

Project Development Phase Delivery of Sprint-1

Date	29 OCT 2022
Team ID	PNT2022TMID23353
Project Name	Analytics for Hospitals' HealthCare Data

Project Development Phase:

Sprint1:

- 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_SFhUNdUKUdjkhT

Load the Dataset:

Tool used: IBM Cognos Analytics

Maintenance: Scheduled maintenance completed. Click More Info for details

Reading 2 files...

CancelDetails

Dismiss

More info

Content

My contentTeam contentSamples

<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

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 :

The screenshot shows the 'Edit calculation' dialog in IBM Cognos Analytics. The dialog has a title bar with 'IBM Cognos Analytics with Watson', a dropdown menu showing 'hospital_care_data', a search bar, and user icons. The main area is divided into 'Components' and 'Expression' sections. The 'Name' field is set to 'City_Code_Patient'. The 'Expression' field contains the following SQL code:

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

The 'Components' section on the left shows a search bar and a list of functions: between, case, contains, currentMeasure, default, distinct, else, end, ends with, escape, for, for all, for any, and for some. The 'Validation Results' section at the bottom shows a green checkmark and the message 'The expression is valid.'.

At the bottom of the dialog are 'Cancel' and 'OK' buttons. The background shows a file named 'test_data.csv'.



Edit calculation



Name Bed Grade

Components

Expression



24



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

+

Q Search

- ▶ test_data.csv

 Custom tables

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

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Properties

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

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

Data ...dule

Search

tr...sv

R...

c...

H...

abc H...

📍 C...

📍 H...

A...

abc D...

abc ...

abc ...

B...

p...

📍 C...

abc T...

abc S...

V...

abc Age

A...

abc Sta

te...sv

Grid

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