

Project Development Phase

Delivery of Sprint-1

Project Development Phase

| | |
|---------------------|--|
| Date | 15 NOVEMBER 2022 |
| Team ID | PNT2022TMID44091 |
| Project Name | Analytics for Hospitals Health-Care Data |

SPRINT-I

Registration
Data Uploading

SPRINT-III

Story Creation

SPRINT-II

Data Analysis
Dashboard

SPRINT-IV

Report Creation

Importing Data Sets of Analytics for Hospitals Health Care Data Using CognosAnalysis:

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.

IBMgithub.comAnalyticsIBM-ProjIBM-ProjSprint --1GmailMy IBMContentSPRINT 1192.168.0.

us1.ca.analytics.ibm.com/bi/?perspective=content&tab=myContent&folder=i003867FE304B4061A6F6502530C7286F

IBM Cognos Analytics with WatsonContent

Search content

New +

My contentTeam contentSamples

Name

Type

Last Accessed

Sales Analytics Report

Report

9/20/2022, 12:28 AM

Sales data module

Data module

9/6/2022, 1:34 AM

sample_sub.csv

CSV

Uploaded file

11/14/2022, 10:18 PM

sept 13

Data module

9/13/2022, 1:43 AM

test_data.csv

CSV

Uploaded file

11/14/2022, 10:18 PM

train_data_dictionary.csv

CSV

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11/14/2022, 10:17 PM

train_data.csv

CSV

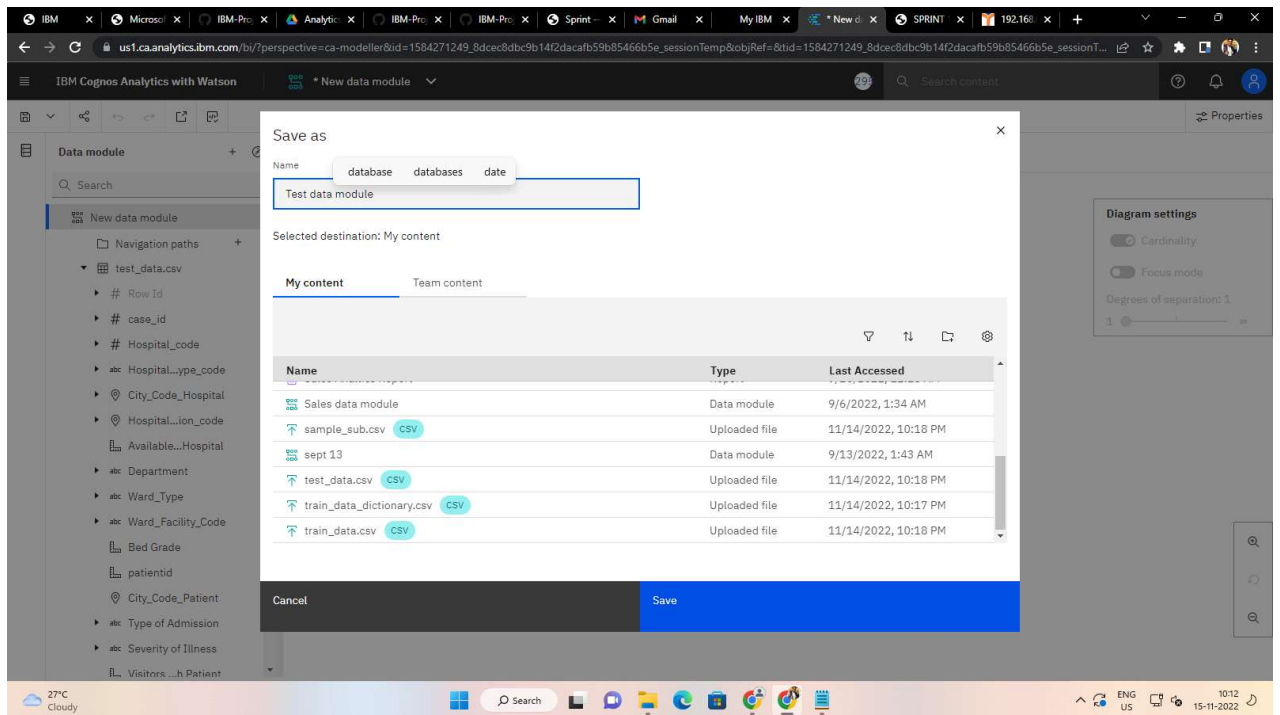
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11/14/2022, 10:18 PM

Search

ENG US

09:49 15-11-2022



Data module

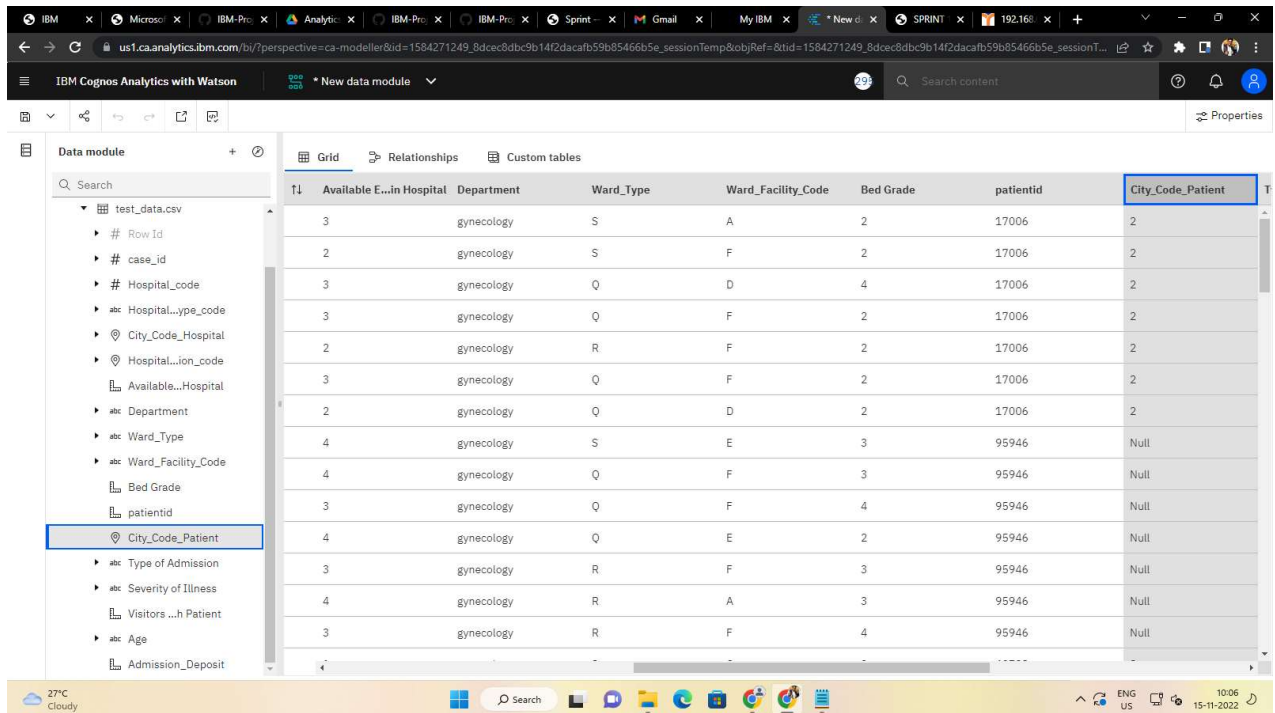
Grid Relationships Custom tables

| Row Id | case_id | Hospital_code | Hospital_type_code | City_Code_Hospital | Hospital_region_code | Available E...in Hospital |
|--------|---------|---------------|--------------------|--------------------|----------------------|---------------------------|
| 1 | 318439 | 21 | c | 3 | Z | 3 |
| 2 | 318440 | 29 | a | 4 | X | 2 |
| 3 | 318441 | 26 | b | 2 | Y | 3 |
| 4 | 318442 | 6 | a | 6 | X | 3 |
| 5 | 318443 | 28 | b | 11 | X | 2 |
| 6 | 318444 | 23 | a | 6 | X | 3 |
| 7 | 318445 | 26 | b | 2 | Y | 2 |
| 8 | 318446 | 25 | e | 1 | X | 4 |
| 9 | 318447 | 23 | a | 6 | X | 4 |
| 10 | 318448 | 23 | a | 6 | X | 3 |
| 11 | 318449 | 10 | e | 1 | X | 4 |
| 12 | 318450 | 4 | a | 4 | X | 3 |
| 13 | 318451 | 16 | c | 3 | Z | 4 |
| 14 | 318452 | 28 | b | 11 | X | 3 |

Data Cleaning and Data Processing using Cognos

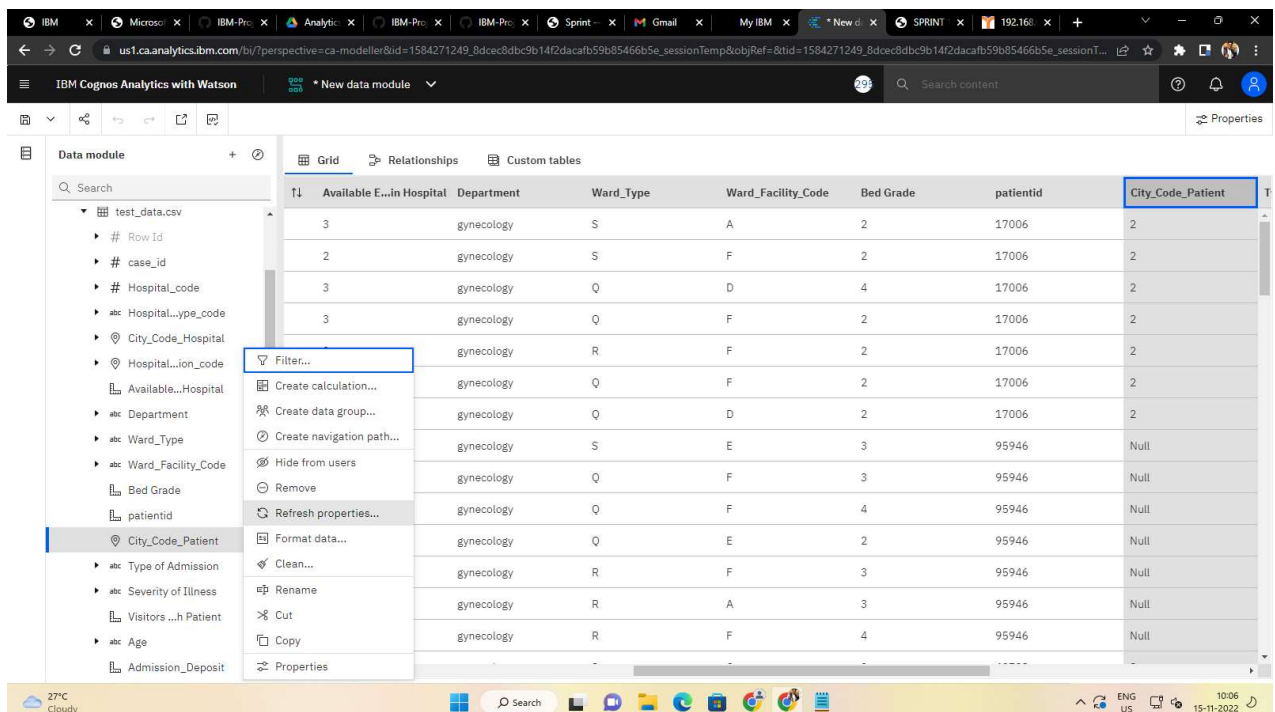
Analytics:USN-2:

- 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. On the left, the 'Data module' pane lists the columns of the 'test_data.csv' dataset. The 'City_Code_Patient' column is highlighted. The main grid displays the data table with the following columns: Available E...in Hospital, Department, Ward_Type, Ward_Facility_Code, Bed Grade, patientid, and City_Code_Patient. The data rows show various patient records, with some having null values in the 'City_Code_Patient' column.

| Available E...in Hospital | Department | Ward_Type | Ward_Facility_Code | Bed Grade | patientid | City_Code_Patient |
|---------------------------|------------|-----------|--------------------|-----------|-----------|-------------------|
| 3 | gynecology | S | A | 2 | 17006 | 2 |
| 2 | gynecology | S | F | 2 | 17006 | 2 |
| 3 | gynecology | Q | D | 4 | 17006 | 2 |
| 3 | gynecology | Q | F | 2 | 17006 | 2 |
| 2 | gynecology | R | F | 2 | 17006 | 2 |
| 3 | gynecology | Q | F | 2 | 17006 | 2 |
| 2 | gynecology | Q | D | 2 | 17006 | 2 |
| 4 | gynecology | S | E | 3 | 95946 | Null |
| 4 | gynecology | Q | F | 3 | 95946 | Null |
| 3 | gynecology | Q | F | 4 | 95946 | Null |
| 4 | gynecology | Q | E | 2 | 95946 | Null |
| 3 | gynecology | R | F | 3 | 95946 | Null |
| 4 | gynecology | R | A | 3 | 95946 | Null |
| 3 | gynecology | R | F | 4 | 95946 | Null |



The screenshot shows the same IBM Cognos Analytics interface, but with a context menu open over the 'City_Code_Patient' column. The menu options are: Filter..., Create calculation..., Create data group..., Create navigation path..., Hide from users, Remove, Refresh properties..., Format data..., Clean..., Rename, Cut, Copy, and Properties. The 'Clean...' option is highlighted, indicating the next step in the data cleaning process.

| Available E...in Hospital | Department | Ward_Type | Ward_Facility_Code | Bed Grade | patientid | City_Code_Patient |
|---------------------------|------------|-----------|--------------------|-----------|-----------|-------------------|
| 3 | gynecology | S | A | 2 | 17006 | 2 |
| 2 | gynecology | S | F | 2 | 17006 | 2 |
| 3 | gynecology | Q | D | 4 | 17006 | 2 |
| 3 | gynecology | Q | F | 2 | 17006 | 2 |
| | gynecology | R | F | 2 | 17006 | 2 |
| | gynecology | Q | F | 2 | 17006 | 2 |
| | gynecology | Q | D | 2 | 17006 | 2 |
| | gynecology | S | E | 3 | 95946 | Null |
| | gynecology | Q | F | 3 | 95946 | Null |
| | gynecology | Q | F | 4 | 95946 | Null |
| | gynecology | Q | E | 2 | 95946 | Null |
| | gynecology | R | F | 3 | 95946 | Null |
| | gynecology | R | A | 3 | 95946 | Null |
| | gynecology | R | F | 4 | 95946 | Null |

IBM Cognos Analytics with Watson

Grid Relationships Custom tables

Search

test_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
- Bed Grade
- patientid
- City_Code_Patient
- Type of Admission
- Severity of Illness
- Visitors ...h Patient
- Age
- Admission_Deposit

Available E...in Hospital Department Ward_Type Ward_Facility_Code Bed Grade patientid City_Code_Patient

3 gynecology S A 2 17006 2

2 2 17006 2

3 4 17006 2

3 2 17006 2

2 2 17006 2

3 2 17006 2

2 2 17006 2

4 3 95946 Null

4 3 95946 Null

3 gynecology Q F 4 95946 Null

4 gynecology Q E 2 95946 Null

3 gynecology R F 3 95946 Null

4 gynecology R A 3 95946 Null

3 gynecology R F 4 95946 Null

27°C Cloudy

Search

ENG US 10:07 15-11-2022

IBM Cognos Analytics with Watson

Grid Relationships Custom tables

Search

New data module

- Navigation paths
- test_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
- Bed Grade
- patientid
- City_Code_Patient
- Type of Admission
- Severity of Illness
- Visitors ...h Patient

Row Id case_id Hospital_code Hospital_type_code City_Code_Hospital Hospital_region_code Available E...in Hospital

1 318439 21 c 3 Z 3

2 318440 29 a 4 X 2

3 318441 26 b 2 Y 3

4 318442 6 a 6 X 3

5 318443 28 b 11 X 2

6 318444 23 a 6 X 3

7 318445 26 b 2 Y 2

8 318446 25 e 1 X 4

9 318447 23 a 6 X 4

10 318448 23 a 6 X 3

11 318449 10 e 1 X 4

12 318450 4 a 4 X 3

13 318451 16 c 3 Z 4

14 318452 28 b 11 X 3

27°C Cloudy

Search

ENG US 10:05 15-11-2022

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

The screenshot displays the IBM Cognos Analytics interface. On the left, the 'Data module' pane shows a list of fields from the 'test_data.csv' dataset, including 'Row Id', 'case_id', 'Hospital_code', 'City_Code_Hospital', 'Hospital...ion_code', 'Available...Hospital', 'Department', 'Ward_Type', 'Ward_Facility_Code', 'Bed Grade', 'patientid', 'City_Code_Patient', 'Type of Admission', 'Severity of Illness', 'Visitors ...h Patient', 'Age', and 'Admission_Deposit'. The 'City_Code_Patient' field is selected. The main grid view shows a table with columns: 'Available E...In Hospital', 'Department', 'Ward_Type', 'Ward_Facility_Code', 'Bed Grade', 'patientid', and 'City_Code_Patient'. A dialog box titled 'Clean - City_Code_Patient' is open, showing options for handling NULL values. The dialog has two sections: 'NULL values' and 'Replace NULL values with'. The 'Replace this value with NULL' checkbox is checked, and the 'Replace NULL values with' checkbox is unchecked. The 'Clean' button is highlighted. The bottom of the screen shows a Windows taskbar with the date 15-11-2022 and time 10:07.

| Available E...In Hospital | Department | Ward_Type | Ward_Facility_Code | Bed Grade | patientid | City_Code_Patient |
|---------------------------|------------|-----------|--------------------|-----------|-----------|-------------------|
| 3 | gynecology | S | A | 2 | 17006 | 2 |
| 2 | | | | 2 | 17006 | 2 |
| 3 | | | | 4 | 17006 | 2 |
| 3 | | | | 2 | 17006 | 2 |
| 2 | | | | 2 | 17006 | 2 |
| 3 | | | | 2 | 17006 | 2 |
| 2 | | | | 2 | 17006 | 2 |
| 4 | | | | 3 | 95946 | Null |
| 4 | | | | 3 | 95946 | Null |
| 3 | gynecology | Q | F | 4 | 95946 | Null |
| 4 | gynecology | Q | E | 2 | 95946 | Null |
| 3 | gynecology | R | F | 3 | 95946 | Null |
| 4 | gynecology | R | A | 3 | 95946 | Null |
| 3 | gynecology | R | F | 4 | 95946 | Null |

IBM Cognos Analytics with Watson

test_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
- Bed Grade
- patientid
- City_Code_Patient
- Type of Admission
- Severity of Illness
- Visitors ...h Patient
- Age
- Admission_Deposit

Grid

Ward_Type

Severity of Illness

Emergency

Trauma

Moderate

Cancel

Clean

27°C Cloudy

15-11-2022

IBM Cognos Analytics with Watson

test_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
- Bed Grade
- patientid
- City_Code_Patient
- Type of Admission
- Severity of Illness
- Visitors ...h Patient
- Age
- Admission_Deposit

Grid

Ward_Type

Ward_Facility_Code

Bed Grade

patientid

City_Code_Patient

Type of Admission

Severity of Illness

Emergency

Trauma

Moderate

Filter...

Create data group...

Create navigation path...

Search for members...

Refresh members

Split...

Hide from users

Remove

Refresh properties...

Format data...

Clean...

Rename

Cut

Copy

Properties

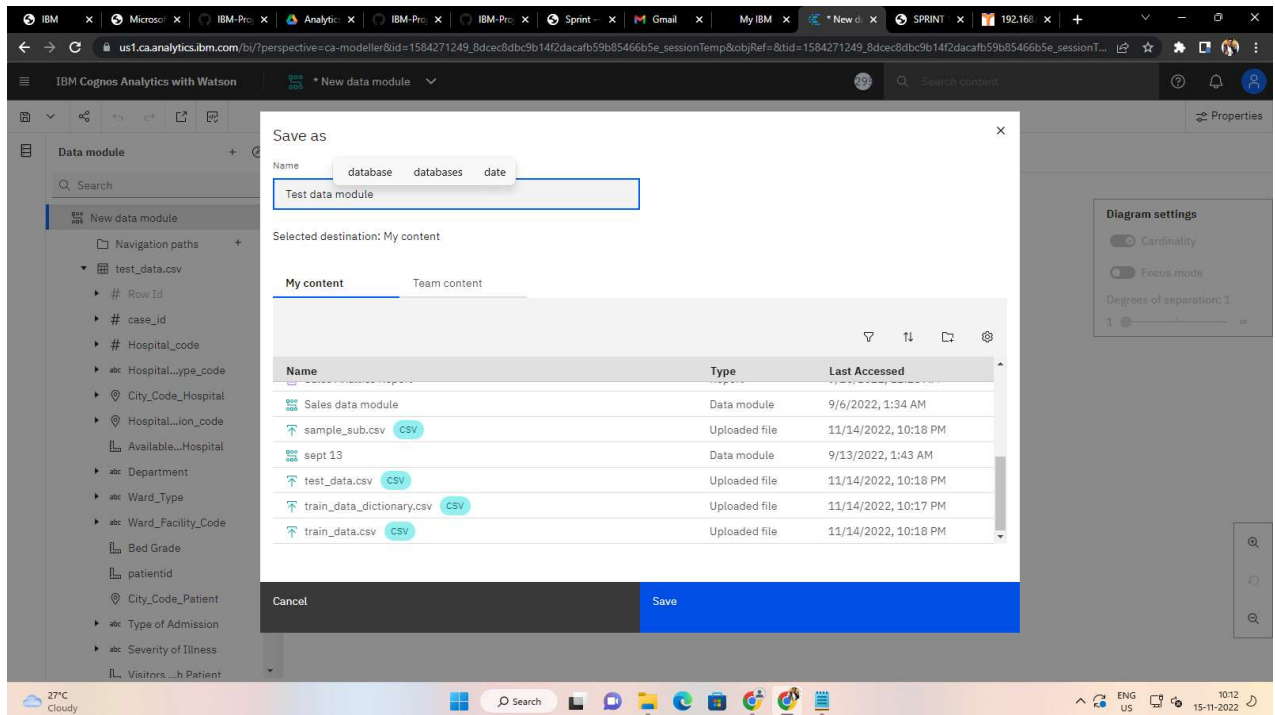
27°C Cloudy

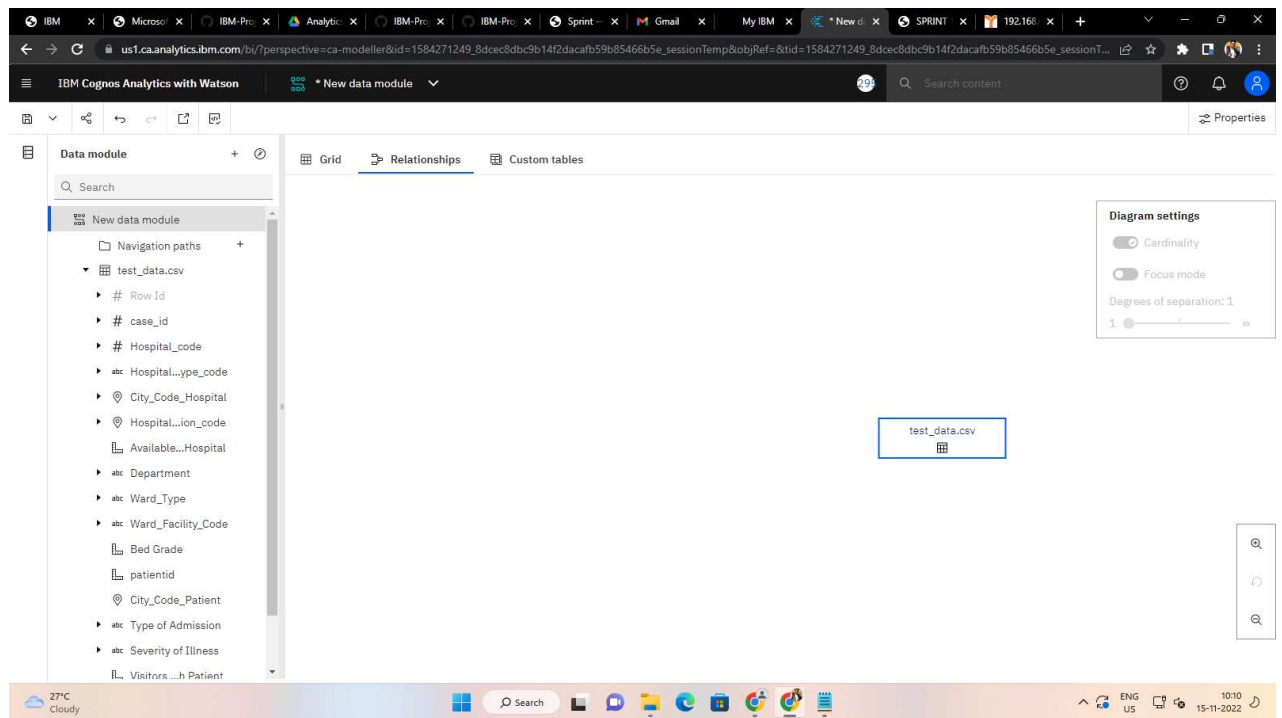
15-11-2022

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.

