Heart Disease Project

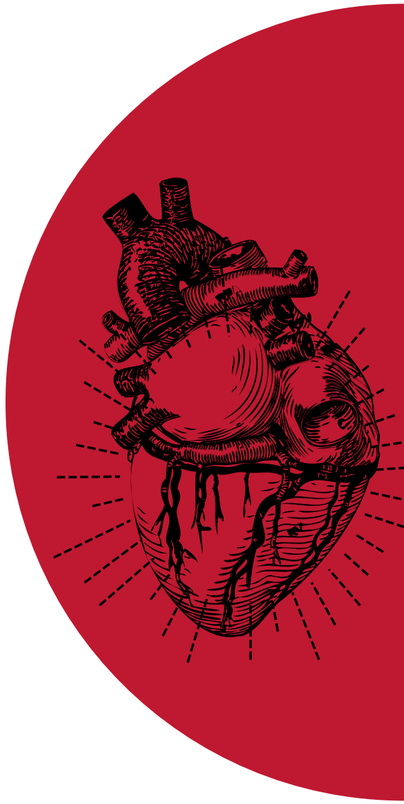
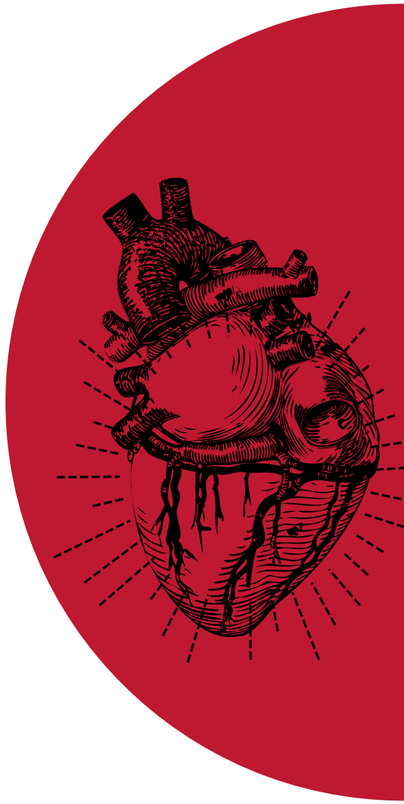


Table of Contents

Goal

Predict whether the patient has heart disease or not.



Data

Age

CP

Exang

Target

Gender

Trestbps

Thalach

Restecg

Oldpeak

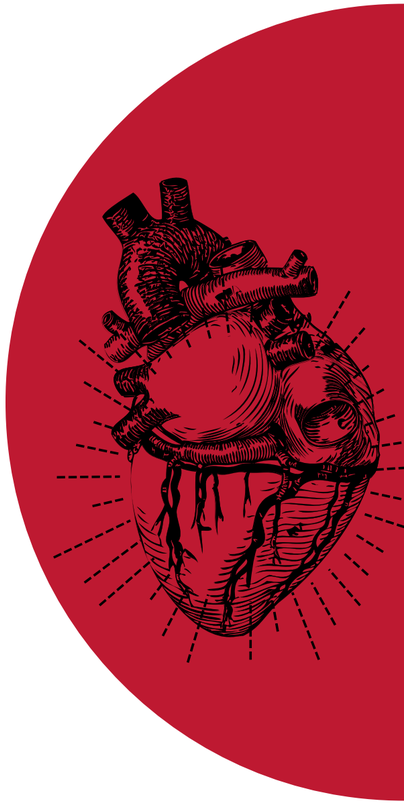
CA

Chol

FBS

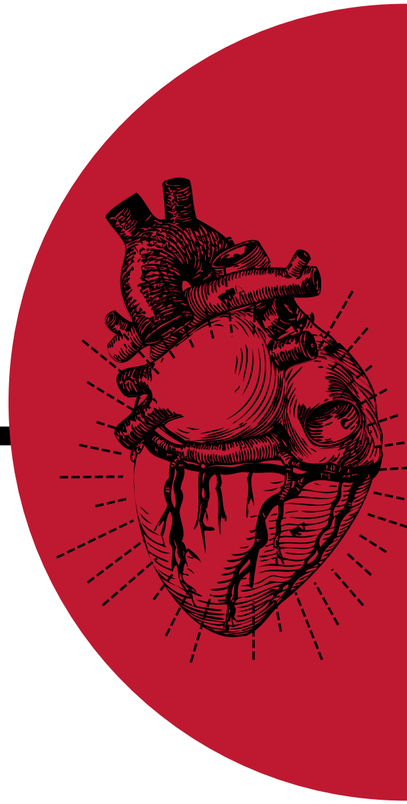
Slope

Thal



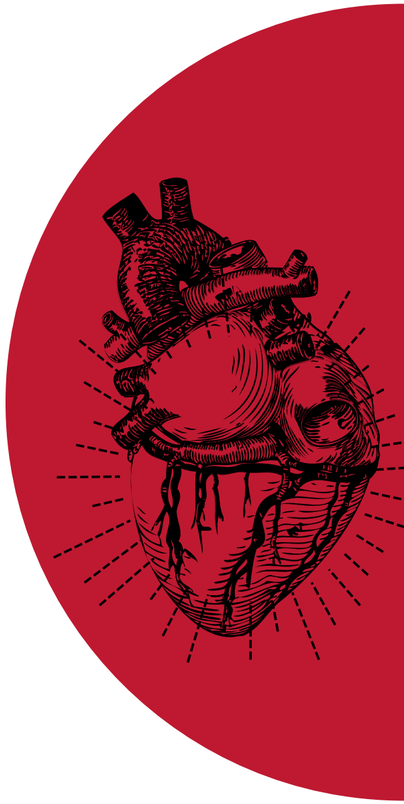
Tools

- Pandas
- NumPy
- Heroku
- Flask
- Seaborn
- Ploty
- matplotlib
- Sklearn
- SQL Alchemy

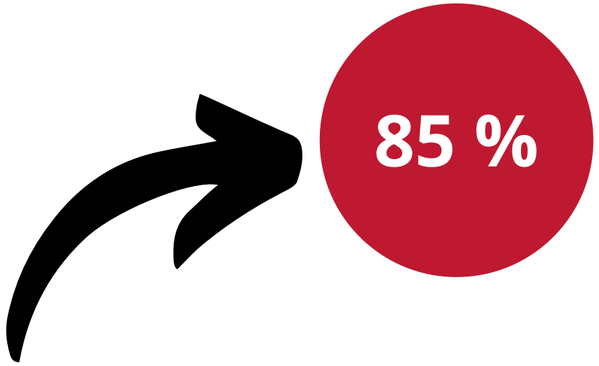


Modeling

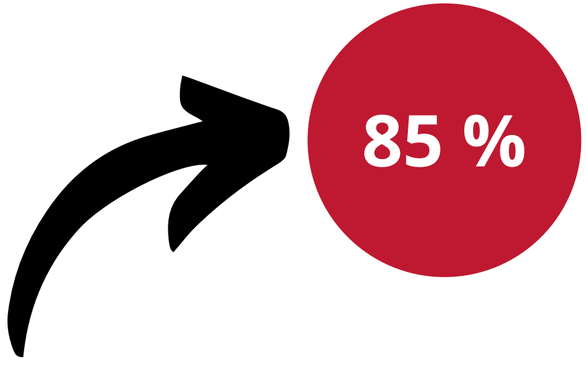
Build
Classification models



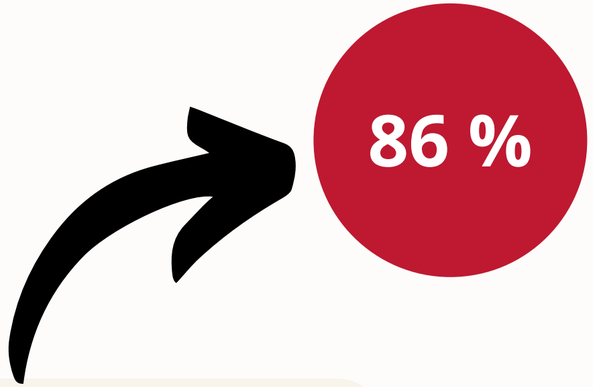
Accuracy



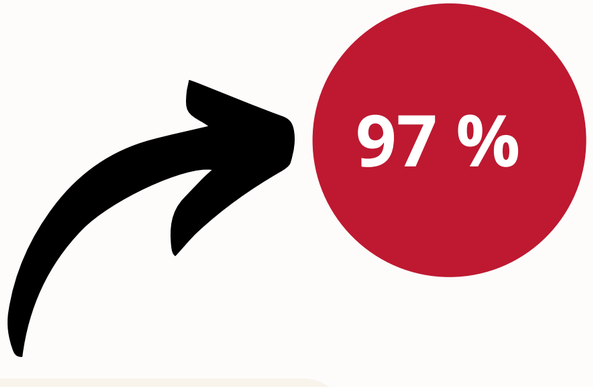
Naive Bayes



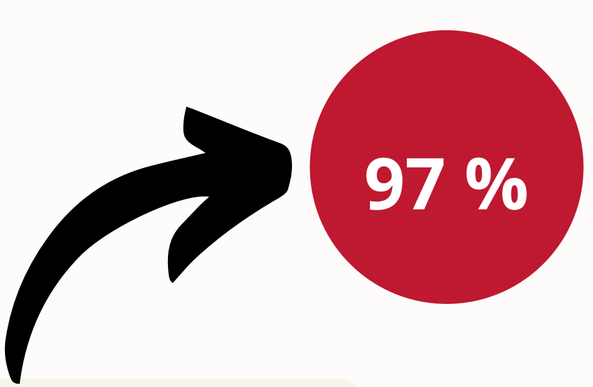
LDA



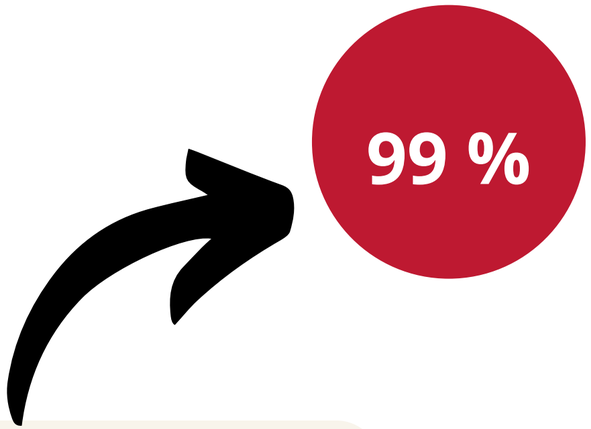
Logistic Regression



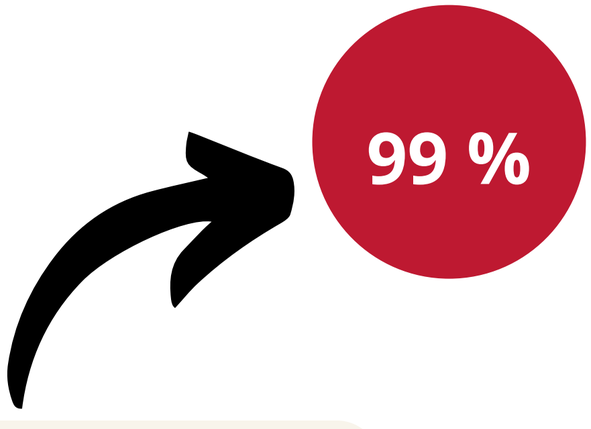
Decision Tree



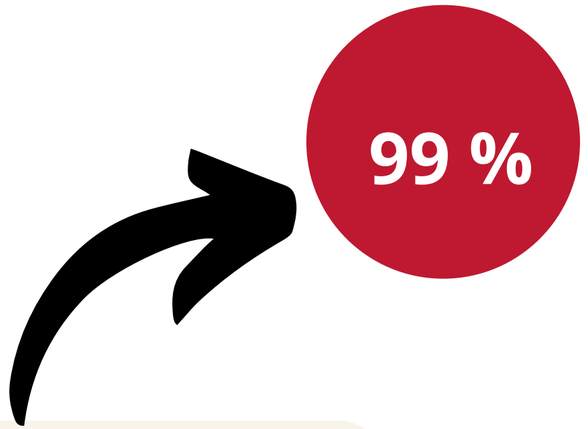
Stacking



Random Forest



XGBoost



Gradient Boosting

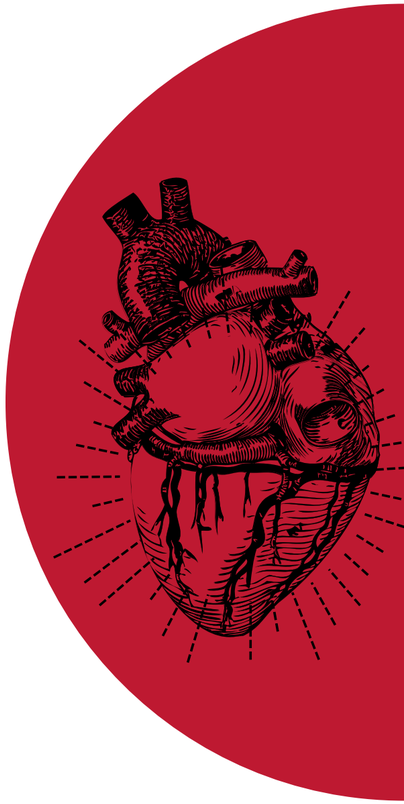
KNN

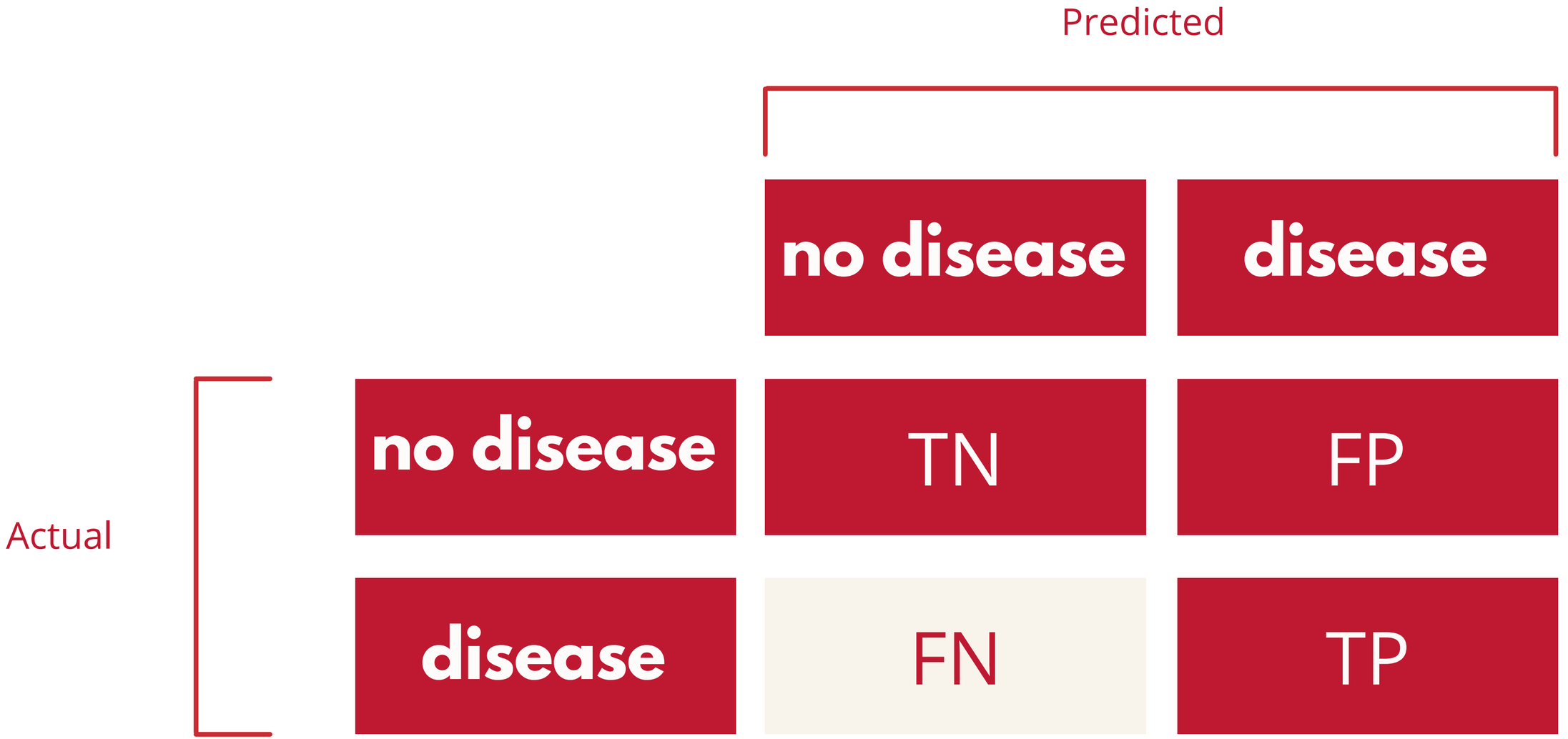
Extra Trees Classifier

SVM

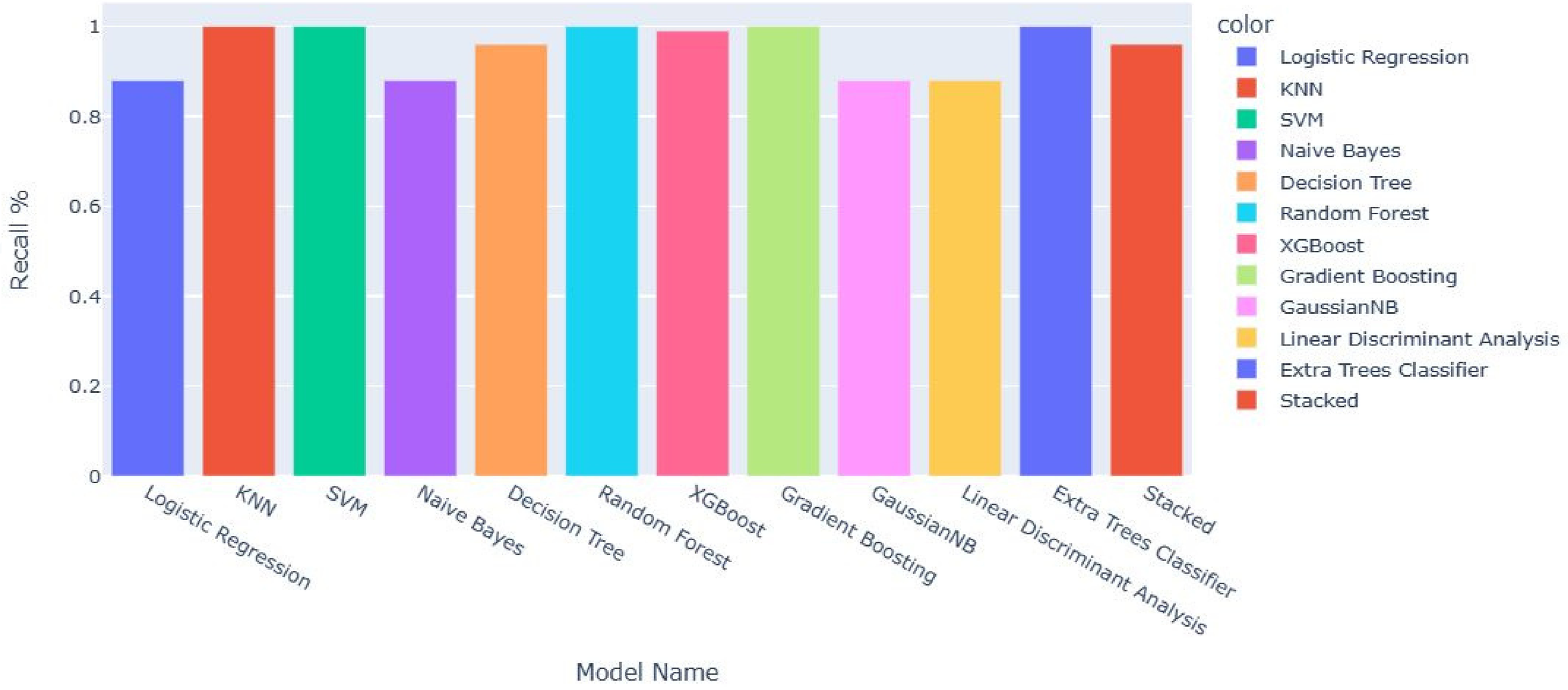
Results

Minimize the number of false predictions for people with heart disease



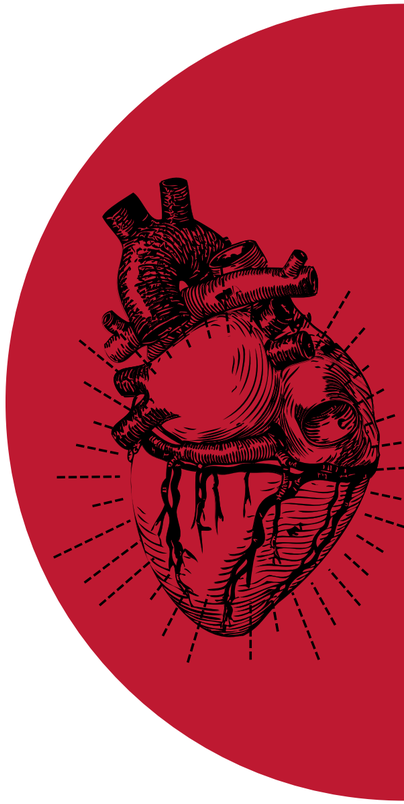


confusion matrix


Recall %
1
0.8
0.6
0.4
0.2
0
Logistic Regression
KNN
SVM
Naive Bayes
Decision Tree
Random Forest
XGBoost
Gradient Boosting
GaussianNB
Linear Discriminant Analysis
Extra Trees Classifier
Stacked
Model Name
color
Logistic Regression
KNN
SVM
Naive Bayes
Decision Tree
Random Forest
XGBoost
Gradient Boosting
GaussianNB
Linear Discriminant Analysis
Extra Trees Classifier
Stacked

Future Work

People with a high risk of heart disease



Thank you..

Any questions?

Rania Almneie
data scientist

Hanadi Alshahrani
data scientist

Najd Alqahtani
data scientist