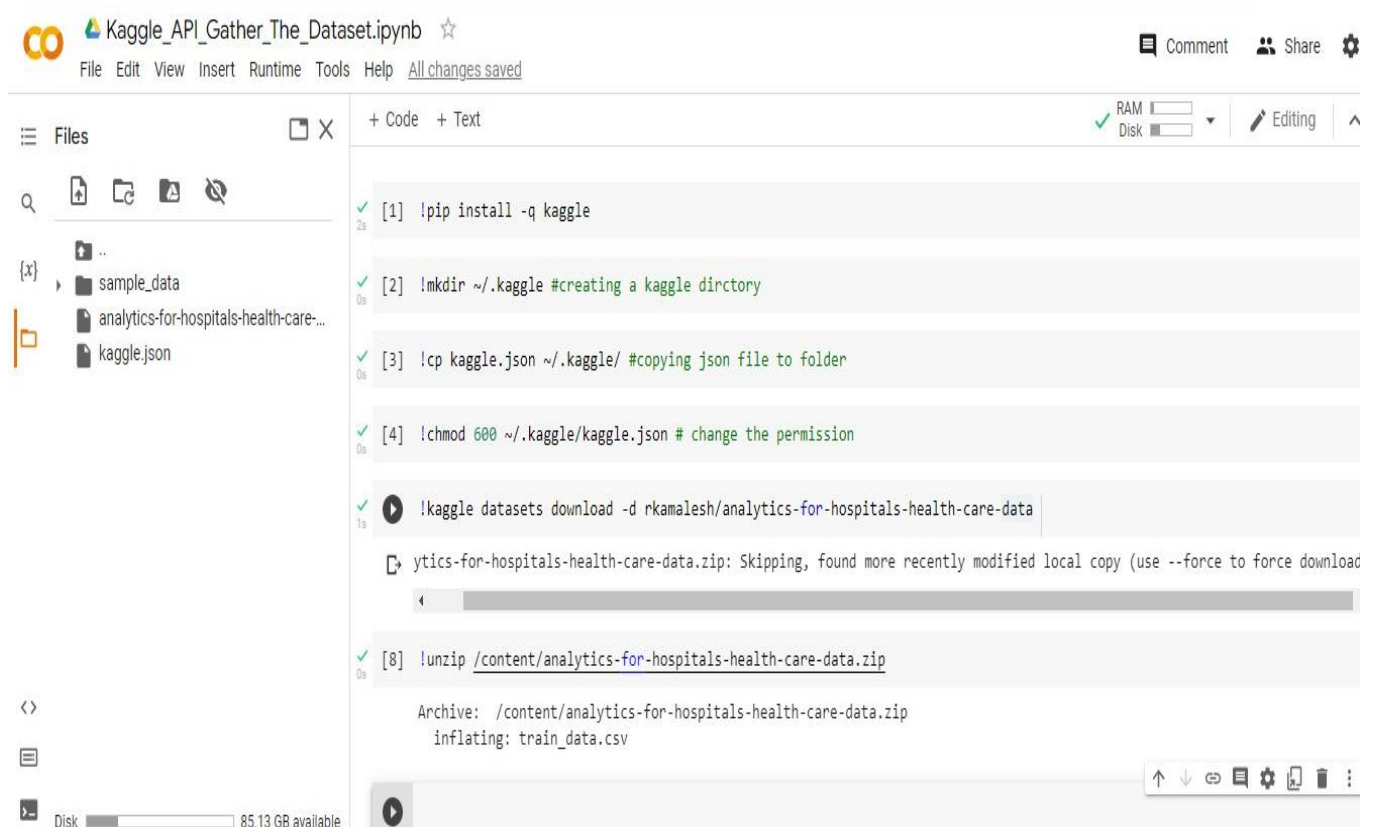


Sprint Delivery Plan I

Date	28 October 2022
Team ID	PNT2022TMID30840
Project Name	Analytics for Hospitals Health Care Data

Fetch data from external API (Kaggle API). (Ipython file):



Kaggle_API_Gather_The_Dataset.ipynb ☆

File Edit View Insert Runtime Tools Help All changes saved

RAM 100% Disk 100% Editing

Files

- sample_data
- analytics-for-hospitals-health-care...
- kaggle.json

```
[1] !pip install -q kaggle
[2] !mkdir ~/.kaggle #creating a kaggle dirctory
[3] !cp kaggle.json ~/.kaggle/ #copying json file to folder
[4] !chmod 600 ~/.kaggle/kaggle.json # change the permission
[5] !kaggle datasets download -d rkamalesh/analytics-for-hospitals-health-care-data
ytics-for-hospitals-health-care-data.zip: Skipping, found more recently modified local copy (use --force to force download)
[8] !unzip /content/analytics-for-hospitals-health-care-data.zip
Archive: /content/analytics-for-hospitals-health-care-data.zip
  inflating: train_data.csv
```

Disk 85.13 GB available

kaggle

+

Create

Home

Competitions

Datasets

Code

Discussions

Learn

More

Your Work

RECENTLY VIEWED

Analytics for hospita...

View Active Events

Search

R KAMALESH · UPDATED 3 MINUTES AGO · PRIVATE

0

New Notebook

Download (5 MB)

Analytics for hospitals health care data

Add a subtitle [Edit](#)

Data

Code (0)

Discussion (0)

Settings

Pending Actions

USABILITY SCORE: 1.18

Add a subtitle

Stand out on the listings page with a snappy subtitle

Add tags

Make it easy for users to find your dataset in search

Add a description

Share specifics about the context, sources, and inspiration behind your...

Upload an image

Make your dataset pop with an eye-catching cover image and thumbnail

kaggle

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Search

Analytics for hospitals health care data

Data

Code (0)

Discussion (0)

Settings

0

New Notebook

Download (5 MB)

train_data.csv (26.92 MB)

Detail

Compact

Column

10 of 18 columns

About this file

This file does not have a description yet.

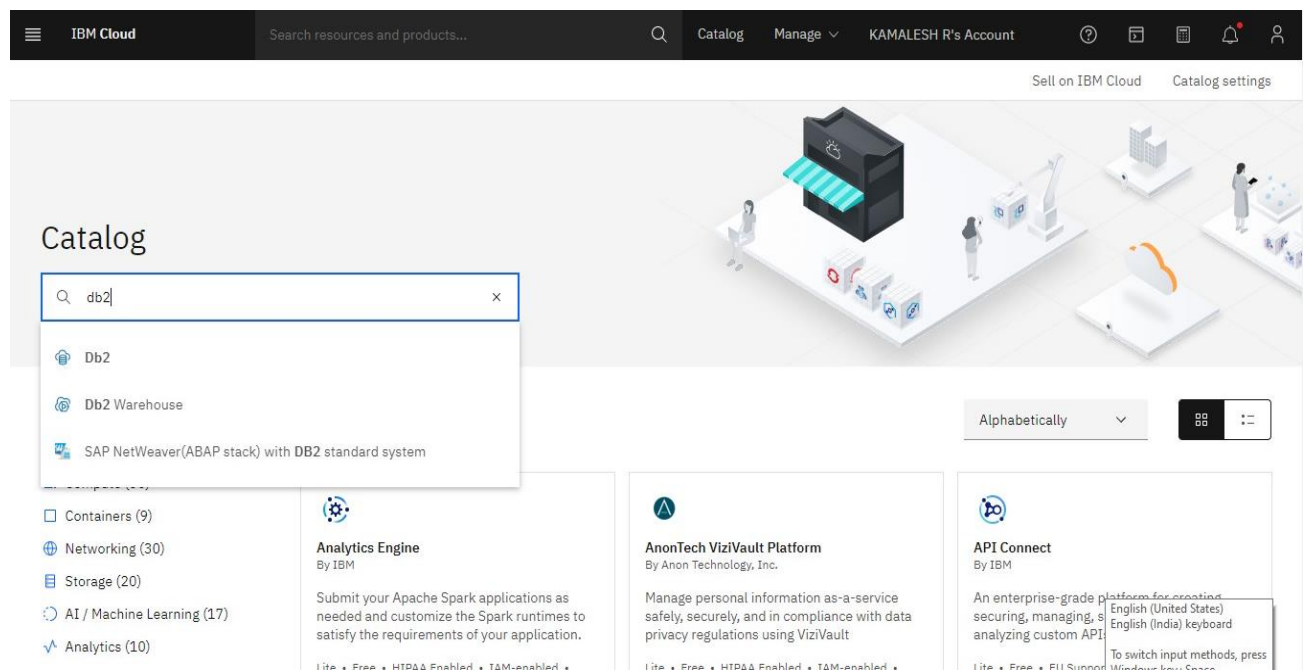
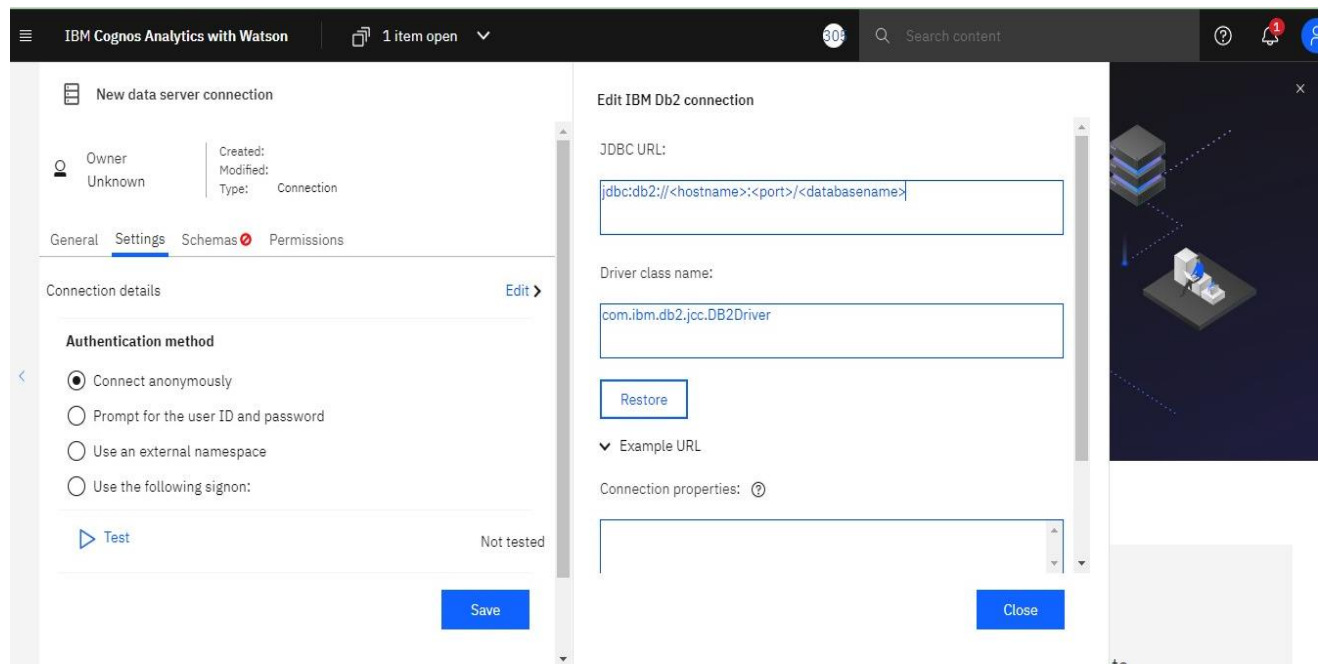
case_id	# Hospital_code	Hospital_type_co...	City_Code_Hospital	H
1	318k	a	45%	X
1	8	b	22%	Y
2	2	Other (106067)	33%	Other
3	10	c	3	Z
4	26	c	5	Z
		e	1	X
		b	2	Y

Data Explorer

Version 1 (26.92 MB)

train_data.csv

IBM DB2 service creation and DB2 connectivity with Cognos. (Pdf file)



IBM Cloud

Search resources and products...

Q

Catalog

Manage

KAMALESH R's Account

?

Resource list

Create resource +

Name	Group	Location	Product	Status	Tags
Filter by name or IP address...	Filter by group or org...	Filter...	Filter...	Filter...	Filter...
Compute (0)					
Containers (0)					
Networking (0)					
Storage (0)					
AI / Machine Learning (0)					
Analytics (0)					
Blockchain (0)					
Databases (1)					
Db2-h6	Default	Dallas	Db2	Active	-
Developer tools (0)					
Logging and monitoring (0)					

IBM Cloud

Search resources and products...

Q

Catalog

Manage

KAMALESH R's Account

?

Resource list /

Db2-h6

Active

Add tags

Details

Actions...

Manage

Getting started

Service credentials

Connections

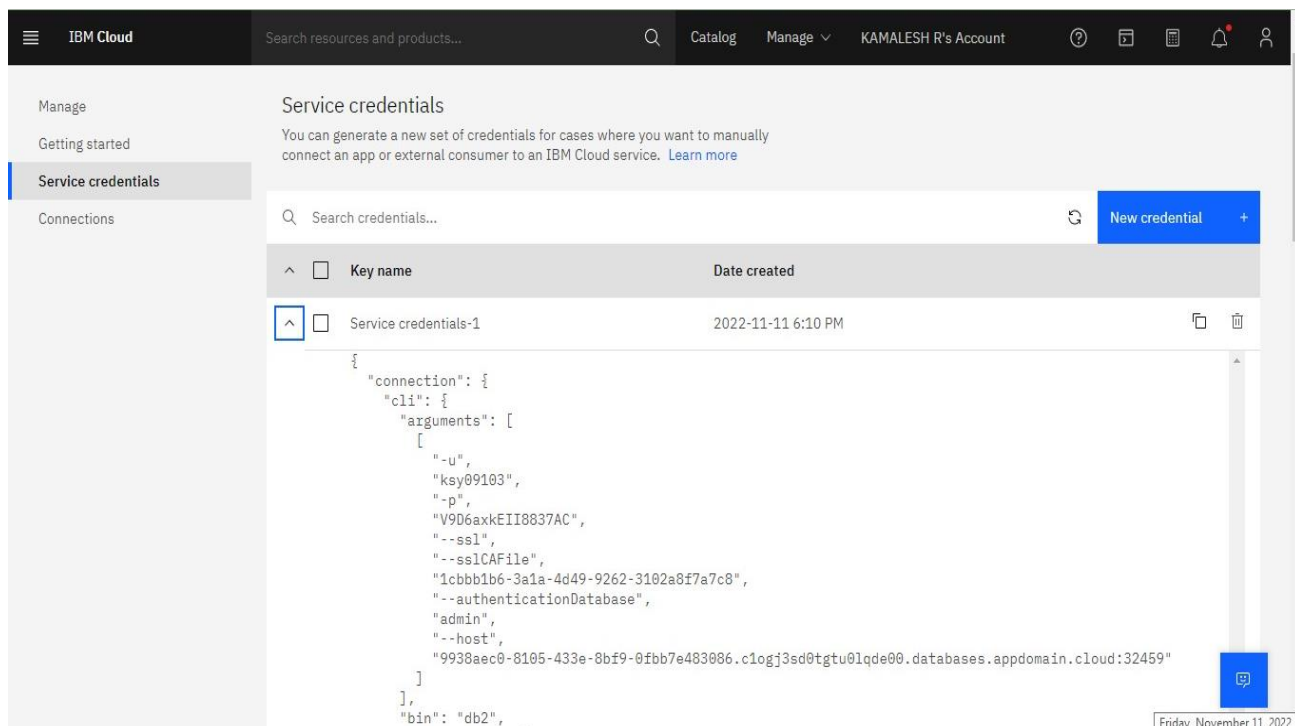
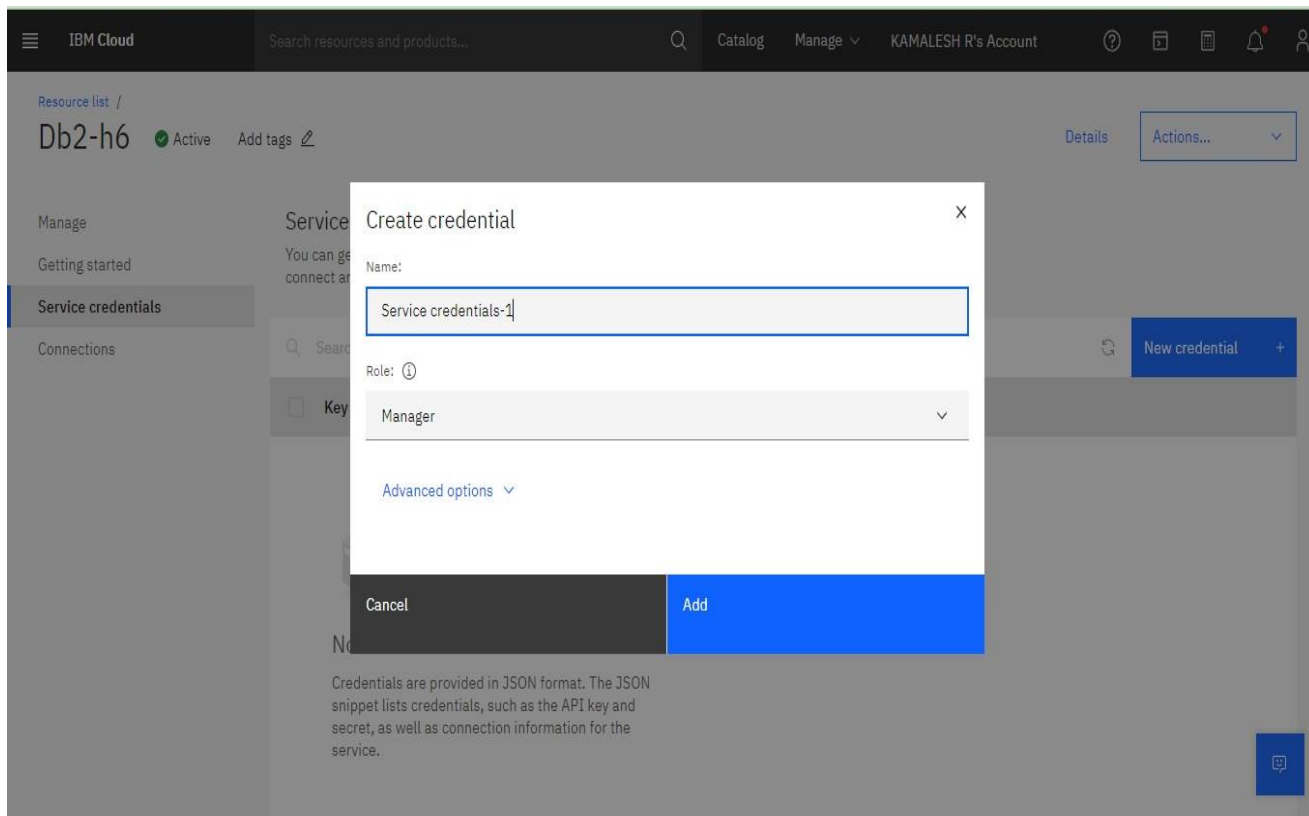
Service credentials

You can generate a new set of credentials for cases where you want to manually connect an app or external consumer to an IBM Cloud service. [Learn more](#)

Search credentials...

New credential +

Key name	Date created
<div><div></div><div>No service credentials</div><div>Credentials are provided in JSON format. The JSON snippet lists credentials, such as the API key and secret, as well as connection information for the service.</div></div>	



IBM Cognos Analytics with Watson

1 item open

30

Search content

?

1

?

Analytics for Hospi ... H ... Care data test

Owner

KAMAL ... 12602

Created: 11/11/2022, 6:47 AM

Modified: 11/11/2022, 6:47 AM

Type: Data Server

General

Connections

Permissions

Name

Modified

Analytics for H ... data test

11/11/2022 6:59 AM

Analytics for Hospitals Health Care data test

Owner

KAMAL ... 12602

Created: 11/11/2022, 6:47 AM

Modified: 11/11/2022, 6:59 AM

Type: Connection

General

Settings

Schemas

Permissions

Connection details

Edit

Authentication method

☒ Connect anonymously

☐ Prompt for the user ID and password

☐ Use an external namespace

☐ Use the following signon:

Test

Success

Save

Present data

Create sophisticated, multi-page, multi-query

IBM Db2 on Cloud

Load Data

Load History

Tables

Views

Indexes

Aliases

MQTs

Sequences

Application objects

Source

Target

Define

Finalize

You are loading the file train_data.csv

My Computer

A single delimited text file (CSV) without header row.

Amazon S3

Cloud Object Storage

File selection

+

Drag a file here or browse files

Selected file

train_data.csv

Next

IBM Db2 on Cloud

Load DataLoad HistoryTablesViewsIndexesAliasesMQTsSequencesApplication objects

SourceTargetDefineFinalize

You are loading the file `train_data.csv` into `KSY09103.HEALTHCARE_DATA`

Select a load target

Refresh

Schema

Find schemas

KSY09103

Table

New table +

Find tables in KSY09103

HEALTHCARE_DATA

BackNext

IBM Db2 on Cloud

Load DataLoad HistoryTablesViewsIndexesAliasesMQTsSequencesApplication objects

SourceTargetDefineFinalize

You are loading the file `train_data.csv` into `KSY09103.HEALTHCARE_DATA`

Code page
(character encoding): 1208 (UTF-8) Separator: , Header in first row: Time & date format: Detect data types:

CASE_ID SMALLINT	HOSPITAL_CODE SMALLINT	HOSPITAL_TYPE_CODE VARCHAR(1)	CITY_CODE_HOSPITAL SMALLINT	HOSPITAL_REGION_CODE VARCHAR(1)	AVAILABLE_EXTRA_ROOMS_IN SMALLINT	
1	1	8	c	3	Z	3
2	2	2	c	5	Z	2
3	3	10	e	1	X	2
4	4	26	b	2	Y	2
5	5	26	b	2	Y	2
6	6	23	a	6	X	2
7	7	32	f	9	Y	1
8	8	23	a	6	X	4
9	9	1	d	10	V	2

BackNext

Application objects

 Finalize

Begin Load

Create sophisticated,
multi-node, multi-query

Importing Data Sets of Analytics for Hospitals Health Care Data Using Cognos Analysis:

USN-1:

- As a User I can enter the details of the patients working in our organization of the details.
- Uploading the dataset of test_data.csv and train_data.csv file to IBM Cognos Analytics.

The screenshot displays the IBM Cognos Analytics user interface. At the top, a dark navigation bar includes the text 'IBM Cognos Analytics with Watson', a 'Content' dropdown menu, a search bar with the placeholder 'Search content', and user profile icons. Below this, the main area shows a folder named 'Hospitals health care'. Underneath the folder name are tabs for 'My content', 'Team content', and 'Samples'. The 'My content' tab is active, showing a list of items within the folder. The list has columns for 'Name', 'Type', and 'Last Accessed'. The items listed are 'Test_data module' (Data module), 'test_data.csv' (Uploaded file), and 'train_data.csv' (Uploaded file). Each item has a checkbox on the left and a three-dot menu on the right.

Name	Type	Last Accessed
<input type="checkbox"/> Test_data module	Data module	30/10/2022, 8:59 AM
<input type="checkbox"/> test_data.csv CSV	Uploaded file	30/10/2022, 3:39 AM
<input type="checkbox"/> train_data.csv CSV	Uploaded file	30/10/2022, 3:12 AM

IBM Cognos Analytics with Watson

Content

31

Search content

?

1

Hospitals health care

My contentTeam contentSamples

My content / Hospitals health care

FilterSortShareRefreshSettingsGridMenu

Name	Type	Last Accessed
<input type="checkbox"/> train_data.csv CSV	Uploaded file	30/10/2022, 3:12 AM

IBM Cognos Analytics with Watson

New data module

31

Search content

?

1

GridRelationshipsCustom tables

case_id	Hospital_code	Hospital_type_code	City_Code_Hospital	Hospital_region_code	Av
1	8	c	3	Z	3
2	2	c	5	Z	2
3	10	e	1	X	2
4	26	b	2	Y	2
5	26	b	2	Y	2
6	23	a	6	X	2
7	32	f	9	Y	1
8	23	a	6	X	4
9	1	d	10	Y	2
10	10	e	1	X	2

Data module

Search

New data module

Navigation paths

train_data.csv

Row Id

case_id

Hospital_code

abc Hospital...ype_code

City_Code_Hospital

Hospital...ion_code

Available...Hospital

abc Department

abc Ward_Type

abc Ward_Facility_Code

Data Cleaning and Data Processing using Cognos Analytics:

USN-2:

- As an Analyst, I will check the data set and clean the dataset to create an efficient model.
- To Data cleaning the null values in test_data.csv dataset first.

The screenshot shows the IBM Cognos Analytics interface with the 'New data module' selected. The 'Data module' pane on the left lists various fields, with 'City_Code_Patient' highlighted. The main grid displays data with columns: Ward_Facility_Code, Bed Grade, patientid, City_Code_Patient, Type of Admission, and Severity of Illness. The 'City_Code_Patient' column contains several null values.

Ward_Facility_Code	Bed Grade	patientid	City_Code_Patient	Type of Admission	Severity of Illness
D	4	17006	2	Emergency	Mo
F	2	17006	2	Trauma	Mo
F	2	17006	2	Trauma	Mo
F	2	17006	2	Trauma	Mo
D	2	17006	2	Trauma	Mo
E	3	95946	Null	Emergency	Mo
F	3	95946	Null	Trauma	Mo
F	4	95946	Null	Urgent	Mo
E	2	95946	Null	Trauma	Mo
F	3	95946	Null	Emergency	Mo

The screenshot shows the IBM Cognos Analytics interface with the 'Test_data module' selected. A dialog box titled 'Clean - City_Code_Patient' is open, allowing the user to replace null values. The dialog has two options: 'Replace this value with NULL' (unchecked) and 'Replace NULL values with' (checked). The value '4' is entered in the input field. The background grid shows the same data as the previous screenshot, but with the 'City_Code_Patient' column highlighted.

Ward_Facility_Code	Bed Grade	patientid	City_Code_Patient	Type of Admission	Severity of Illness
S		17006	2	Emergency	
S		17006	2	Trauma	
Q		17006	2	Emergency	
Q		17006	2	Trauma	
R		17006	2	Trauma	
Q		17006	2	Trauma	
Q		17006	2	Trauma	
S	E	3	95946	Null	Emergency
Q	F	3	95946	Null	Trauma
Q	F	4	95946	Null	Urgent

IBM Cognos Analytics with Watson

* New data module

Search content

Prop

Data module

Search

- 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

ent	Ward_Type	Ward_Facility_Code	Bed Grade	patientid	City_Code_Patient
gy	Q	F	2	17006	2
gy	R	F	2	17006	2
gy	Q	F	2	17006	2
gy	Q	D	2	17006	2
gy	S	E	3	95946	4
gy	Q	F	3	95946	4
gy	Q	F	4	95946	4
gy	Q	E	2	95946	4
gy	R	F	3	95946	4
gy	R	A	3	95946	4

- To Data cleaning the null values in train_data.csv dataset.

IBM Cognos Analytics with Watson

* New data module

Search content

Properties

Data module

Search

- 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
- abc Stay

ent	Ward_Type	Ward_Facility_Code	Bed Grade	patientid	City_Code_Patient	Type of Admission	Severity of Illness	Visitors wi
gy	Q	F	2	17006	2	Emergency	Extreme	2
gy	R	F	2	17006	2	Trauma	Extreme	2
gy	Q	F	2	17006	2	Trauma	Extreme	2
gy	Q	D	2	17006	2	Trauma	Extreme	2
gy	S	E	3	95946	4	Trauma	Extreme	2
gy	Q	F	3	95946	4	Trauma	Extreme	2
gy	Q	F	4	95946	4	Trauma	Extreme	2
gy	Q	E	2	95946	4	Emergency	Extreme	2
gy	R	F	3	95946	4	Trauma	Extreme	2
gy	R	A	3	95946	4	Trauma	Extreme	2

Clean - City_Code_Patient

NULL values

☐ Replace this value with NULL

☒ Replace NULL values with 7

Cancel Clean

IBM Cognos Analytics with Watson

Whitespace

☐ Trim leading and trailing whitespace

Convert case to

☐ UPPERCASE ☐ lowercase ☒ Do not change

Return a substring of characters

Start Length

Preview

This is a preview

NULL values

☐ Replace this value with NULL

☒ Replace NULL values with

Cancel Clean

Age	Admission_Deposit
51-60	4911
51-60	5954
51-60	4745
51-60	7272
51-60	5558
51-60	4449
51-60	6167
51-60	5571
51-60	7223
51-60	6056

IBM Cognos Analytics with Watson

* New data module

Search content

Properties

Data module

Grid Relationships Custom tables

Search

New data module

Navigation paths

train_data.csv

Row Id

case_id

Hospital_code

Hospital_type_code

City_Code_Hospital

Hospital_region_code

Available...Hospital

Department

Ward_Type

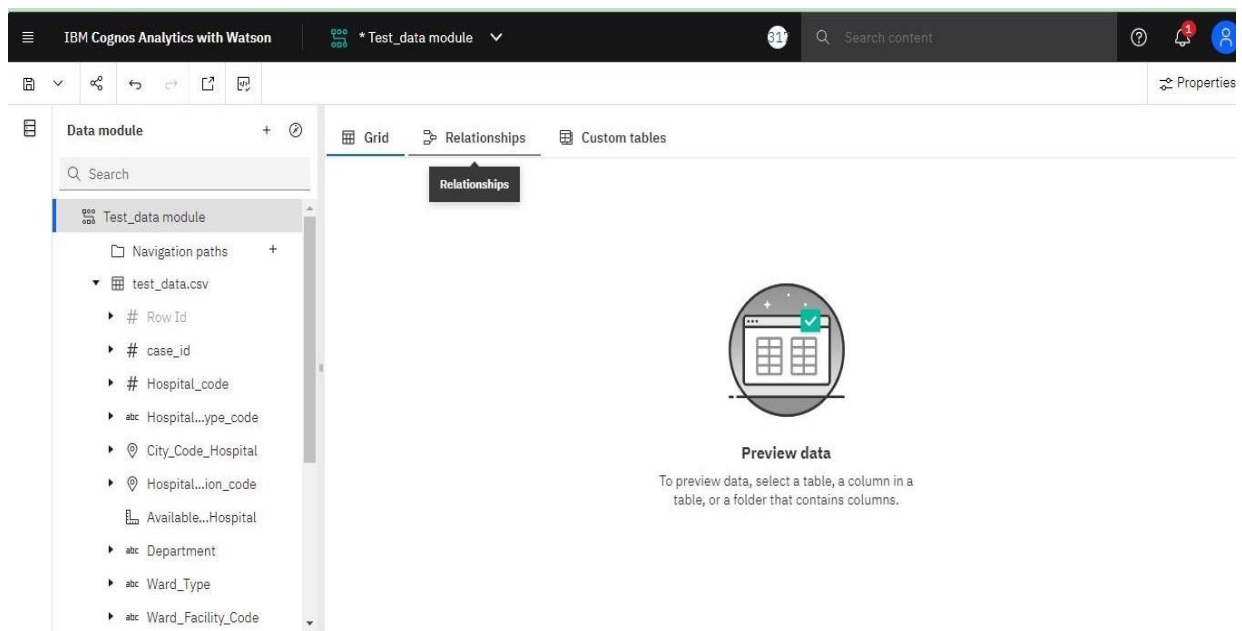
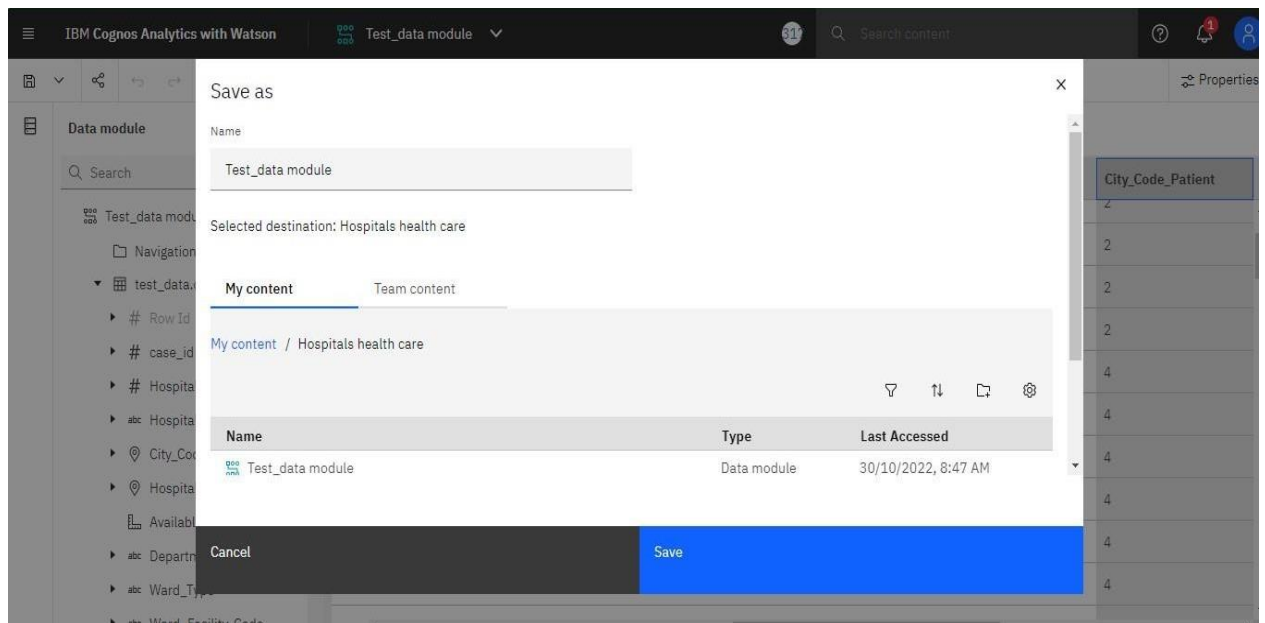
Ward_Facility_Code

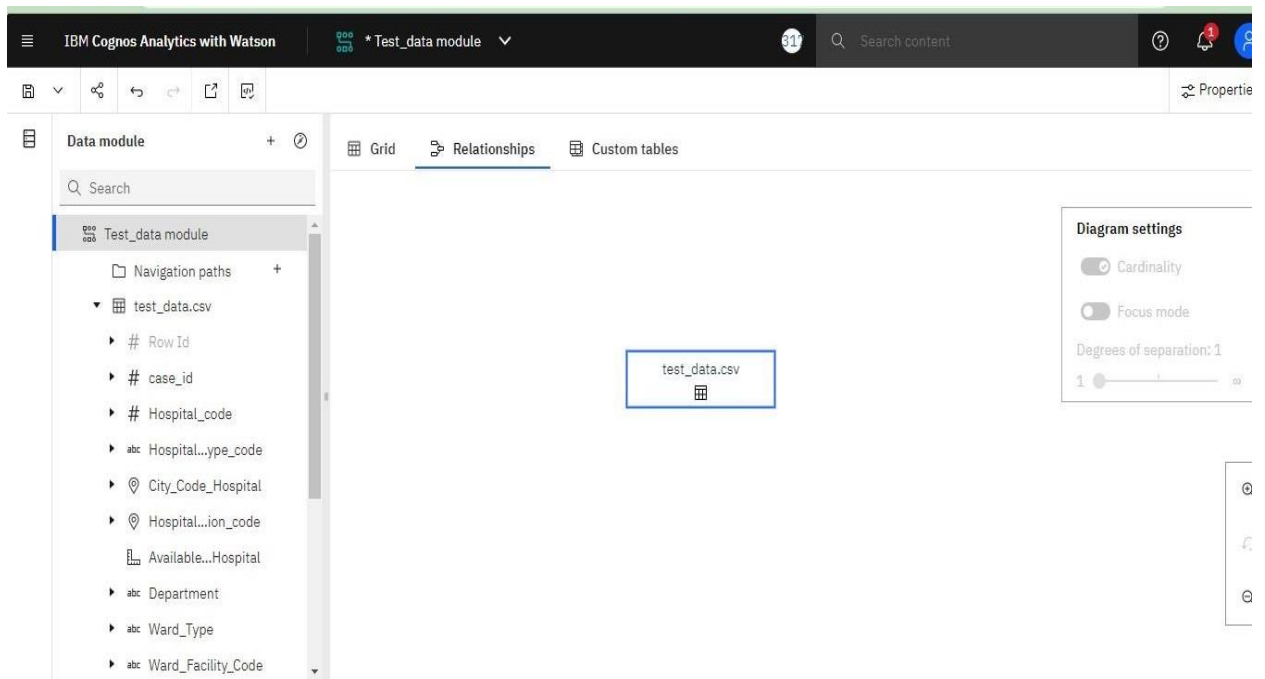
case_id	Hospital_code	Hospital_type_code	City_Code_Hospital	Hospital_region_code	Av
1	8	c	3	Z	3
2	2	c	5	Z	2
3	10	e	1	X	2
4	26	b	2	Y	2
5	26	b	2	Y	2
6	23	a	6	X	2
7	32	f	9	Y	1
8	23	a	6	X	4
9	1	d	10	Y	2
10	10	e	1	X	2

Creating The Data Module using Cognos Analytics:

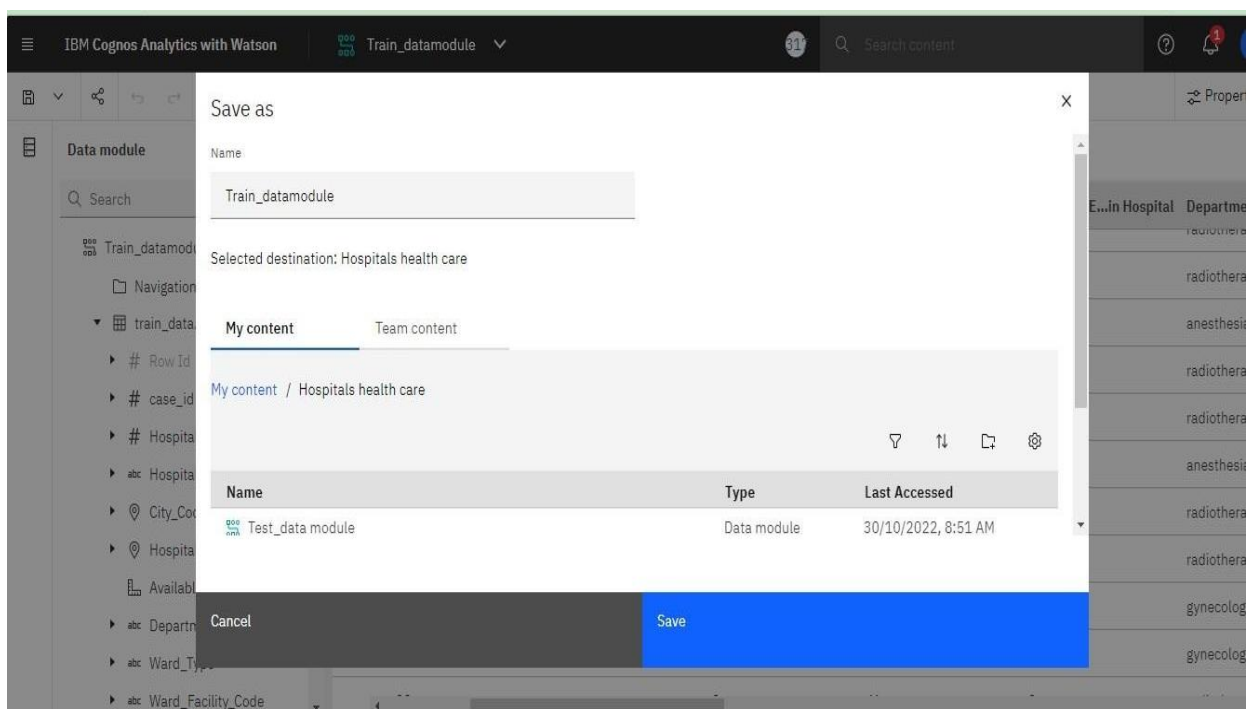
USN-3:

- As an Analyst I will also correct the raw data and create a data module.
- I will Create the data module using test_data.csv dataset first.





- Then I will Create the data module using train_data.csv dataset.



us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=i62D0214C205D44E6BF7E5A3DD961130A&objRef=i62D0214C205D44E6BF7E5A3DD961130A&tid...

IBM Cognos Analytics with Watson Train_datamodule

Search content

Data module

Search

Train_datamodule

- Navigation paths
- train_data.csv
 - Row Id
 - case_id
 - Hospital_code
 - Hospital...ype_code
 - City_Code_Hospital
 - Hospital...ion_code
 - Available...Hospital
 - Department
 - Ward_Type
 - Ward_Facility_Code

Grid Relationships Custom tables

Preview data

To preview data, select a table, a column in a table, or a folder that contains columns.

IBM Cognos Analytics with Watson Train_datamodule

Search content

Data module

Search

Train_datamodule

- Navigation paths
- train_data.csv
 - Row Id
 - case_id
 - Hospital_code
 - Hospital...ype_code
 - City_Code_Hospital
 - Hospital...ion_code
 - Available...Hospital
 - Department
 - Ward_Type
 - Ward_Facility_Code

Grid Relationships Custom tables

Diagram settings

- Cardinality
- Focus mode
- Degrees of separation: 1

train_data.csv