# Sprint- 4

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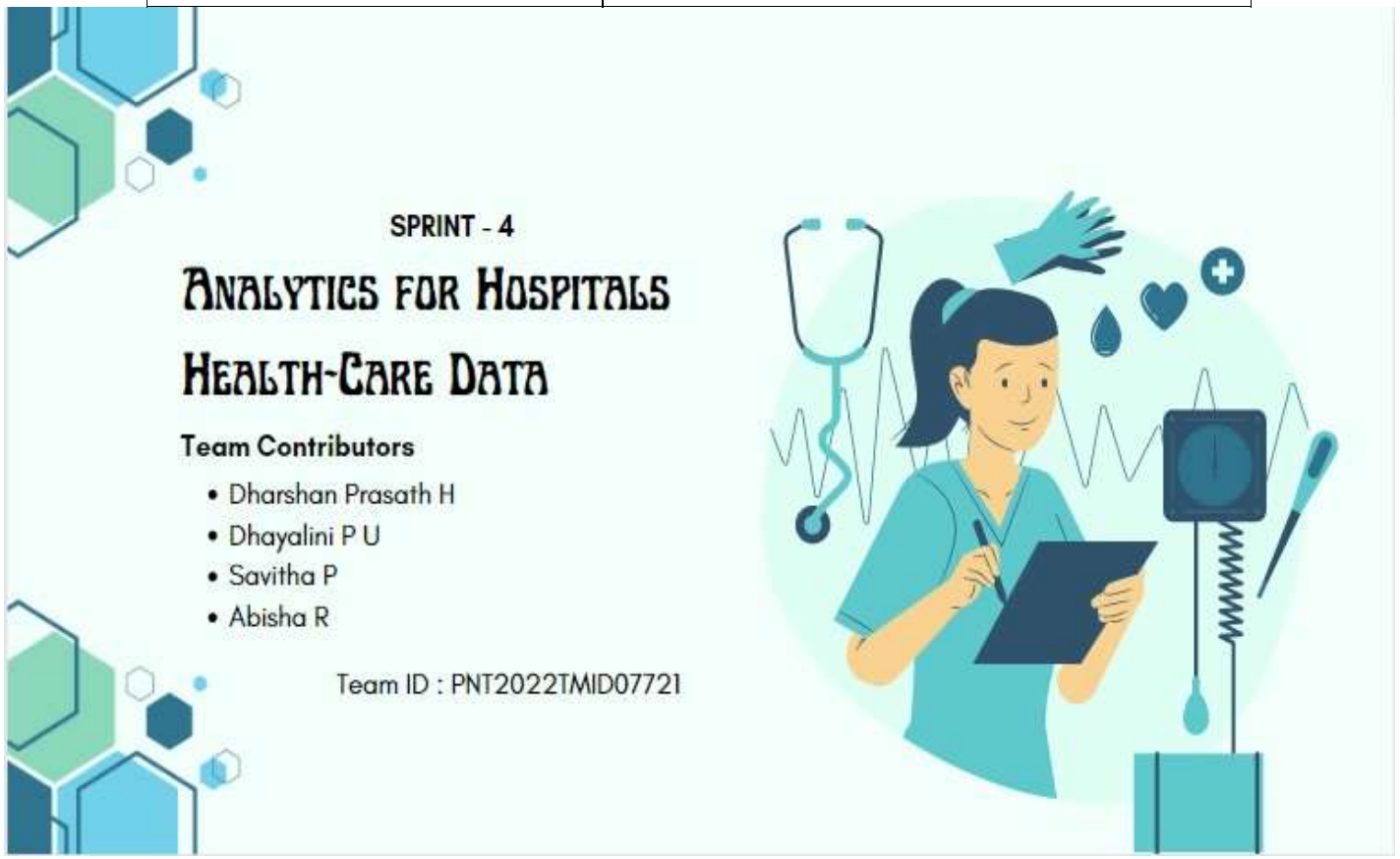
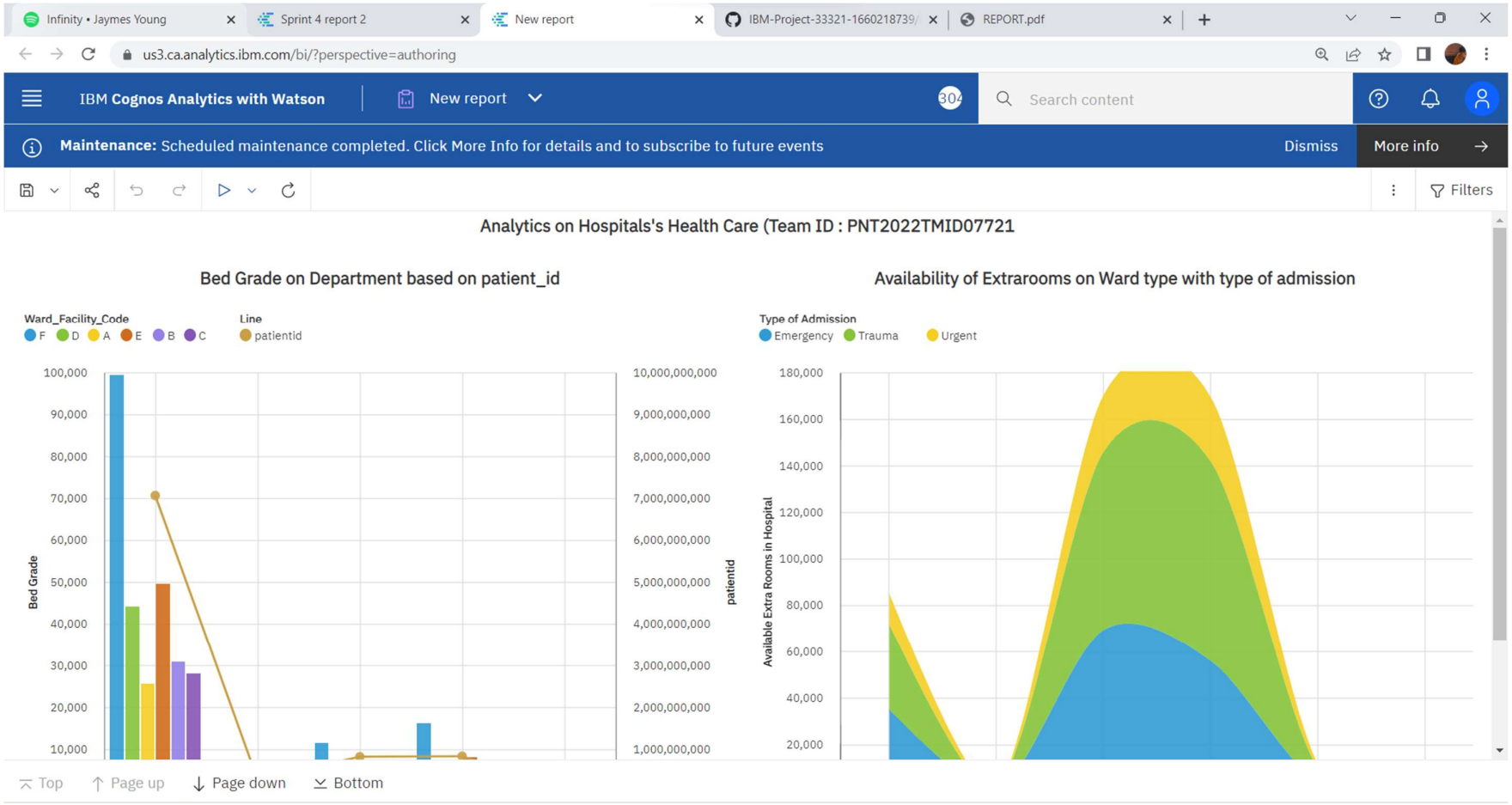
|---|---|
| Date | 13th November 2022 |
| Team ID | PNT2022TMID07721 |
| Project Name | Analytics for Hospital's Health-Care Data |



# Predictive analysis with report

- In this process we need to predict the length of stay so that the hospital management will allocate the required resources to the patients
- Categorization of patients and prediction of length of stay is done with the help of IBM Cognos analytics detailed report where Cognos has the tendency to predict with the help of insights and detailed report and story done in the presentation part of Cognos dashboard
- In Cognos analytics reports are created with specified pages in each page we can create page wise reports with visualizations
- We have created a five page report that consist of the following:
    1. Bed Grade on Department based on patient_id
    2. Availability of rooms on Ward type with type of admission.
    3. Availability of rooms with bed grade and severity
    4. Admission Deposit with Length of Stay and Department
    5. Predictive analysis with various constraints for Length of Stay
    6. Scattered plot with Bed Grade , Severity of Illness and patient_id
    7. Heatmap on Department and Age with Admission
    8. Bubble plot on Availability of Rooms with ward Type by type of Admission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Dismiss
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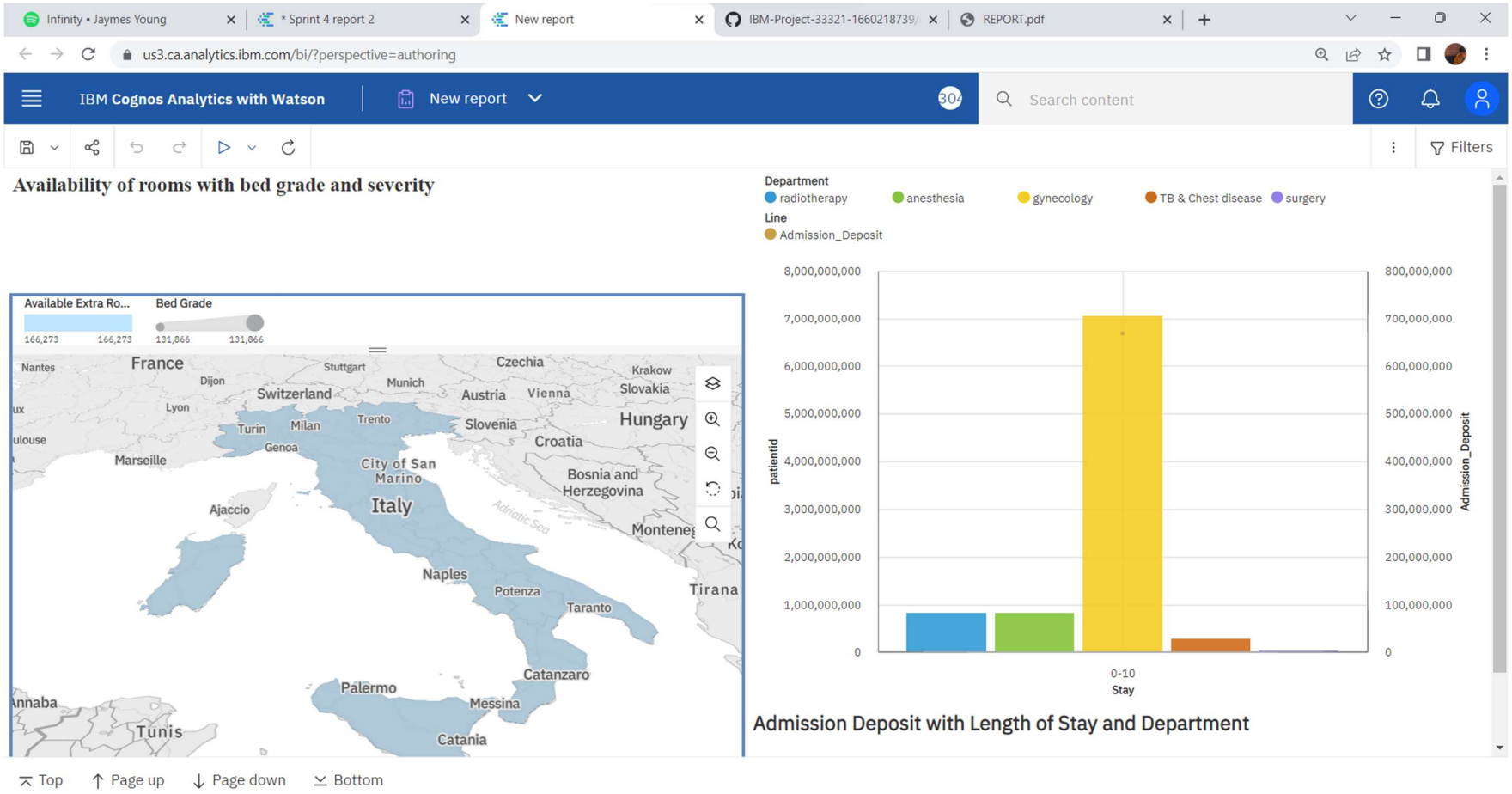
Analytics on Hospitals's Health Care (Team ID : PNT2022TMID07721
Bed Grade on Department based on patient_id
Ward_Facility_Code
F D A E B C
Line
patientid
Bed Grade
patientid
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
10,000,000,000
9,000,000,000
8,000,000,000
7,000,000,000
6,000,000,000
5,000,000,000
4,000,000,000
3,000,000,000
2,000,000,000
1,000,000,000
Availability of Extrarooms on Ward type with type of admission
Type of Admission
Emergency Trauma Urgent
Available Extra Rooms in Hospital
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
Top
Page up
Page down
Bottom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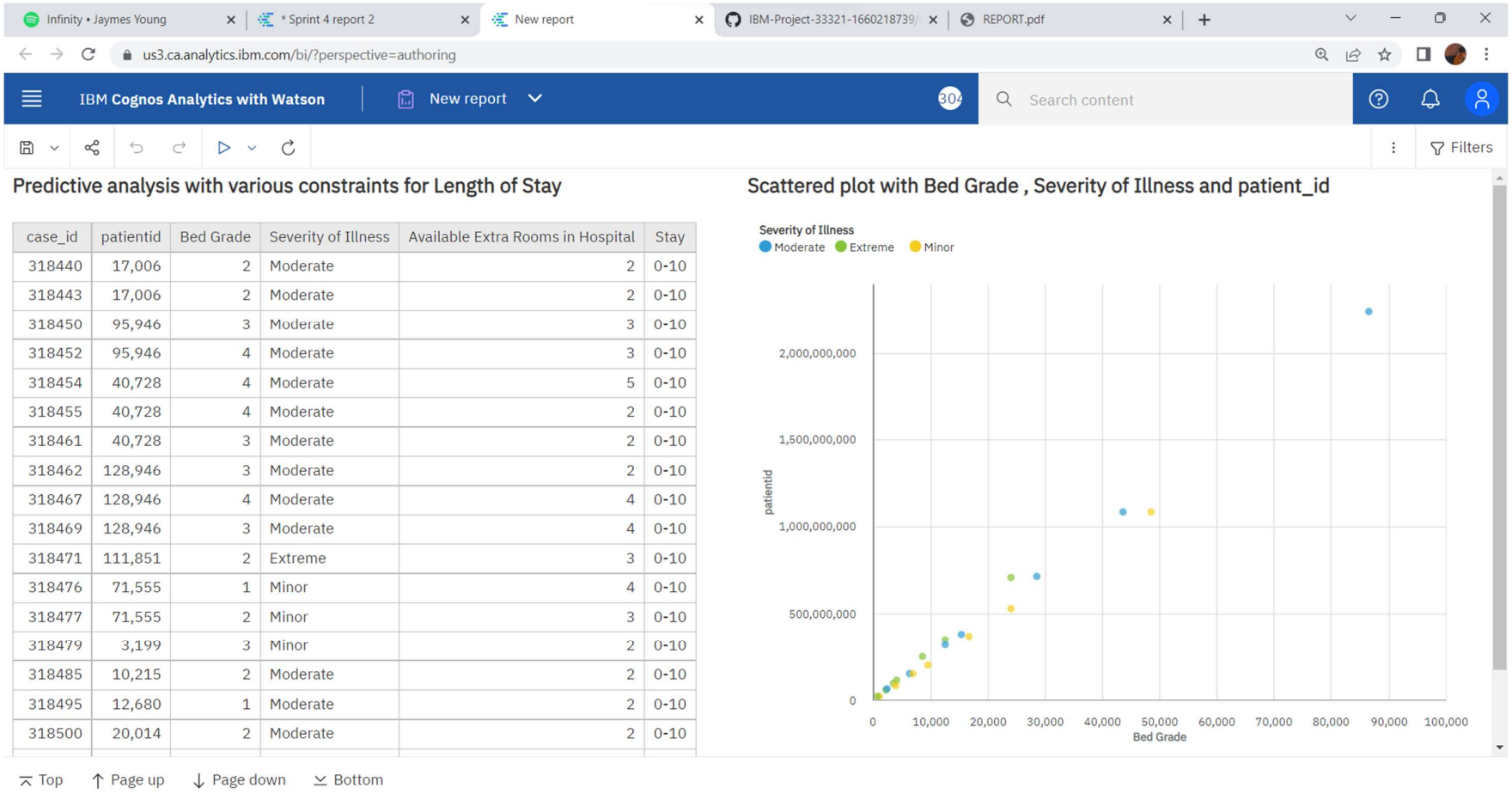
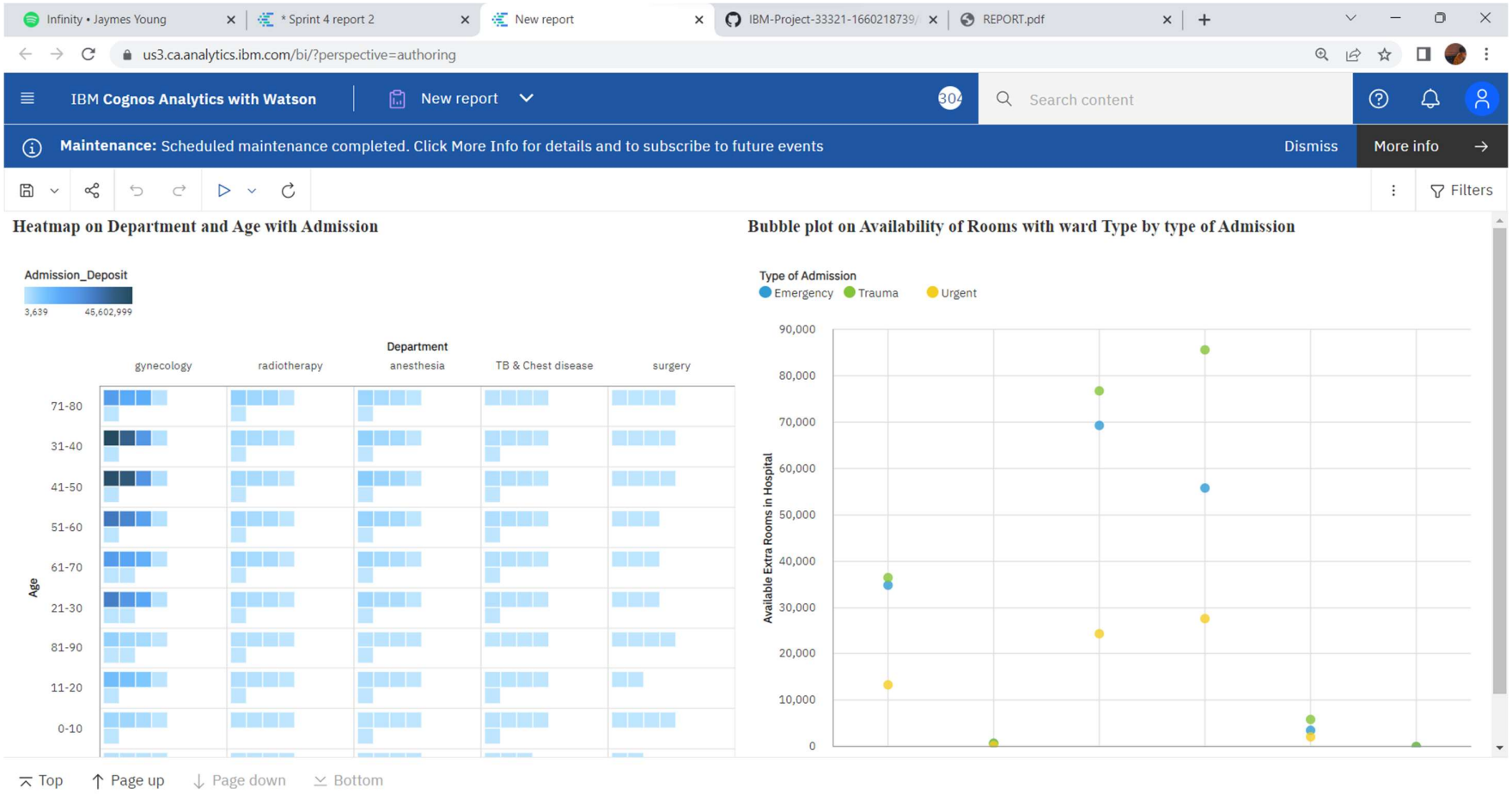
Availability of rooms with bed grade and severity
Available Extra Ro...
Bed Grade
166,273
166,273
131,866
131,866
France
Switzerland
Italy
Hungary
Slovenia
Croatia
Bosnia and Herzegovina
Austria
Czechia
Slovakia
Krakow
Vienna
Munich
Stuttgart
Dijon
Lyon
Nantes
Marseille
Turin
Milan
Trento
Genoa
City of San Marino
Ajaccio
Naples
Potenza
Taranto
Catanzaro
Palermo
Messina
Catania
Tirana
Tunis
Adriatic Sea
Department
radiotherapy
anesthesia
gynecology
TB & Chest disease
surgery
Line
Admission_Deposit
8,000,000,000
7,000,000,000
6,000,000,000
5,000,000,000
4,000,000,000
3,000,000,000
2,000,000,000
1,000,000,000
0
patientid
800,000,000
700,000,000
600,000,000
500,000,000
400,000,000
300,000,000
200,000,000
100,000,000
0
Admission_Deposit
0-10
Stay
Admission Deposit with Length of Stay and Department
Top
Page up
Page down
Bottom




| case_id | patientid | Bed Grade | Severity of Illness | Available Extra Rooms in Hospital | Stay |
|---|---|---|---|---|---|
| 318440 | 17,006 | 2 | Moderate | 2 | 0-10 |
| 318443 | 17,006 | 2 | Moderate | 2 | 0-10 |
| 318450 | 95,946 | 3 | Moderate | 3 | 0-10 |
| 318452 | 95,946 | 4 | Moderate | 3 | 0-10 |
| 318454 | 40,728 | 4 | Moderate | 5 | 0-10 |
| 318455 | 40,728 | 4 | Moderate | 2 | 0-10 |
| 318461 | 40,728 | 3 | Moderate | 2 | 0-10 |
| 318462 | 128,946 | 3 | Moderate | 2 | 0-10 |
| 318467 | 128,946 | 4 | Moderate | 4 | 0-10 |
| 318469 | 128,946 | 3 | Moderate | 4 | 0-10 |
| 318471 | 111,851 | 2 | Extreme | 3 | 0-10 |
| 318476 | 71,555 | 1 | Minor | 4 | 0-10 |
| 318477 | 71,555 | 2 | Minor | 3 | 0-10 |
| 318479 | 3,199 | 3 | Minor | 2 | 0-10 |
| 318485 | 10,215 | 2 | Moderate | 2 | 0-10 |
| 318495 | 12,680 | 1 | Moderate | 2 | 0-10 |
| 318500 | 20,014 | 2 | Moderate | 2 | 0-10 |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More info
Filters
Heatmap on Department and Age with Admission
Admission_Deposit
3,639
45,602,999
Department
gynecology
radiotherapy
anesthesia
TB & Chest disease
surgery
Age
71-80
31-40
41-50
51-60
61-70
21-30
81-90
11-20
0-10
Bubble plot on Availability of Rooms with ward Type by type of Admission
Type of Admission
Emergency
Trauma
Urgent
Available Extra Rooms in Hospital
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Top
Page up
Page down
Bottom