

Working with Dataset

Loading and Preparation of dataset

Team id	PNT2022TMID21213
Project name	VISUALIZING AND PREDICTING HEART DISEASEWITH AN INTERACTIVE DASHBOARD

LOADING DATASET

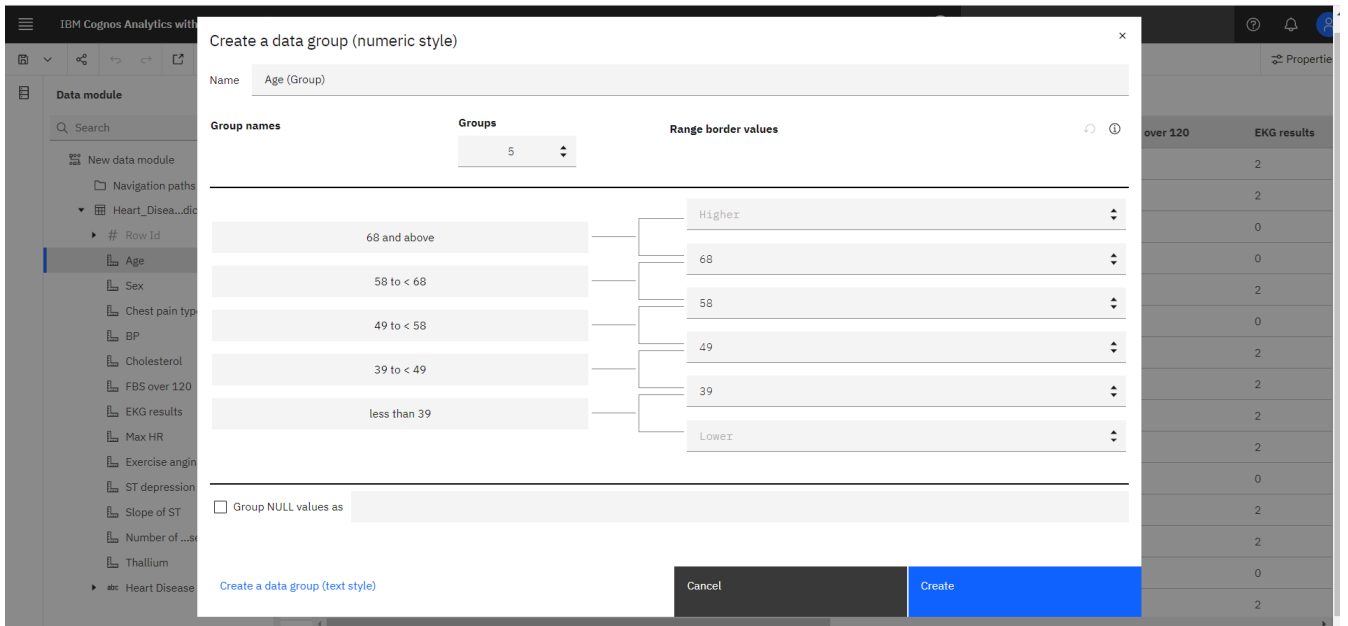
The screenshot shows the IBM Cognos Analytics with Watson interface. The top navigation bar includes a menu icon, the text 'IBM Cognos Analytics with Watson', a search icon, and a search bar. Below the navigation bar, there are four main action cards: 'Upload data' (with an upload icon), 'Prepare data' (with a data icon), 'Exploration' (with a magnifying glass icon), and 'Present data' (with a presentation icon). Each card has a brief description of its function. Below these cards, there are two tabs: 'Get started' and 'Recent'. The 'Recent' tab is active, showing a list of recent data sources. Two CSV files are listed: 'Heart_Disease_Prediction.csv' (last accessed 11/17/2022, 6:39 AM) and '50_Startups.csv' (last accessed 9/19/2022, 9:51 AM). Each file has a 'CSV' label and an upload icon.

PREPARATION OF DATA

AGE GROUPS

The screenshot shows the IBM Cognos Analytics with Watson interface in the 'Grid' view. The top navigation bar includes a menu icon, the text 'IBM Cognos Analytics with Watson', a search icon, and a search bar. Below the navigation bar, there are three tabs: 'Data module', 'Grid', and 'Custom tables'. The 'Grid' tab is active, showing a table with 15 rows and 8 columns. The columns are: Row Id, Age, Sex, Chest pain type, BP, Cholesterol, FBS over 120, and EKG results. The 'Age' column is highlighted. The 'Data module' sidebar on the left shows a tree view of the data source 'Heart_Disease_Prediction.csv' with a list of fields including Age, Sex, Chest pain type, BP, Cholesterol, FBS over 120, EKG results, Max HR, Exercise angina, ST depression, Slope of ST, Number of ...sels fluoro, and Thallium.

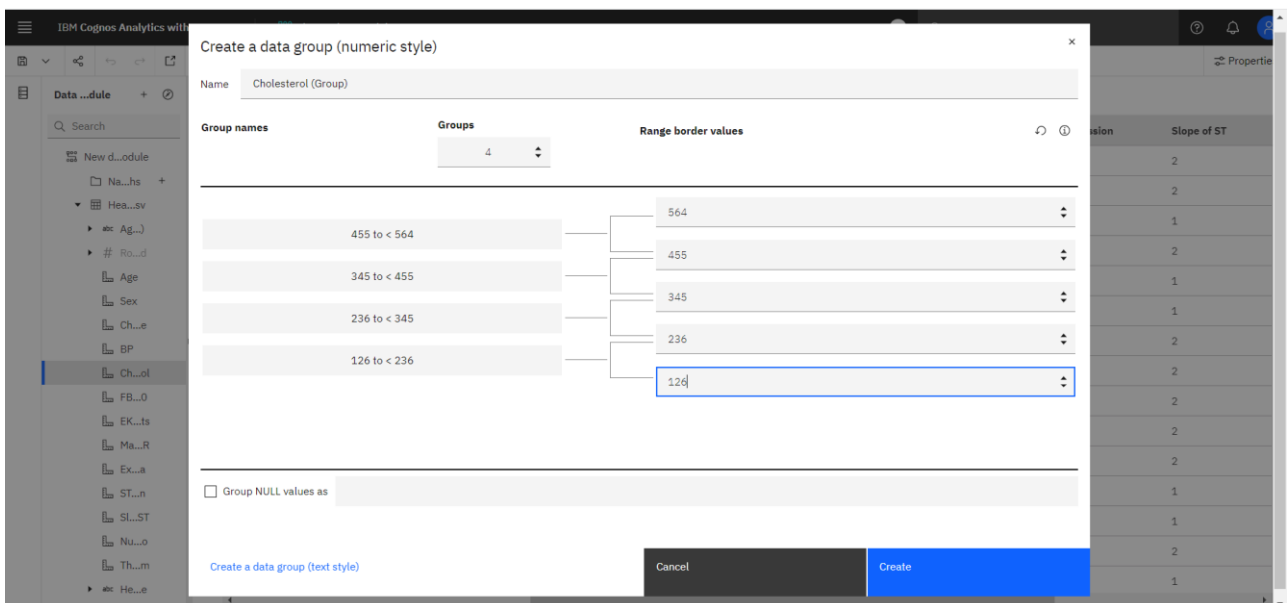
Row Id	Age	Sex	Chest pain type	BP	Cholesterol	FBS over 120	EKG results
1	70	1	4	130	322	0	2
2	67	0	3	115	564	0	2
3	57	1	2	124	261	0	0
4	64	1	4	128	263	0	0
5	74	0	2	120	269	0	2
6	65	1	4	120	177	0	0
7	56	1	3	130	256	1	2
8	59	1	4	110	239	0	2
9	60	1	4	140	293	0	2
10	63	0	4	150	407	0	2
11	59	1	4	135	234	0	0
12	53	1	4	142	226	0	2
13	44	1	3	140	235	0	2
14	61	1	1	134	234	0	0
15	57	0	4	128	303	0	2



The screenshot shows a data grid in IBM Cognos Analytics. The grid has columns: 'Age (Group)', 'Row Id', 'Age', 'Sex', 'Chest pain type', 'BP', 'Cholesterol', and 'FBS over 120'. The grid displays 15 rows of data. The 'Age (Group)' column is highlighted in blue.

Age (Group)	Row Id	Age	Sex	Chest pain type	BP	Cholesterol	FBS over 120
68 and above	1	70	1	4	130	322	0
58 to < 68	2	67	0	3	115	564	0
49 to < 58	3	57	1	2	124	261	0
58 to < 68	4	64	1	4	128	263	0
68 and above	5	74	0	2	120	269	0
58 to < 68	6	65	1	4	120	177	0
49 to < 58	7	56	1	3	130	256	1
58 to < 68	8	59	1	4	110	239	0
58 to < 68	9	60	1	4	140	293	0
58 to < 68	10	63	0	4	150	407	0
58 to < 68	11	59	1	4	135	234	0
49 to < 58	12	53	1	4	142	226	0
39 to < 49	13	44	1	3	140	235	0
58 to < 68	14	61	1	1	134	234	0
49 to < 58	15	57	0	4	128	303	0

CHOLESTEROL USER GROUP



NEW TABLE FOR AGE VS CHEST PAIN TYPE

IBM Cognos Analytics with Watson

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Search content

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* New data module

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Properties

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Data module

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🔍 Search

📄 New data module

📄 Navigation paths

📄 AGE VS CHEST PAIN TYPE

▶ 📄 Age (Group)

📄 Age

📄 Sex

📄 Chest pain type

▶ 📄 Heart_Disease_Prediction.csv

▶ 📄 Cholesterol (Group)

▶ 📄 Age (Group)

▶ # Row Id

📄 Age

📄 Sex

📄 Chest pain type

📄 BP

📄 Cholesterol

📄 FBS over 120

📄 EKG results

📄 Max HR

📄 Grid

🔗 Relationships

📄 Custom tables

1	Age (Group)	Age	Sex	Chest pain type
	68 and above	70	1	4
	58 to < 68	67	0	3
	49 to < 58	57	1	2
	58 to < 68	64	1	4
	68 and above	74	0	2
	58 to < 68	65	1	4
	49 to < 58	56	1	3
	58 to < 68	59	1	4
	58 to < 68	60	1	4
	58 to < 68	63	0	4
	58 to < 68	59	1	4
	49 to < 58	53	1	4
	39 to < 49	44	1	3
	58 to < 68	61	1	1
	49 to < 58	57	0	4

TABLE FOR MAX HR VS CHEST PAIN

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Data module

Grid Relationships Custom tables

Max HR (Group)	Chest pain type	Max HR
104 to < 137	4	109
137 to < 170	3	160
137 to < 170	2	141
104 to < 137	4	105
104 to < 137	2	121
137 to < 170	4	140
137 to < 170	3	142
137 to < 170	4	142
170 and above	4	170
137 to < 170	4	154
137 to < 170	4	161
104 to < 137	4	111
170 and above	3	180
137 to < 170	1	145
137 to < 170	4	159

TABLE FOR BP VS AGE

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Data module

Grid Relationships Custom tables

BP (Group)	Age	BP
121 to < 147	70	130
less than 121	67	115
121 to < 147	57	124
121 to < 147	64	128
less than 121	74	120
less than 121	65	120
121 to < 147	56	130
less than 121	59	110
121 to < 147	60	140
147 to < 174	63	150
121 to < 147	59	135
121 to < 147	53	142
121 to < 147	44	140
121 to < 147	61	134
121 to < 147	57	128

TABLE FOR MAX HR VS EXISTING HEART DISEASE

The screenshot shows the IBM Cognos Analytics interface. The left sidebar displays a data module hierarchy. The main area shows a grid view of data with columns: Max HR (Group), Max HR, and Heart Disease.

Max HR (Group)	Max HR	Heart Disease
104 to < 137	109	Presence
137 to < 170	160	Absence
137 to < 170	141	Presence
104 to < 137	105	Absence
104 to < 137	121	Absence
137 to < 170	140	Absence
137 to < 170	142	Presence
137 to < 170	142	Presence
170 and above	170	Presence
137 to < 170	154	Presence
137 to < 170	161	Absence
104 to < 137	111	Absence
170 and above	180	Absence
137 to < 170	145	Presence
137 to < 170	159	Absence

TABLE FOR AGE – CHEST PAIN VS EXISTING HEART DISEASE

The screenshot shows the IBM Cognos Analytics interface. The left sidebar displays a data module hierarchy. The main area shows a grid view of data with columns: Age (Group), Age, Chest pain type, and Heart Disease.

Age (Group)	Age	Chest pain type	Heart Disease
68 and above	70	4	Presence
58 to < 68	67	3	Absence
49 to < 58	57	2	Presence
58 to < 68	64	4	Absence
68 and above	74	2	Absence
58 to < 68	65	4	Absence
49 to < 58	56	3	Presence
58 to < 68	59	4	Presence
58 to < 68	60	4	Presence
58 to < 68	63	4	Presence
58 to < 68	59	4	Absence
49 to < 58	53	4	Absence
39 to < 49	44	3	Absence
58 to < 68	61	1	Presence
49 to < 58	57	4	Absence

OVERALL DATASET

