

## Project Development Phase

### Delivery of Sprint-1

Date	12 NOVEMBER 2022
Team ID	PNT2022TMID28702
Project Name	Analytics for Hospitals' Health-Care Data

### Project Development Phase:

#### Sprint-1:

- Data Collection
- Data Preparation

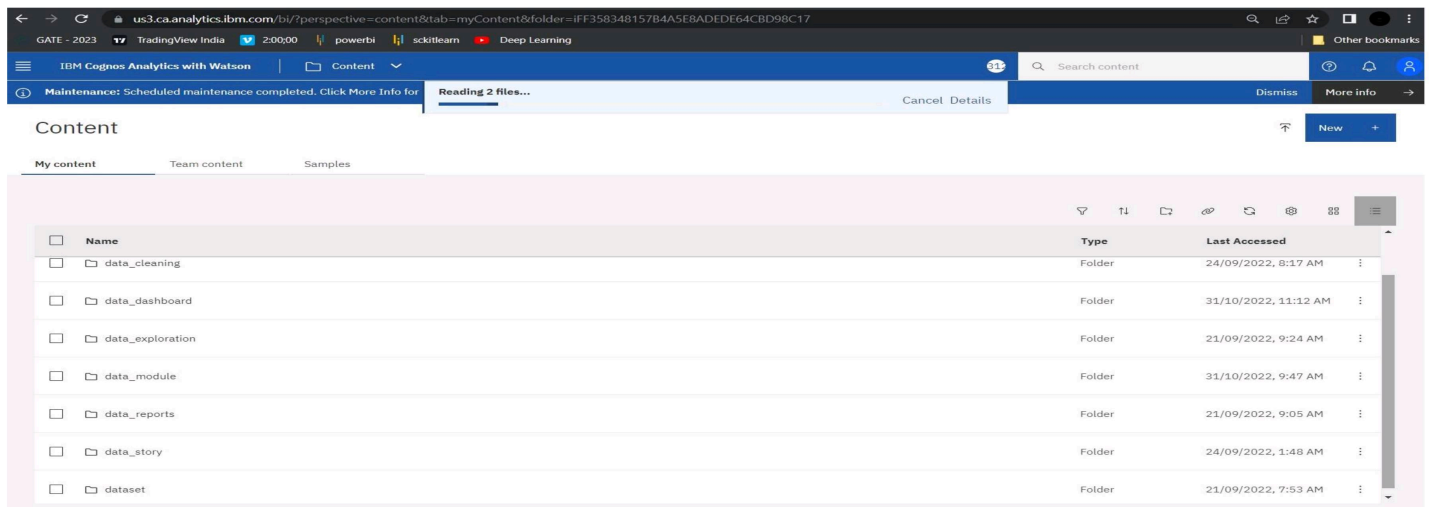
## Sprint-1:

**Data Collection:** Download the Dataset Dataset link :

[https://drive.google.com/drive/folders/1qozDgfVw04hGS8Di\\_SFhUNdUKUdjhrT?usp=sharing](https://drive.google.com/drive/folders/1qozDgfVw04hGS8Di_SFhUNdUKUdjhrT?usp=sharing)

**Load the Dataset:**

**Tool used:** IBM Cognos Analytics



The screenshot shows the IBM Cognos Analytics web interface. The browser address bar displays the URL: `us3.ca.analytics.ibm.com/bi/?perspective=content&tab=myContent&folder=IFF358348157B4A5E8ADEDE64CBD98C17`. The page title is "Content". A navigation bar at the top includes "IBM Cognos Analytics with Watson", "Content", and a search bar. A maintenance notification banner is visible. Below the navigation bar, there are tabs for "My content", "Team content", and "Samples". The main content area displays a list of folders under the "My content" tab. The list has columns for "Name", "Type", and "Last Accessed".

Name	Type	Last Accessed
data_cleaning	Folder	24/09/2022, 8:17 AM
data_dashboard	Folder	31/10/2022, 11:12 AM
data_exploration	Folder	21/09/2022, 9:24 AM
data_module	Folder	31/10/2022, 9:47 AM
data_reports	Folder	21/09/2022, 9:05 AM
data_story	Folder	24/09/2022, 1:48 AM
dataset	Folder	21/09/2022, 7:53 AM

Data Preparation:  
Prepare the Dataset

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Search content

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Properties

Data module

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🔍 Search

hospital\_care\_data

Navigation paths

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▶ train\_data.csv

▶ test\_data.csv

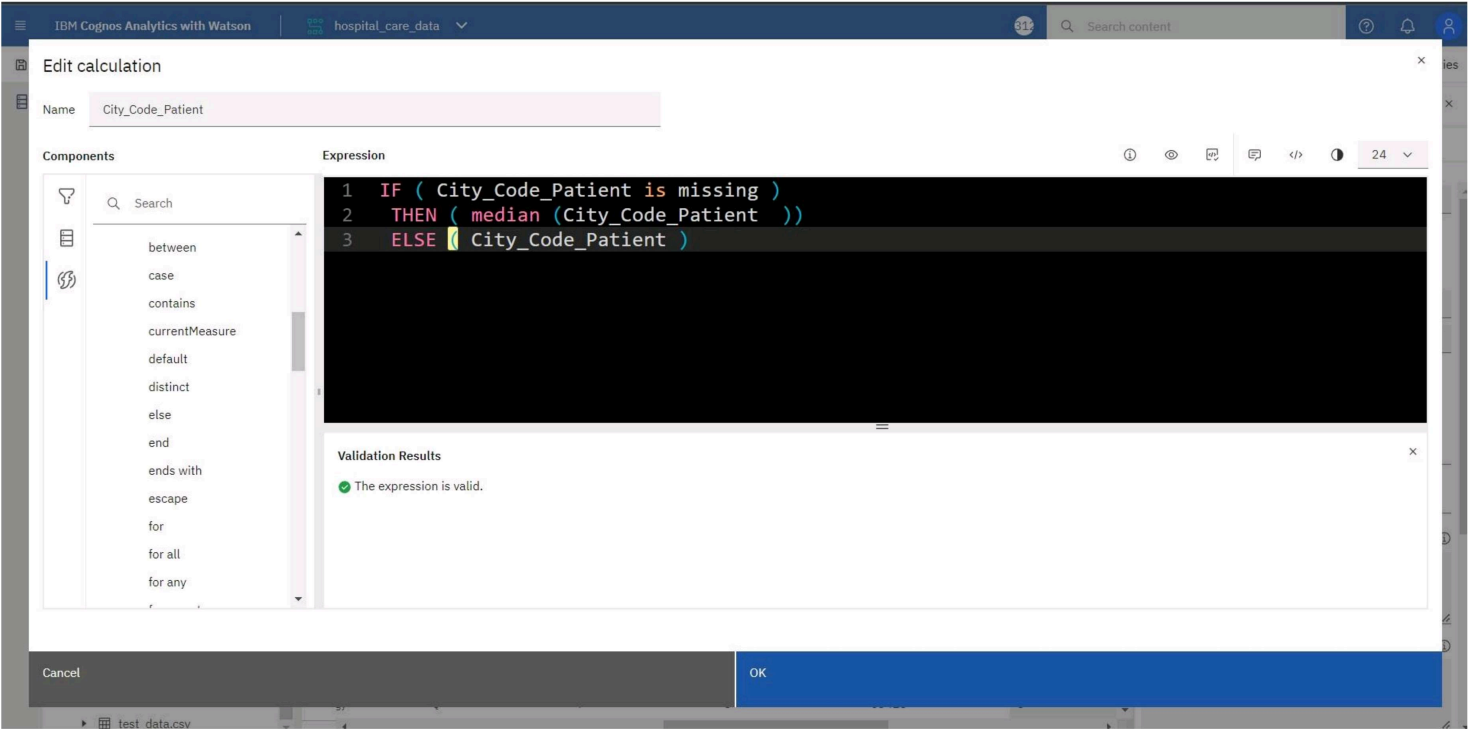
Grid

Relationships

Custom tables

↑	Row Id	case_id	Hospital_code	Hospital_type_code	City_Code_Hospital	Hospital_region_code	Available E...in Hospital	Department
1	1	1	8	c	3	Z	3	radiotherapy
2	2	2	2	c	5	Z	2	radiotherapy
3	3	3	10	e	1	X	2	anesthesia
4	4	4	26	b	2	Y	2	radiotherapy
5	5	5	26	b	2	Y	2	radiotherapy
6	6	6	23	a	6	X	2	anesthesia
7	7	7	32	f	9	Y	1	radiotherapy
8	8	8	23	a	6	X	4	radiotherapy
9	9	9	1	d	10	Y	2	gynecology
10	10	10	10	e	1	X	2	gynecology
11	11	11	22	g	9	Y	2	radiotherapy
12	12	12	26	b	2	Y	4	radiotherapy
13	13	13	16	c	3	Z	2	radiotherapy
14	14	14	9	d	5	Z	3	radiotherapy
15	15	15	6	a	6	X	4	gynecology
16	16	16	6	a	6	X	3	gynecology

## Null Values Cleaning Process :



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Search content

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Edit calculation

Name

Bed Grade

Components

Search

Operators

Summaries

Constants

Constructs

if then else

in\_range

search case

simple case

Business Dat...e Functions

Period Predicates

Vendor Specific Functions

Common Functions

Macro Functions

Expression

1 IF ( Bed\_Grade is missing)

2 THEN (median (Bed\_Grade))

3 ELSE(Bed\_Grade )

Validate

Validation Results

The expression is valid.

Cancel

OK

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Search content

Properties

Data module

Search

train\_data.csv

# Row Id

# case\_id

# Hospital\_code

abc Hospital...pe\_code

City\_Cod...Hospital

Hospital...ion\_code

Available...Hospital

abc Department

abc Ward\_Type

abc Ward\_Fa...ty\_Code

Bed Grade

patientid

City\_Code\_Patient

abc Type of Admission

abc Severity of Illness

Visitors ...h Patient

abc Age

Admissio...Deposit

abc Stay

test\_data.csv

Grid

Relationships

Custom tables

ent	Ward_Type	Ward_Facility_Code	Bed Grade	patientid	City_Code_Patient	Type of Admission	Severity of Illness	Vi
apy	R	F	2	31397	7	Emergency	Extreme	
apy	S	F	2	31397	7	Trauma	Extreme	
ia	S	E	2	31397	7	Trauma	Extreme	
apy	R	D	2	31397	7	Trauma	Extreme	
apy	S	D	2	31397	7	Trauma	Extreme	
ia	S	F	2	31397	7	Trauma	Extreme	
apy	S	B	3	31397	7	Emergency	Extreme	
apy	Q	F	3	31397	7	Trauma	Extreme	
zy	R	B	4	31397	7	Trauma	Extreme	
zy	S	E	3	31397	7	Trauma	Extreme	
apy	S	B	2	31397	7	Urgent	Extreme	
apy	R	D	1	31397	7	Urgent	Extreme	
apy	R	A	3	31397	7	Emergency	Extreme	
apy	S	F	3	31397	7	Urgent	Extreme	
zy	Q	F	3	63418	8	Emergency	Extreme	
zy	Q	F	3	63418	8	Emergency	Extreme	

# Hospital Data :

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Search content

Properties

Data module

Search

train\_data.csv

# Row Id

# case\_id

# Hospital\_code

etc Hospital...pe\_code

City\_Cod...Hospital

Hospital...ion\_code

Available...Hospital

etc Department

etc Ward\_Type

etc Ward\_Fa...ty\_Code

Bed Grade

patientid

City\_Code\_Patient

etc Type of Admission

etc Severity of Illness

Visitors ...h Patient

etc Age

Admissio...Deposit

etc Stay

test\_data.csv

Grid

Relationships

Custom tables

Row Id	case_id	Hospital_code	Hospital_type_code	City_Code_Hospital	Hospital_region_code	Available E...in Hospital	Department
1	1	8	c	3	Z	3	radiotherapy
2	2	2	c	5	Z	2	radiotherapy
3	3	10	e	1	X	2	anesthesia
4	4	26	b	2	Y	2	radiotherapy
5	5	26	b	2	Y	2	radiotherapy
6	6	23	a	6	X	2	anesthesia
7	7	32	f	9	Y	1	radiotherapy
8	8	23	a	6	X	4	radiotherapy
9	9	1	d	10	Y	2	gynecology
10	10	10	e	1	X	2	gynecology
11	11	22	g	9	Y	2	radiotherapy
12	12	26	b	2	Y	4	radiotherapy
13	13	16	c	3	Z	2	radiotherapy
14	14	9	d	5	Z	3	radiotherapy
15	15	6	a	6	X	4	gynecology
16	16	6	a	6	X	3	gynecology

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Grid

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Relationships

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Custom tables

Grade	patientid	City_Code_Patient	Type of Admission	Severity of Illness	Visitors with Patient	Age	Admission_Deposit	Stay
	31397	7	Emergency	Extreme	2	51-60	4911	0-10
	31397	7	Trauma	Extreme	2	51-60	5954	41-50
	31397	7	Trauma	Extreme	2	51-60	4745	31-40
	31397	7	Trauma	Extreme	2	51-60	7272	41-50
	31397	7	Trauma	Extreme	2	51-60	5558	41-50
	31397	7	Trauma	Extreme	2	51-60	4449	11-20
	31397	7	Emergency	Extreme	2	51-60	6167	0-10
	31397	7	Trauma	Extreme	2	51-60	5571	41-50
	31397	7	Trauma	Extreme	2	51-60	7223	51-60
	31397	7	Trauma	Extreme	2	51-60	6056	31-40
	31397	7	Urgent	Extreme	2	51-60	5797	21-30
	31397	7	Urgent	Extreme	2	51-60	5993	11-20
	31397	7	Emergency	Extreme	2	51-60	5141	0-10
	31397	7	Urgent	Extreme	2	51-60	8477	21-30
	63418	8	Emergency	Extreme	2	71-80	2685	0-10
	63418	8	Emergency	Extreme	2	71-80	9398	0-10