

# **ANALYTICS FOR HOSPITAL'S HEALTH-CARE DATA**

## **PROJECT DEVELOPMENT PHASE**



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## **PROJECT DEVELOPMENT PHASE DELIVERY OF SPRINT-1**

<b>Team ID</b>	PNT2022TMID09280
<b>Project Name</b>	Analytics for Hospitals' Health-Care Data

**PROJECT DEVELOPMENT PHASE**

<div><div><b>Sprint-1:</b></div><div><div>○ Data Collection</div><div>○ Data Preparation</div></div><div><div><b>Sprint-2:</b></div><div><div>○ Data Exploration</div></div></div></div>	<div><div><b><u>Sprint-3:</u></b></div><div><div>○ Dashboard Creation</div></div><div><div><b><u>Sprint-4:</u></b></div><div><div>○ Report Creation</div><div>○ Story Creation</div></div></div></div>
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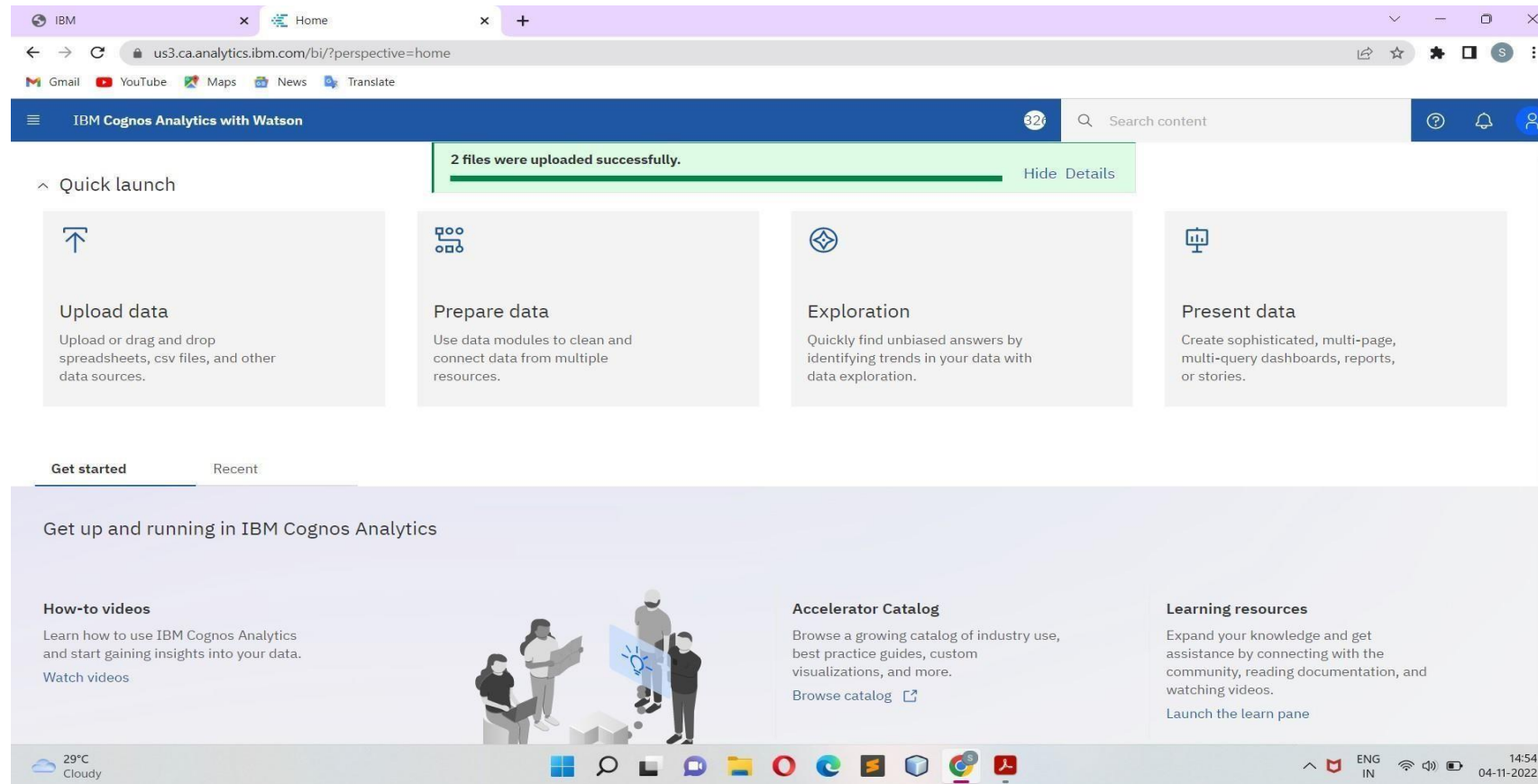
**Sprint-1:**

# Data Collection

Download the Dataset Dataset link [https://drive.google.com/drive/folders/1qozDgfVw04hGS8Di\\_SFhUNdUKUdjkhT?usp=sharing](https://drive.google.com/drive/folders/1qozDgfVw04hGS8Di_SFhUNdUKUdjkhT?usp=sharing)

## 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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Search content

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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 module

Search

hospital\_care\_data

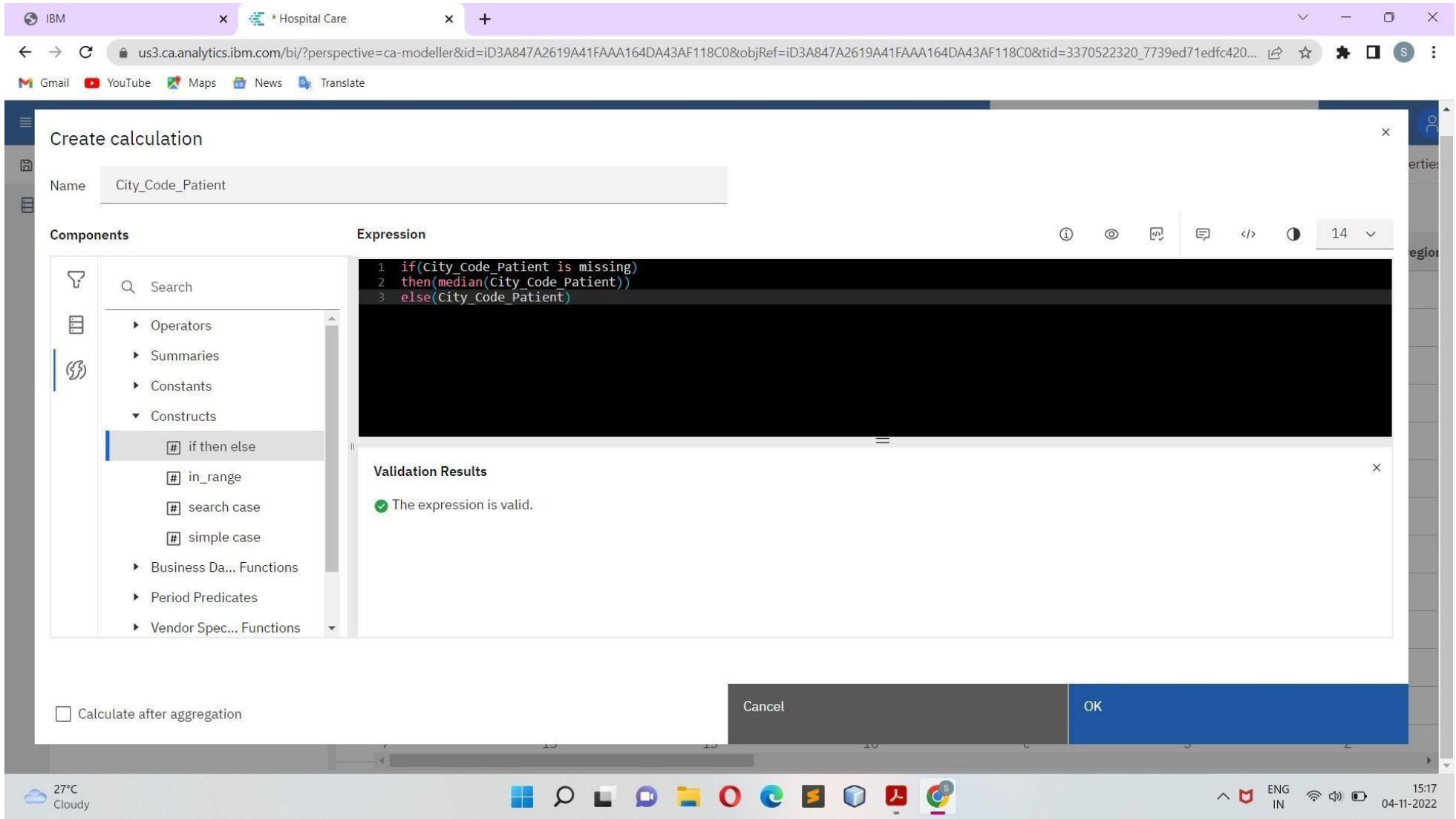
Navigation paths

train\_data.csv

test\_data.csv

Properties

### Null Values Cleaning Process:



## Create calculation

Name

### Components

- 
- test\_data.csv
    - # Row Id
    - # case\_id
    - # Hospital\_code
    - abc Hospit...\_code
    - City\_Co...spital
    - Hospit...\_code
    - Availabl...Hospital
    - abc Department
    - abc Ward\_Type
    - abc Ward\_...\_Code

### Expression

```
1 if(Bed_Grade is missing)
2 then(median(Bed_Grade))
3 else(Bed_Grade)
```

### Validation Results

✓ The expression is valid.

☐ Calculate after aggregation

Cancel OK

IBM

\* Hospital Care

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Properties

Data module

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🔍 Search

▶ # case\_id

▶ # Hospital\_code

▶ abc Hospital\_type\_code

▶ 📍 City\_Code\_Hospital

▶ 📍 Hospital...ion\_code

📄 Available... Hospital

▶ abc Department

▶ abc Ward\_Type

▶ abc Ward\_Facility\_Code

📄 Bed Grade

📄 patientid

📍 City\_Code\_Patient

▶ abc Type of Admission

▶ abc Severity of Illness

📄 Visitors ...h Patient

▶ abc Age

📄 Admission\_Denosit

📊 Grid

🔗 Relationships

📄 Custom tables

↕	Bed Grade	Row Id	case_id	Hospital_code	Hospital_type_code	City_Code_Hospital	Hospital_region_c
	2	1	318439	21	c	3	Z
	2	2	318440	29	a	4	X
	4	3	318441	26	b	2	Y
	2	4	318442	6	a	6	X
	2	5	318443	28	b	11	X
	2	6	318444	23	a	6	X
	2	7	318445	26	b	2	Y
	3	8	318446	25	e	1	X
	3	9	318447	23	a	6	X
	4	10	318448	23	a	6	X
	2	11	318449	10	e	1	X
	3	12	318450	4	a	4	X
	3	13	318451	16	c	3	Z

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**Hospital Data:**

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Properties

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Search

# case\_id

# Hospital\_code

abc Hospital\_type\_code

📍 City\_Code\_Hospital

📍 Hospital...ion\_code

📄 Available... Hospital

abc Department

abc Ward\_Type

abc Ward\_Facility\_Code

📄 Bed Grade

📄 patientid

📍 City\_Code\_Patient

abc Type of Admission

abc Severity of Illness

📄 Visitors ...h Patient

abc Age

📄 Admission Deposit

Grid

Relationships

Custom tables

↕	Bed Grade	patientid	City_Code_Patient	Type of Admission	Severity of Illness	Visitors with Patient	Age
2	17006	2	Emergency	Moderate	2	71-80	
2	17006	2	Trauma	Moderate	4	71-80	
4	17006	2	Emergency	Moderate	3	71-80	
2	17006	2	Trauma	Moderate	3	71-80	
2	17006	2	Trauma	Moderate	4	71-80	
2	17006	2	Trauma	Moderate	2	71-80	
2	17006	2	Trauma	Moderate	2	71-80	
3	95946	Null	Emergency	Moderate	2	31-40	
3	95946	Null	Trauma	Moderate	2	31-40	
4	95946	Null	Urgent	Moderate	2	31-40	
2	95946	Null	Trauma	Moderate	2	31-40	
3	95946	Null	Emergency	Moderate	6	31-40	
3	95946	Null	Trauma	Moderate	3	31-40	

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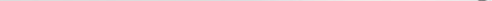
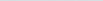
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