

Project Development Phase Delivery of Sprint-1

Date	31 OCT 2022
Team ID	PNT2022TMID35169
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 HEALTHCARE

TEAM MEMBERS:

Team lead- Nishanthini .M.I

Team member 1-Santhiya c

Team member 2-Yashvanthini N

Team member 3-Vimal raja S

Sprint-1:

Data Collection: Download the Dataset Dataset link :

https://drive.google.com/drive/folders/1qozDgfVw04hGS8Di_SFhUNdUKUdjkhT?usp=sharing

Load the Dataset:

Tool used: IBM Cognos Analytics

The screenshot displays the IBM Cognos Analytics web interface. The browser address bar shows the URL: `us3.ca.analytics.ibm.com/bi/?perspective=content&tab=myContent&folder=IFF358348157B4A5E8ADEDE64CBD98C17`. The page title is "Content". Below the title, there are tabs for "My content", "Team content", and "Samples". The "My content" tab is active, showing a list of folders. The list 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. A "New" button is visible in the top right corner of the content area.

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

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hospital_care_data

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Properties

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Data module

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🔍 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 displays the 'Edit calculation' dialog in IBM Cognos Analytics. The dialog is titled 'Edit calculation' and has a close button (X) in the top right corner. The 'Name' field is set to 'City_Code_Patient'. The 'Components' panel on the left 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' panel on the right contains 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 panel, the 'Validation Results' section shows a green checkmark and the message: 'The expression is valid.' At the bottom of the dialog, there are 'Cancel' and 'OK' buttons.

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Edit calculation

Name

Bed Grade

Components

Expression

🔍

Search

▶ Operators

▶ Summaries

▶ Constants

▼ Constructs

if then else

in_range

search case

simple case

▶ Business Data 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

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Properties

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🔍 Search

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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

📄 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	
	zy	R	B	4	31397	7	Trauma	Extreme	
	zy	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	
	zy	Q	F	3	63418	8	Emergency	Extreme	
	zy	Q	F	3	63418	8	Emergency	Extreme	

Hospital Data :

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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
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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

📄 Custom tables

↕	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

