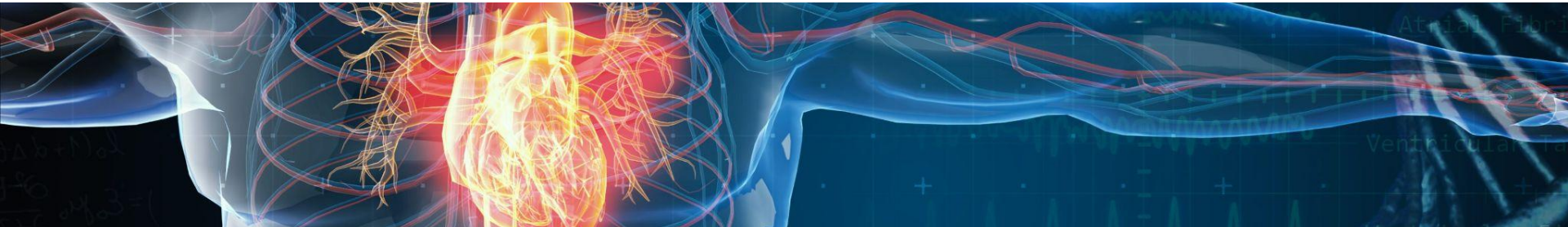
Predicting Heart Disease

Based on Physical Key Indicators.

Significance

Several health conditions, your lifestyle, and your age and family history can increase your risk for heart disease. These are called risk factors. About half of all Americans (47%) have at least 1 of 3 key risk factors for heart disease: high blood pressure, high cholesterol, and smoking. Some risk factors for heart disease cannot be controlled, such as your age or family history. But you can take steps to lower your risk by changing the factors you can control

Detecting and preventing the factors that have the greatest impact on heart disease is very important in healthcare. Computational developments, in turn, allow the application of machine learning methods to detect "patterns" from the data that can predict a patient's condition.



Questions to answer

1. Who is at higher risk of suffering Heart Failure based on sex/gender?
2. What is the correlation between age & heart failure?
3. Are BMI, Smoking, Alcohol drinking, and prior stroke associated to Heart disease?

Technologies Used

Technologies Used

Data Cleaning & Analysis:
Pandas will be used to clean the data and perform an exploratory analysis . Further analysis will be completed using Python.

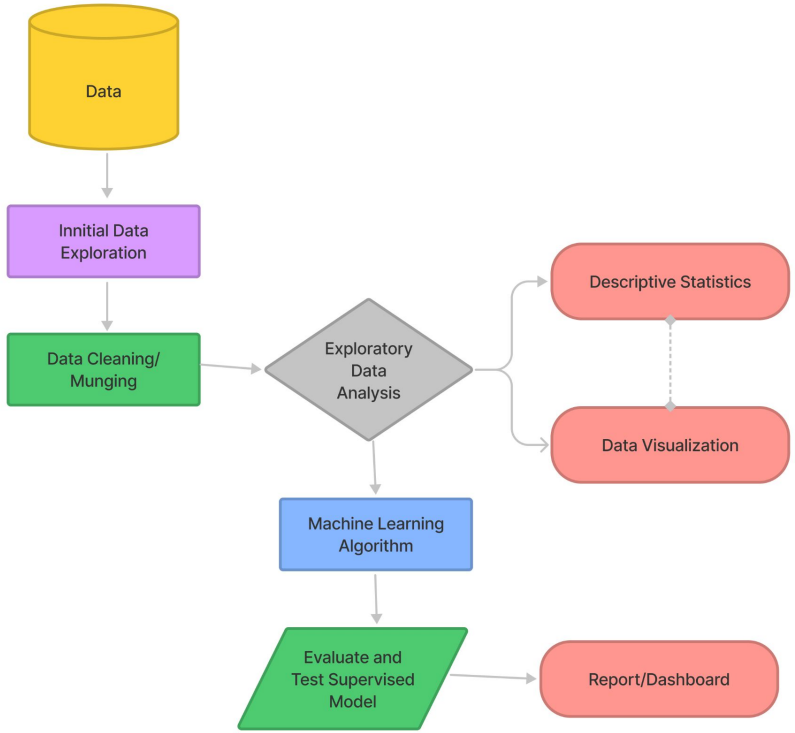
Database Storage:
Postgresql will be the intended database to use , and will be fed from jupyter notebook using SQLite.

Communication Protocols

- Team members will communicate using the #final-project Slack channel.
- Team members will meet at least 1x per week.
- Team members will plan next time they meet at the end of every meeting-- being flexible and open to each other's schedules.
- Team members will communicate with each other in the case they need internal deadline extensions or help with their part of the project.
- Team members will distribute work evenly amongst each other and be responsible for their distribution.
  Segment 1 Responsibilities: due date 4.6.2022
  All the members of the team are responsible of preparing the deliverable required by segment 1 and the majority of the work have been performed in group meetings but the final commit of the information have been splitted as follows:
  - Ivan: Performing the Github Repository for the project, creating the branches and setting up the Flow of the Machine Learning Model
  - Pavel: Uploading the jupyter notebook file and loading up the Database to be used until the end of the project
  - Gustavo: Preparing the final version of the Readme file to submit.
  - Jhonatan: Preparation of the slides presentation to be submitted.

Machine Learning Model

Data flow and processing




Thank you.