

# Project Development Phase

## Delivery of Sprint-1

### Project Development Phase:

#### **Sprint-1:**

- Data Collection
- Data Preparation

#### **Sprint-2:**

- Data Exploration

#### **Sprint-3:**

- Dashboard Creation

#### **Sprint-4:**

- Report Creation
- Story Creation

# 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 navigation bar includes the text 'IBM Cognos Analytics with Watson', a 'Content' dropdown menu, a search bar with the placeholder 'Search content', and icons for help, notifications, and user profile. Below the navigation bar, 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 content area is titled 'Content' and features tabs for 'My content', 'Team content', and 'Samples'. Under 'My content', a table lists several folders. The table has 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'. Each folder entry includes a checkbox on the left and a three-dot menu icon on the right. The 'Last Accessed' column shows dates and times, such as '24/09/2022, 8:17 AM' for 'data\_cleaning' and '21/09/2022, 7:53 AM' for 'dataset'.

<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

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hospital\_care\_data

312

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

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

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Edit calculation

×

Name

Bed Grade

Components

Expression

24

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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

test\_data.csv

+

Q 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

 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 :

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Search content

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📄

Properties

Data module

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🔍 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)

