Kwadwo Asante Marco Lopez Malachai Cravens Yarely Vargas

Personal Key Indicators of Heart Disease

Intro

According to the CDC, heart disease is one of the leading causes of death for most races in the US. 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. Our group is interested in learning about what key indicators lead to heart disease. The data we selected from Kaggle comes from the 2020 annual CDC survey data of 400k adults. Personal Key indicators include BMI, Smoking, Alcohol Drinking, Stroke, Physical health, Mental health, Difficulty Walking, Sex, Age Category, Race, Diabetes, Physical Activity, Gen Health, Sleep Time, Asthma, Kidney Disease, Skin Cancer.

Links

Our Data:

https://www.kaggle.com/datasets/kamilpytlak/personal-key-indicators-of-heart-disease CDC Heart Disease info:

https://www.cdc.gov/heartdisease/risk_factors.htm

Info on Precision and Recall:

https://en.wikipedia.org/wiki/Precision and recall

Questions for data

What health conditions affect risk of Heart Disease?

Do male or females have a higher risk of heart disease?

Does mental health affect risk of Heart Disease?

Are people of a certain race more likely to have a heart disease?

Machine learning

Good data exploration:

 $\underline{https://www.kaggle.com/code/arkalodh/prediction-of-heart-disease-easy}$

Good Machine learning results, precision and recall:

https://www.kaggle.com/code/houssemeddinedhahri/eda-prediction-with-7-models/notebook

Website Design Inspiration

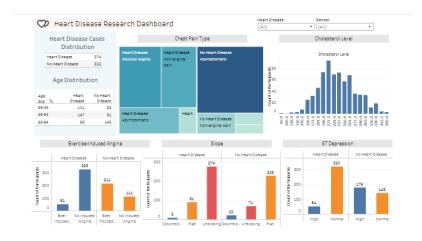
https://world-heart-federation.org/

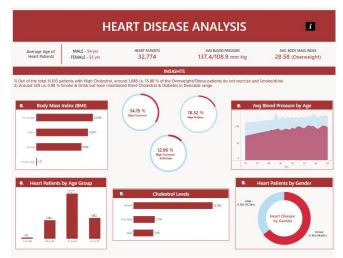
Dashboards

Theme: wine red, vanilla/off white, gray/blue (think blood, heart, artery, veins)

https://public.tableau.com/app/profile/shreerangscp/viz/HeartDisease 16303068486410/ HeartDiseaseAnalysis

 $\underline{https://public.tableau.com/app/profile/jeff.ho4188/viz/HeartDiseaseResearchDashboard/} Dashboard$





Inspiration:

https://www.kaggle.com/code/arkalodh/prediction-of-heart-disease-easy

Roles and Responsibilities

Kwadwo - machine Learning Marco - Tableau Malachai - Tableau Yarely - machine learning, All - Website design/Flask