

Sprint Delivery Plan I

Date	28 October 2022
Team ID	PPNT2022TMID37670
Project Name	Project - Visualizing and Predicting Heart Diseases with an Interactive Dashboard

Uploading Heart disease Prediction Dataset Using Cognos Analysis:

USN-1:

- As a user, I can gather the details of the patients and storing the data set.
- Uploading the dataset of heart_disease_prediction.csv file to IBM Cognos Analytics.

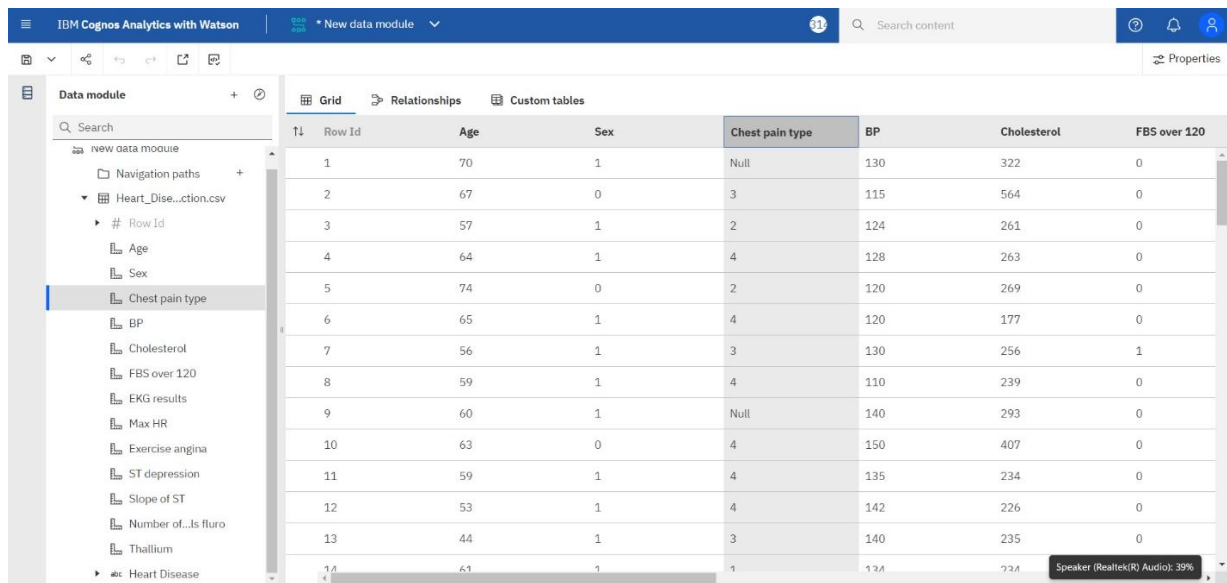
The screenshot displays the IBM Cognos Analytics user interface. At the top, a blue navigation bar contains the text 'IBM Cognos Analytics with Watson', a 'Content' dropdown menu, a notification bell icon, and a user profile icon. Below the navigation bar, the main heading 'Content' is visible, followed by tabs for 'My content', 'Team content', and 'Samples'. A 'New +' button is located to the right of the 'Content' heading. The main area shows a list of content items with columns for 'Name', 'Type', and 'Last Accessed'. The list includes several CSV files and one dashboard.

Name	Type	Last Accessed
50_Startups.csv	Uploaded file	15/09/2022, 08:39
Bank Analysis Dashboard	Dashboard	19/09/2022, 01:35
bank.csv	Uploaded file	19/09/2022, 00:03
bikebuyer.csv	Uploaded file	14/09/2022, 09:02
Heart_Disease_Prediction.csv	Uploaded file	30/10/2022, 01:19
Olympic Events.xlsx	Uploaded file	08/09/2022, 10:19
Olympic Medals.xlsx	Uploaded file	08/09/2022, 10:19

Data Cleaning and Data Processing using Cognos Analytics:

USN-2:

- As an Analyst, I will check the data set and clean the dataset to create an efficient model.
- To Data cleaning the null values in heart_disease_prediction.csv Dataset.



IBM Cognos Analytics with Watson | * New data module

Search content

Properties

Data module

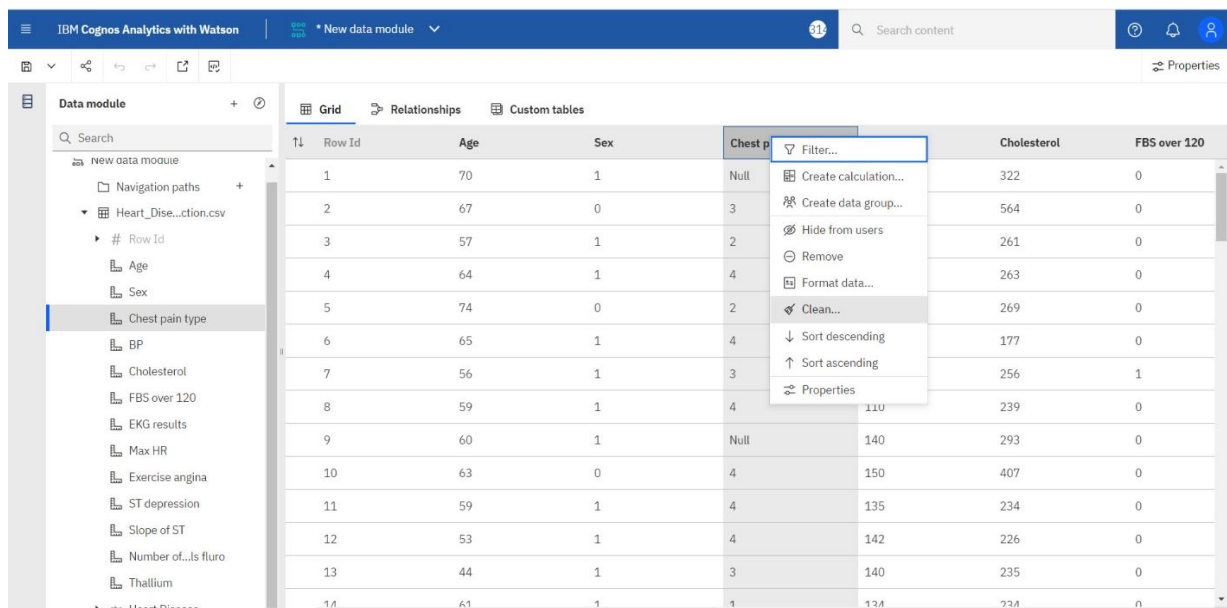
Search

new data module

- Navigation paths
- Heart_Disease_prediction.csv
 - Row Id
 - Age
 - Sex
 - Chest pain type
 - BP
 - Cholesterol
 - FBS over 120
 - EKG results
 - Max HR
 - Exercise angina
 - ST depression
 - Slope of ST
 - Number of...Is fluoro
 - Thallium
- Heart Disease

Row Id	Age	Sex	Chest pain type	BP	Cholesterol	FBS over 120
1	70	1	Null	130	322	0
2	67	0	3	115	564	0
3	57	1	2	124	261	0
4	64	1	4	128	263	0
5	74	0	2	120	269	0
6	65	1	4	120	177	0
7	56	1	3	130	256	1
8	59	1	4	110	239	0
9	60	1	Null	140	293	0
10	63	0	4	150	407	0
11	59	1	4	135	234	0
12	53	1	4	142	226	0
13	44	1	3	140	235	0
14	61	1	1	124	224	0

Speaker (Realtek(R) Audio): 39%



IBM Cognos Analytics with Watson | * New data module

Search content

Properties

Data module

Search

new data module

- Navigation paths
- Heart_Disease_prediction.csv
 - Row Id
 - Age
 - Sex
 - Chest pain type
 - BP
 - Cholesterol
 - FBS over 120
 - EKG results
 - Max HR
 - Exercise angina
 - ST depression
 - Slope of ST
 - Number of...Is fluoro
 - Thallium
- Heart Disease

Row Id	Age	Sex	Chest p	Cholesterol	FBS over 120
1	70	1	Null	322	0
2	67	0	3	564	0
3	57	1	2	261	0
4	64	1	4	263	0
5	74	0	2	269	0
6	65	1	4	177	0
7	56	1	3	256	1
8	59	1	4	239	0
9	60	1	Null	293	0
10	63	0	4	407	0
11	59	1	4	234	0
12	53	1	4	226	0
13	44	1	3	235	0
14	61	1	1	124	0

Filter...

- Create calculation...
- Create data group...
- Hide from users
- Remove
- Format data...
- Clean...
- Sort descending
- Sort ascending
- Properties

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Data module

Grid Relationships Custom tables

Search

new data module

Navigation paths

Heart_Disease.csv

Row Id

Age

Sex

Chest pain type

BP

Cholesterol

FBS over 120

EKG results

Max HR

Exercise angina

ST depression

Slope of ST

Number of...Is fluoro

Thallium

Heart Disease

Clean - Chest pain type

NULL values

☐ Replace this value with NULL

☒ Replace NULL values with 4

Cancel Clean

Row Id	Age	Sex	Chest pain type	BP	Cholesterol	FBS over 120
1	70	1	Null	130	322	0
2				115	564	0
3				124	261	0
4				128	263	0
5				120	269	0
6				120	177	0
7				130	256	1
8				110	239	0
9				140	293	0
10	63	0	4	150	407	0
11	59	1	4	135	234	0
12	53	1	4	142	226	0
13	44	1	3	140	235	0
14	61	1	1	134	234	0

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Data module

Grid Relationships Custom tables

Search

new data module

Navigation paths

Heart_Disease.csv

Row Id

Age

Sex

Chest pain type

BP

Cholesterol

FBS over 120

EKG results

Max HR

Exercise angina

ST depression

Slope of ST

Number of...Is fluoro

Thallium

Heart Disease

Row Id	Age	Sex	Chest pain type	BP	Cholesterol	FBS over 120
1	70	1	4	130	322	0
2	67	0	3	115	564	0
3	57	1	2	124	261	0
4	64	1	4	128	263	0
5	74	0	2	120	269	0
6	65	1	4	120	177	0
7	56	1	3	130	256	1
8	59	1	4	110	239	0
9	60	1	4	140	293	0
10	63	0	4	150	407	0
11	59	1	4	135	234	0
12	53	1	4	142	226	0
13	44	1	3	140	235	0
14	61	1	1	134	234	0

IBM Cognos Analytics with Watson

* New data module

Search content

Properties

Data module

Grid Relationships Custom tables

Search

new data module

Navigation paths

Heart_Dise...ction.csv

Row Id

Age

Sex

Chest pain type

BP

Cholesterol

FBS over 120

EKG results

Max HR

Exercise angina

ST depression

Slope of ST

Number of...ls fluoro

Thallium

Heart Disease

Clean - Number of vessels fluoro

NULL values

☐ Replace this value with NULL

☒ Replace NULL values with

0

0

Cancel Clean

	Exercise angina	ST depression	Slope of ST	Number of vessels fluoro	Thallium	Heart Disease
0	2.4	2	3	3	3	Presence
0				Null	7	Absence
0				Null	7	Presence
1			1	7	7	Absence
1			1	3	3	Absence
0				Null	7	Absence
1			1	6	6	Presence
1			1	7	7	Presence
0			2	7	7	Presence
0	4	2	3	7	7	Presence
0	0.5	2	0	7	7	Absence
1	0	1	0	7	7	Absence
0	0	1	0	3	3	Absence
0	2.6	2	2	2	2	Presence

IBM Cognos Analytics with Watson

* New data module

Search content

Properties

Data module

Grid Relationships Custom tables

Search

new data module

Navigation paths

Heart_Dise...ction.csv

Row Id

Age

Sex

Chest pain type

BP

Cholesterol

FBS over 120

EKG results

Max HR

Exercise angina

ST depression

Slope of ST

Number of...ls fluoro

Thallium

Heart Disease

	Exercise angina	ST depression	Slope of ST	Number of vessels fluoro	Thallium	Heart Disease
0	2.4	2	3	3	3	Presence
0	1.6	2	0	7	7	Absence
0	0.3	1	0	7	7	Presence
1	0.2	2	1	7	7	Absence
1	0.2	1	1	3	3	Absence
0	0.4	1	0	7	7	Absence
1	0.6	2	1	6	6	Presence
1	1.2	2	1	7	7	Presence
0	1.2	2	2	7	7	Presence
0	4	2	3	7	7	Presence
0	0.5	2	0	7	7	Absence
1	0	1	0	7	7	Absence
0	0	1	0	3	3	Absence
0	2.6	2	2	2	2	Presence

IBM Cognos Analytics with Watson

* New data module

Search content

Properties

Data module

new data module

- Navigation paths
- Heart_Disease...ction.csv
 - # Row Id
 - Age
 - Sex
 - Chest pain type
 - BP
 - Cholesterol
 - FBS over 120
 - EKG results
 - Max HR
 - Exercise angina
 - ST depression
 - Slope of ST
 - Number of...ls fluoro
 - Thallium

Grid

	Exercise angina	ST depression	Slope of ST	Number of vessels fluoro	Thallium	
0	2.4	2	3	3		
0	1.6	2	0	7		
0	0.3	1	0	7		
1	0.2	2	1	7		
1	0.2	1	1	3		
0	0.4	1	0	7		
1	0.6	2	1	6		
1	1.2	2	1	7		
0	1.2	2	2	7		
0	4	2	3	7		
0	0.5	2	0	7		
1	0	1	0	7		
0	0	1	0	3		
0	2.6	2	2	3		

Filter...

- Create data group...
- Create navigation path...
- Split...
- Hide from users
- Remove
- Format data...
- Clean...
- Sort descending
- Sort ascending
- Properties

Presence

Presence

Absence

Absence

Absence

Presence

IBM Cognos Analytics with Watson

* New data module

Search content

Properties

Data module

new data module

- Navigation paths
- Heart_Disease...ction.csv
 - # Row Id
 - Age
 - Sex
 - Chest pain type
 - BP
 - Cholesterol
 - FBS over 120
 - EKG results
 - Max HR
 - Exercise angina
 - ST depression
 - Slope of ST
 - Number of...ls fluoro
 - Thallium

Grid

Clean - Heart Disease

Whitespace

☐ Trim leading and trailing whitespace

Convert case to

☐ UPPERCASE ☐ lowercase ☒ Do not change

Return a substring of characters

Start Length

Preview

This is a preview

NULL values

☐ Replace this value with NULL Empty string

☒ Replace NULL values with Presence

Cancel Clean

Number of vessels fluoro	Thallium	Heart Disease			
3		Presence			
7		Absence			
7		Presence			
7		Absence			
3		Absence			
7		Absence			
6		Presence			
7		Presence			
7		Presence			
7		Presence			
7		Absence			
7		Absence			
3		Absence			
0	2.6	2	2	3	Presence

IBM Cognos Analytics with Watson | * New data module

Search content

Properties

Data module

Search

new data module

Navigation paths

Heart_Disease_prediction.csv

Row Id

Age

Sex

Chest pain type

BP

Cholesterol

FBS over 120

EKG results

Max HR

Exercise angina

ST depression

Slope of ST

Number of vessels fluro

Thallium

Heart Disease

	Exercise angina	ST depression	Slope of ST	Number of vessels fluro	Thallium	Heart Disease
						Absence
1	1	3.4	3	0	7	Presence
1	1	0.9	2	0	7	Presence
1	1	0	1	2	7	Presence
1	1	1.9	1	1	7	Presence
0	0	0	1	0	3	Presence
0	0	0	1	0	3	Absence
0	0	0	1	0	3	Absence
0	0	0	1	0	7	Presence
0	0	0	1	0	3	Absence
0	0	0	1	0	3	Absence
1	1	0.4	1	0	3	Absence
0	0	0	1	0	7	Absence
0	0	2.2	2	1	6	Presence
0	0	0	1	0	3	Absence

Creating The Data Module using Cognos Analytics:

USN-3:

- As an Analyst I will also correct the raw data and create a data module.
- I will Create the data module using heart_disease_prediction.csv Dataset.

IBM Cognos Analytics with Watson | * New data module

Search content

Properties

Data module

Search

new data module

Navigation paths

Heart_Disease_prediction.csv

Row Id

Age

Sex

Chest pain type

BP

Cholesterol

FBS over 120

EKG results

Max HR

Exercise angina

ST depression

Slope of ST

Number of vessels fluro

Thallium

Heart Disease

	Exercise angina	ST depression	Slope of ST	Number of vessels fluro	Thallium	Heart Disease
						Absence
1	1	3.4	3	0	7	Presence
1	1	0.9	2	0	7	Presence
1	1	0	1	2	7	Presence
1	1	1.9	1	1	7	Presence
0	0	0	1	0	3	Presence
0	0	0	1	0	3	Absence
0	0	0	1	0	3	Absence
0	0	0	1	0	7	Presence
0	0	0	1	0	3	Absence
0	0	0	1	0	3	Absence
1	1	0.4	1	0	3	Absence
0	0	0	1	0	7	Absence
0	0	2.2	2	1	6	Presence
0	0	0	1	0	3	Absence

