

## PROJECT DEVELOPMENT PHASE

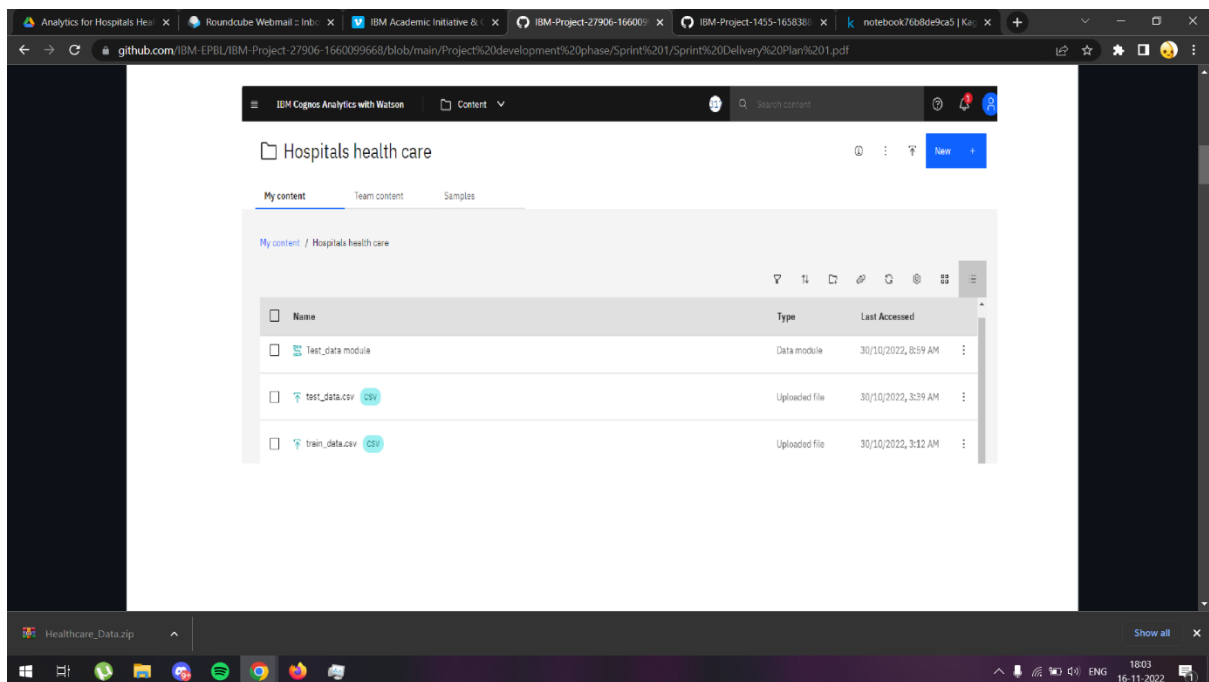
### SPRINT I

Date	15/11/2022
Team ID	PNT2022TMID44298
Project Name	Analytics for Hospital's Healthcare Data

### Importing Data Sets of Analytics for Hospital 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.



Resource list - IBM Cloud x IBM Cloud x Cognos Analytics - India | IBM x My IBM x Content x +

ap2.ca.analytics.ibm.com/bl/?perspective=content&tab=myContent&folder=ICE14AFD986824C6090891BD87B58C1E1

IBM Cognos Analytics with Watson Content 30 Search content

## Content

My content Team content Samples

data visualization sample\_sub.csv sprint2 test\_data.csv

Last Accessed 11/16/2022, 1:33 PM Last Accessed 11/16/2022, 12:46 PM Last Accessed 11/16/2022, 6:55 AM Last Accessed 11/16/2022, 6:50 AM

train\_data\_dictionary.csv train\_data.csv

Last Accessed 11/16/2022, 12:45 PM Last Accessed 11/16/2022, 1:44 PM

Windows taskbar: 01:14 17-11-2022

Resource list - IBM Cloud x IBM Cloud x Cognos Analytics - India | IBM x My IBM x IBM Cloud x \* New data module x +

ap2.ca.analytics.ibm.com/bl/?perspective=ca-modeller&id=833573463\_1d06447e030046f5bc02b2e0800648a5\_sessionTemp&objRef=&tid=833573463\_1d06447e030046f5bc02b2e0800...

IBM Cognos Analytics with Watson \* New data module 30 Search content

Data module Grid Relationships Custom tables

Search

New data module

Navigation paths

train\_data.csv

- # Row Id
- # case\_id
- # Hospital\_code
- # Hospital\_type\_code
- # City\_Code\_Hospital
- # Hospital\_region\_code
- Available...Hospital
- Department
- Ward\_Type
- Ward\_Facility\_Code
- Bed Grade
- patientid
- City\_Code\_Patient
- Type of Admission
- Severity of Illness

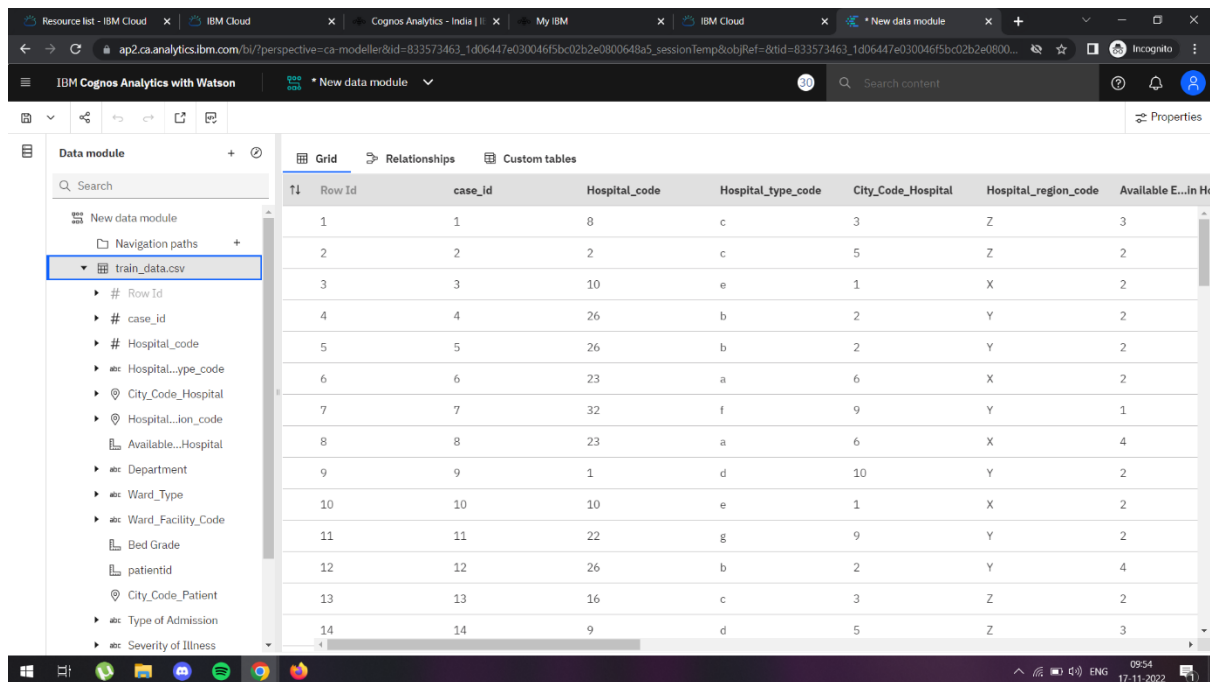
Row Id	case_id	Hospital_code	Hospital_type_code	City_Code_Hospital	Hospital_region_code	Available E...in Hc
1	1	8	c	3	Z	3
2	2	2	c	5	Z	2
3	3	10	e	1	X	2
4	4	26	b	2	Y	2
5	5	26	b	2	Y	2
6	6	23	a	6	X	2
7	7	32	f	9	Y	1
8	8	23	a	6	X	4
9	9	1	d	10	Y	2
10	10	10	e	1	X	2
11	11	22	g	9	Y	2
12	12	26	b	2	Y	4
13	13	16	c	3	Z	2
14	14	9	d	5	Z	3

Windows taskbar: 09:54 17-11-2022

## Data Cleaning and Data Processing using Cognos Analytics:

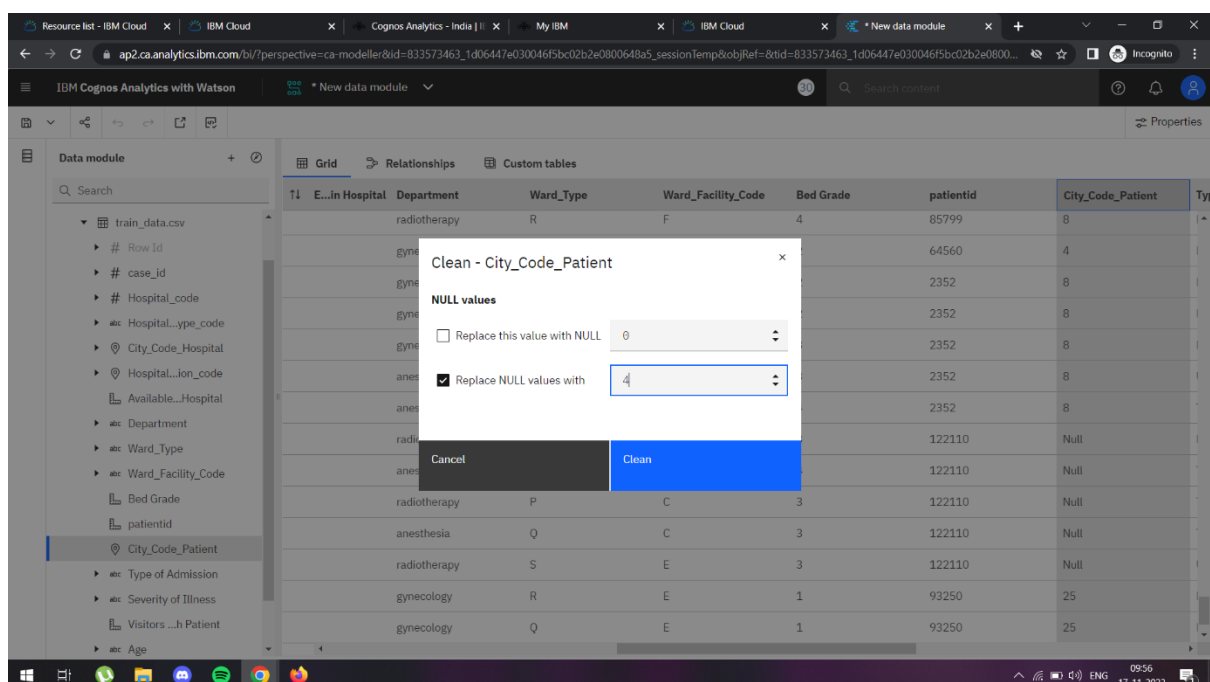
### USN-2:

- 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.



The screenshot shows the IBM Cognos Analytics interface with the 'train\_data.csv' dataset loaded. The 'Grid' view is active, displaying a table with 14 rows and 8 columns. The columns are: Row Id, case\_id, Hospital\_code, Hospital\_type\_code, City\_Code\_Hospital, Hospital\_region\_code, and Available E...in Hc. The data is as follows:

Row Id	case_id	Hospital_code	Hospital_type_code	City_Code_Hospital	Hospital_region_code	Available E...in Hc
1	1	8	c	3	Z	3
2	2	2	c	5	Z	2
3	3	10	e	1	X	2
4	4	26	b	2	Y	2
5	5	26	b	2	Y	2
6	6	23	a	6	X	2
7	7	32	f	9	Y	1
8	8	23	a	6	X	4
9	9	1	d	10	Y	2
10	10	10	e	1	X	2
11	11	22	g	9	Y	2
12	12	26	b	2	Y	4
13	13	16	c	3	Z	2
14	14	9	d	5	Z	3



The screenshot shows the IBM Cognos Analytics interface with the 'test\_data.csv' dataset loaded. The 'Grid' view is active, displaying a table with 14 rows and 8 columns. The columns are: E...in Hospital, Department, Ward\_Type, Ward\_Facility\_Code, Bed Grade, patientid, City\_Code\_Patient, and Ty. The data is as follows:

E...in Hospital	Department	Ward_Type	Ward_Facility_Code	Bed Grade	patientid	City_Code_Patient	Ty
radiotherapy	R	F	4	85799	8		
gynecology				64560	4		
gynecology				2352	8		
gynecology				2352	8		
gynecology				2352	8		
anesthesia				2352	8		
radiotherapy				122110	Null		
anesthesia				122110	Null		
radiotherapy	P	C	3	122110	Null		
anesthesia	Q	C	3	122110	Null		
radiotherapy	S	E	3	122110	Null		
gynecology	R	E	1	93250	25		
gynecology	Q	E	1	93250	25		

A dialog box titled 'Clean - City\_Code\_Patient' is open, showing the 'NULL values' section. The 'Replace NULL values with' option is selected, and the value '4' is entered in the input field. The 'Clean' button is highlighted in blue.

Resource list - IBM Cloud x IBM Cloud x Cognos Analytics - India | x My IBM x IBM Cloud x \* New data module x +

ap2.ca.analytics.ibm.com/bl/?perspective=ca-modeller&id=833573463\_1d06447e030046f5bc02b2e0800648a5\_sessionTemp&objRef=&tid=833573463\_1d06447e030046f5bc02b2e0800...

IBM Cognos Analytics with Watson New data module 30 Search content Incognito

Data module +

Search

New data module

Navigation paths +

train\_data.csv

# Row Id

# case\_id

# Hospital\_code

Hospital...ype\_code

City\_Code\_Hospital

Hospital...ion\_code

Available...Hospital

Department

Ward\_Type

Ward\_Facility\_Code

Bed Grade

patientid

City\_Code\_Patient

Type of Admission

Severity of Illness

Grid Relationships Custom tables

Row Id	case_id	Hospital_code	Hospital_type_code	City_Code_Hospital	Hospital_region_code	Available E...in Hc
1	1	8	c	3	Z	3
2	2	2	c	5	Z	2
3	3	10	e	1	X	2
4	4	26	b	2	Y	2
5	5	26	b	2	Y	2
6	6	23	a	6	X	2
7	7	32	f	9	Y	1
8	8	23	a	6	X	4
9	9	1	d	10	Y	2
10	10	10	e	1	X	2
11	11	22	g	9	Y	2
12	12	26	b	2	Y	4
13	13	16	c	3	Z	2
14	14	9	d	5	Z	3

Windows taskbar: 09:54 17-11-2022

Resource list - IBM Cloud x IBM Cloud x Cognos Analytics - India | x My IBM x IBM Cloud x \* New data module x +

ap2.ca.analytics.ibm.com/bl/?perspective=ca-modeller&id=833573463\_1d06447e030046f5bc02b2e0800648a5\_sessionTemp&objRef=&tid=833573463\_1d06447e030046f5bc02b2e0800...

IBM Cognos Analytics with Watson New data module 30 Search content Incognito

Data module +

Search

# case\_id

# Hospital\_code

Hospital...ype\_code

City\_Code\_Hospital

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

Admission\_Deposit

Stay

Grid Relationships Custom tables

Clean - Severity of Illness

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 Minor

Cancel Clean

City_Code_Patient	Type of Admission	Severity of Illness
	Trauma	Moderate
	Emergency	Moderate
	Emergency	Moderate
	Urgent	Moderate
	Emergency	Moderate
	Urgent	Moderate
	Urgent	Moderate
	Urgent	Moderate
	Emergency	Moderate
	Urgent	Moderate
	Urgent	Moderate
	Urgent	Moderate
	Urgent	Moderate
	Urgent	Moderate
	Urgent	Moderate
	Urgent	Moderate
	Urgent	Moderate

Windows taskbar: 09:57 17-11-2022

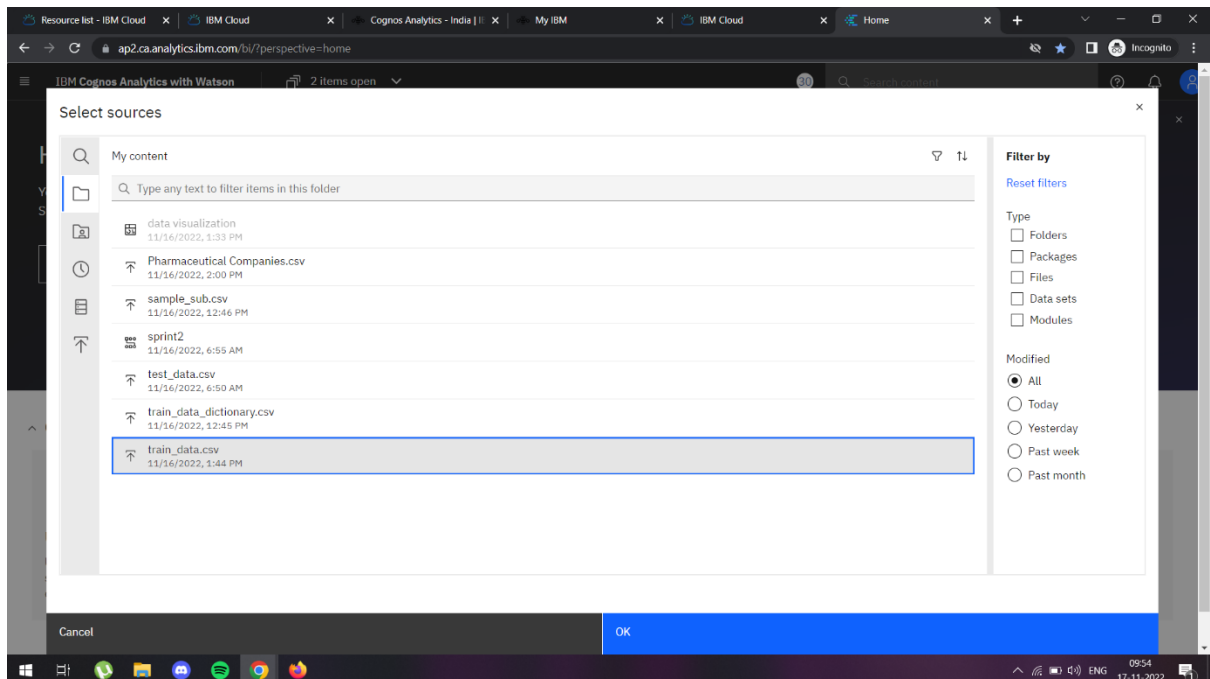
The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane lists 'train\_data.csv' as the selected source. The main area displays a grid view of the data with the following columns: Row Id, case\_id, Hospital\_code, Hospital\_type\_code, City\_Code\_Hospital, Hospital\_region\_code, and Available E...in Hc. The data is as follows:

Row Id	case_id	Hospital_code	Hospital_type_code	City_Code_Hospital	Hospital_region_code	Available E...in Hc
1	1	8	c	3	Z	3
2	2	2	c	5	Z	2
3	3	10	e	1	X	2
4	4	26	b	2	Y	2
5	5	26	b	2	Y	2
6	6	23	a	6	X	2
7	7	32	f	9	Y	1
8	8	23	a	6	X	4
9	9	1	d	10	Y	2
10	10	10	e	1	X	2
11	11	22	g	9	Y	2
12	12	26	b	2	Y	4
13	13	16	c	3	Z	2
14	14	9	d	5	Z	3

## 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





Resource list - IBM Cloud x IBM Cloud x Cognos Analytics - India | x My IBM x IBM Cloud x Train\_data module x +

ap2.ca.analytics.ibm.com/bl/?perspective=ca-modeller&id=48324D5C56F649A5AE011CF047468DB2&objRef=48324D5C56F649A5AE011CF047468DB2&tid=833573463\_1d06447e0300...

IBM Cognos Analytics with Watson Train\_data module 30 Search content Incognito

Properties

Data module +

Search

Train\_data module

- Navigation paths +
- train\_data.csv
  - # Row Id
  - # case\_id
  - # Hospital\_code
  - Hospital...type\_code
  - City\_Code\_Hospital
  - Hospital...ion\_code
  - Available...Hospital
  - Department
  - Ward\_Type
  - Ward\_Facility\_Code
  - Bed Grade
  - patientid
  - City\_Code\_Patient
  - Type of Admission
  - Severity of Illness

Grid Relationships Custom tables

train\_data.csv

Diagram settings

- Cardinality
- Focus mode

Degrees of separation: 1

1

1001 17-11-2022