

Working with Dataset

Team ID	PNT2022TMID53162
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Project Name	Visualizing and Predicting Heart Diseases with an Interactive Dash Board
Project mentors	Industry mentor - Mahidhar, Saumya Faculty mentor – Dr. Vasuki

Understanding the dataset:

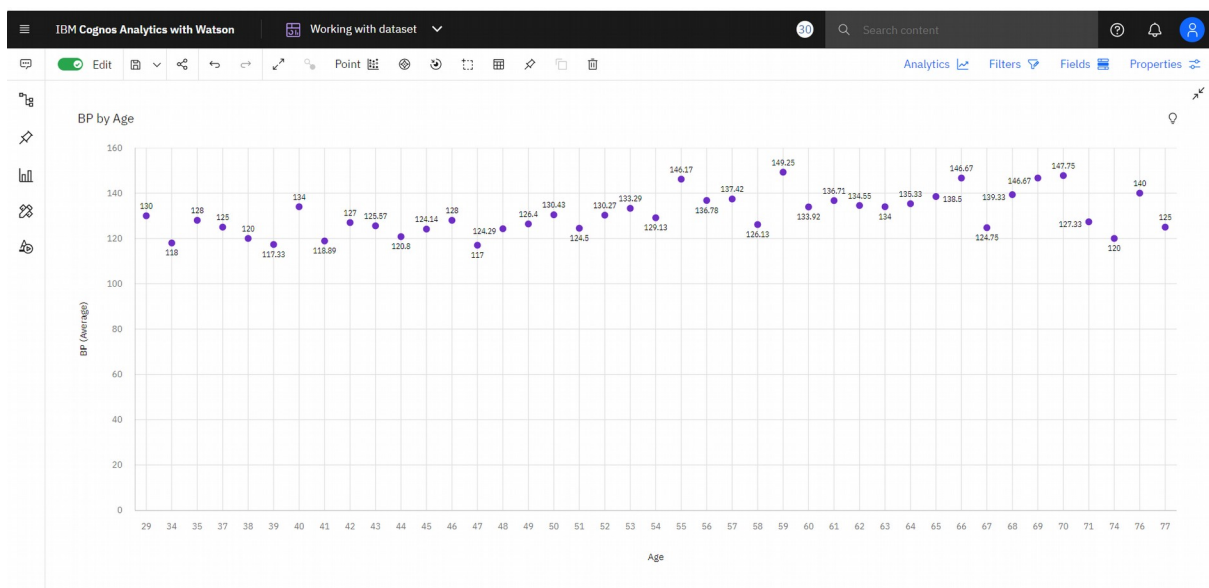
- The dataset taken consists of 270 rows or entries
- Features included are:
 - o Age – Numeric data type that represents the age of the person
 - o Sex – Numeric value which is either zero or one, defines the sexuality of the person
 - o Chest pain type – Numeric value that ranges from 1 to 4, says about the type of chest pain which may be of four types
 - o BP – Numeric value , indicates the blood pressure of the person
 - o Cholesterol – Numeric value, gives the cholesterol value of the person
 - o FBS over 120 - Numeric value which is either zero or one , says whether Fasting blood sugar is above 120 (0) or not(1).
 - o EKG results – Numeric value that ranges from 1 to 3, Provides information about heart rate
 - o Max HR – Numeric value, it is the maximum heart rate achieved by the person
 - o 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.
 - o ST depression – Floating value, In case if there is ST depression it indicates severe coronary lesions and unstable coronary artery disease.
 - o 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.
 - o Number of vessels fluro – Numeric value ranging from 0 to 3, Fluoroscopy can be used for diagnosing heart or intestinal disease
 - o 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.
 - o Heart disease – String type, says whether the person has heart disease or not

Loading the dataset:

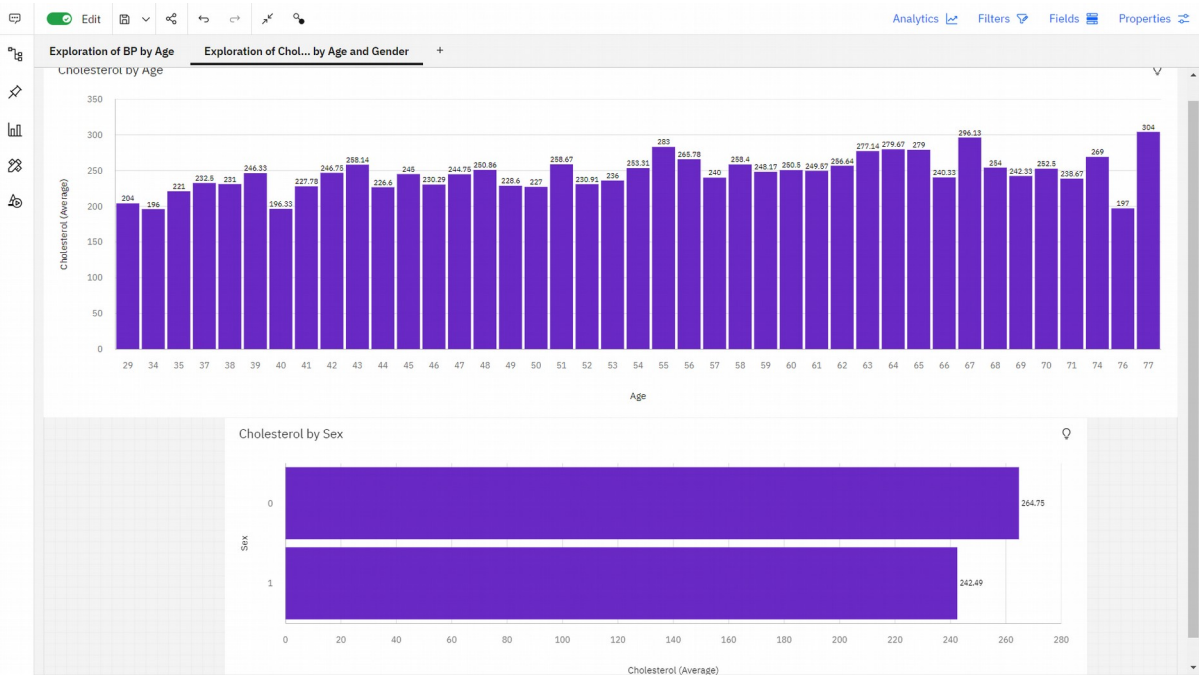
The screenshot shows the IBM Cognos Analytics Content Hub interface. The top navigation bar includes the IBM Cognos Analytics with Watson logo, a 'Content' dropdown menu, a search bar, and user profile icons. A blue banner at the top indicates 'Maintenance: Scheduled maintenance completed. Click More Info for details and to subscribe to future events'. Below the banner, the 'Content' section is active, showing a list of items under the 'My content' tab. The items are 'Heart Disease prediction', 'Heart disease prediction dashboard', and 'Heart_Disease_Prediction.csv'. The 'Heart_Disease_Prediction.csv' item is highlighted with a red box and shows a 'CSV' icon and an upward arrow icon. The 'Last Accessed' date for all items is '16/11/2022, 07:20'.

Exploration of Data:

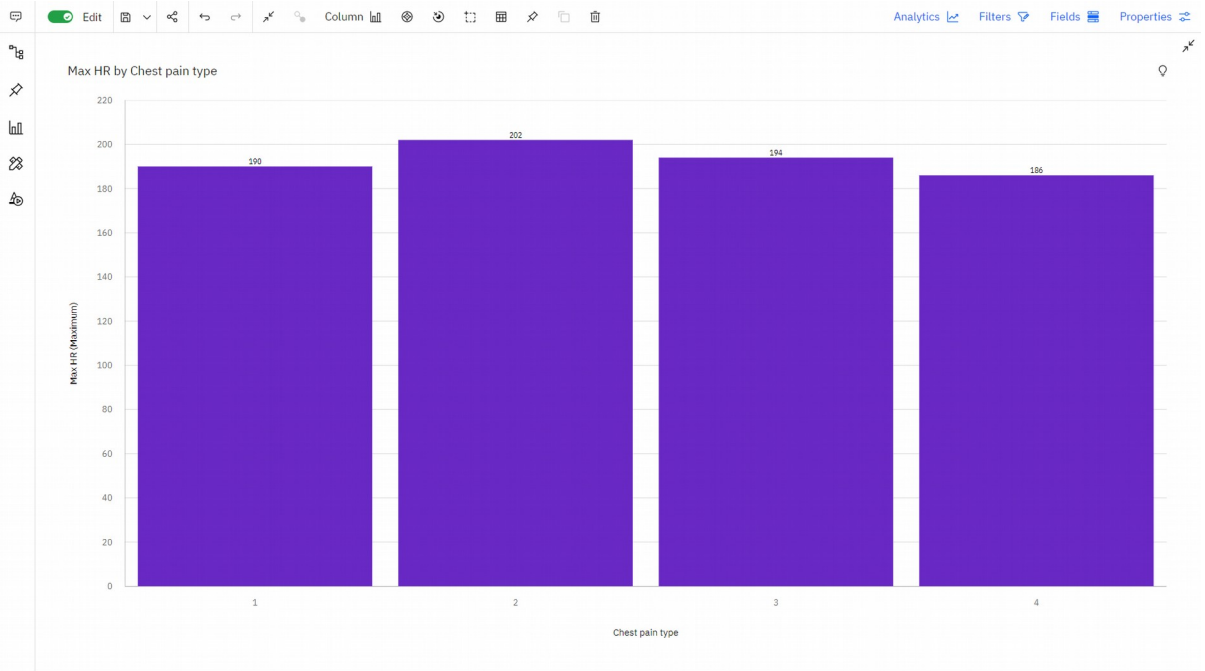
i) Exploration of BP by Age



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

