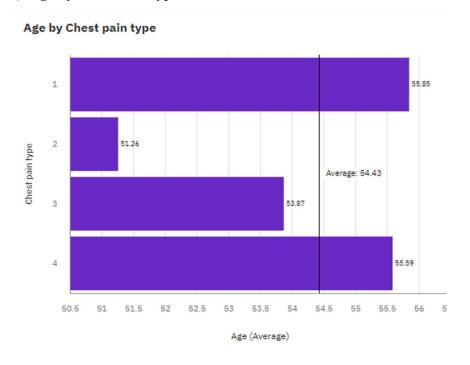
# **Sprint Delivery Plan-II**

| Date         | 03 November 2022                               |
|--------------|--|
| Team ID      | PNT2022TMID17743                               |
| Project Name | Visualizing and Predicting Heart Diseases with |
|              | an Interactive Dashboard                       |

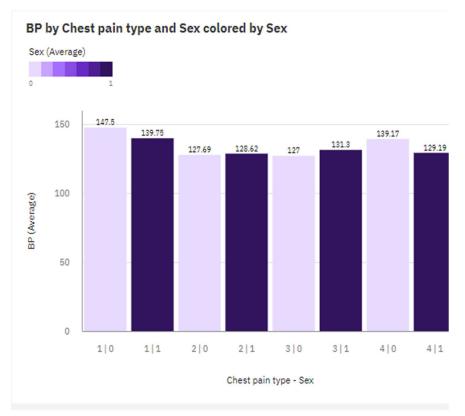
# Visualization of various factors causing heart disease:

#### 1). Age by Chest Pain type



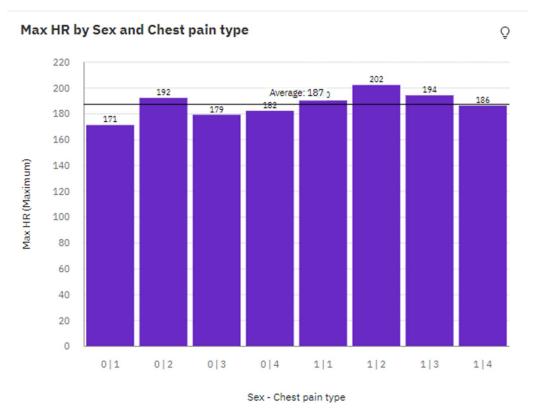
- a) The most common value of Chest pain type is 4, occurring 129 times, which is 47.8 % of the total.
- b) Over all chest pain types, the average of Age is 54.43.
- c) The average values of Age range from 51.26, occurring when Chest pain type is 2, to 55.85, when Chest pain type is 1.

# 2). BP by Chest pain type and Sex coloured by Sex



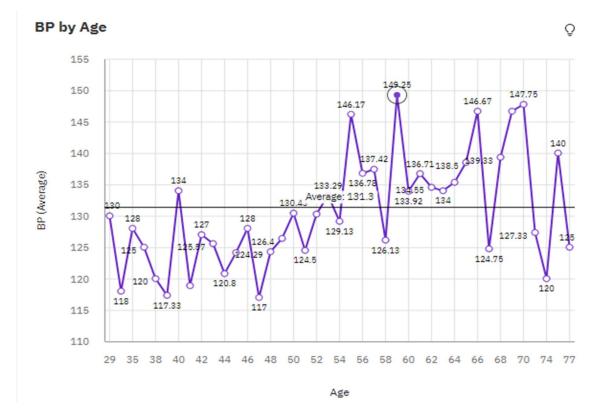
- a) The total number of results for Sex is 270.
- b) Over all chest pain type sexes, the average of BP is 0.6778.
- c) The average values of BP range from 0, occurring when Chest pain type Sex is 1|0, to 1, when Chest pain type Sex is 1|0.
- d) The most common value of Chest pain type Sex is 2|1, occurring 129 times, which is 47.8% of the total.

# 3) Max HR by Sex and Chest pain type



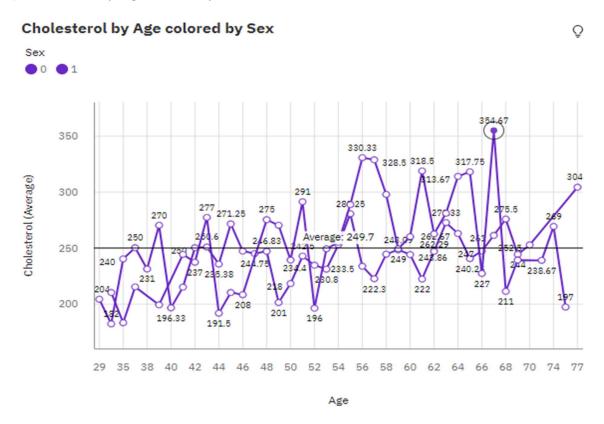
- a) The total number of results for Max HR, across all sex chest pain types, is 270.
- b) The most common value of Sex Chest pain type is 0|2, occurring 183 times, which is 67.8 % of the total.
- c) The largest value of Max HR is 3, occurring when Sex Chest pain type is 0|1.

# 4) BP by Age



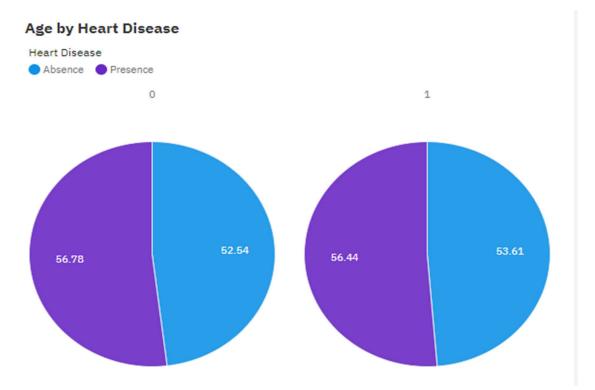
- a) Over all ages, the average of BP is 131.3.
- b) The average values of BP range from 117, occurring when Age is 47, to 149.2, when Age is 59.
- c) BP is unusually high when Age is 59.
- d) The most common values of Age are 54 (5.9 %) and 58 (5.6 %), together occurring 31 times, which is 11.5 % of the total.

#### 5) Cholesterol by Age colored by Sex



- a) The most common values of Age are 54 (5.9 %) and 58 (5.6 %), together occurring 31 times, which is 11.5 % of the total.
- b) The most common value of Sex is 1, occurring 183 times, which is 67.8 % of the total.
- c) Over all ages and sexes, the average of Cholesterol is 249.7.
- d) The average values of Cholesterol range from 182 to 354.7.
- e) Cholesterol is unusually high when the combination of Age and Sex is 67 and 0.

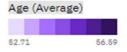
# 6) Age by Heart Disease

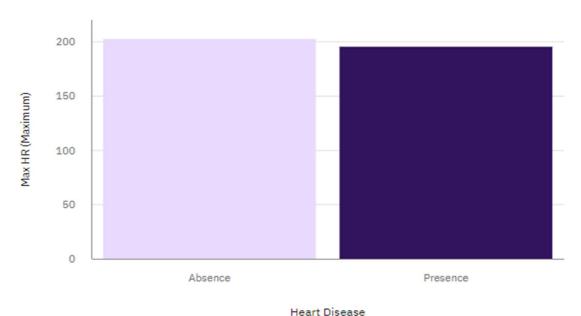


- a) The most common value of Heart Disease is Absence, occurring 150 times, which is 55.6 % of the total.
- b) The most common value of Exercise angina is 0, occurring 181 times, which is 67 % of the total.
- c) Over all values of Heart Disease and Exercise angina, the average of Age is 54.43.
- d) The average values of Age range from 52.54 to 56.78.

## 7) Max HR by Heart Disease colored by Age

#### Max HR by Heart Disease colored by Age

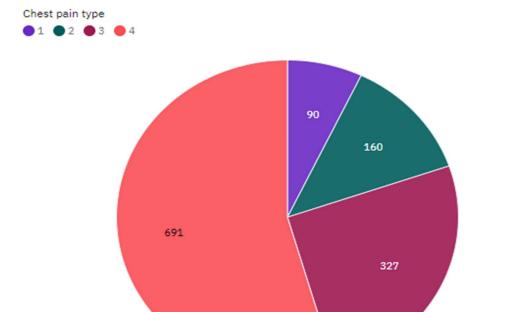




- a) The total number of results for Max HR is 270.
- b) The total number of results for Age is 270.
- c) The most common value of Heart Disease is Absence, occurring 150 times, which is 55.6 % of the total.
- d) The largest value of Max HR is 202, occurring when Heart Disease is Absence.

# 8) Thallium by Chest pain type

# Thallium by Chest pain type

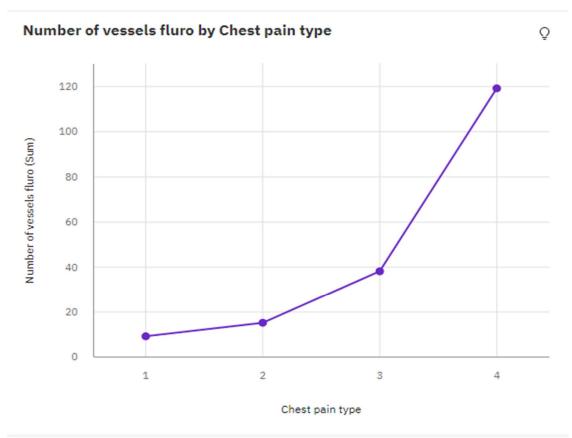


# **Insights:**

- a) Over all chest pain types, the sum of Thallium is almost 1500.
- b) Thallium ranges from 90, when Chest pain type is 1, to 691, when Chest pain type is 4.
- c) Thallium is unusually high when Chest pain type is 4.

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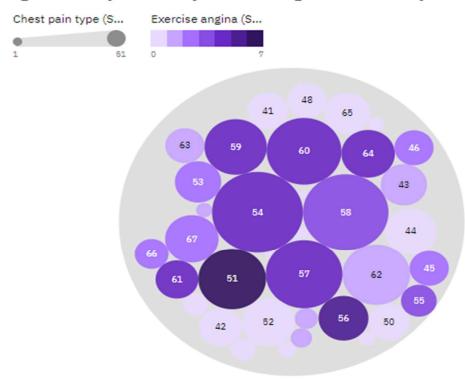
# 9) Number of vessels fluro by Chest pain type



- a) Over all chest pain types, the sum of Number of vessels fluro is 181.
- b) Number of vessels fluro ranges from 9, when Chest pain type is 1, to 119, when Chest pain type is 4.
- c) Number of vessels fluro is unusually high when Chest pain type is 4.

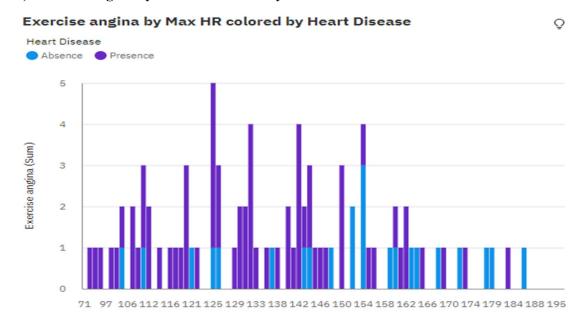
## 10) Age hierarchy colored by Exercise angina and sized by Chest pain type

## Age hierarchy colored by Exercise angina and sized by Chest pain type



- a) Over all ages, the sum of Chest pain type is 857.
- b) For Chest pain type, the most significant values of Age are 54 and 58, whose respective Chest pain type values add up to 99, or 11.6 % of the total.
- c) Chest pain type ranges from 1, when Age is 38, to 51, when Age is 54.

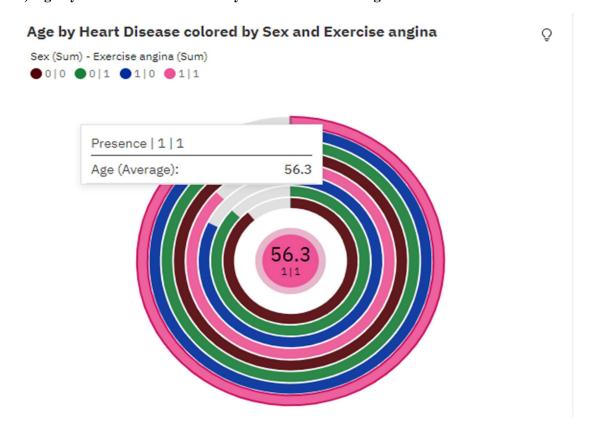
#### 11) Exercise angina by Max HR colored by Heart Disease



Max HR

- a) Exercise angina by Max HR colored by Heart Disease.
- b) Over all max hrs and heart diseases, the sum of Exercise angina is 89.
- c) For Exercise angina, the most significant value of Max HR is 125, whose respective Exercise angina values add up to 5, or 5.6 % of the total.
- d) For Exercise angina, the most significant value of Heart Disease is Presence, whose respective Exercise angina values add up to 66, or 74.2 % of the total.
- e) The summed values of Exercise angina range from 0 to 4.
- f) Exercise angina is unusually high when the combinations of Max HR and Heart
- g) Disease are 125 and Presence, 132 and Presence and 142 and Presence.
- h) Exercise angina is unusually high when Max HR is 125.

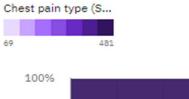
## 12) Age by Heart Disease colored by Sex and Exercise angina

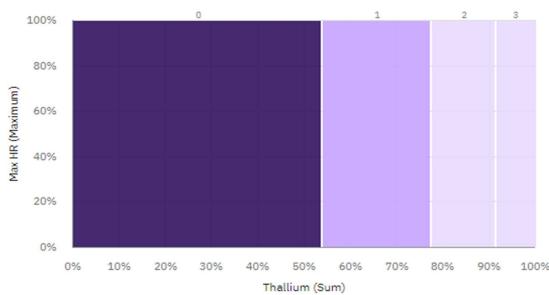


- a) Over all values of Heart Disease and Sex Exercise angina, the average of Age is 54.43.
- b) The average values of Age range from 50.63 to 61.5.
- c) Age is unusually low when the combination of Heart Disease and Sex Exercise angina is Absence and 1|0.
- d) The most common value of Sex Exercise angina is 0|1, occurring 183 times, which is 67.8 % of the total.
- e) The most common value of Heart Disease is Absence, occurring 150 times, which is 55.6 % of the total.

## 13) Max HR and Thallium for Number of vessels fluro colored by Chest pain type

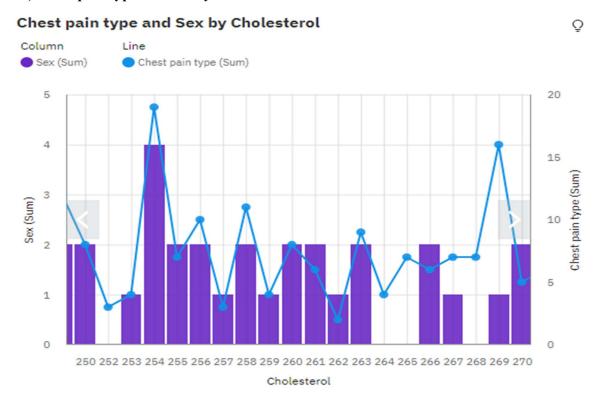
# Max HR and Thallium for Number of vessels fluro colored by Chest pain type





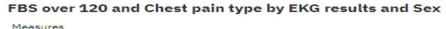
- a) The total number of results for Max HR is 270.
- b) The most common value of Number of vessels fluro is 0, occurring 160 times, which is 59.3 % of the total.
- c) The largest value of Max HR is 202, occurring when Number of vessels fluro is 0.

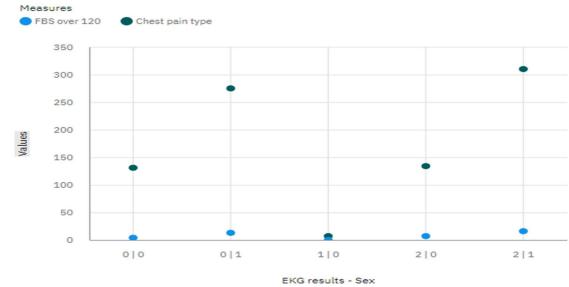
#### 14) Chest pain type and Sex by Cholesterol



- a) Over all values of Cholesterol, the sum of Sex is 183.
- b) For Sex, the most significant values of Cholesterol are 233, 234, 254, 282, and 212, whose respective Sex values add up to 20, or 10.9 % of the total.
- c) Sex ranges from 0, when Cholesterol is 141, to 4, when Cholesterol is 212.
- d) Over all values of Cholesterol, the sum of Chest pain type is 857.
- e) Chest pain type ranges from 1, when Cholesterol is 182, to 19, when Cholesterol is 254.

#### 15) FBS over 120 and Chest pain type by EKG results and Sex





- a) FBS over 120 ranges from 0, when EKG results Sex is 0|0, to 1, when EKG results Sex is 0|0.
- b) Chest pain type ranges from 0, when EKG results Sex is 0|1, to 16, when EKG results Sex is 1|0.
- c) FBS over 120 is unusually high when EKG results Sex is 2|0.
- d) The total number of results for Chest pain type, across all ekg results sexes, is 270.
- e) Over all ekg results sexes, the average of Chest pain type is 0.1481.

- f) The most common values of EKG results Sex are 1|0 (50.7 %) and 0|0 (48.5 %), together occurring 268 times, which is 99.3 % of the total.
- g) The total number of results for FBS over 120, across all ekg results sexes, is 270.
- h) Over all ekg results sexes, the average of FBS over 120 is 0.007407.