**Wireframe Document**

**Heart Disease Diagnostic Analysis**



**Revision Number - 1.2**

**Last Date of Revision - 10/08/2022**

**Pathipaka Aishwarya**

WIREFRAME DOCUMENT DESIGN

**Document Control**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
|  |  |  |  |
| 27/07/2022 | 1.0 | Introduction, | Pathipaka Aishwarya |
|  |  | Problem Statement |  |
|  |  |  |  |
| 02/08/2022 | 1.1 | Dataset Information, | Pathipaka Aishwarya |
|  |  | Architecture |  |
|  |  | Description |  |
|  |  |  |  |
| 10/08/2022 | 1.2 | Final Revision | Pathipaka Aishwarya |
|  |  |  |  |



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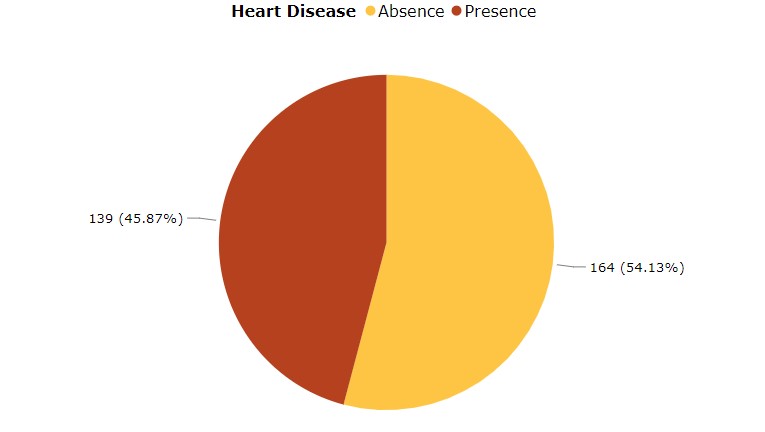
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**We Performed Exploratory Data Analysis on Jupyter Notebook and then created a Power BI Desktop Dashboard.**

1. **What Kind of Population do we have?**

Chart 1

Chart 1



* 139 people i.e., 45% of people are suffering from heart disease.
* 164 people i.e., 54.13% people do not have heart disease.

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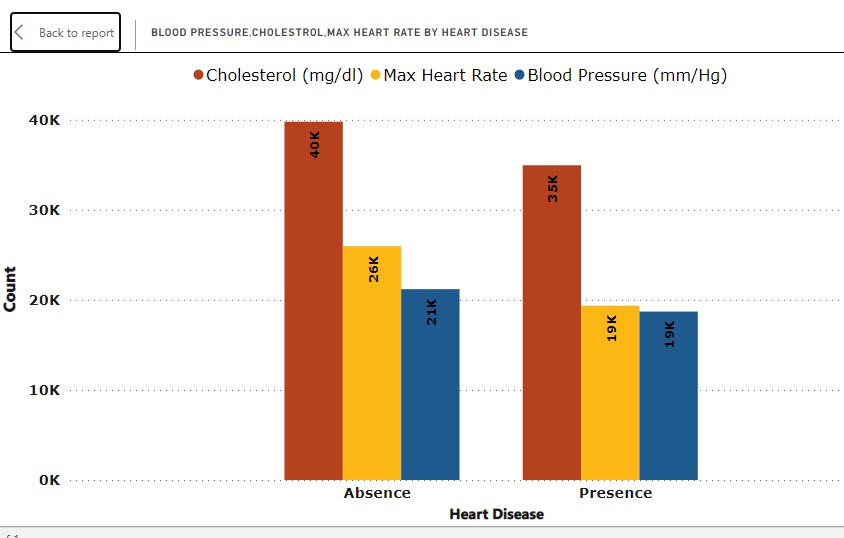
H e a r t D i s e a s e D i a g n o s t i c A n a l y s i s

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**2. What symptoms do people experience in heart disease**

Chart 2



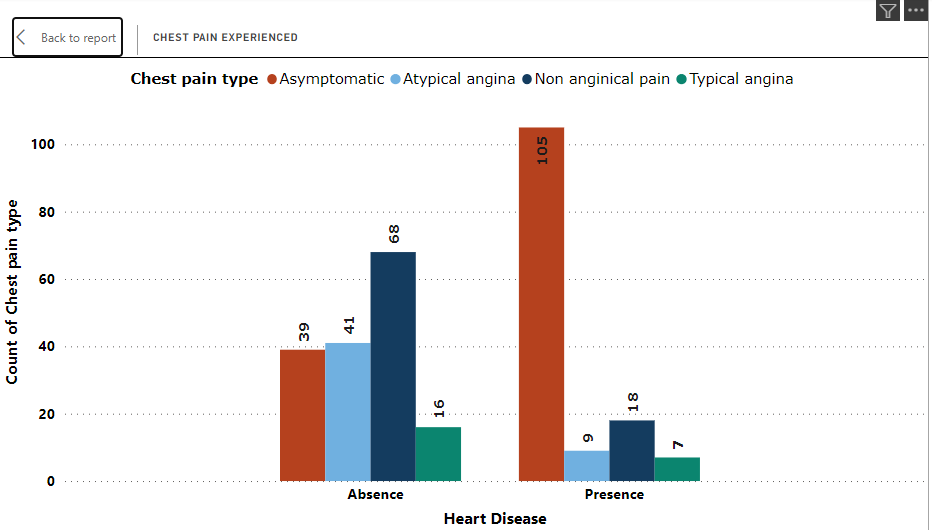
* People having higher Cholesterol level is having heart disease



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H e a r t D i s e a s e D i a g n o s t i c A n a l y s i s

Chart 3

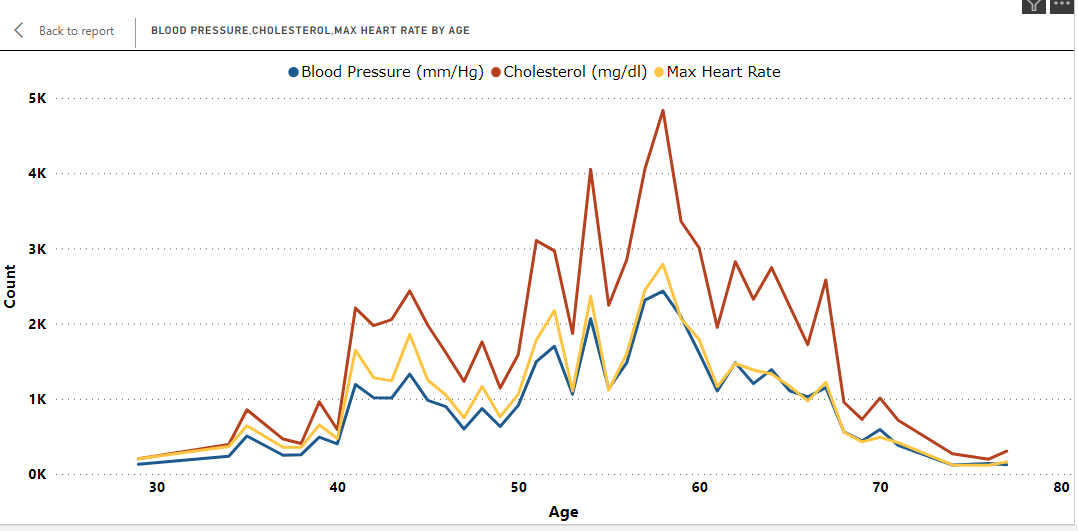


* It is Observed that people having asymptomatic chest pain have a higher chance of heart disease.
* Asymptomatic chest pain means neither causing nor exhibiting symptoms of heart disease.

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H e a r t D i s e a s e D i a g n o s t i c A n a l y s i s

Chart 4



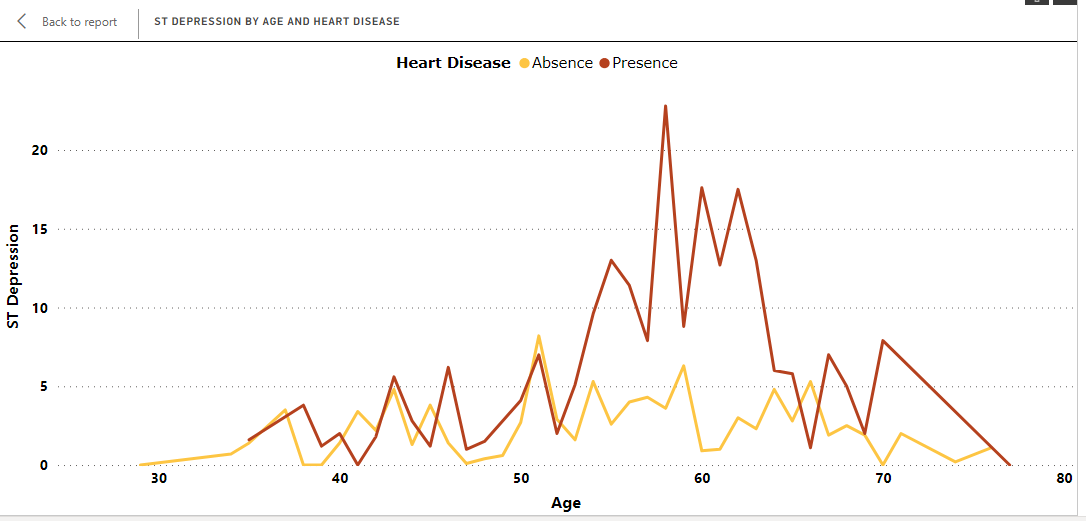
* Here we can observe that Blood Pressure increases between age of 50 to 60 and somehow continue the pattern till 70.
* Similarly, Cholesterol and Maximum heart rate increasing in the age group 50-60.

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H e a r t D i s e a s e D i a g n o s t i c A n a l y s i s

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Chart 5



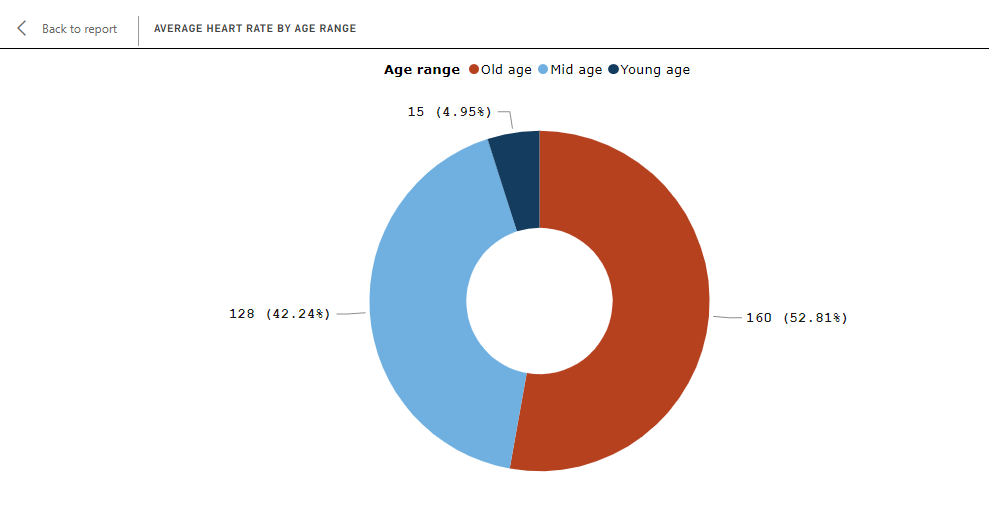
* The ST Depression mostly increases between the age group of 30-40.
* ST Depression refers to a finding on an electrocardiogram, wherein the trace in the ST segment is abnormally low below the baseline.

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H e a r t D i s e a s e D i a g n o s t i c A n a l y s i s

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Chart 6



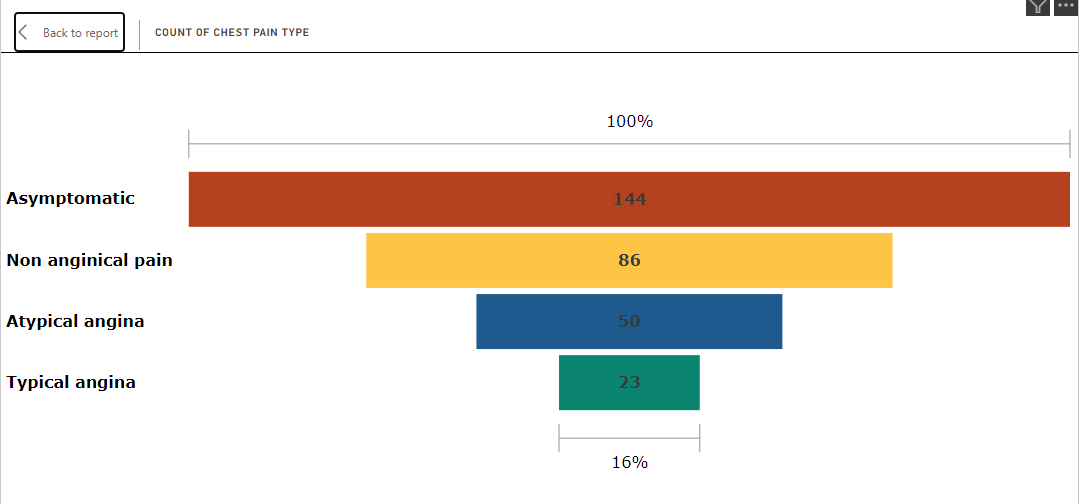
* Old age people are more prone to heart disease and then Mid age.

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H e a r t D i s e a s e D i a g n o s t i c A n a l y s i s

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Chart 7

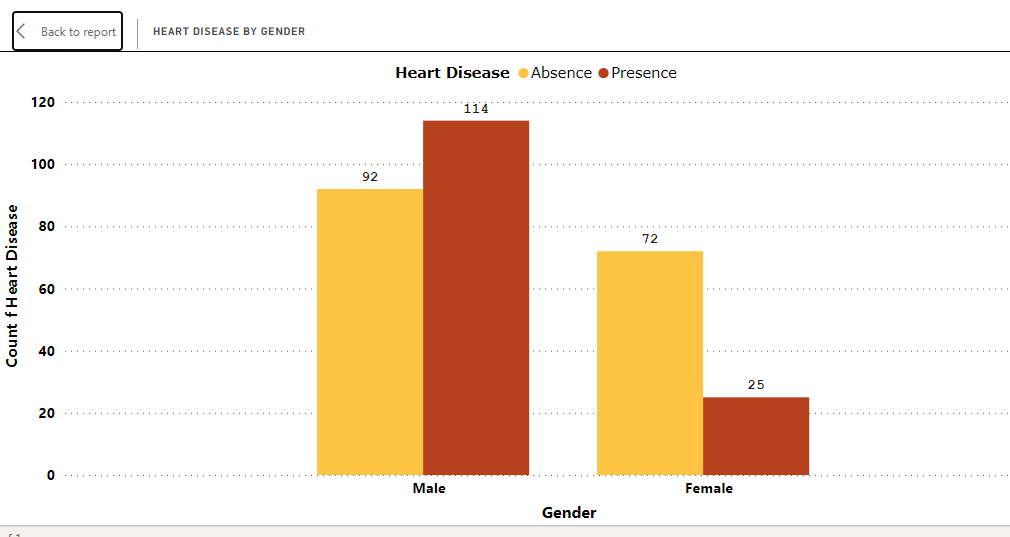


* It is Observed that people having asymptomatic chest pain have a higher chance of heart disease.

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H e a r t D i s e a s e D i a g n o s t i c A n a l y s i s

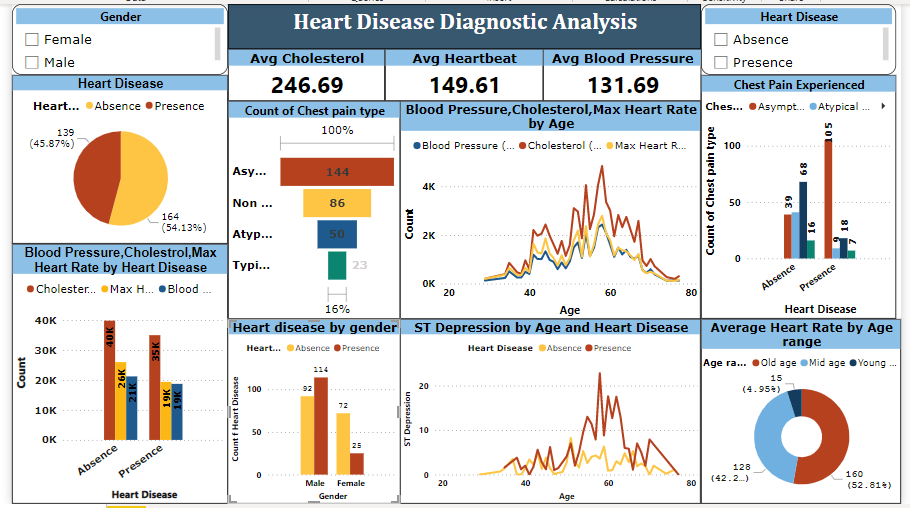
Chart 8



* Males are more prone to heart disease.

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H e a r t D i s e a s e D i a g n o s t i c A n a l y s i s

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* Total Patients with heart disease is 165 (54.6%) of total 303
* subjects.
* Average Risk of developing heart disease is 83.39%.
* Average Resting BP for people with heart disease is 129.3 mmHg.
* Average Serum Cholesterol for people with heart disease is 242.33 mm/dl.
* Average age for people with heart disease is 52.5 years.
* Average max heart rate achieved for people with heart disease is 158.47 bpm.
* Average ST depression induced due to exercise for people with heart disease is 0.58.
* Average no. of major vessels affected for people with heart disease is 0.36.

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H e a r t D i s e a s e D i a g n o s t i c A n a l y s i s