

## Sprint Delivery Plan I

Date	11 November 2022
Team ID	PNT2022TMID30840
Project Name	Project – Analytics for Hospitals Health Care Data

### Importing Data Sets of Analytics for Hospitals Health Care Data Using Cognos Analysis:

#### USN-1:

- As a User I can enter the details of the patients working in our organization of the details.
- Uploading the dataset of test\_data.csv and train\_data.csv file to IBM Cognos Analytics.

The screenshot displays the IBM Cognos Analytics user interface. At the top, a dark navigation bar includes the text 'IBM Cognos Analytics with Watson', a 'Content' dropdown menu, a search bar with the placeholder 'Search content', and user profile icons. Below this, the main area shows a folder named 'Hospitals health care'. Underneath the folder name are tabs for 'My content', 'Team content', and 'Samples'. The 'My content' tab is active, showing a list of items. The list has columns for 'Name', 'Type', and 'Last Accessed'. The items listed are: 'Test\_data module' (Data module, 30/10/2022, 8:59 AM), 'test\_data.csv' (Uploaded file, 30/10/2022, 3:39 AM), and 'train\_data.csv' (Uploaded file, 30/10/2022, 3:12 AM). Each item has a checkbox on the left and a three-dot menu on the right.

Name	Type	Last Accessed
<input type="checkbox"/> Test_data module	Data module	30/10/2022, 8:59 AM
<input type="checkbox"/> test_data.csv	Uploaded file	30/10/2022, 3:39 AM
<input type="checkbox"/> train_data.csv	Uploaded file	30/10/2022, 3:12 AM

IBM Cognos Analytics with Watson

Content

31

Search content

?

1

Hospitals health care

My contentTeam contentSamples

My content / Hospitals health care

Name

Type

Last Accessed

train\_data.csv CSV

Uploaded file

30/10/2022, 3:12 AM

IBM Cognos Analytics with Watson

New data module

31

Search content

?

1

Data module

+

?

Search

New data module

Navigation paths

train\_data.csv

# Row Id

# case\_id

# Hospital\_code

abc Hospital...ype\_code

City\_Code\_Hospital

Hospital...ion\_code

Available...Hospital

abc Department

abc Ward\_Type

abc Ward\_Facility\_Code

Grid

Relationships

Custom tables

case\_id

Hospital\_code

Hospital\_type\_code

City\_Code\_Hospital

Hospital\_region\_code

Av

1

2

3

4

5

6

7

8

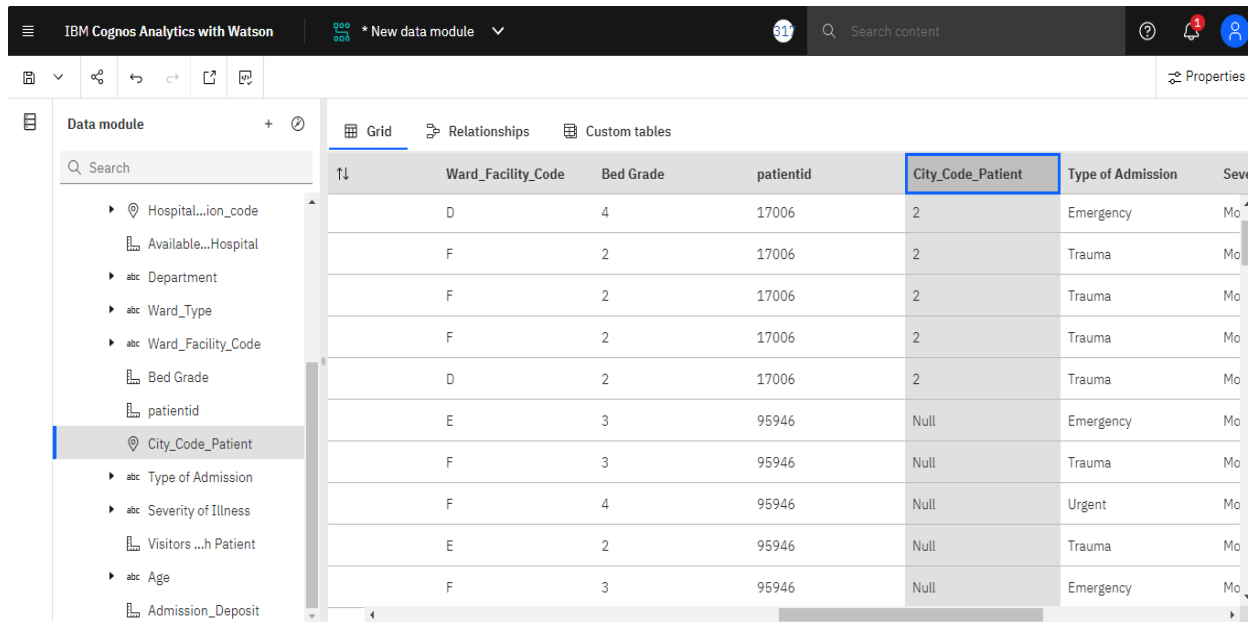
9

10

## 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 test\_data.csv dataset first.



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New data module

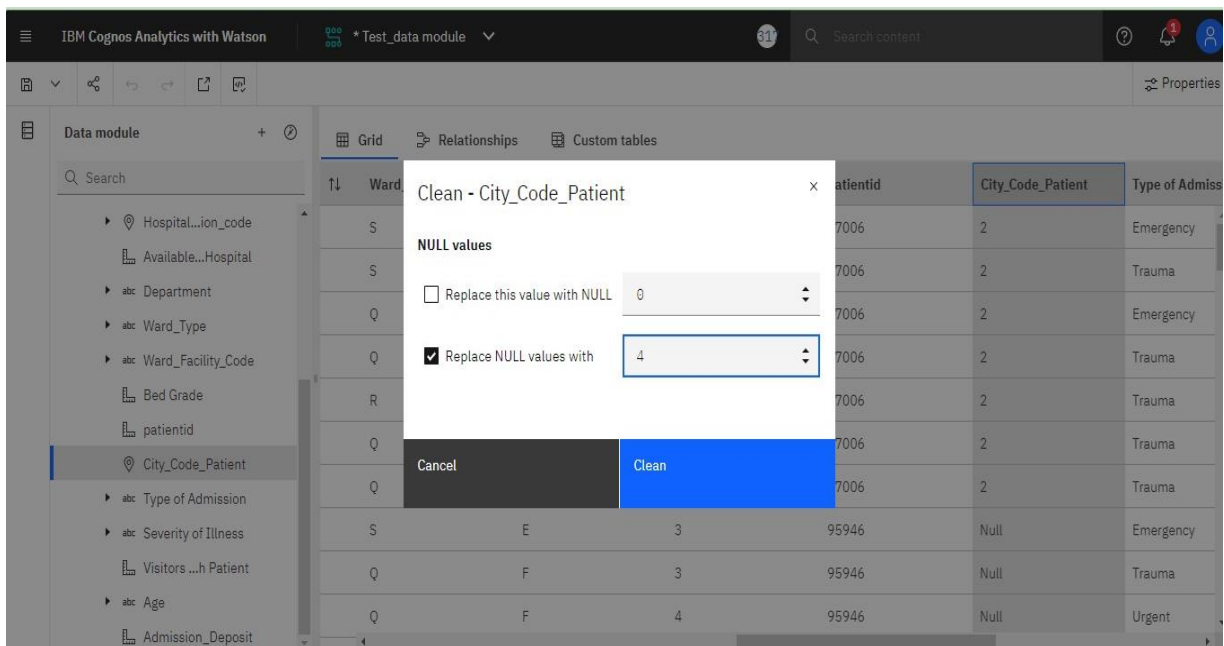
Search content

Properties

Data module

Grid Relationships Custom tables

Ward_Facility_Code	Bed Grade	patientid	City_Code_Patient	Type of Admission	Sev
D	4	17006	2	Emergency	Mo
F	2	17006	2	Trauma	Mo
F	2	17006	2	Trauma	Mo
F	2	17006	2	Trauma	Mo
D	2	17006	2	Trauma	Mo
E	3	95946	Null	Emergency	Mo
F	3	95946	Null	Trauma	Mo
F	4	95946	Null	Urgent	Mo
E	2	95946	Null	Trauma	Mo
F	3	95946	Null	Emergency	Mo



IBM Cognos Analytics with Watson

\* Test\_data module

Search content

Properties

Data module

Grid Relationships Custom tables

Clean - City\_Code\_Patient

NULL values

☐ Replace this value with NULL

☒ Replace NULL values with 4

Cancel Clean

Ward	patientid	City_Code_Patient	Type of Admiss
S	7006	2	Emergency
S	7006	2	Trauma
Q	7006	2	Emergency
Q	7006	2	Trauma
R	7006	2	Trauma
Q	7006	2	Trauma
Q	7006	2	Trauma
S	95946	Null	Emergency
Q	95946	Null	Trauma
Q	95946	Null	Urgent

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane lists various fields: Hospital...ion\_code, Available...Hospital, Department, Ward\_Type, Ward\_Facility\_Code, Bed Grade, patientid, City\_Code\_Patient, Type of Admission, Severity of Illness, Visitors ...h Patient, Age, and Admission\_Deposit. The 'City\_Code\_Patient' field is selected. The main area displays a table with the following columns: Patient, Ward\_Type, Ward\_Facility\_Code, Bed Grade, patientid, and City\_Code\_Patient. The table contains 12 rows of data.

Patient	Ward_Type	Ward_Facility_Code	Bed Grade	patientid	City_Code_Patient
17006	Q	F	2	17006	2
17006	R	F	2	17006	2
17006	Q	F	2	17006	2
17006	Q	D	2	17006	2
95946	S	E	3	95946	4
95946	Q	F	3	95946	4
95946	Q	F	4	95946	4
95946	Q	E	2	95946	4
95946	R	F	3	95946	4
95946	R	A	3	95946	4

- To Data cleaning the null values in train\_data.csv dataset.

The screenshot shows the IBM Cognos Analytics interface with a dialog box titled 'Clean - City\_Code\_Patient' open. The dialog box has a section for 'NULL values' with two options: 'Replace this value with NULL' (unchecked) and 'Replace NULL values with' (checked). The value '7' is entered in the input field next to the checked option. The background shows a table with columns: Type of Admission, Severity of Illness, and Visitors w. The table contains 12 rows of data.

Type of Admission	Severity of Illness	Visitors w
Emergency	Extreme	2
Trauma	Extreme	2
Trauma	Extreme	2
Trauma	Extreme	2
Trauma	Extreme	2
Trauma	Extreme	2
Emergency	Extreme	2
Trauma	Extreme	2
Trauma	Extreme	2
Trauma	Extreme	2

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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

☒ Replace NULL values with

Cancel Clean

Age	Admission_Deposit
51-60	4911
51-60	5954
51-60	4745
51-60	7272
51-60	5558
51-60	4449
51-60	6167
51-60	5571
51-60	7223
51-60	6056

IBM Cognos Analytics with Watson

\* New data module

Search content

Properties

Data module

Search

New data module

Navigation paths

train\_data.csv

# Row Id

# case\_id

# Hospital\_code

abc Hospital\_type\_code

City\_Code\_Hospital

Hospital\_region\_code

Available...Hospital

abc Department

abc Ward\_Type

abc Ward\_Facility\_Code

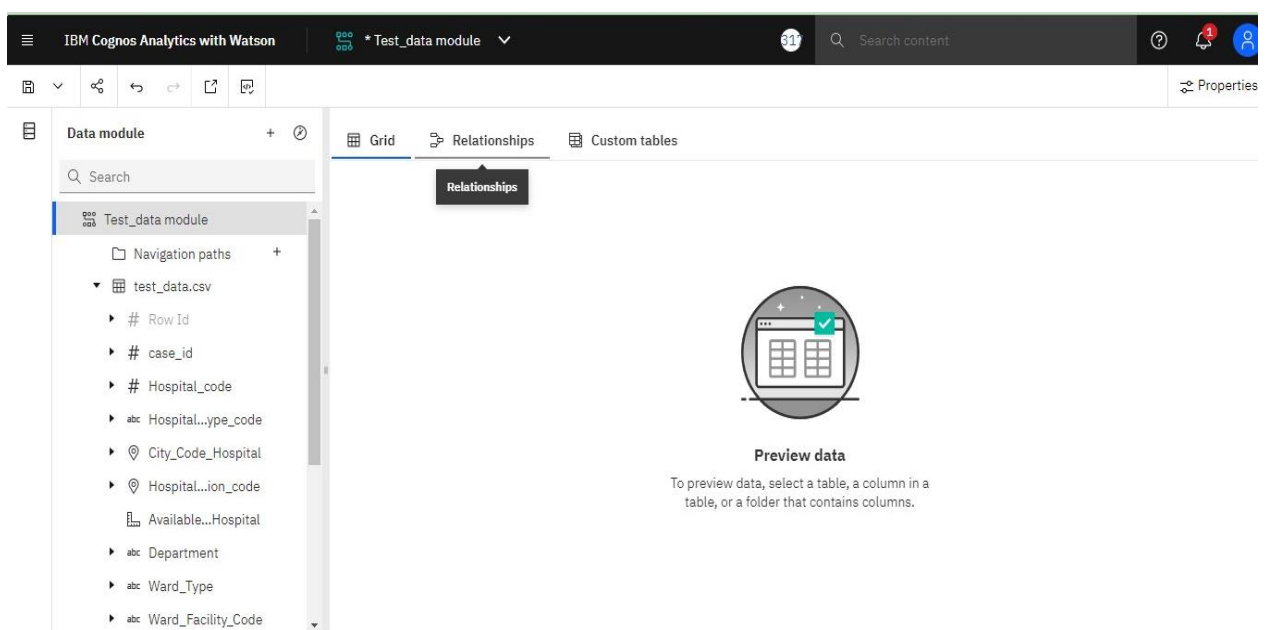
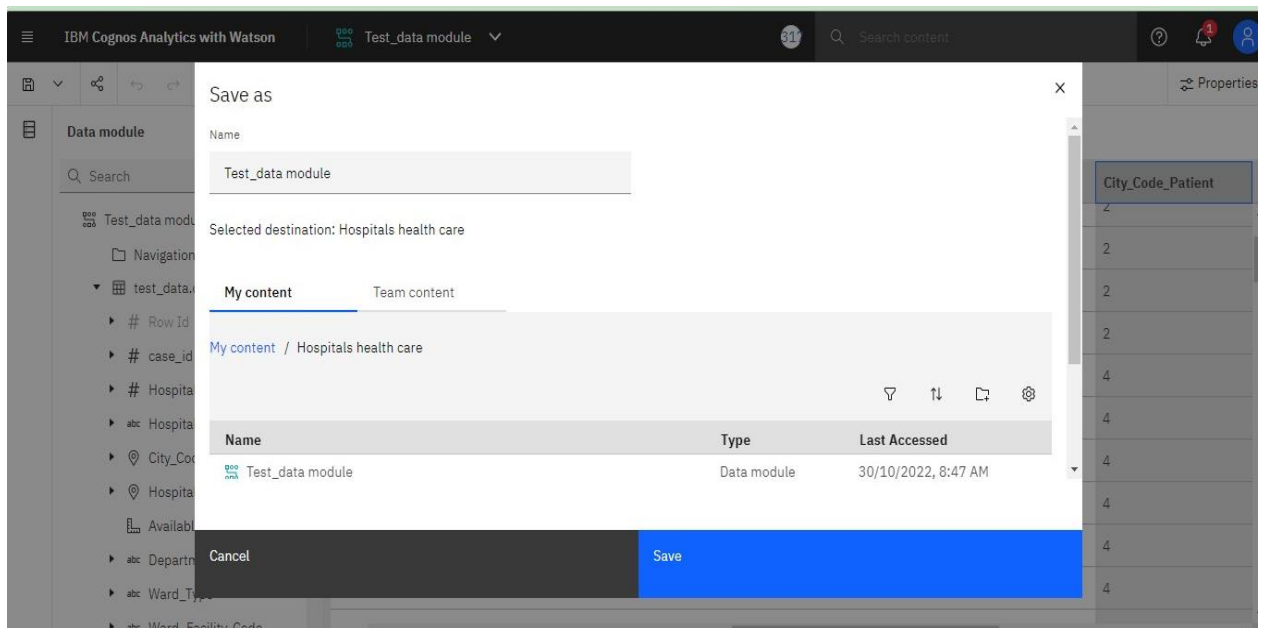
Grid Relationships Custom tables

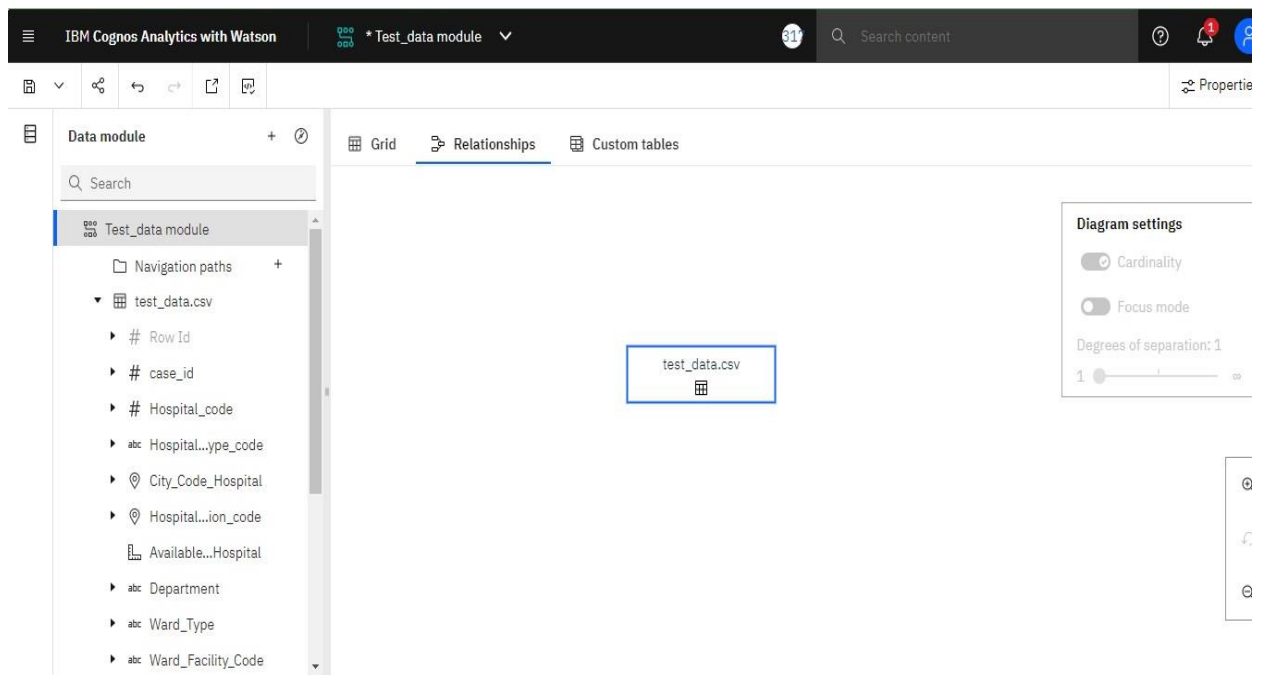
case_id	Hospital_code	Hospital_type_code	City_Code_Hospital	Hospital_region_code	Av
1	8	c	3	Z	3
2	2	c	5	Z	2
3	10	e	1	X	2
4	26	b	2	Y	2
5	26	b	2	Y	2
6	23	a	6	X	2
7	32	f	9	Y	1
8	23	a	6	X	4
9	1	d	10	Y	2
10	10	e	1	X	2

## Creating The Data Module using Cognos Analytics:

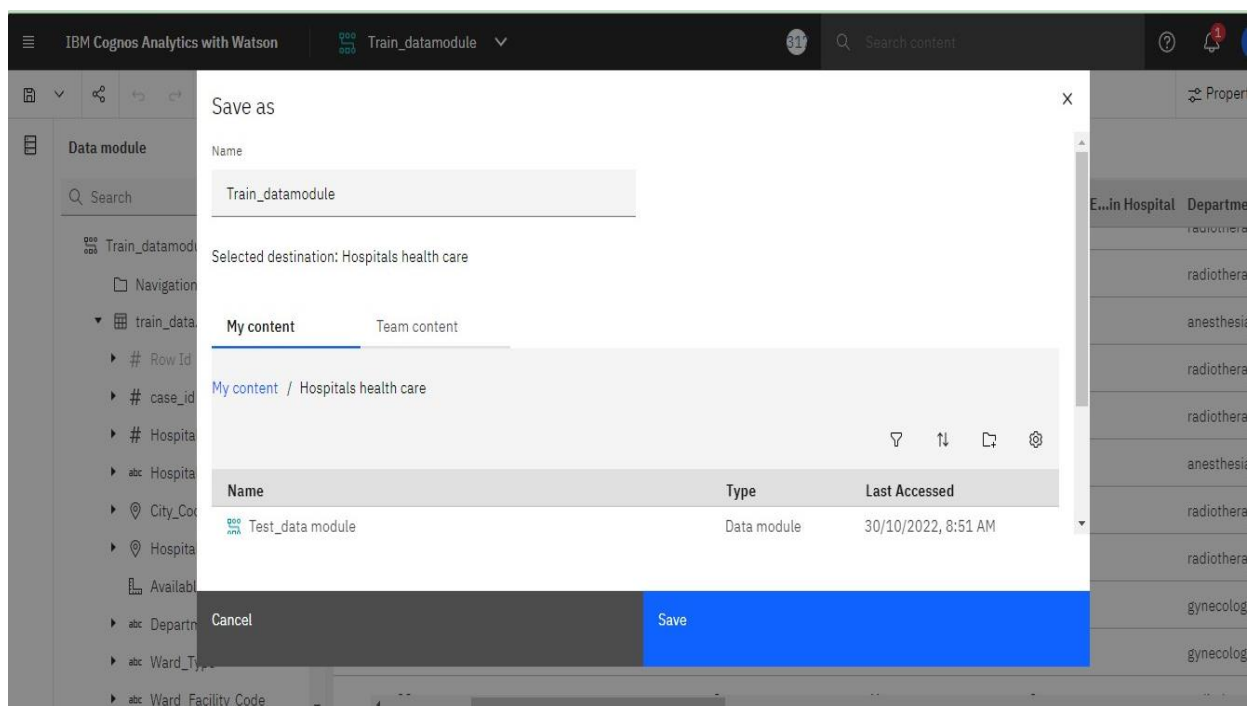
### USN-3:

- As an Analyst I will also correct the raw data and create a data module.
- I will Create the data module using test\_data.csv dataset first.





- Then I will Create the data module using train\_data.csv dataset.



us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=i62D0214C205D44E6BF7E5A3DD961130A&objRef=i62D0214C205D44E6BF7E5A3DD961130A&tid...

IBM Cognos Analytics with Watson Train\_datamodule

Search content

Data module

Search

Train\_datamodule

- Navigation paths
- train\_data.csv
  - # Row Id
  - # case\_id
  - # Hospital\_code
  - abc Hospital...ype\_code
  - City\_Code\_Hospital
  - Hospital...ion\_code
  - Available...Hospital
  - abc Department
  - abc Ward\_Type
  - abc Ward\_Facility\_Code

Grid Relationships Custom tables

Preview data

To preview data, select a table, a column in a table, or a folder that contains columns.

IBM Cognos Analytics with Watson Train\_datamodule

Search content

Properties

Data module

Search

Train\_datamodule

- Navigation paths
- train\_data.csv
  - # Row Id
  - # case\_id
  - # Hospital\_code
  - abc Hospital...ype\_code
  - City\_Code\_Hospital
  - Hospital...ion\_code
  - Available...Hospital
  - abc Department
  - abc Ward\_Type
  - abc Ward\_Facility\_Code

Grid Relationships Custom tables

Diagram settings

- Cardinality
- Focus mode

Degrees of separation: 1

train\_data.csv