

# Project Development Phase

## Delivery of Sprint-1

<b>Date</b>	29 OCT 2022
<b>Team ID</b>	PNT2022TMID35335
<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

TEAM ID : PNT2022TMID35335

## Sprint-1:

**Data Collection:**

Download the Dataset link :

[https://drive.google.com/drive/folders/1qozDgfVw04hGS8Di\\_SFhUNdUKUdjkhT?usp=sharing](https://drive.google.com/drive/folders/1qozDgfVw04hGS8Di_SFhUNdUKUdjkhT?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 top navigation bar includes the IBM Cognos Analytics logo, a 'Content' dropdown menu, a search bar, and user profile icons. A maintenance notification banner is visible, stating 'Maintenance: Scheduled maintenance completed. Click More Info for'. A progress bar indicates 'Reading 2 files...' with 'Cancel' and 'Details' buttons. The main content area is titled 'Content' and features tabs for 'My content', 'Team content', and 'Samples'. Below the tabs is a table listing various folders.

<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

IBM Cognos Analytics with Watson

hospital\_care\_data

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Search content

?

🔔

👤

📁

📄

↶

↷

🔗

📄

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 :

The screenshot shows the 'Edit calculation' dialog in IBM Cognos Analytics. The dialog has a title bar with 'IBM Cognos Analytics with Watson' and a dropdown menu showing 'hospital\_care\_data'. Below the title bar, there is a 'Name' field containing 'City\_Code\_Patient'. The main area is divided into two panes: 'Components' on the left and 'Expression' on the right. The 'Components' pane shows 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' pane contains a code editor with the following SQL expression:

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

Below the code editor, there is a 'Validation Results' section with 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 | ? | Bell | User

Edit calculation

Name: City\_Code\_Patient

Components

- Search
- between
- case
- contains
- currentMeasure
- default
- distinct
- else
- end
- ends with
- escape
- for
- for all
- for any

Expression

```
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

test\_data.csv

## Edit calculation

Name Bed Grade

## Components

## Expression



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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





# Hospital Data :

IBM Cognos Analytics with Watson

hospital\_care\_data

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Search content

?

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	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



## **Prepared data link :**

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

