

Project Development Phase

Delivery of Sprint-1

Date	29 OCT 2022
Team ID	PNT2022TMID33111
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

Sprint-1:

Data Collection: Download the Dataset Dataset link :

https://drive.google.com/drive/folders/1qozDgfVw04hGS8Di_SFhUNdUKUdjkhrT?usp=sharing **Load the Dataset:**

Tool used: IBM Cognos Analytics

The screenshot shows the IBM Cognos Analytics interface with the URL <https://us3.ca.analytics.ibm.com/bi/?perspective=content&tab=myContent&folder=iFF358348157B4A5E8ADEDE64CBD98C17> in the address bar. The top navigation bar includes links for GATE - 2023, TradingView India, powerbi, scikitlearn, Deep Learning, and Other bookmarks. A maintenance message "Scheduled maintenance completed. Click More Info for details" is displayed. The main content area shows a list of folders under "My content":

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

Prepare the Dataset

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Data module +

Grid Relationships Custom tables

Search

hospital_care_data

Navigation paths +

train_data.csv

test_data.csv

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

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Edit calculation

Name: City_Code_Patient

Components 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

Search Operators Summaries Constants Constructs

if then else # in_range # search case # simple case Business Data...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

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Data module + ⏎

Grid Relationships Custom tables

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

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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Data module + ⚙️

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

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

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Data module +

Grid Relationships Custom tables

Search

Grade patientid City_Code_Patient Type of Admission Severity of Illness Visitors with Patient Age Admission Deposit Stay

Grade	patientid	City_Code_Patient	Type of Admission	Severity of Illness	Visitors with Patient	Age	Admission Deposit	Stay
tr...sv	31397	7	Emergency	Extreme	2	51-60	4911	0-10
# R...	31397	7	Trauma	Extreme	2	51-60	5954	41-50
# c...	31397	7	Trauma	Extreme	2	51-60	4745	31-40
# H...	31397	7	Trauma	Extreme	2	51-60	7272	41-50
abc H...	31397	7	Trauma	Extreme	2	51-60	5558	41-50
abc C...	31397	7	Trauma	Extreme	2	51-60	4449	11-20
abc H...	31397	7	Emergency	Extreme	2	51-60	6167	0-10
abc ...	31397	7	Trauma	Extreme	2	51-60	5571	41-50
abc ...	31397	7	Trauma	Extreme	2	51-60	7223	51-60
L A...	31397	7	Trauma	Extreme	2	51-60	6056	31-40
abc D...	31397	7	Urgent	Extreme	2	51-60	5797	21-30
abc ...	31397	7	Urgent	Extreme	2	51-60	5993	11-20
abc S...	31397	7	Emergency	Extreme	2	51-60	5141	0-10
L V...	31397	7	Urgent	Extreme	2	51-60	8477	21-30
abc Age	63418	8	Emergency	Extreme	2	71-80	2685	0-10
L A...	63418	8	Emergency	Extreme	2	71-80	9398	0-10
abc Sta	te...sv							