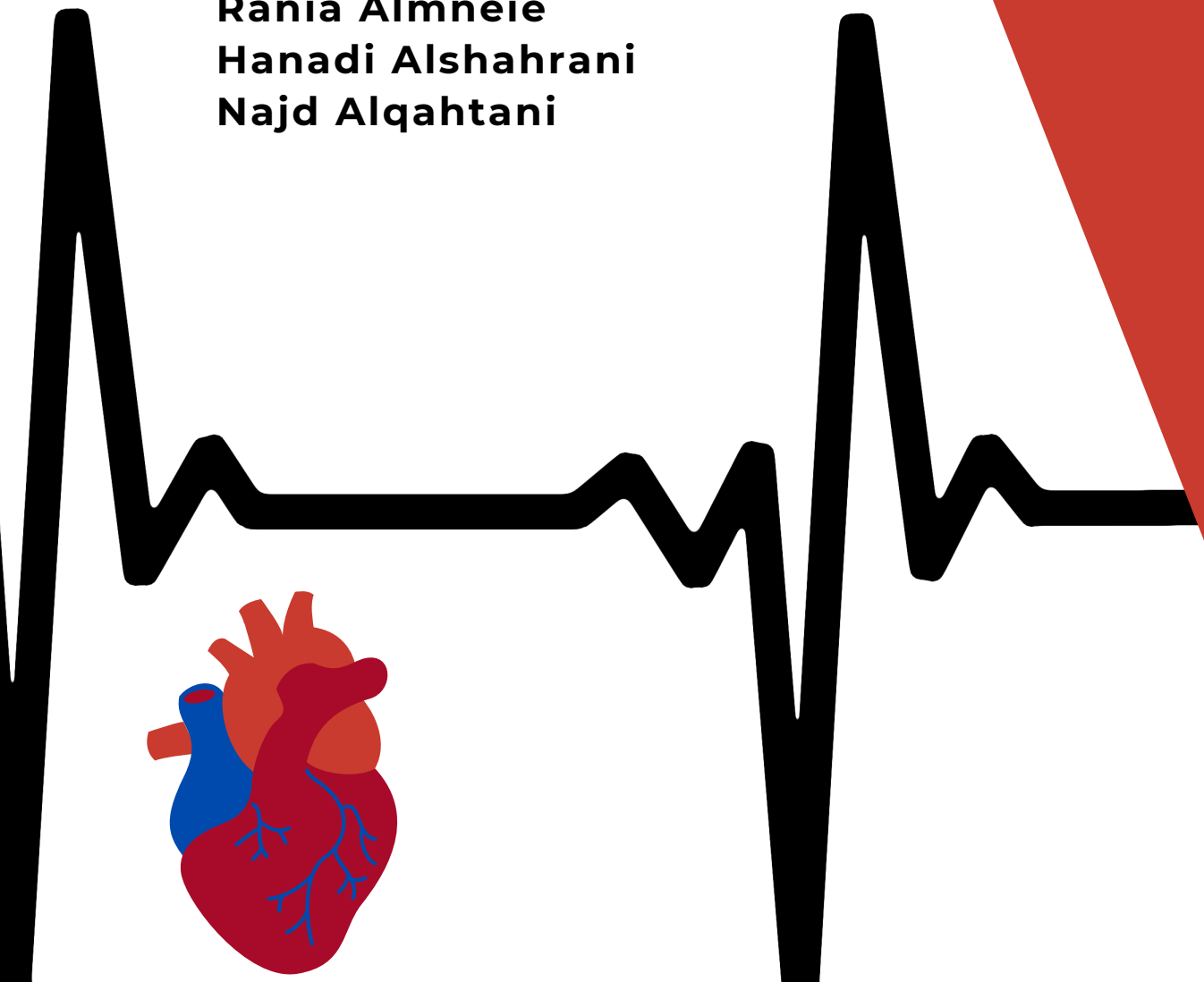
"Start taking care of your heart before it falls apart."

# Heart Disease Proposal

Proposed by

Rania Almneie
Hanadi Alshahrani
Najd Alqahtani



## Goal:

Predict whether the patient has heart disease or not. This is a binary result.

We will experiment with different classification models and see which one yields the most minimum number of incorrect predictions for people with heart disease (Recall).

"A healthy heart is the main source of your strength."

## Question:

Can a classification model predict whether the patient has heart disease or not ?

## Data Description:

The dataset was downloaded from the Kaggle website and consisted of 1026 observations. The predictor Y (Positive or Negative diagnosis of Heart Disease) is determined by 14 features (X):

- age: age in years
- sex: male,  female
- cp: chest pain type
- trestbps: resting blood pressure
- chol: serum cholesterol
- fbs: fasting blood sugar
- restecg: resting electrocardiographic results
- thalach: maximum heart rate achieved
- exang: exercise induced angina
- oldpeak: ST depression induced by exercise relative to rest
- slope: the slope of the peak exercise ST segment
- ca: number of major vessels
- thal: number of defect type
- target: disease, no disease

## Tools:

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