

ANALYTICS FOR HOSPITAL'S HEALTH-CARE DATA

PROJECT DEVELOPMENT PHASE



SUBMITTED BY

Sivagamasundari G
Subhaa S G
Sanchana G S
Vidhyalakshmi K R

PROJECT DEVELOPMENT PHASE DELIVERY OF SPRINT-1

Team ID	PNT2022TMID10306
Project Name	Analytics for Hospitals' Health-Care Data

PROJECT DEVELOPMENT PHASE

Sprint-1: <ul style="list-style-type: none">○ Data Collection○ Data Preparation Sprint-2: <ul style="list-style-type: none">○ Data Exploration	Sprint-3: <ul style="list-style-type: none">○ Dashboard Creation Sprint-4: <ul style="list-style-type: none">○ Report Creation○ Story Creation
---	---

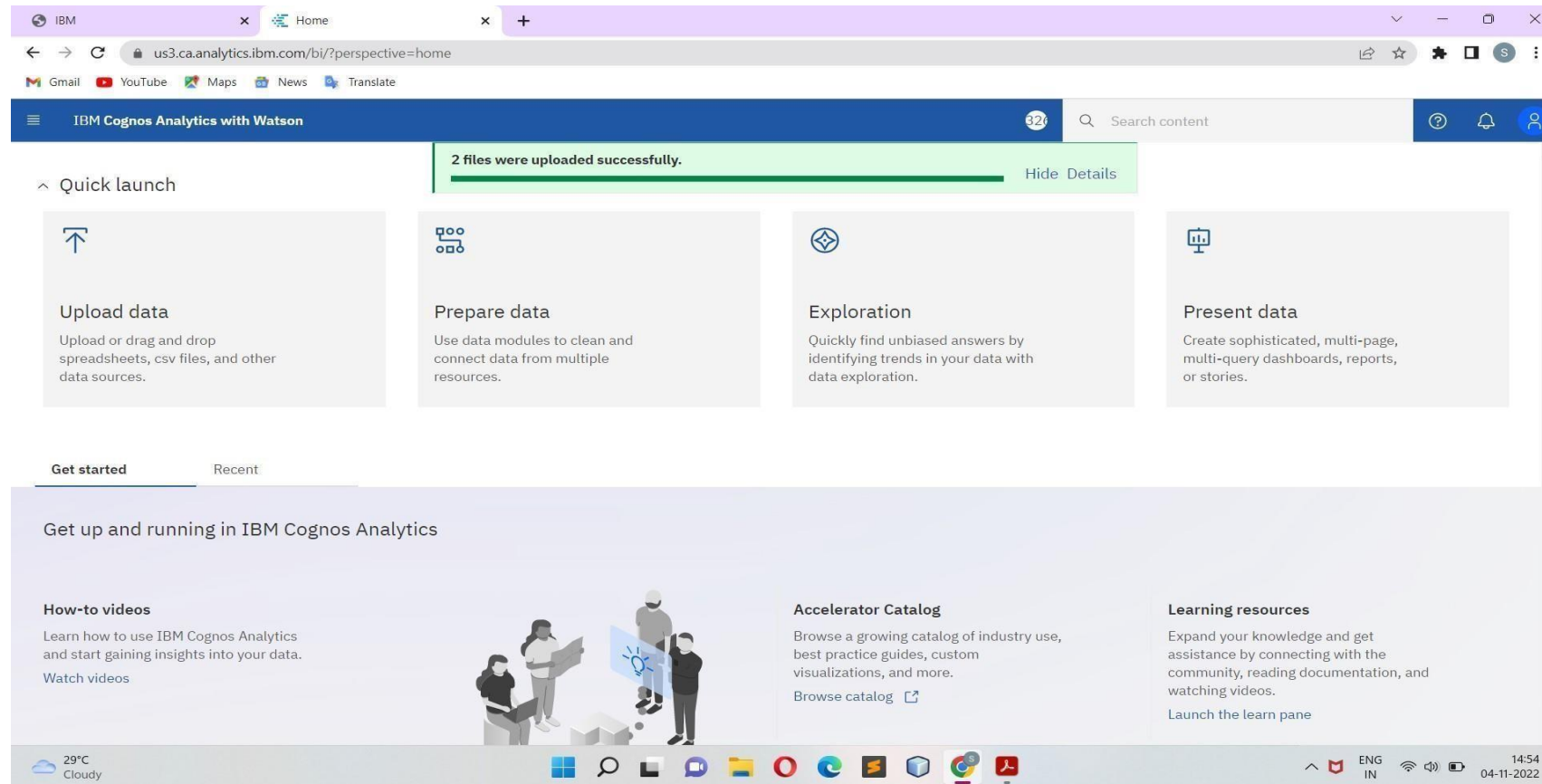
Sprint-1:

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



Data Preparation:

Prepare the dataset

IBM Cognos Analytics with Watson

hospital_care_data

312

Search content

?

🔔

👤

📄

🔗

↶

↷

📄

📄

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:

IBM

* Hospital Care

us3.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=iD3A847A2619A41FAAA164DA43AF118C0&objRef=iD3A847A2619A41FAAA164DA43AF118C0&tid=3370522320_7739ed71edfc420...

Gmail YouTube Maps News Translate

Create calculation

NameCity_Code_Patient

Components

Search

Operators

Summaries

Constants

Constructs

if then else

in_range

search case

simple case

Business Da... Functions

Period Predicates

Vendor Spec... Functions

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.

Calculate after aggregation

CancelOK

27°C Cloudy

Windows Taskbar Icons

System Tray

15:17 04-11-2022

Create calculation

Name Bed Grade

Components

Search

- 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

+

us3.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=iD3A847A2619A41FAAA164DA43AF118C0&objRef=iD3A847A2619A41FAAA164DA43AF118C0&tid=3370522320_7739ed71edfc420...

GmailYouTubeMapsNewsTranslate

IBM Cognos Analytics with Watson

* Hospital Care

326

Search content

?

🔔

👤

📁

🔗

↶

↷

🔗

🔗

Properties

Data module

+

🕒

🔍 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	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

27°C

Cloudy

📀

🔍

📁

💬

📁

🔴

🌐

🔥

📦

📄

🌐

ENG

IN

📶

🔊

🔋

15:21

04-11-2022

Hospital Data:

IBM

* Hospital Care

us3.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=id3A847A2619A41FAAA164DA43AF118C0&objRef=id3A847A2619A41FAAA164DA43AF118C0&tid=3370522320_7739ed71edfc420...

Gmail

YouTube

Maps

News

Translate

IBM Cognos Analytics with Watson

* Hospital Care

326

Search content

?

🔔

👤

📁

↶

↷

↺

↻

🔗

🔍

Properties

Data module

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	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

27°C Cloudy

📀

🔍

🖨

💬

📁

🔴

🌐

⚡

📶

🔊

🔋

ENG IN

15:22

04-11-2022