

# Project Development Phase

## Delivery of Sprint-1

<b>Date</b>	29 OCT 2022
<b>Team ID</b>	PNT2022TMID23641
<b>Project Name</b>	Analytics for Hospitals' Health-Care Data

## Project Development Phase:

### Sprint-

1

- Data Collection
- Data Preparation

### Sprint-

2:

- Data Exploration

### Sprint-3:

- Dashboard Creation

### Sprint-4:

- Report Creation
- Story Creation

# Analytics for Hospitals' Health- Care Data



TEAM ID :  
PNT2022TMID23641

# Sprint-1:

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

[https://drive.google.com/drive/folders/1qozDgfVw04hGS8Di\\_SFhUNdUKUdjkhRT?usp=sharing](https://drive.google.com/drive/folders/1qozDgfVw04hGS8Di_SFhUNdUKUdjkhRT?usp=sharing)

## Load the Dataset:

**Tool used:** IBM Cognos Analytics

The screenshot displays the IBM Cognos Analytics user interface. At the top, a blue header bar contains the text "IBM Cognos Analytics with Watson" and a "Content" dropdown menu. A search bar with the placeholder "Search content" is also present. Below the header, a maintenance notification states: "Maintenance: Scheduled maintenance completed. Click More Info for". A progress bar indicates "Reading 2 files..." with "Cancel" and "Details" buttons. The main section is titled "Content" and includes tabs for "My content", "Team content", and "Samples". A toolbar with various icons (filter, sort, share, etc.) is located above a table of content items. The table has columns for "Name", "Type", and "Last Accessed".

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

## Data Preparation:

Prepare the Dataset

# Null Values Cleaning Process :

The screenshot shows the 'Edit calculation' dialog in IBM Cognos Analytics. The dialog has a header bar with the text 'IBM Cognos Analytics with Watson' and a dropdown menu showing 'hospital\_care\_data'. Below the header, the 'Name' field is set to 'City\_Code\_Patient'. The main area is divided into two sections: 'Components' on the left and 'Expression' on the right. The 'Components' section contains a search bar and a list of functions including 'between', 'case', 'contains', 'currentMeasure', 'default', 'distinct', 'else', 'end', 'ends with', 'escape', 'for', 'for all', and 'for any'. The 'Expression' section contains a text editor with the following SQL code:

```
1 IF ( City_Code_Patient is missing )  
2 THEN ( median (City_Code_Patient ))  
3 ELSE ( City_Code_Patient )
```

Below the expression editor, there is a 'Validation Results' section that displays a green checkmark and the text 'The expression is valid.' At the bottom of the dialog, there are two buttons: 'Cancel' and 'OK'.

IBM Cognos Analytics with Watson

hospital\_care\_data

312

Search content

?

🔔

👤

Edit calculation

×

Name

Bed Grade

Components

Expression

🔍 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

1 IF ( Bed\_Grade is missing)

2 THEN (median (Bed\_Grade))

3 ELSE(Bed\_Grade )

Validate

Validation Results

×

✔ The expression is valid.

Cancel

OK

 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 Ea ty Code

Bed Grade

patientid

© City Code Patient

abc Type of Admission

► **abc** Severity of Illness

**Visitors**   **h Patient**

abc Age

### Admission Deposit

## ▶ **also** **Study**



 Grid

## Relationships

 Custom tables

ent	Ward_Type	Ward_Facility_Code	Bed Grade	patientid	City_Code_Patient	Type of Admission	Severity of Illness	View
apy	R	F	2	31397	7	Emergency	Extreme	View
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	
gy	R	B	4	31397	7	Trauma	Extreme	
gy	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	
gy	Q	F	3	63418	8	Emergency	Extreme	
gy	Q	F	3	63418	8	Emergency	Extreme	

# Hospital Data :

IBM Cognos Analytics with Watson

hospital\_care\_data

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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

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



↑↓	I 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

# Prepared data link :

[https://us3.ca.analytics.ibm.com/bi/?perspective=ca-modeller&pathRef=.my\\_folders%2Fdata\\_module%2Fhospital\\_care\\_data](https://us3.ca.analytics.ibm.com/bi/?perspective=ca-modeller&pathRef=.my_folders%2Fdata_module%2Fhospital_care_data)

