DATA VISUALIZATION

Date	11/11/2022
Team ID	IBM-Project-25390-1659961381
Project Name	Visualizing and predicting heart diseases with an interactive Dashboard

Using the given dataset, we plan to create various graphs and charts to highlight the insights and visualizations.

Build the following visualizations

Average Age for different Chest Pain Types

Average Max heart beats achieved during Chest Pain

Resting Blood Pressure variation with Age

Effect of Existing Heart Diseases on Average Max Heart beats Achieved

Average age for Chest pain type with existing heart disease

Serum Cholesterol levels vs Age plot

Effect of Existing heart disease on Fasting Blood Sugar

Average Age for Different Chest Pain Types:

Average age of the different pain types in the chest of different users are calculated.

With Age, Sex and Chest pain types, we will be plotting BAR chart to see the comparison between Male and Females as well as average age of people experiencing the same type of Chest Pain.
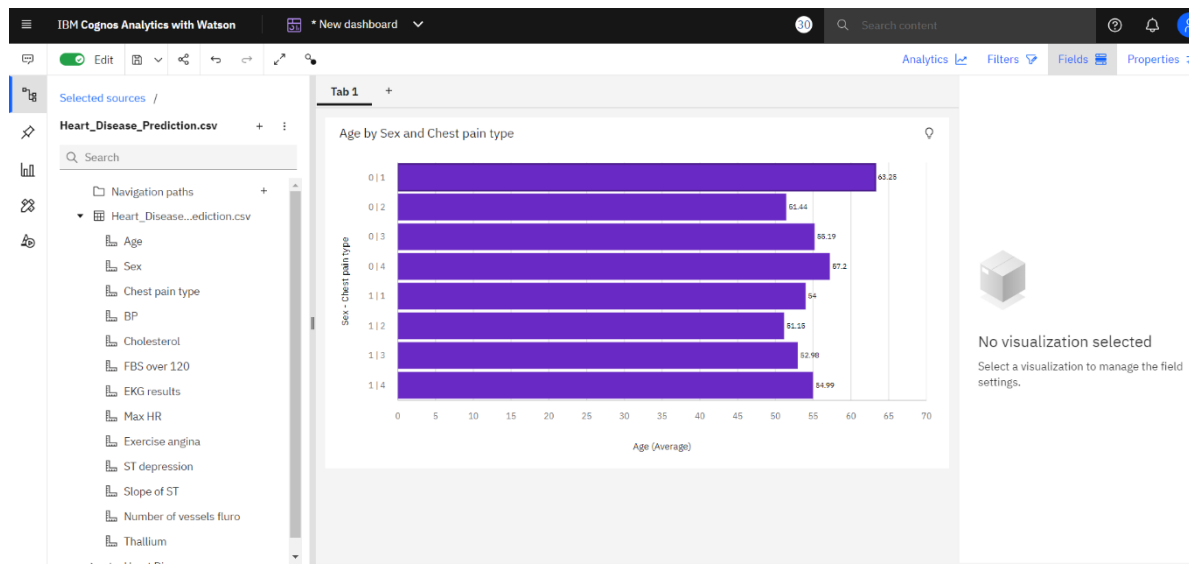
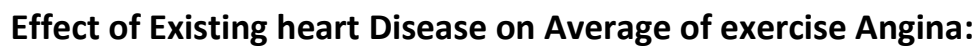## Average Exercise Angina During Chest Pain:

The Chest pain and the average exercise Angina during the Chest pain is calculated.

Here we are plotting the Chest Pain recorded for Exercise Angina for both Male and Female.
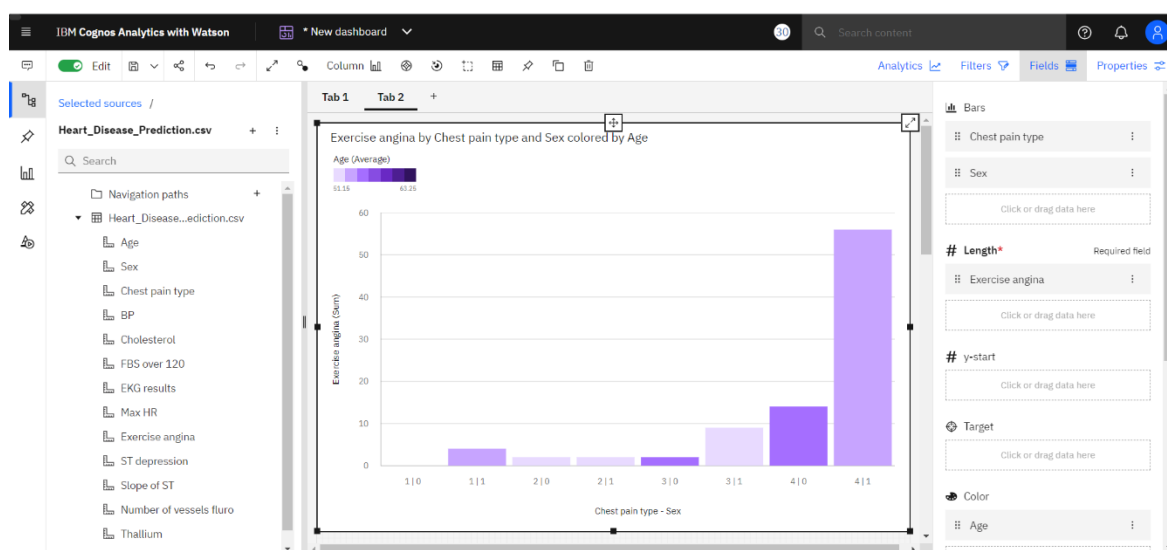
BP Variation with respect to Age:

This particular step plots the variation of the Blood Pressure of the user.

We need to consider the age as a factor to plot the resting BP for both the genders.

Effect of Existing heart Disease on Average of exercise Angina:

This process includes the calculation of effects on the heart rate on the exercise Angina of the user especially for the females.

The below plot represents the average values of Maximum Heart Rate achieved according to the Exercise Angina in presence of existing heart disease.

Average Age for Different Types of Chest Pain in Existing Heart Diseases:

The average age of the people getting Chest pain in heart diseases and their different types are being calculated.

Here are trying to find out the presence of existing heart disease affects the type of chest pain induced by Age for different gender people.
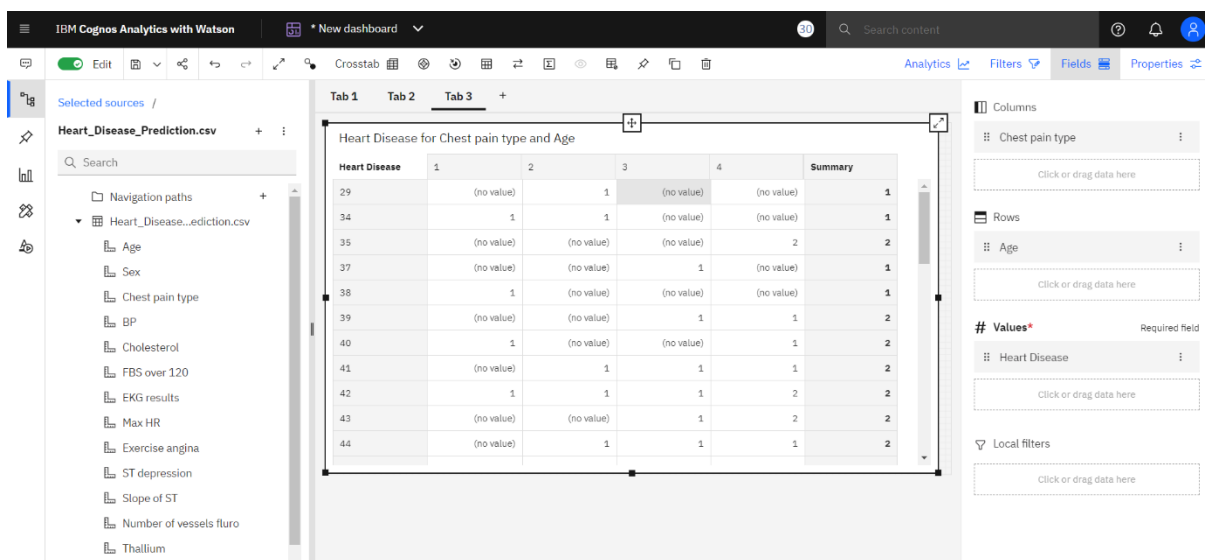
**Serum Cholesterol Levels Vs Age:**

This process enhances the identification of the Cholesterol levels of the people with respect to age. The Serum cholesterol values of different gender people wrt to their age. We are trying to understand the Cholesterol levels by age for Male and Female.
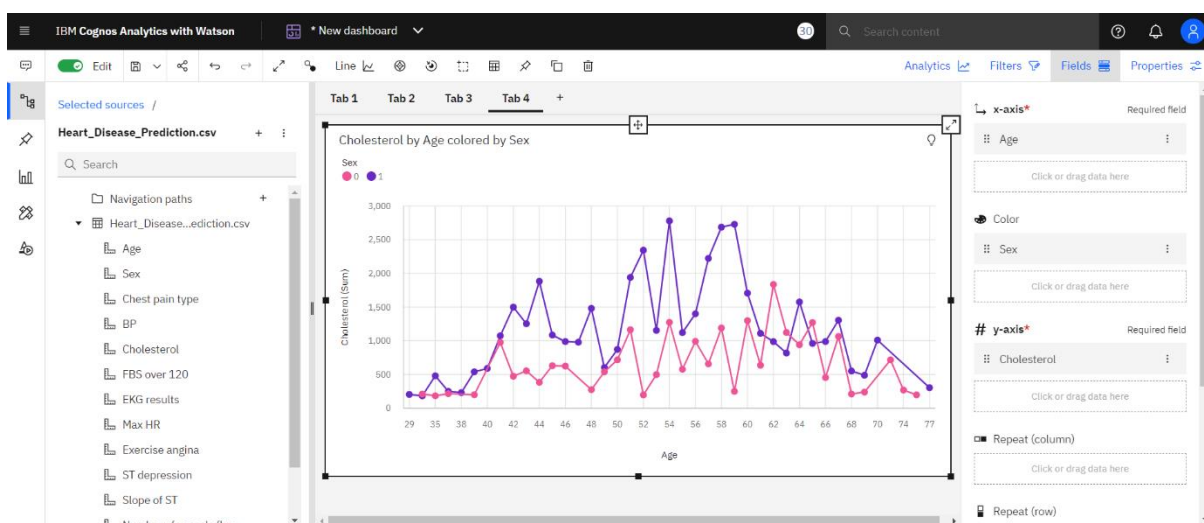
Maximum Heart Rate in Existing Heart Disease by Exercise Angina:

This process manifests the heart rates in its highest with respect to the exercise Angina.

The following Bar Plot represents the effect of existing heart disease wrt to Exercise Angina.
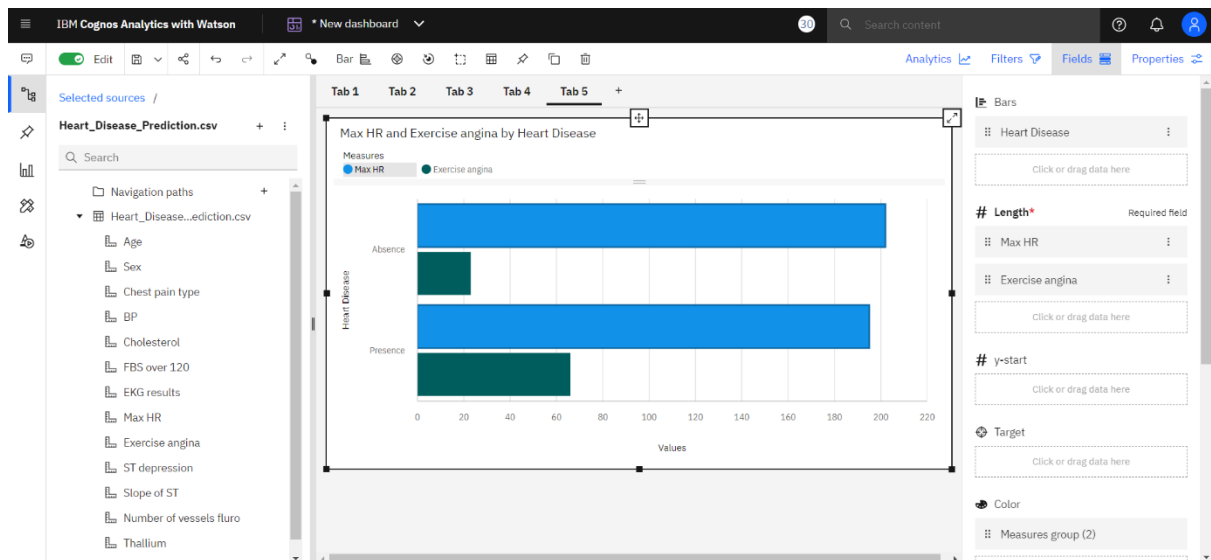
Dashboard showing different types of Visuals:

Dashboard presenting the following visuals.

1) BP variation wrt to Age in both the Gender people.

2) Max Heart Rate vs exercise Angina in case of Existing Heart Disease.

3) Exercise Angina against the different types of Chest Pain in both the Gender.

4) Serum Cholesterol levels vs Age in both the Gender people.