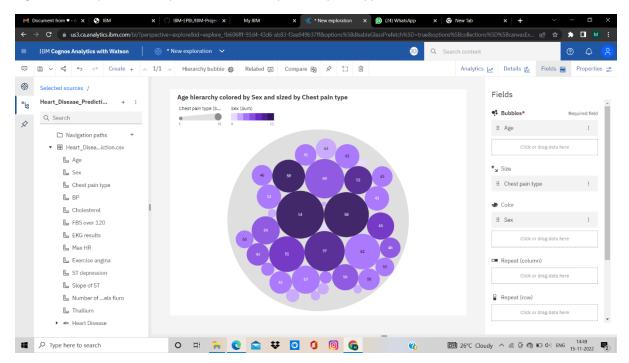
<u>VISUALIZING AND PREDICTING HEART DISEASE USING INTERACTIVE</u> DASHBOARD – SPRINT 2

USN - 4,5,6

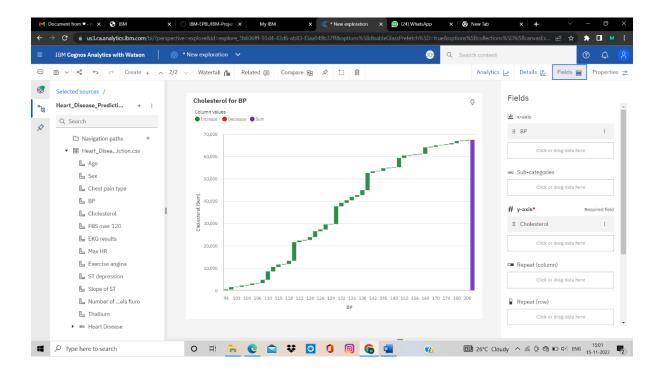
Visualizing and exploring the dataset and getting the inference of the visualization in Cognos Analytics:

Age hierarchy colored by Sex and sized by Chest pain type:



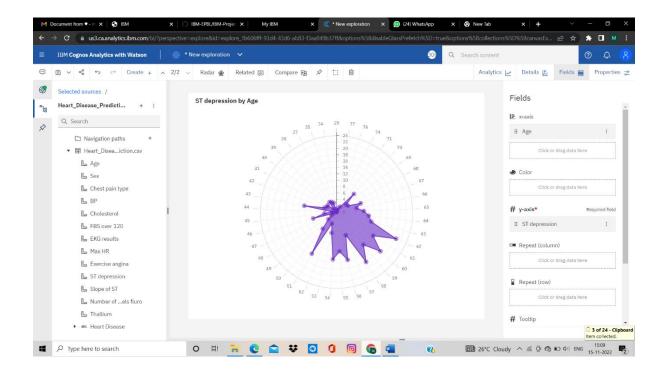
- Over all ages, the sum of Chest pain type is 857.
- For Chest pain type, the most significant values of Age are 54 and 58, whose respective Chest pain type values add up to 99, or 11.6 % of the total.
- Chest pain type ranges from 1, when Age is 38, to 51, when Age is 54.

Cholesterol for BP



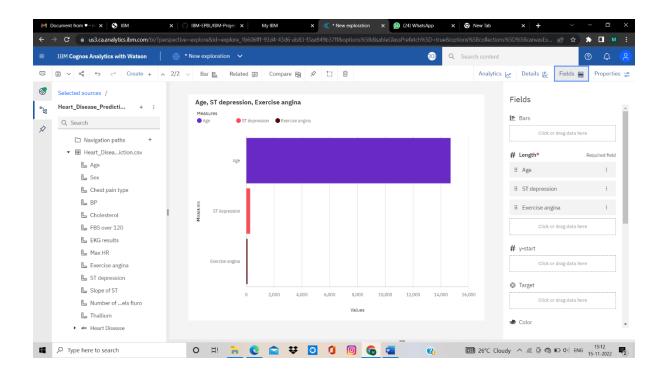
- Cholesterol ranges from 196, when BP is 129, to almost 8500, when BP is 120.
- Exercise angina ranges from 0, when BP is 101, to 10, when BP is 140.
- Cholesterol is unusually high when BP is 120, 130, 140, 150 and 110.
- The total number of results for Exercise angina, across all BP, is 270.
- Over all values of BP, the average of Exercise angina is 0.3296.
- The most common values of BP are 120 (12.6 %), 130 (11.5 %), and 140 (11.1 %), together occurring 95 times, which is 35.2 % of the total.
- The total number of results for Cholesterol, across all BP, is 270.
- Over all values of BP, the average of Cholesterol is 249.7.

ST depression by Age



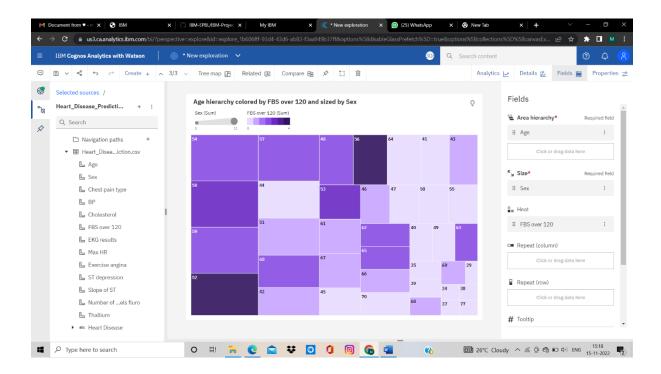
• The total of Exercise angina is 89.

Age, ST depression, Exercise angina



- The total number of results for ST depression is 270.
- The total number of results for Age is 270.
- The total number of results for Exercise angina is 270.

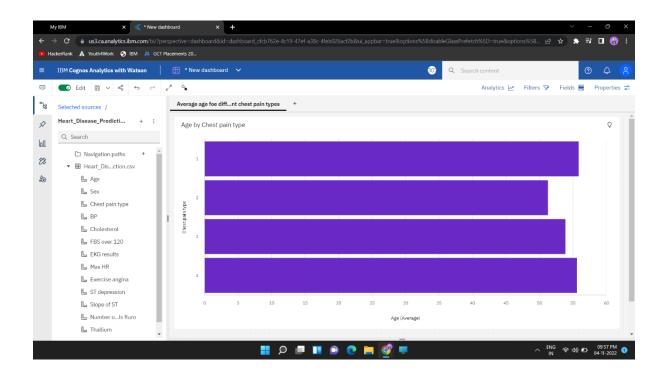
Age hierarchy coloured by FBS over 120 and sized by Sex



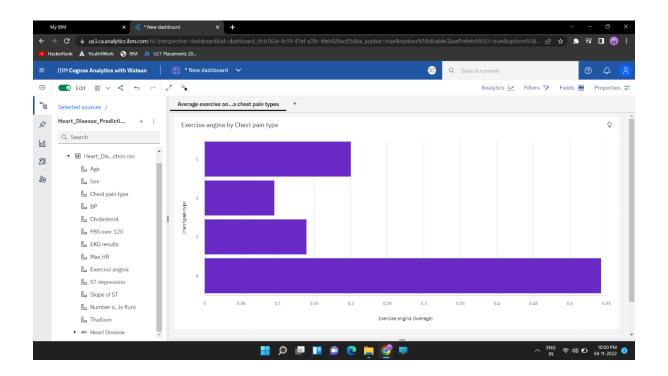
- The total number of results for Exercise angina, across all ages, is 270.
- Over all ages, the average of Exercise angina is 0.3296.
- The most common values of Age are 54 (5.9 %) and 58 (5.6 %), together occurring 31 times, which is 11.5 % of the total.
- The total number of results for Sex, across all ages, is 270.
- Over all ages, the average of Sex is 0.6778.
- Sex ranges from 0, when Age is 71, to 11, when Age is 54.
- Exercise angina ranges from 0, when Age is 29, to 7, when Age is 51.

Visualization of dataset using Cognos Dashboard:

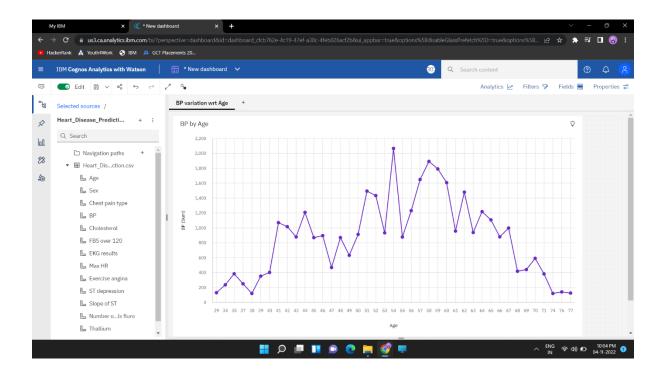
Average age for different chest pain types:



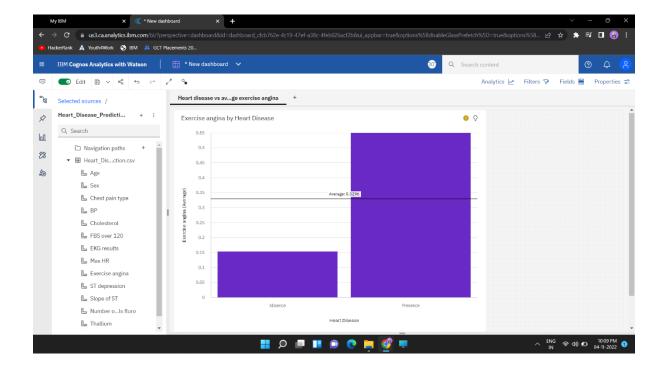
Average exercise Angina During chest pain:



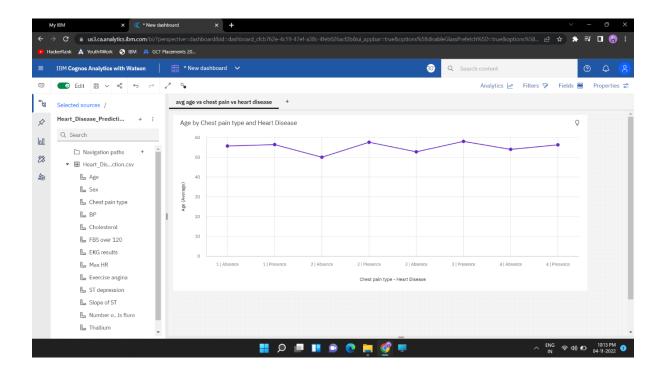
BP variation with respect to age:



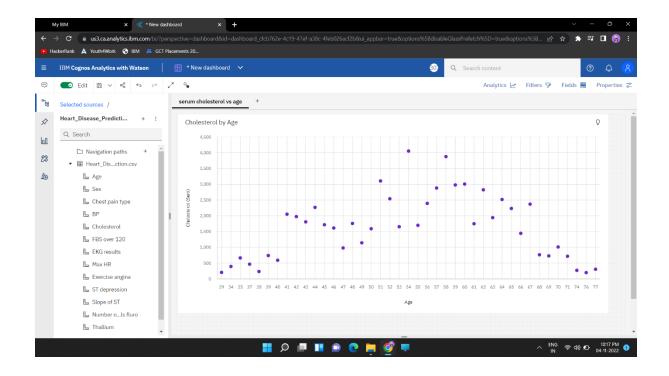
Effect of existing heart disease on average of exercise angina:



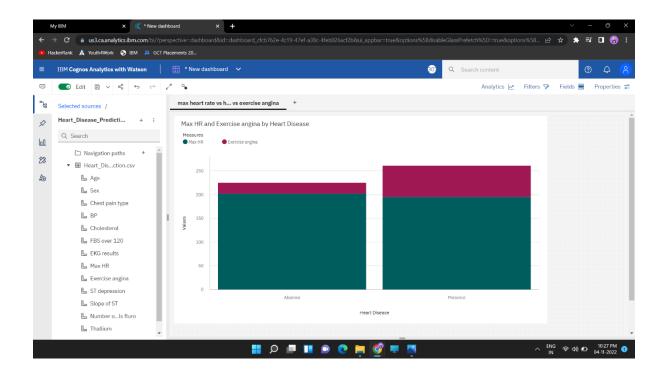
Average age for different types of chest pain in existing heart disease:



Serum cholesterol levels vs Age:



Maximum heart rate in existing heart disease by exercise angina:



Dashboard showing different type of visuals:

