

PROJECT DEVELOPMENT PHASE

SPRINT DELIVERY -1

TEAM ID : PNT2022TMID01180

BATCH NO : B5-5M1E

PROJECT : Analytics for Hospitals Health-Care Data

DATE : 29 OCT 2022





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

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Project Development Phase

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

1.HOSPITAL DATASET LINK:

https://drive.google.com/drive/folders/1qozDgfVw04hGS8Di_SFhUNdUKUdjkhRT?usp=sharing

2.UNDERSTANDING THE DATA

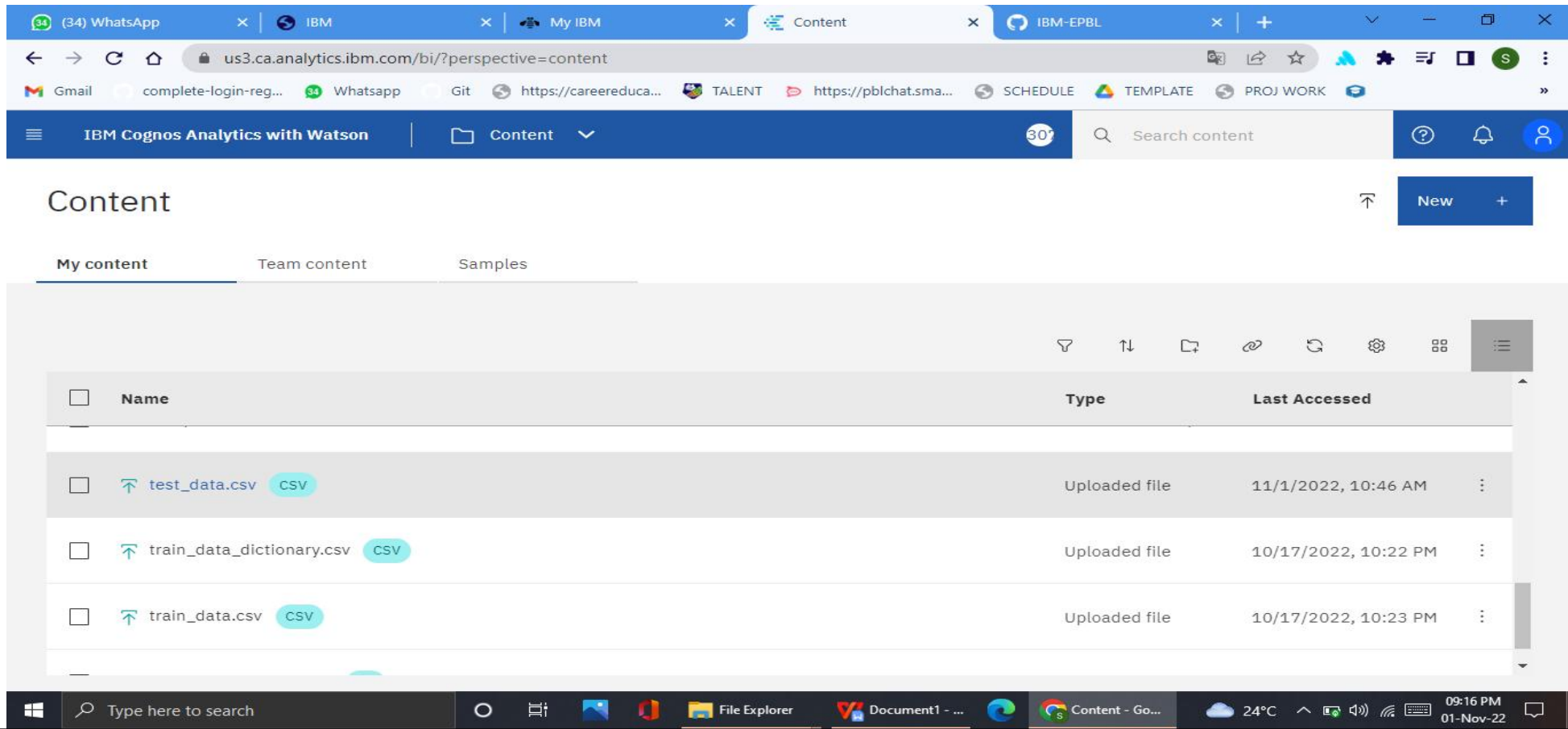
This project is based on understanding the Health Analytics dataset .
The data is spread across 3 data files (csv) and one data dictionary enclosed.

- 1.Test_data.csv
- 2.Sample_sub.csv
- 3.Train_data_dictionary.csv
- 4.Train_data.csv

The primary data file we use is test_data.csv consist of 17 Columns with 137057 Rows.

3. LOADING OF DATA

- Connect the data to IBM Cognos.
- Cognos supports connecting to a wide variety of data, stored in a variety of places.
- Loading of the data set in IBM Cognos is important for analyzing.



The screenshot displays the IBM Cognos Analytics web interface. The browser tabs include WhatsApp, IBM, My IBM, Content, and IBM-EPBL. The address bar shows the URL us3.ca.analytics.ibm.com/bi/?perspective=content. The page header features the IBM Cognos Analytics with Watson logo, a 'Content' dropdown menu, a search bar, and user profile icons. The main content area is titled 'Content' and includes a 'New' button. Below this, there are tabs for 'My content', 'Team content', and 'Samples'. A table lists three CSV files:

Name	Type	Last Accessed
<input type="checkbox"/> test_data.csv CSV	Uploaded file	11/1/2022, 10:46 AM
<input type="checkbox"/> train_data_dictionary.csv CSV	Uploaded file	10/17/2022, 10:22 PM
<input type="checkbox"/> train_data.csv CSV	Uploaded file	10/17/2022, 10:23 PM

The Windows taskbar at the bottom shows the system clock as 09:16 PM on 01-Nov-22, along with various system icons and open applications like File Explorer and Document1.

DATASET PREPARATION

IBM Cognos Analytics with Watson

* New data module

304

Search content

?

Properties

Data module

Search

New data module

Navigation paths

test_data.csv

- # Row Id
- # case_id
- # Hospital_code
- abc Hospital...pe_code
- City_Code_Hospital
- Hospital...ion_code
- Available...Hospital
- abc Department
- abc Ward_Type
- abc Ward_Fa...ty_Code
- Bed Grade

Grid

Relationships

Custom tables

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

DATA PREPARATION

The screenshot displays the IBM Analytics web interface. The browser's address bar shows the URL: `us3.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=i69959F2C568449BC95AE44A87F892EB6&objRef=i69959F2C568...`. The interface includes a top navigation bar with various application icons and a sidebar on the left with a menu icon and a search bar.

The main workspace is divided into two panels:

- Components:** A list of data sources and tables under the heading "SPRINT 1". The list includes:
 - test_dat...Join (1)
 - sample_sub.csv
 - test_data.csv
 - # Row Id
 - # case_id
 - # Hosp...code
 - abc Hosp...code
 - City_...pital
 - Hosp...code
 - Availab...ospital
- Expression:** A text area containing a SQL expression:

```
1 IF (test_data_csv.City_Code_Patient is missing )
2 THEN (median(test_data_csv.City_Code_Patient))
3 ELSE(test_data_csv.City_Code_Patient)
4
```

Below the expression editor, a "Validation Results" window is open, displaying a green checkmark and the message: "The expression is valid."

At the bottom of the interface, there is a checkbox labeled "Calculate after aggregation" which is checked. To the right of this checkbox are two buttons: "Cancel" and "OK".

The Windows taskbar at the bottom of the screen shows the system clock as 11:55 AM on 04-Nov-22, along with various system icons and open application windows.

IBM Cognos Analytics with Watson

SPRINT 1

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Search content

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Create calculation

×

Name

Calculation name

Components

Expression

Search

SPRINT 1

test_data....- Join (1)

sample_sub.csv

test_data.csv

train_data.csv

1 IF (test_data_csv.Bed_Grade is missing)

2 THEN (median(test_data_csv.Bed_Grade))

3 ELSE(test_data_csv.Bed_Grade)

4

Validate

Validation Results

×

✔ The expression is valid.

Replacing NULL into values

IBM Cognos Analytics with Watson

* SPRINT 1

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Search content

Properties

Data module

Search

- 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
- Admission_Deposit
- train_data.csv

Grid Relationships Custom tables

artment	Ward_Type	Ward_Facility_Code	Bed Grade	patientid	City_Code_Patient
ecology	R	F	2	17006	2
ecology	Q	F	2	17006	2
ecology	Q	D	2	17006	2
ecology	S	E	3	95946	7
ecology	Q	F	3	95946	7
ecology	Q	F	4	95946	7
ecology	Q	E	2	95946	7
ecology	R	F	3	95946	7
ecology	R	A	3	95946	7
ecology	R	F	4	95946	7
ecology	S	C	2	10728	8

IBM Cognos Analytics with Watson

* SPRINT 1

304

Search content

?

Properties

Data module

Search

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

Admission_Deposit

train_data.csv

Grid

Relationships

Custom tables

	Ward_Type	Ward_Facility_Code	Bed Grade	patientid	City_Code_Patient	Type of
	S	A	2	17006	2	Emerge
	S	F	2	17006	2	Trauma
	Q	D	4	17006	2	Emerge
	Q	F	2	17006	2	Trauma
	R	F	2	17006	2	Trauma
	Q	F	2	17006	2	Trauma
	Q	D	2	17006	2	Trauma
	S	E	3	95946	7	Emerge
	Q	F	3	95946	7	Trauma
	Q	F	4	95946	7	Urgent
	Q	F	2	95946	7	Trauma

PREPARED DATA LINK

https://us3.ca.analytics.ibm.com/bi/?perspective=ca-modeller&pathRef=.my_folders%2FSPRINT%2B1

