

Project Proposal

Purpose:

Cardiovascular diseases have always been one of the most common causes of death globally. According to the World Health Organization (An estimated 17.9 million people died from CVDs in 2019, representing 32% of all global deaths.). The aim of this project is to predict the incidence of cardiovascular diseases.

Question/need:

diagnosing the cardiovascular disease based on several features and symptoms given by the client I will use the features to determine if the disease exists or not in order to be able to warn the client and notify him either way. If he has the disease so he should see a doctor. In the other case, if he doesn't have the disease, he would know the most variable that could cause it in the future and try to avoid that cause

Data Description:

- The dataset from medical examination which were collected at the moment of medical examination.
- Dataset consists of 70 000 records of patients data, 11 features + target [link](#) .

Feature	Type of Feature	name for Feature in data	Data type
Age	Objective	age	int (days)
Height	Objective	height	int (cm)
Weight	Objective	weight	float (kg)
Gender	Objective	gender	categorical
Systolic blood pressure	Examination	ap_hi	int
Diastolic blood pressure	Examination	ap_lo	int
Cholesterol	Examination	cholesterol	1: normal, 2: above normal, 3: well above normal
Glucose	Examination	gluc	1: normal, 2: above normal, 3: well above normal
Smoking	Subjective	smoke	binary
Alcohol intake	Subjective	alco	binary
Physical activity	Subjective	active	binary
Presence or absence of cardiovascular disease	Target	cardio	binary

- **Algorithms:**
 - **Models used:** Linear Regression.

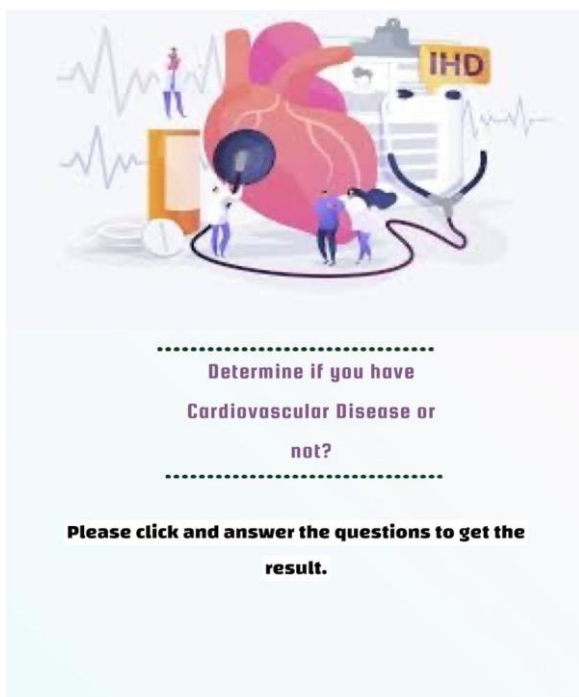
Tools:

- **Programming Language:** Python
- **Environment:** Jupyter notebook
- I will use different types of Python libraries for data science :
 - NumPy
 - Seaborn
 - Pandas
 - Matplotlib
 - SciKit-Learn
- **Other:** Multiplayer Perceptron (MLP).
 - I will use additional tools beyond those required if their need.

MVP Goal:

- **Prepare the environment.**
- **Import all libraries and dependences.**
- **Apply MLP.**

Final look : not like I was Not as I imagine



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