

Working with Dataset

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| Team ID | PNT2022TMID53250 |
| Project Members | Bharanidharan S, Elakkiya S, Pooja T S, Reethika S |
| Project Name | Visualizing and Predicting Heart Diseases with an Interactive Dash Board |
| Project mentors | Industry mentor - Mahidhar, Saumya Faculty mentor – Dr. Arulkumar Venkatachalam |

Understanding the dataset:

- The dataset taken consists of 270 rows or entries
- Features included are:
 - Age – Numeric data type that represents the age of the person
 - Sex – Numeric value which is either zero or one, defines the sexuality of the person
 - Chest pain type – Numeric value that ranges from 1 to 4, says about the type of chest pain which may be of four types
 - BP – Numeric value , indicates the blood pressure of the person
 - Cholesterol – Numeric value, gives the cholesterol value of the person
 - FBS over 120 - Numeric value which is either zero or one , says whether Fasting blood sugar is above 120 (0) or not(1).
 - EKG results – Numeric value that ranges from 1 to 3, Provides information about heart rate
 - Max HR – Numeric value, it is the maximum heart rate achieved by the person
 - Exercise Angina - Numeric value which is either zero or one, says if the person has chest pain caused by reduced blood flow to the heart.
 - ST depression – Floating value, In case if there is ST depression it indicates severe coronary lesions and unstable coronary artery disease.
 - Slope of ST - Numeric value that ranges from 1 to 3, has been proposed as a more accurate ECG criterion for diagnosing significant coronary artery disease.
 - Number of vessels fluoro – Numeric value ranging from 0 to 3, Fluoroscopy can be used for diagnosing heart or intestinal disease
 - Thallium – Numeric value that is either 3,6 or 7 , Thallium can affect your, heart if large amounts are eaten or drunk for short periods of time.
 - Heart disease – String type, says whether the person has heart disease or not

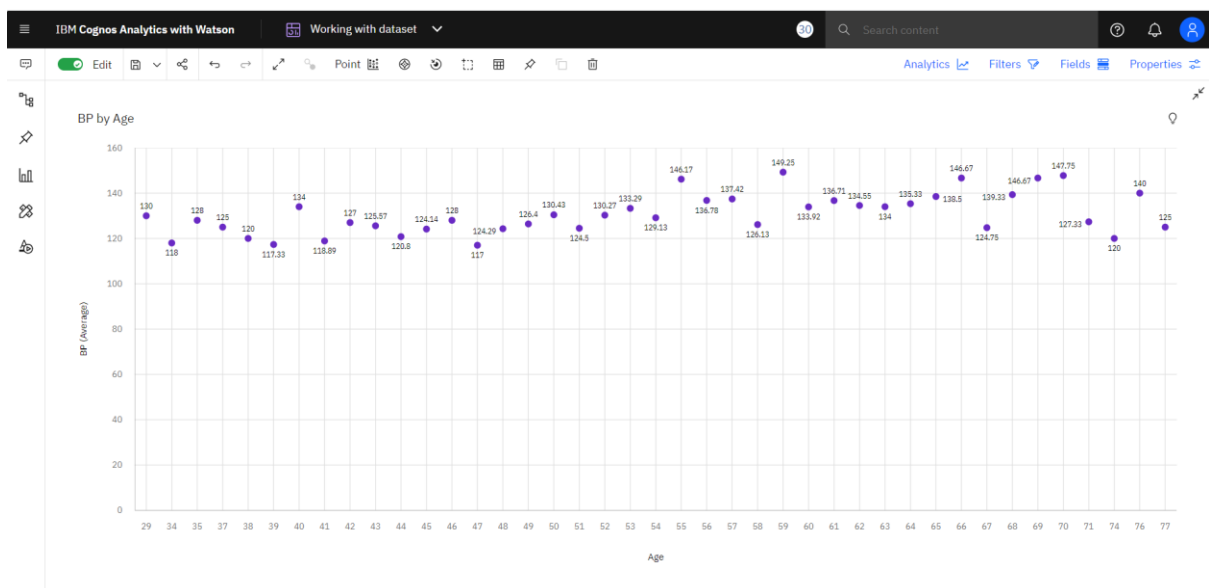
Loading the dataset:

The screenshot shows the IBM Cognos Analytics 'Content' page. At the top, there's a navigation bar with 'IBM Cognos Analytics with Watson', a 'Content' dropdown, a search bar, and user controls. A blue banner below the navigation bar contains a maintenance message. The main area is titled 'Content' and has tabs for 'My content', 'Team content', and 'Samples'. Three content items are displayed in a grid:

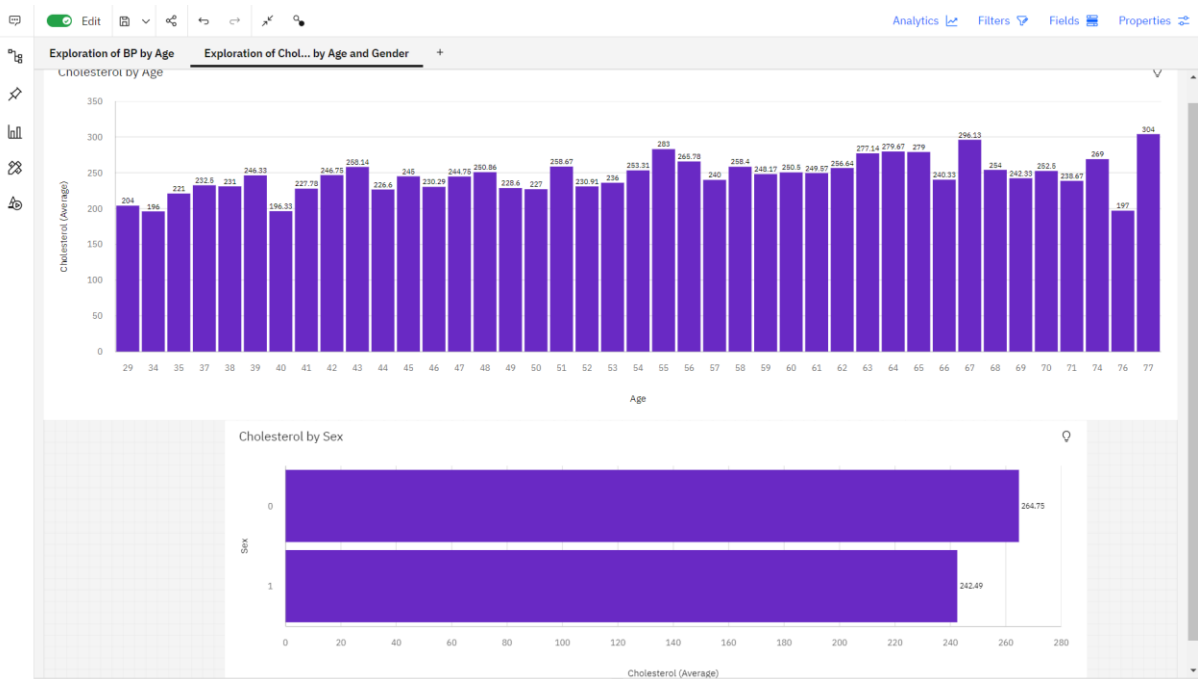
- Heart Disease prediction**: Last Accessed 16/11/2022, 07:20. Includes a small icon.
- Heart disease prediction dashboard**: Last Accessed 16/11/2022, 07:28. Includes a small icon.
- Heart_Disease_Prediction.csv**: Last Accessed 16/11/2022, 06:38. Includes a 'CSV' label and an upload icon. This item is highlighted with a red rectangular box.

Exploration of Data:

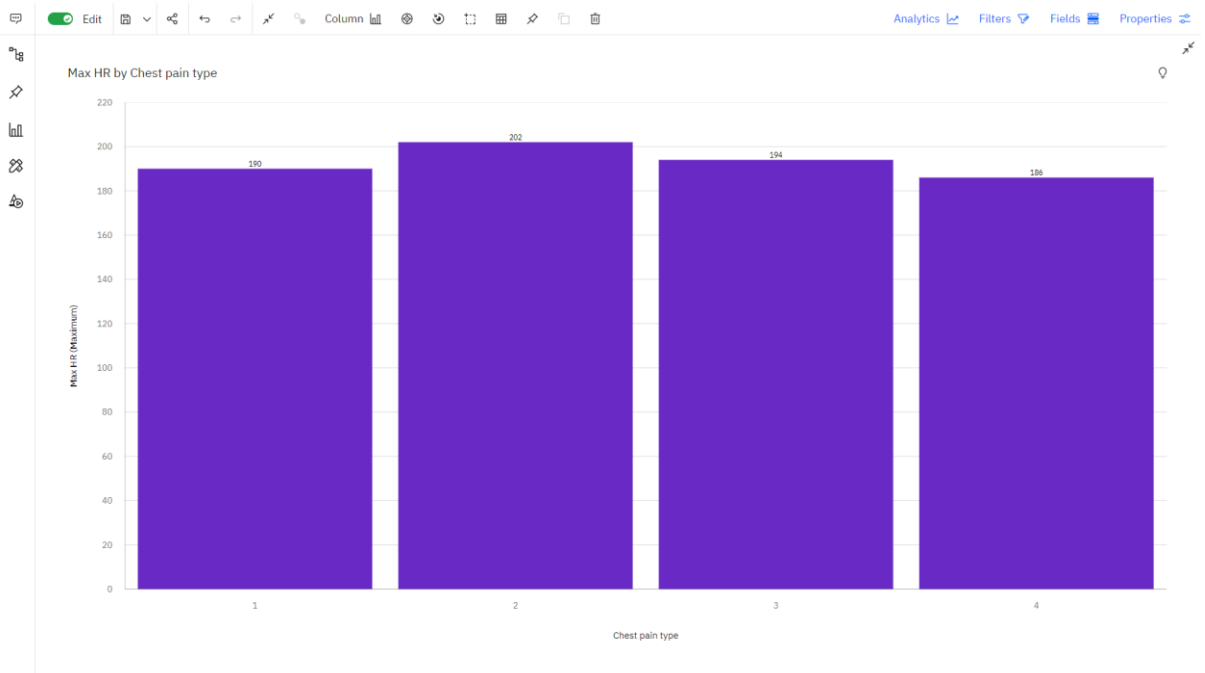
i) Exploration of BP by Age



ii) Exploration of Cholesterol by Age and Gender



iii) Exploration of Max heart rate during the chest pain



iv) Exploration of BP vs Chest pain type and Gender

