

PROJECT DEVELOPMENT PHASE

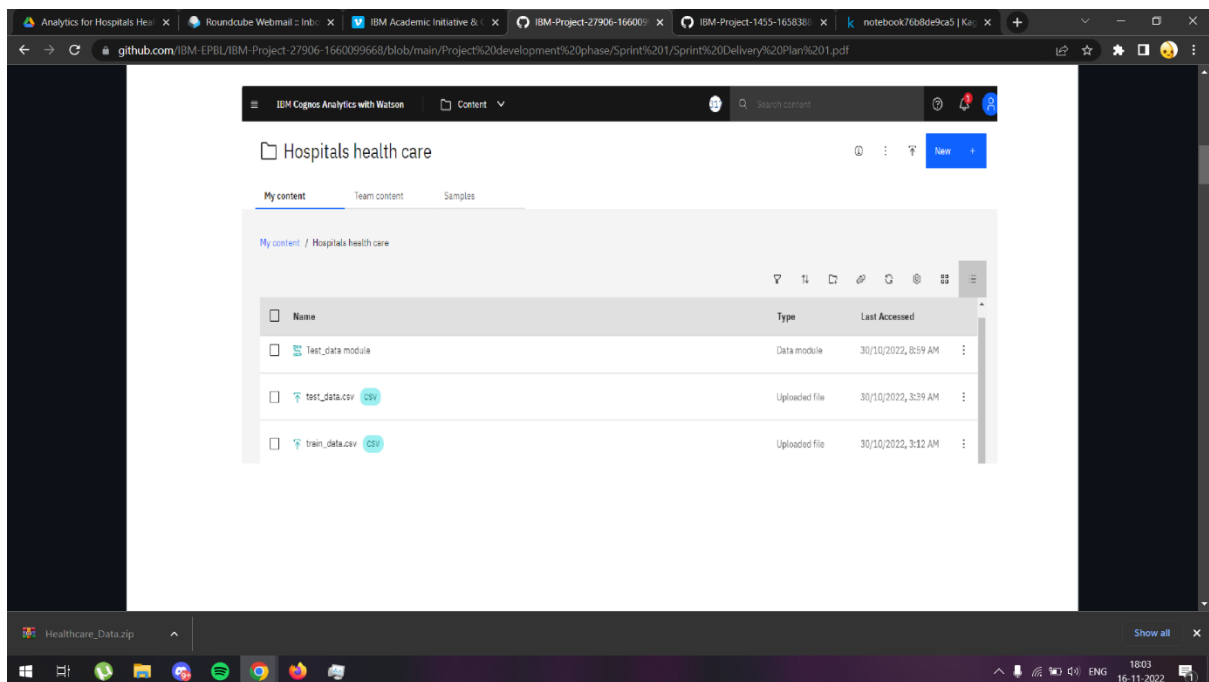
SPRINT II

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=ICE14AFD9B6824C6090891BD87B58C1E1

IBM Cognos Analytics with Watson Content 30 Search content

Content

My content Team content Samples

data visualization Last Accessed 11/16/2022, 1:33 PM

sample_sub.csv Last Accessed 11/16/2022, 12:46 PM CSV

sprint2 Last Accessed 11/16/2022, 6:55 AM

test_data.csv Last Accessed 11/16/2022, 6:50 AM CSV

train_data_dictionary.csv Last Accessed 11/16/2022, 12:45 PM CSV

train_data.csv Last Accessed 11/16/2022, 1:44 PM CSV

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 +

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

Data module

- 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

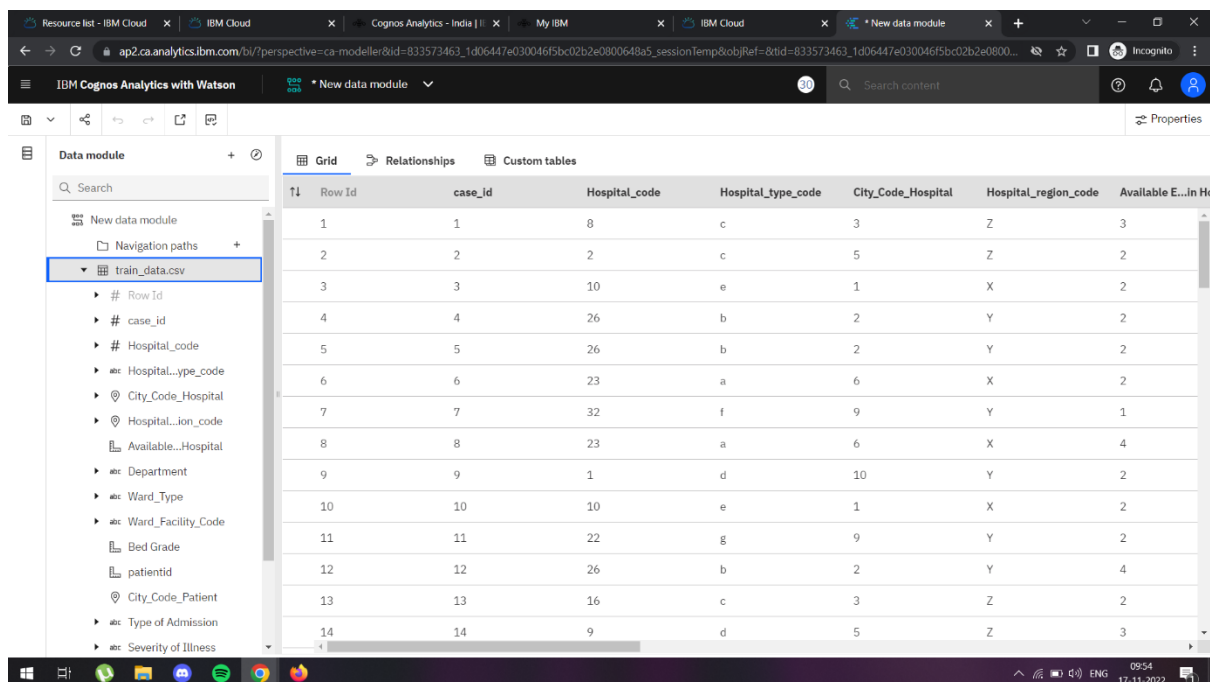
Row Id	case_id	Hospital_code	Hospital_type_code	City_Code_Hospital	Hospital_region_code	Available E...in Hc
1	1	8	c	3	Z	3
2	2	2	c	5	Z	2
3	3	10	e	1	X	2
4	4	26	b	2	Y	2
5	5	26	b	2	Y	2
6	6	23	a	6	X	2
7	7	32	f	9	Y	1
8	8	23	a	6	X	4
9	9	1	d	10	Y	2
10	10	10	e	1	X	2
11	11	22	g	9	Y	2
12	12	26	b	2	Y	4
13	13	16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

Windows taskbar: 09:54 17-11-2022

Data Cleaning and Data Processing using Cognos Analytics:

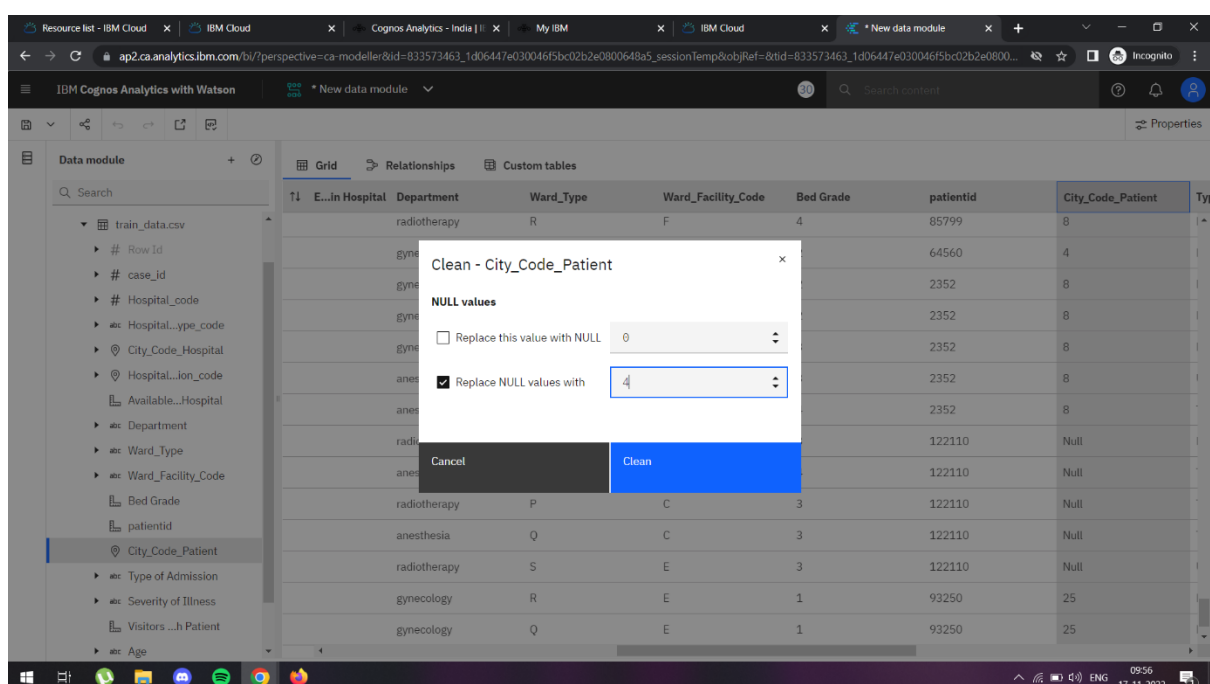
USN-2:

- 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. On the left, the 'Data module' pane lists various data sources, including 'train_data.csv'. The main area displays a table 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 table contains 14 rows of data.

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 a dialog box titled 'Clean - City_Code_Patient' open. The dialog box has a 'NULL values' section with two options: 'Replace this value with NULL' (unchecked) and 'Replace NULL values with' (checked). The 'Replace NULL values with' option has a dropdown menu showing the value '4'. The background table is partially visible, showing columns: E...in Hospital, Department, Ward_Type, Ward_Facility_Code, Bed Grade, patientid, City_Code_Patient, and Ty.

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		

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

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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	
Emergency	Moderate	
Urgent	Moderate	
Urgent	Moderate	
Urgent	Moderate	
Urgent	Moderate	
Urgent	Moderate	
Urgent	Moderate	
Urgent	Moderate	
Urgent	Moderate	
Urgent	Moderate	
Urgent	Moderate	
Urgent	Moderate	

Windows Taskbar: 09:57 17-11-2022

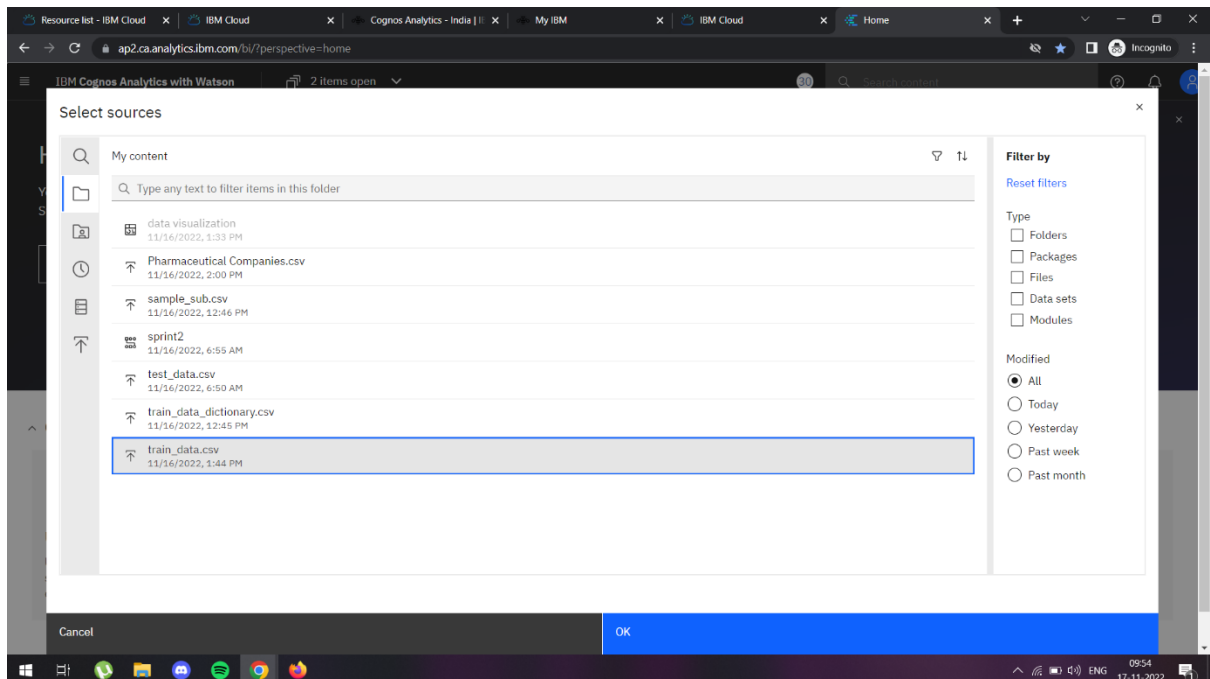
The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane lists 'train_data.csv' as the selected source. The main area displays a grid view of the data with the following columns: Row Id, case_id, Hospital_code, Hospital_type_code, City_Code_Hospital, Hospital_region_code, 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 | IBM Cloud | Cognos Analytics - India | My IBM | IBM Cloud | Train_data module

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

IBM Cognos Analytics with Watson | Train_data module | Search content | Properties

Data module | Grid | Relationships | Custom tables

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

train_data.csv

Diagram settings

- Cardinality
- Focus mode
- Degrees of separation: 1

1001 17-11-2022