Heart Disease Analysis: Visualization of Risk Factors using Tableau

Project Overview :

This project analyses heart disease patterns using Tableau to identify key risk factors influencing heart disease prevalence. The objective is to understand how factors such as age, gender, diabetes, stroke history, smoking, alcohol consumption, BMI, physical activity, race, and general health condition impact heart disease occurrence.

By transforming and visualizing the provided medical dataset, the project delivers meaningful insights to support healthcare awareness, preventive strategies, and data-driven decision-making.

Features:

- Interactive dashboard with 10 analytical visualization sheets
- Gender vs heart disease analysis
- Age vs heart disease comparison
- Diabetic vs Stroke relationship analysis
- Impact of Smoking and Alcohol on Heart Disease
- Stroke vs Other Disease comparison
- Race-wise Heart Disease distribution
- General Health vs Heart Disease analysis

Technologies Used:

- Tableau Public – For creating visualizations, dashboard, and story
- Microsoft Excel – For data preprocessing and verification
- GitHub – For project documentation and repository management

Project Files:

- Tableau Workbook (.twb)
- Heart Disease Dataset (.csv)
- Screenshots of Dashboard and Story
- Final Project Report (PDF)

Links

- Dataset- https://drive.google.com/file/d/190Qmq27LeZZ_nWricP3Obl7ys_5otEsp/view
- Dashboard on Tableau Public - https://public.tableau.com/app/profile/sowjanya.singampalli/viz/HeartDiseaseAnalysisDashboard_17715621713600/Dashboard1?publish=yes
- Story on Tableau Public - https://public.tableau.com/app/profile/sowjanya.singampalli/viz/HeartDiseaseStory_17720882758450/Story1?publish=yes

TEAM :

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Result

The project helps healthcare analysts and stakeholders:

- Identify high-risk age groups for heart disease

- Compare heart disease prevalence across gender and race

- Understand the relationship between diabetes, stroke, and heart disease

- Analyse the impact of smoking, alcohol, and physical activity

- Recognize combined risk factors such as BMI and diabetes