

Project Development Phase

Delivery of Sprint-1

Team ID	PNT2022TMID47568
Project Name	Analytics for Hospitals' Health-Care Data

Project Development Phase:

Sprint1:

- Data Collection
- Data Preparation

Sprint2:

- Data Exploration

Sprint-3:

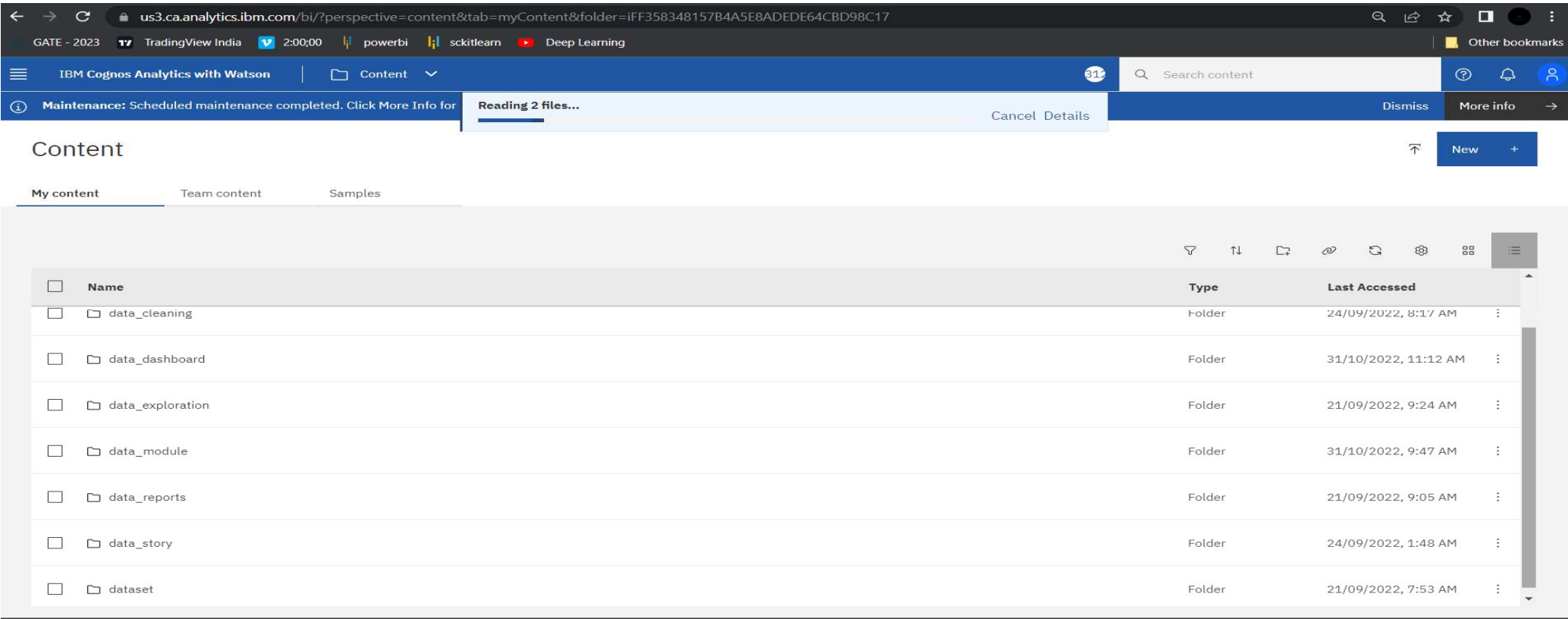
- Dashboard Creation

Sprint-4:

- Report Creation
- Story Creation

Load the Dataset:

Tool used: IBM Cognos Analytics



Data Preparation:

Prepare the Dataset

IBM Cognos Analytics with Watson

hospital_care_data

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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	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 has 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 'Cancel' and 'OK' buttons. The background shows a file explorer with 'test_data.csv' selected.

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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

test_data.csv

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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

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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Properties

Data module

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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

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Relationships

Custom tables

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	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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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

