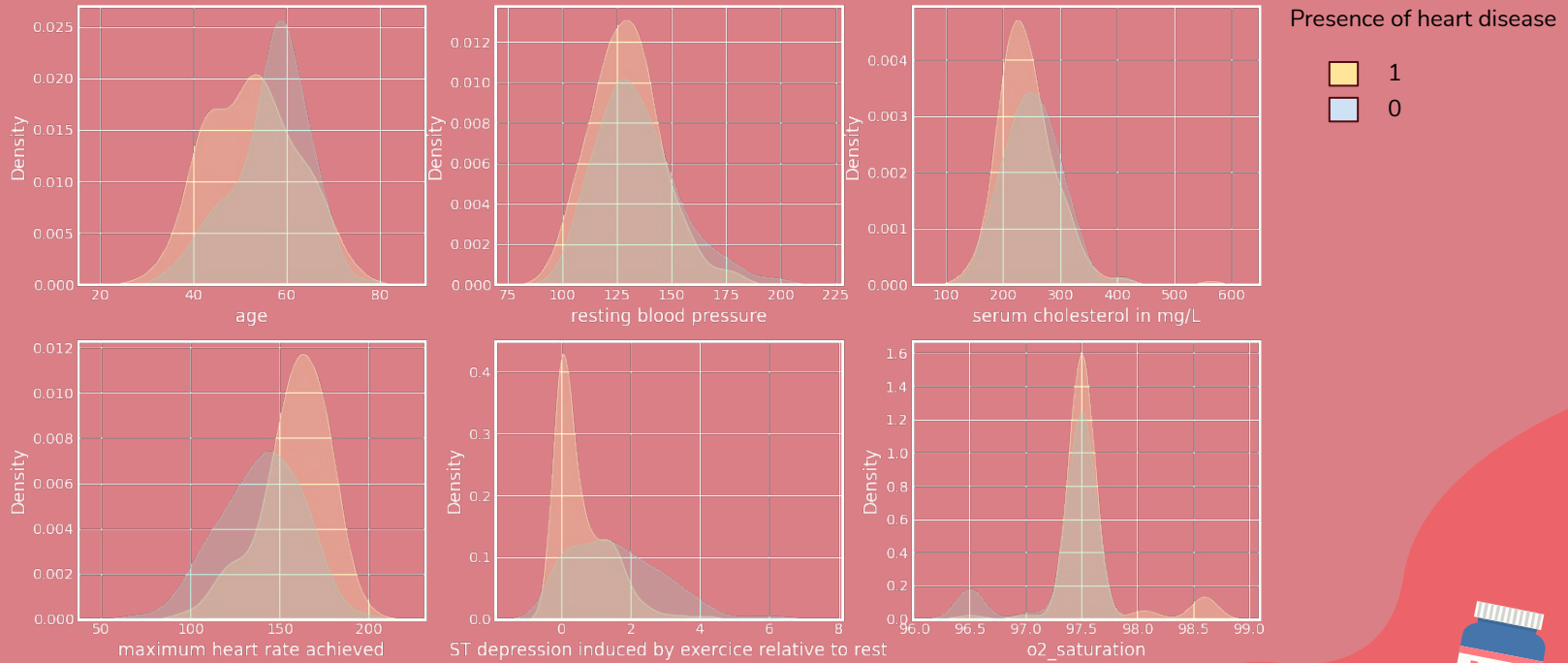




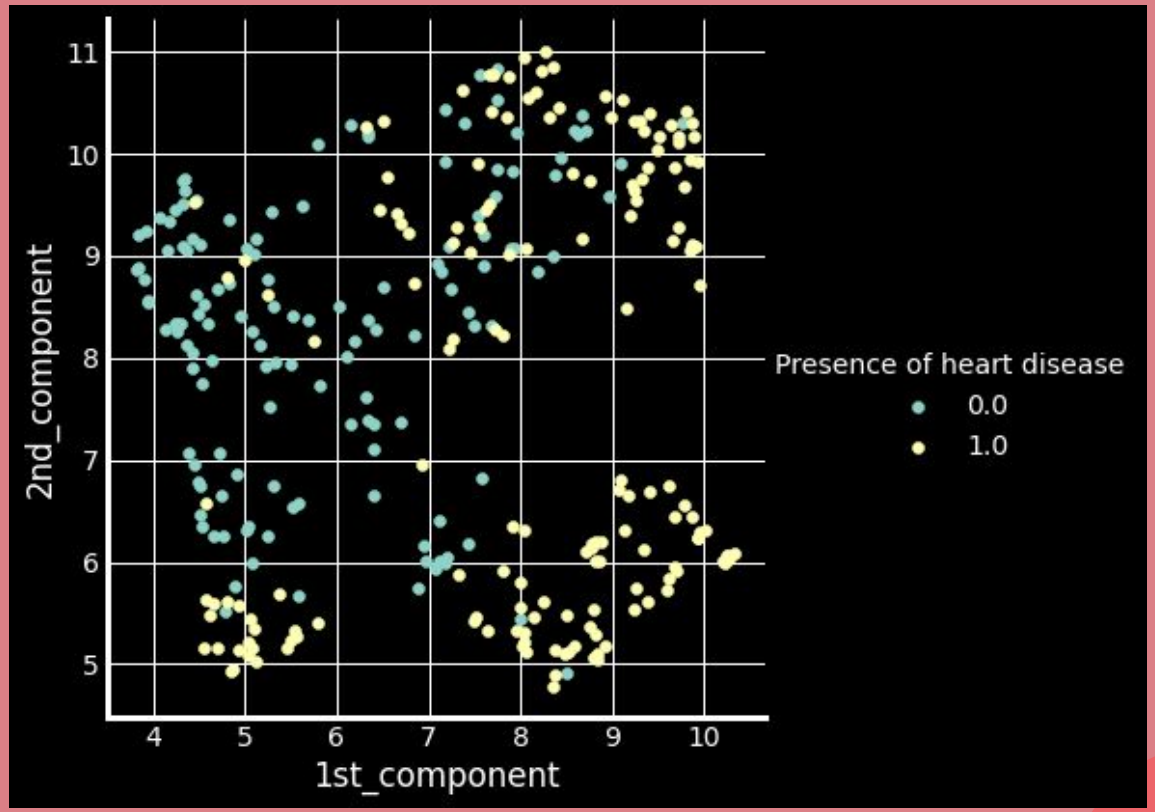


Distribution by outcome

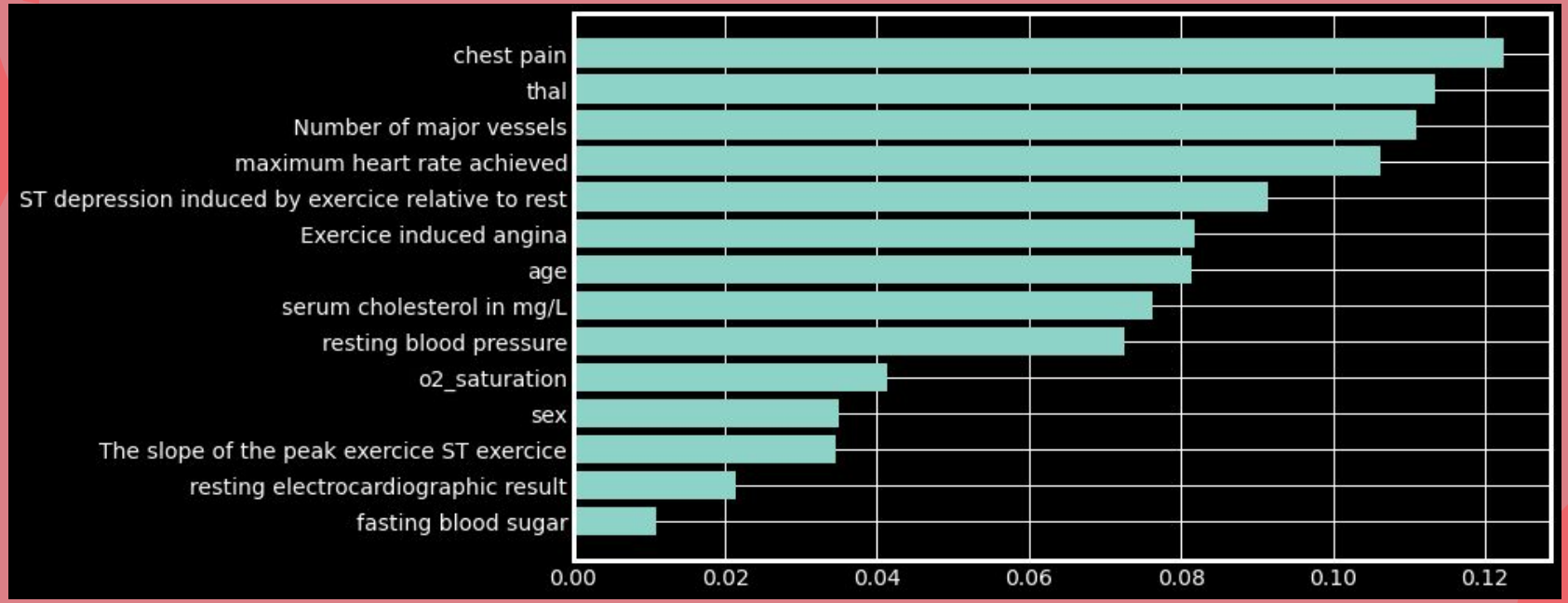
Distributions par classes



Umap dimension reduction



Random forest Feature importances



THANKS!

Does anyone have any questions?