

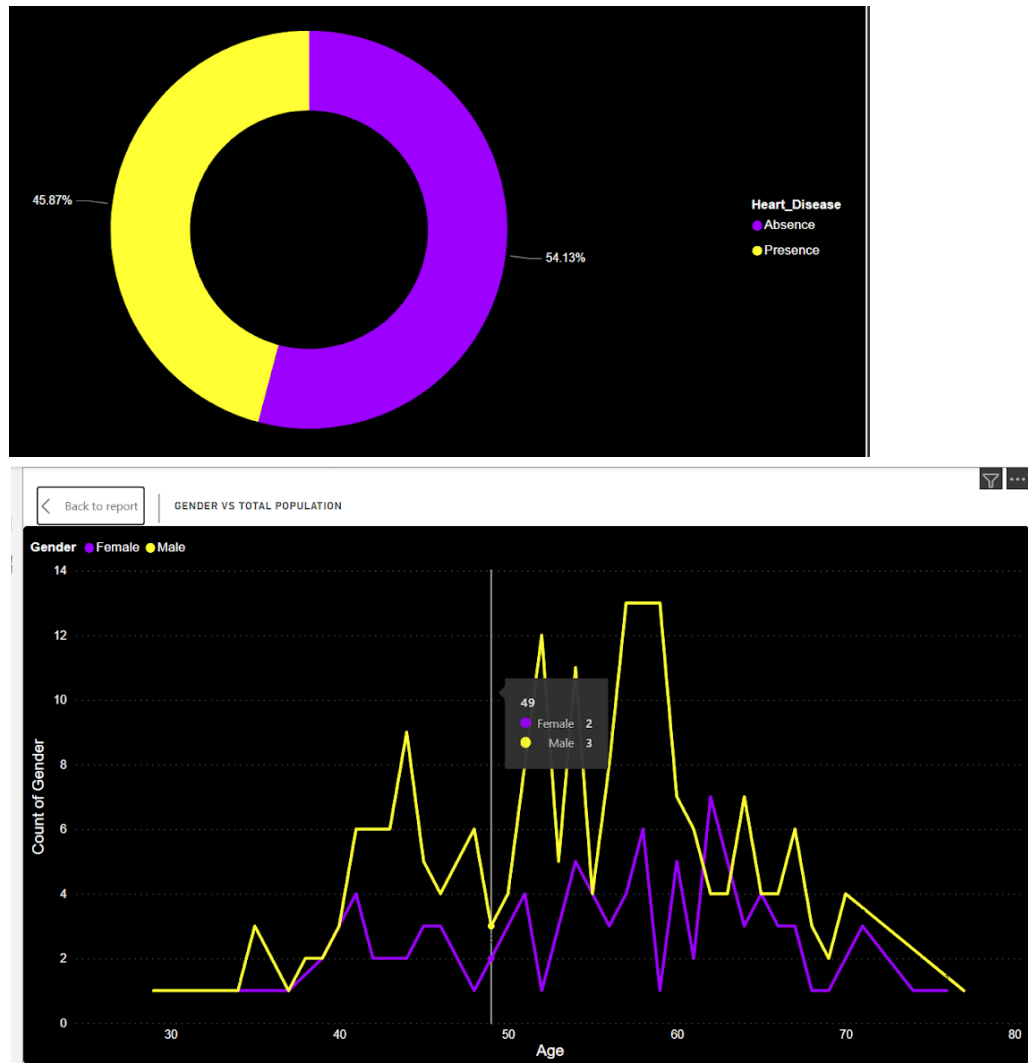
Wireframe Document

Heart Disease Diagnostic Analysis

AAKASH BHUTE

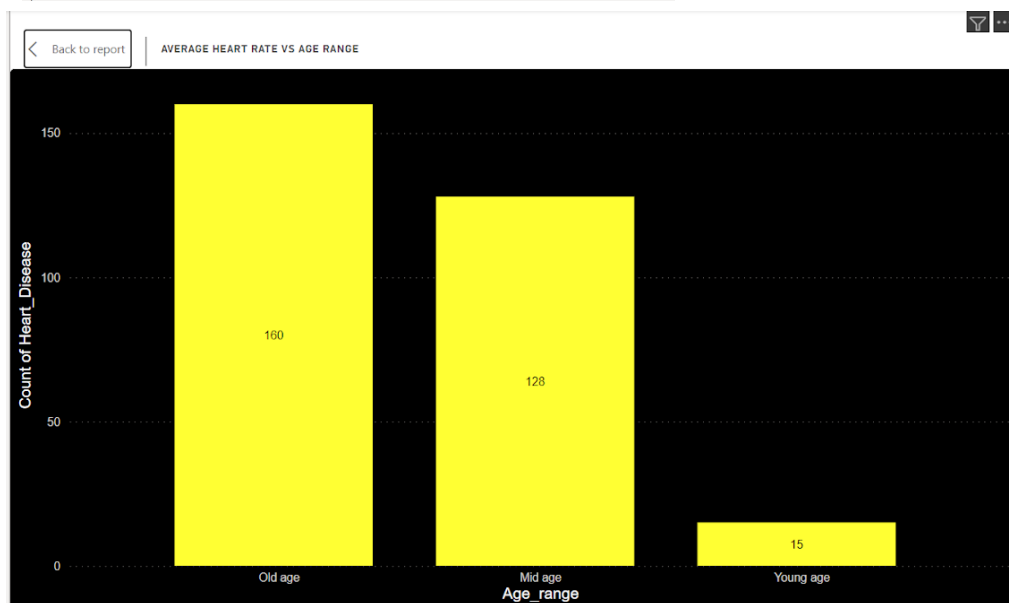
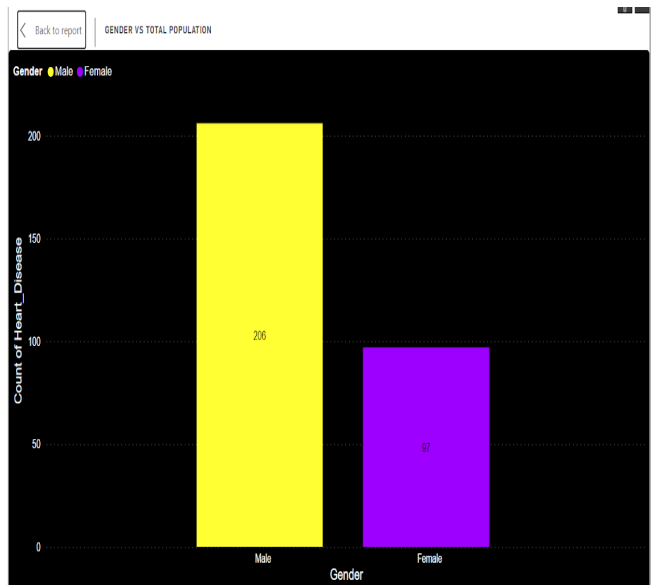
We Performed Exploratory Data Analysis on Jupyter Notebook and then created a Power BI Desktop Dashboard.

1. What Kind of Population do we have?



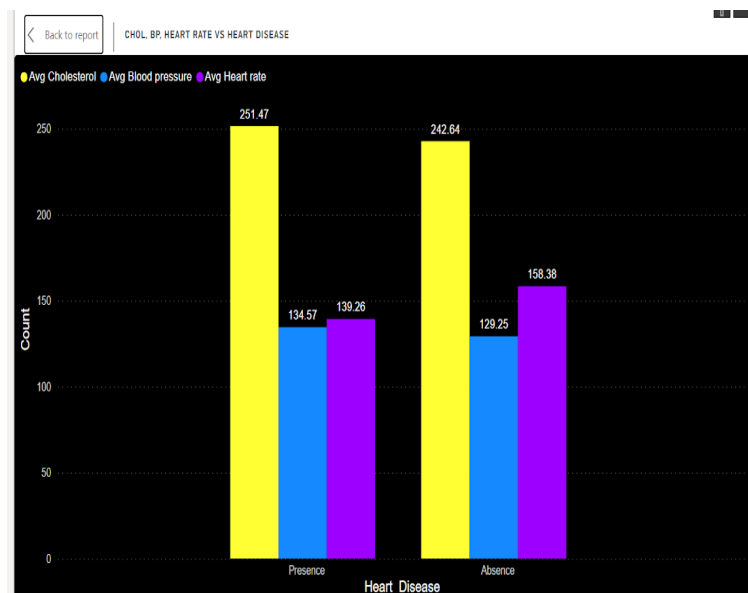
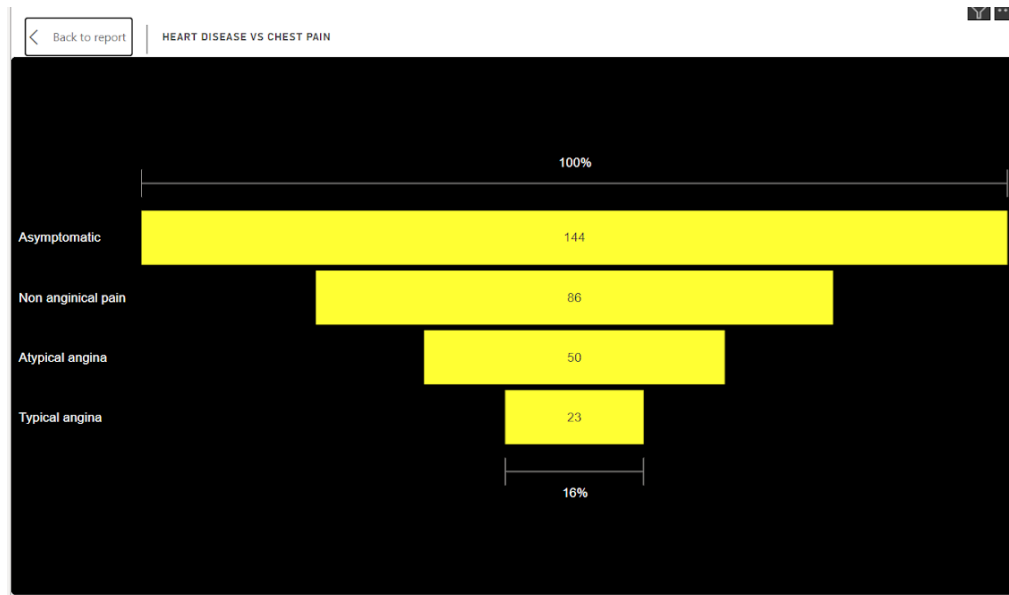
- 45.87% People suffering from heart disease.
- Elderly Aged Men are more (50 to 60 Years) and Females are more in 55 to 65 Years Category

2. Who Suffers from Heart Disease?



- Males are more prone to heart disease.
- Elderly Aged People are more prone to heart disease.

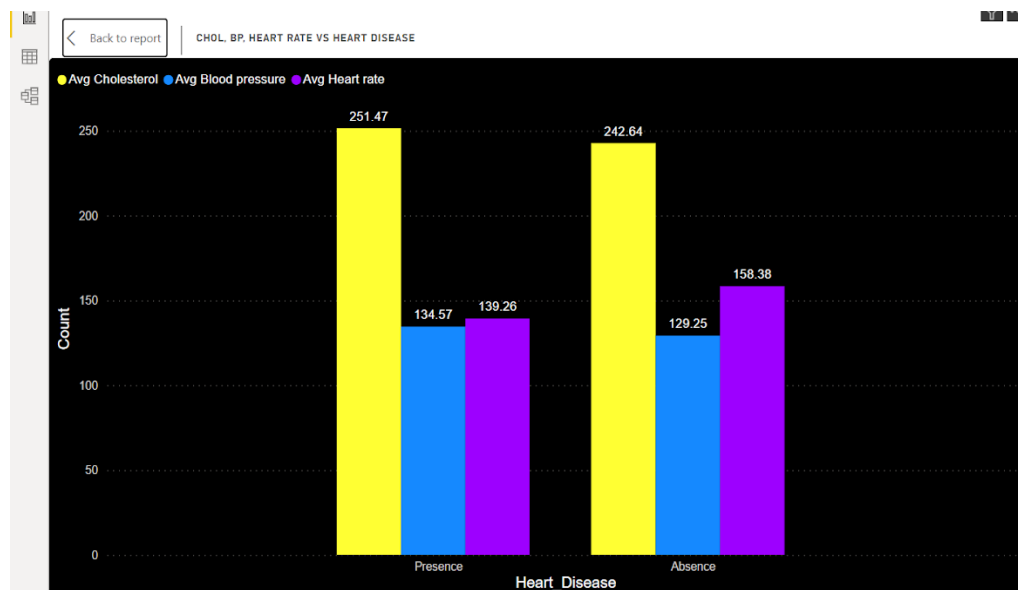
3. What symptoms people experience in heart disease



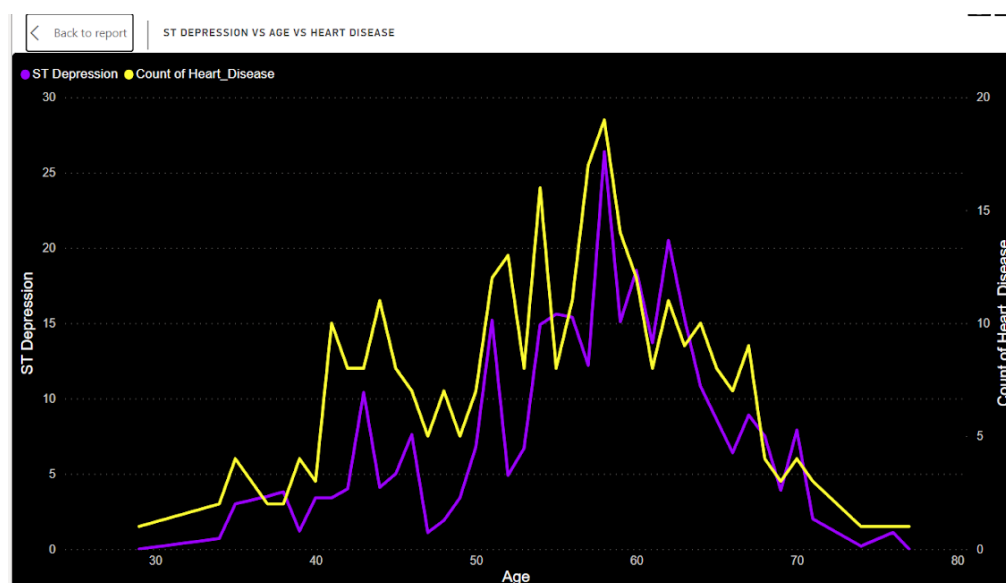
It seems people having asymptomatic chest pain have a higher chance of heart disease.

Asymptomatic Chest pain means neither causing nor exhibiting symptoms of heart disease.

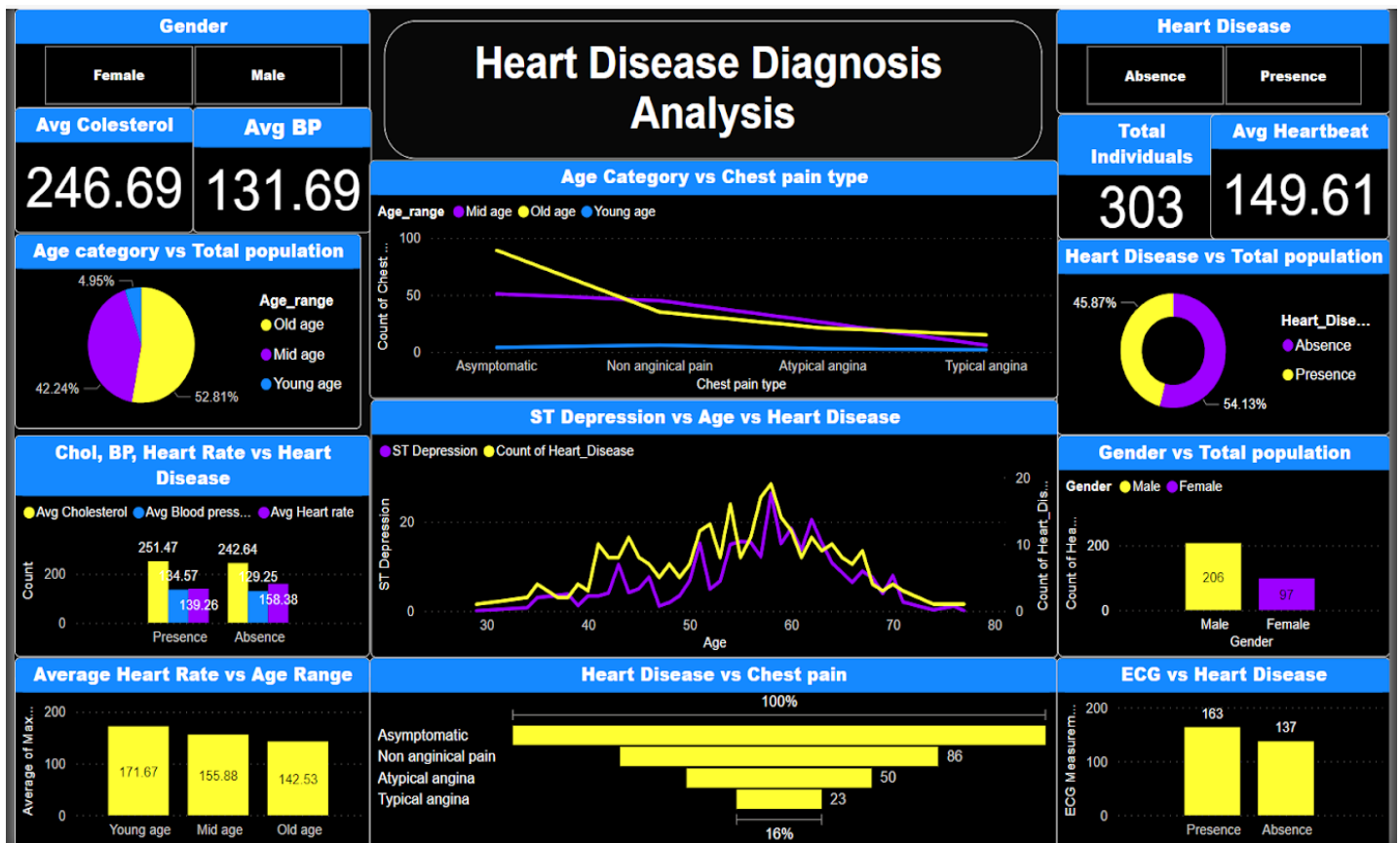
It seems in people high number of cholesterol level have heart disease.



- Here we can observe that Blood Pressure increases between age of 50 to 60 and somehow continue the pattern till 70.
- Similarly, Cholesterol and maximum heart rate Increase in the age group of 50-60.



- We can observe from here that ST depression mostly increases between the age group of 30-40.
- ST depression refers to a finding on an electrocardiogram, wherein the trace in the ST segment is abnormally low below the baseline.



The patient with the below features have all turned out to have developed heart disease:

- age < 54
- Max heart rate > 152 bpm
- No. of vessels colored by flourosopy = 0
- Thalassemia is fixed

The patient with the below features have 88% turned out to have developed heart disease:

- Age > 54
- Peak exercise ST segment is **NOT FLAT**
- No. of vessels colored by flourosopy = 0
- Thalassemia is fixed
- The average resting blood pressure for people with heart disease is 129.3 mmHg.
- The average serum cholesterol level for individuals with heart disease is 242.33 mm/dl.
- The average age of individuals with heart disease is 52.5 years.
- The average maximum heart rate achieved by individuals with heart disease is 158.47 bpm.
- The average number of major vessels affected among those with heart disease is 0.36.
- The average ST depression induced due to exercise for individuals with heart disease is 0.58.
- The total number of patients with heart disease is 165, accounting for 54.6% of the total 303 subjects.
- The average risk of developing heart disease is 83.39%.

