



## Omdena Local Chapter Project

This user interface is part of the Omdena San Jose, USA, Local Chapter project titled *"Exploring the Chronic Disease Risk Using NHANES Data in the U.S."*, implemented by Shakiba Rahimiaghdam.

The project developed a machine learning-based CVD risk estimation tool using **demographic, clinical, and lifestyle** data from the NHANES dataset (2017–2020). It empowers users to receive real-time personalized predictions, making advanced health insights more accessible.



# Cardiovascular Disease (CVD) Risk Estimation

Enter your details below. The model will estimate your risk of cardiovascular disease.

## Enter Your Details

Age (years)? (e.g., Range: 0 - 100+)

0.00100.00

Ever Told: High Blood Pressure? (e.g., Select Yes or No)

☒ Yes

☐ No

High Cholesterol? (e.g., Select Yes or No)

☒ Yes

☐ No

Angina? (e.g., Select Yes or No)

☒ Yes

☐ No

Metal Objects in Body? (e.g., Do you have any artificial joints, pins, plates, metal suture material, or other metal objects?)

☒ Yes

☐ No

Taking Cholesterol Meds? (e.g., Select Yes or No)

☒ Yes

☐ No

LDL-Cholesterol (mg/dL)? (e.g., Range: 0 - 300 mg/dL)

0.00300.00

Arthritis? (e.g., Select Yes or No)

☒ Yes

☐ No

Psoriatic Arthritis? (e.g., Select Yes or No)

☒ Yes

☐ No

Hip Swelling? (e.g., Select Yes or No)

☒ Yes

☐ No

Taking BP Medication? (e.g., Select Yes or No)

☒ Yes

☐ No

Total Cholesterol (mg/dL)? (e.g., Range: 100 - 300 mg/dL)

100.00300.00

Smoking-Related Disease Diagnosis? (e.g., Have you ever been told you have a smoking-related disease?)

☒ Yes

☐ No

Poverty Income Ratio? (e.g., Range: 0 - 5+)

0.005.00

Waist Circumference (cm)? (e.g., Range: 60 - 150 cm)

60.00150.00

Estimate CVD Risk

Estimated CVD Risk Probability: 73.70%

