## Introduction:

Hello everyone. Today, I'm going to present my healthcare analytics Project: the **Heart Disease Analysis Dashboard.**

This interactive dashboard provides a comprehensive overview and analysis of heart disease data, offering valuable insights **into patient demographics, clinical parameters, and key risk factors.**

## Dashboard Header:

As you can see from the **main dashboard**, our dataset includes a total of **920 patients**. Out of these, we've identified **55.3% heart cases** of our population.

The average age of patients within this dataset is **53.5 years**. A significant demographic point to note upfront is that **79% of the patients** are **males**.

## Demographic Analysis:

**Moving into our demographic analysis,** the dashboard clearly illustrates **the Heart Disease Distribution by Age Group and Gender**.

\* When looking at **age**, we observe a notable increase in heart disease prevalence as age advances. For example, **between the 50s and the 60s age group** the percentage of age group patients having heart disease **increased from 58% to 73%.**

\* In terms of **gender**, the data highlights a striking difference: **63.2% of male patients in our dataset have heart disease,** compared to just **25.8% of female patients**. This suggests a significantly higher incidence of heart disease among males in this cohort.

## Clinical parameters analysis:

Next, we delve into the **Clinical Parameters Analysis**, one of the most intriguing findings relates to **chest pain type**: an astonishing **79% of patients classified as 'asymptomatic' actually have heart disease**. This underscores that a lack of typical chest pain symptoms does not rule out the presence of heart disease.

\* Regarding **cholesterol categories**, both 'Borderline' and 'High' levels are strongly associated with heart disease.

## Risk Factors analysis:

**The dashboard features a vital Risk Factors Analysis,** highlighting heart disease risk across key categories: blood pressure, cholesterol, and exercise-induced angina.

Regarding Blood Pressure, the High category shows a 67% risk, while the elevated category carries a 54.3% risk.

For Cholesterol we can see also that Higher levels are clearly linked to increased risk.

Regarding Exercise-Induced Angina: it showed to be A strong predictor so that 83% of patients with it have heart disease, versus 39% without.

Moreover, the dashboard includes filters by age, gender, and data source for deeper insights.

## Conclusion:

In conclusion, the Heart Disease Dashboard reveals key risk patterns, showing higher heart disease rates linked to age, male gender, high blood pressure, cholesterol, and exercise-induced angina.