

# Project Development Phase

## Delivery of Sprint-1

Date	29 OCT 2022
Team ID	PNT2022TMID16434
Project Name	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 Hospital and Health-Care Data

TEAM ID: PNT2022TMID16434

## Team Members

- Deepan \*
- Gopinath
- Farman
- Deepan Chakkaravarithy



# Sprint-1:

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

[https://drive.google.com/drive/folders/1b0hQ3rtM656arM3jrRd8n4BxLnKVOlB8?usp=share\\_link](https://drive.google.com/drive/folders/1b0hQ3rtM656arM3jrRd8n4BxLnKVOlB8?usp=share_link)

## Load the Dataset:

**Tool used:** IBM Cognos Analytics

The screenshot displays the IBM Cognos Analytics user interface. At the top, a blue navigation bar includes the text 'IBM Cognos Analytics with Watson', a 'Content' dropdown menu, a search bar labeled 'Search content', and icons for help, notifications, and user profile. Below the navigation bar, a status bar shows a maintenance message and a progress indicator for 'Reading 2 files...'. The main content area is titled 'Content' and features tabs for 'My content', 'Team content', and 'Samples'. Under the 'My content' tab, a list of folders is displayed with columns for 'Name', 'Type', and 'Last Accessed'. The folders listed are 'data\_cleaning', 'data\_dashboard', 'data\_exploration', 'data\_module', 'data\_reports', 'data\_story', and 'dataset'. A toolbar with various icons is visible above the folder list.

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

IBM Cognos Analytics with Watson

hospital\_care\_data

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Search content

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Properties

Data module

+

🕒

Search

hospital\_care\_data

Navigation paths

+

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	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

# Null Values Cleaning Process :

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Edit calculation

NameCity\_Code\_Patient

Components

Expression

🔍 Search

between

case

contains

currentMeasure

default

distinct

else

end

ends with

escape

for

for all

for any

1 IF ( City\_Code\_Patient is missing )

2 THEN ( median (City\_Code\_Patient ))

3 ELSE ( City\_Code\_Patient )

Validation Results

✔ The expression is valid.

Cancel

OK

IBM Cognos Analytics with Watson

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Search content

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Edit calculation

NameBed 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

+

🔍 Search

►  test data.csv

 Custom tables

ent	Ward_Type	Ward_Facility_Code	Bed Grade	patientid	City_Code_Patient	Type of Admission	Severity of Illness	Vis
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	
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

?

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
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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

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





## **Prepared data link :**

[https://us3.ca.analytics.ibm.com/bi/?perspective=ca-modeller&pathRef=.my\\_folders%2Fhospital %2Bcare %2Bdata](https://us3.ca.analytics.ibm.com/bi/?perspective=ca-modeller&pathRef=.my_folders%2Fhospital%2Bcare%2Bdata)