Smartinternz IBM Hack Challenge

OTT Platform Analytics

By: Russa Pal

Introduction

The aim of this project is to work on the problem statement & create a feasible solution for it.

I have discovered & applied my learning to find the appropriate solution.

The IBM services which are used to solve the problem statements are as follows:

1. IBM Watson Assistant
2. IBM Cloud
3. IBM Watson studios
4. IBM Cognos Analytics.

I have mentioned the steps and images for solving the problem (as possible)

This project has enhanced my learning.

What is the problem?

In recent years, the advent of various OTT platforms has introduced a novel issue: the difficulty in choosing which OTT platform to subscribe to. Netflix, Amazon Prime, and Disney+ are some of the many OTT services that are well-known to the public, but the number of services is growing as localized OTT platforms like Watcha (South Korea) and Voot (India) are joining the line.

As these platforms are coming up with new ways to stand out among competitors by presenting original content, it is evident that more customers are being lost in deciding which platform would be suitable for their use. Moreover, most of the available recommendation systems are focused on suggesting the content but not the platforms that hold and provide those contents. To ease the choice dilemma, our study aims to present a guideline for choosing the appropriate OTT platform that fits one's personal preferences. Therefore, it is the right time to analyze different OTT platforms and provide useful information for people who are not able to decide which platform fits them best.

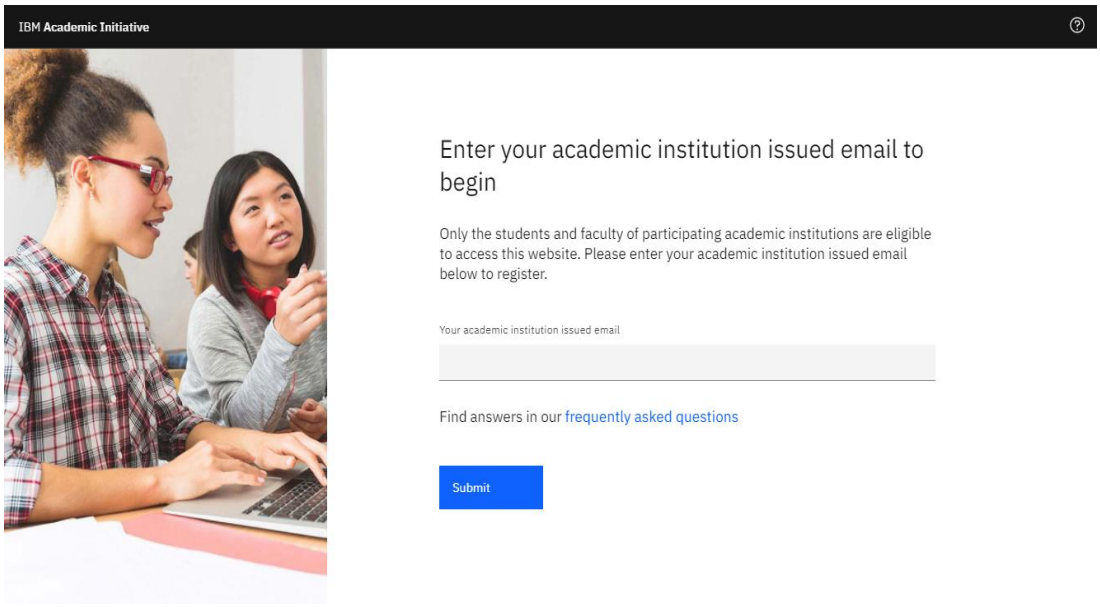
Solution:

The idea presents an analysis of two OTT platforms — Netflix, Amazon Prime. Along with movie datasets for each platform, we incorporated two additional datasets: the IMDb movie dataset to investigate the distribution of movie genres, age limits, and their average ratings by the help of IBM Cognos Analytics.

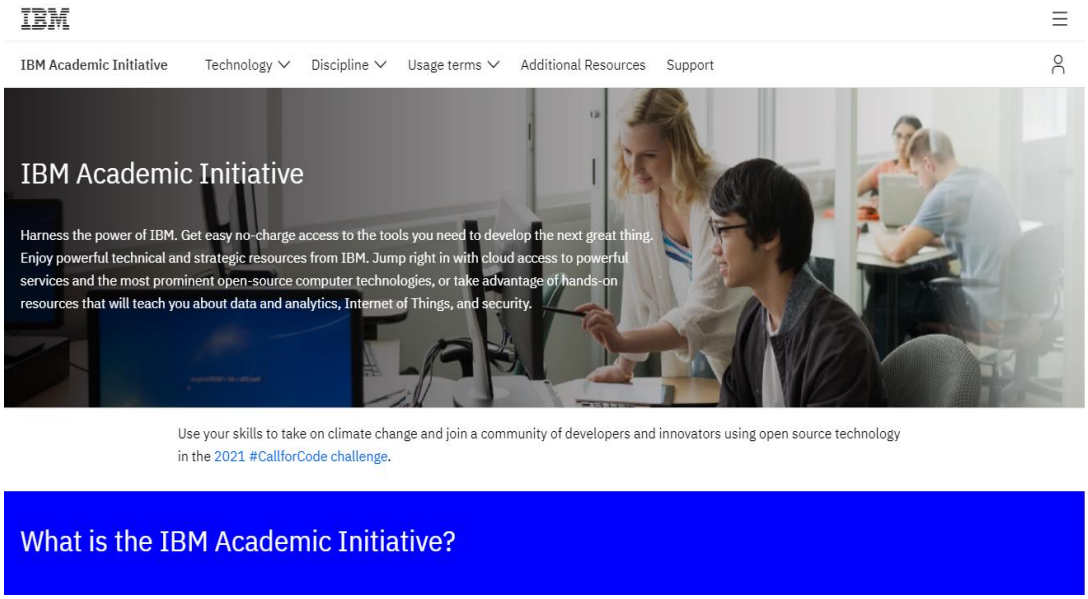
A: Using Cognos Analytics for visualizing the data

For Netflix

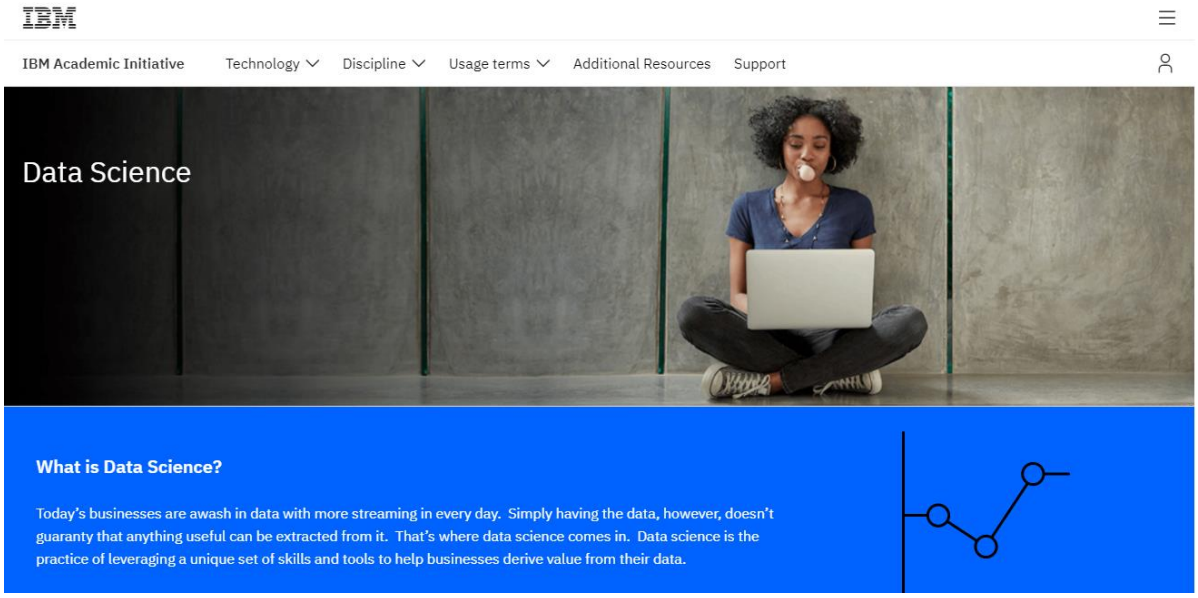
1. Visit https://www.ibm.com/academic/home



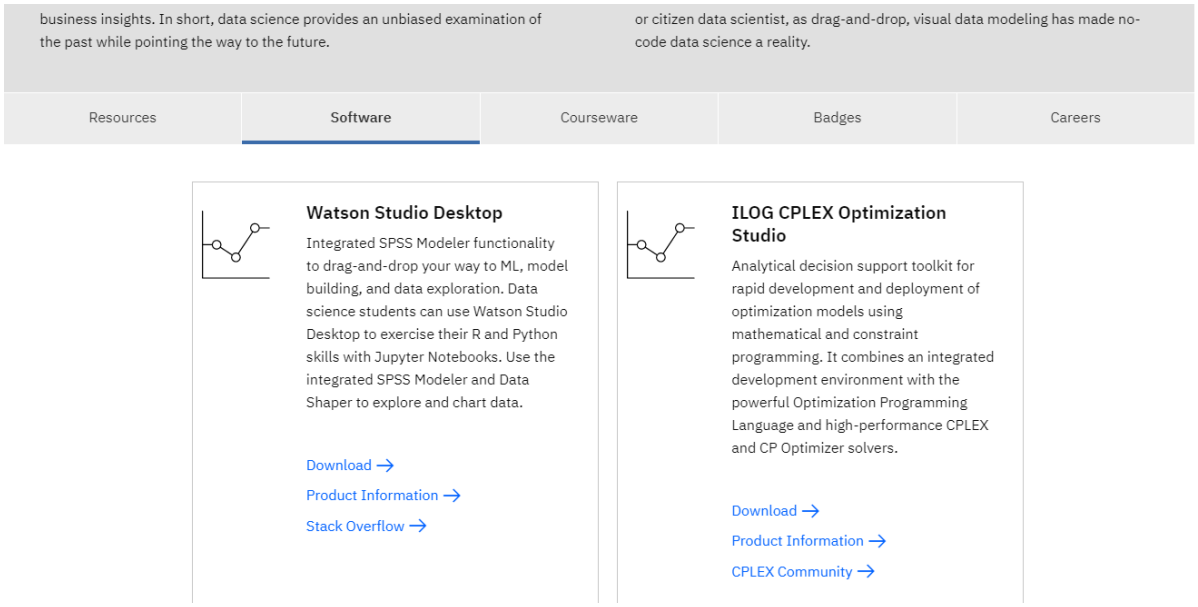
2. Login with your IBMid
3. After Login the below page will get open.

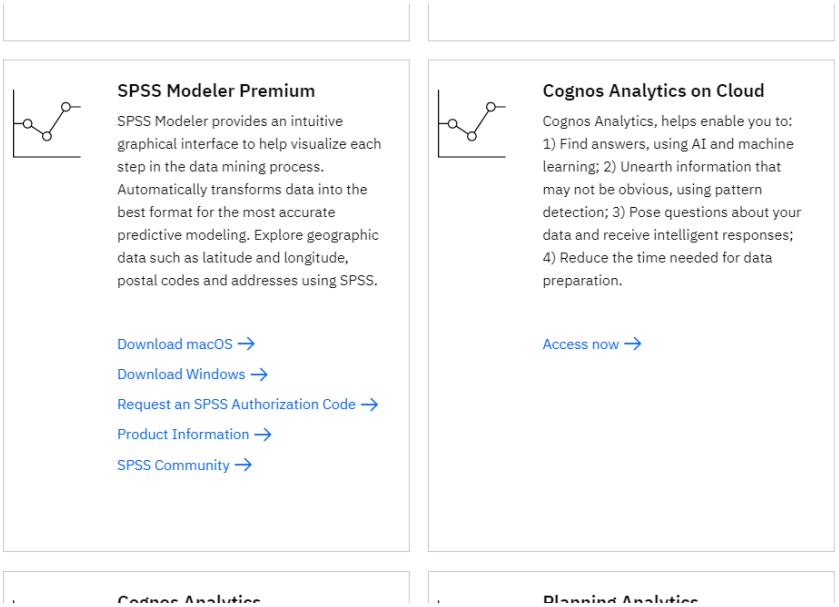


4. Click on Technology drop-down menu . Choose Datascience

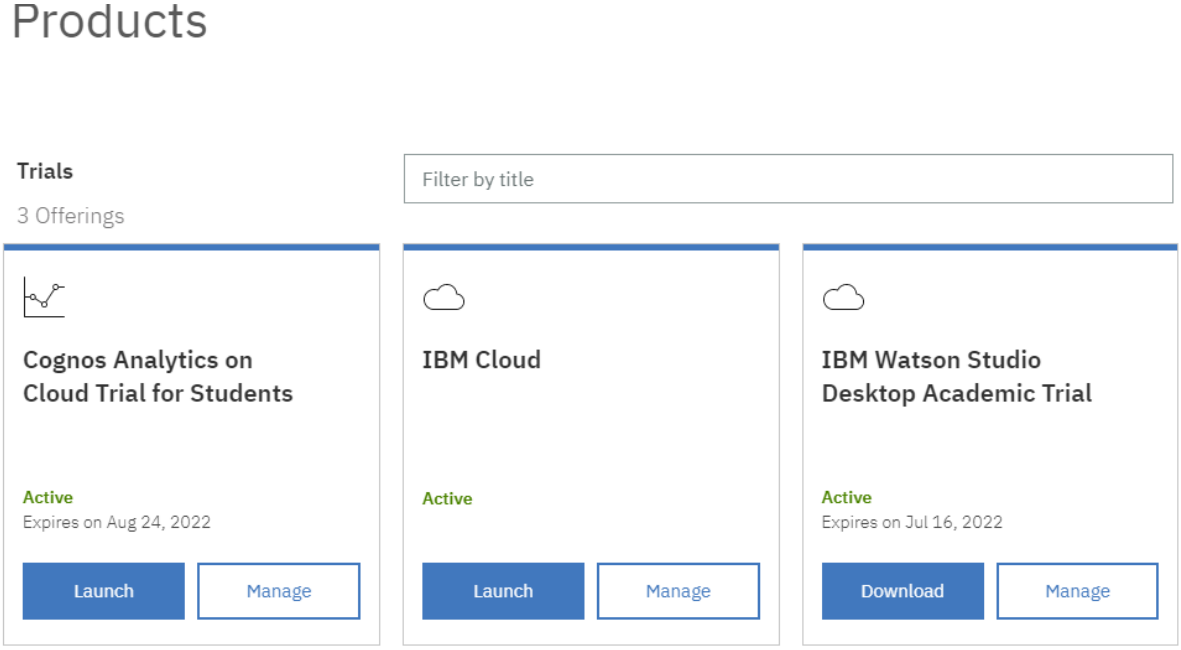


5. Go to software section . Click on access now in Cognos Analytics.

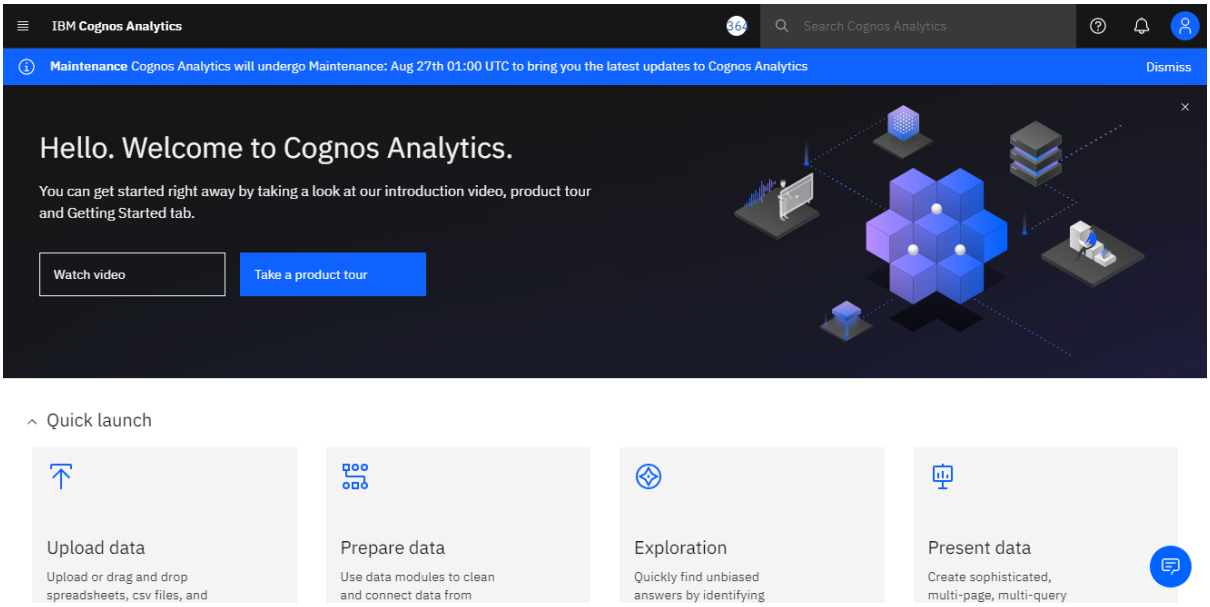




6. Your dashboard will get open and then click on launch.

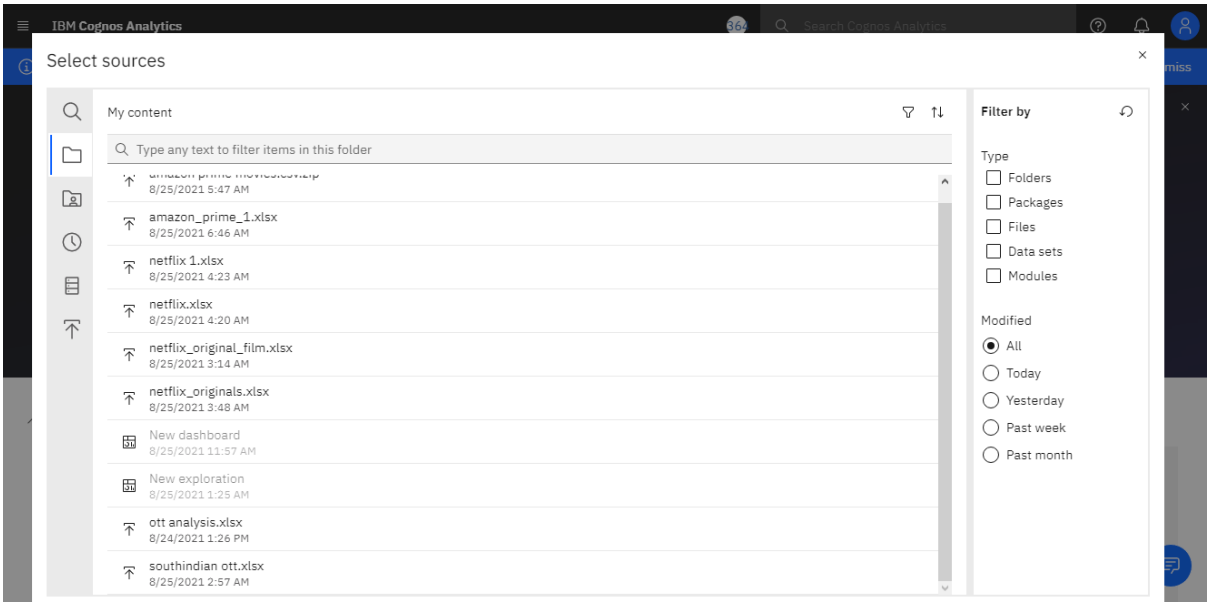


7. Your cognos analytics dashboard will get open.

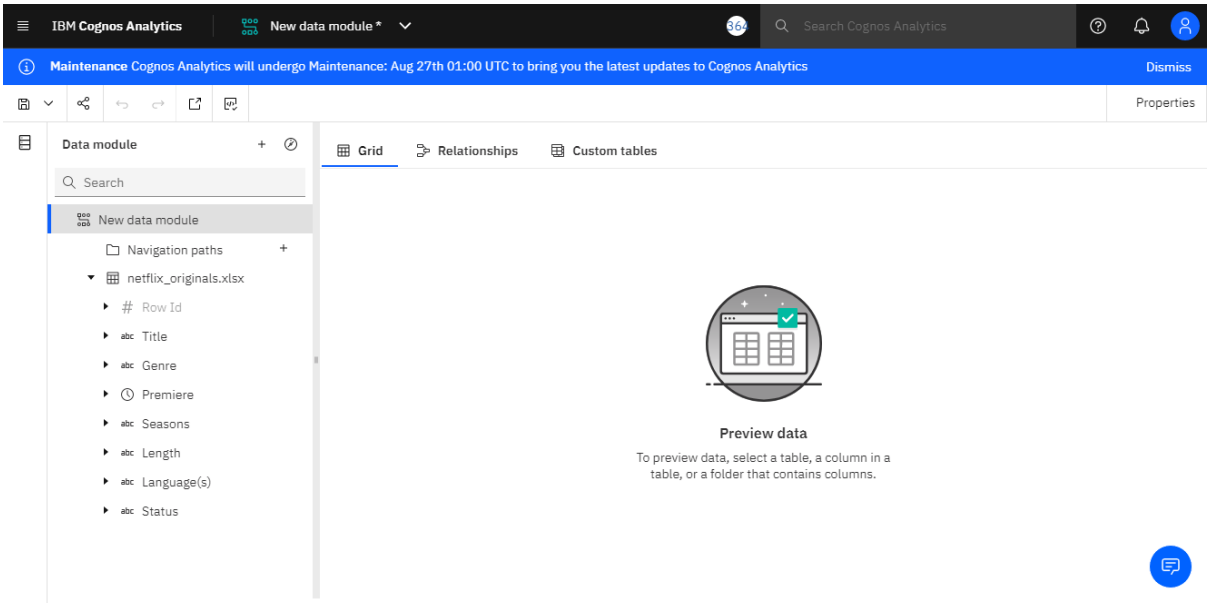


8. Click on upload data. The dataset should be prepared in excel sheet or csv format.

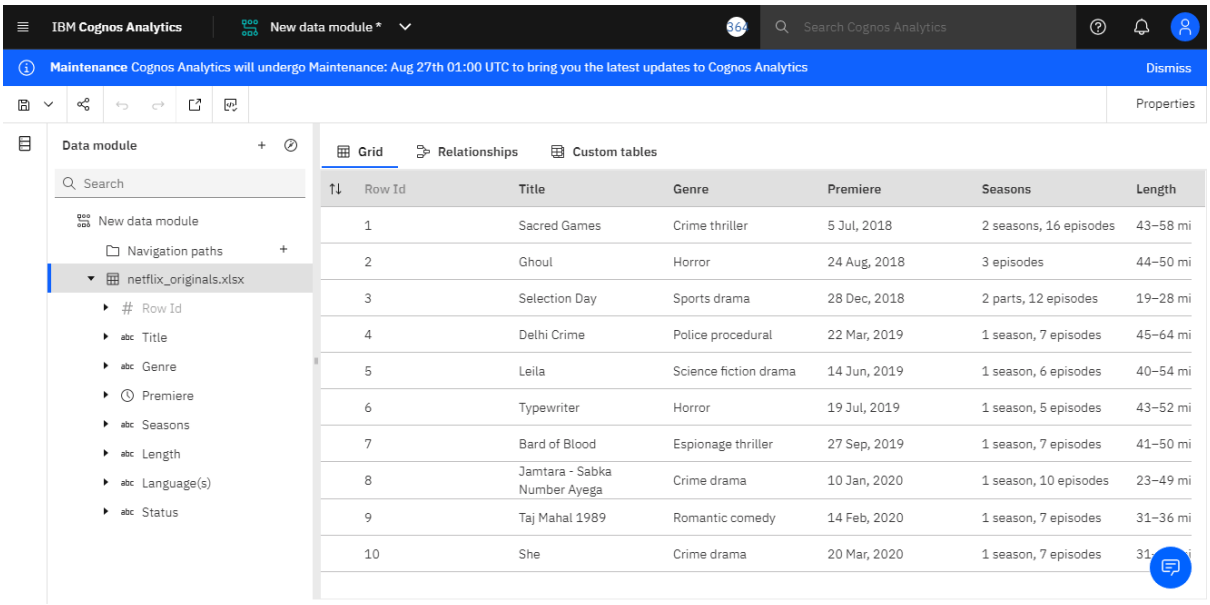
9. Then click on prepare data it will help you to clean and connect dataset.



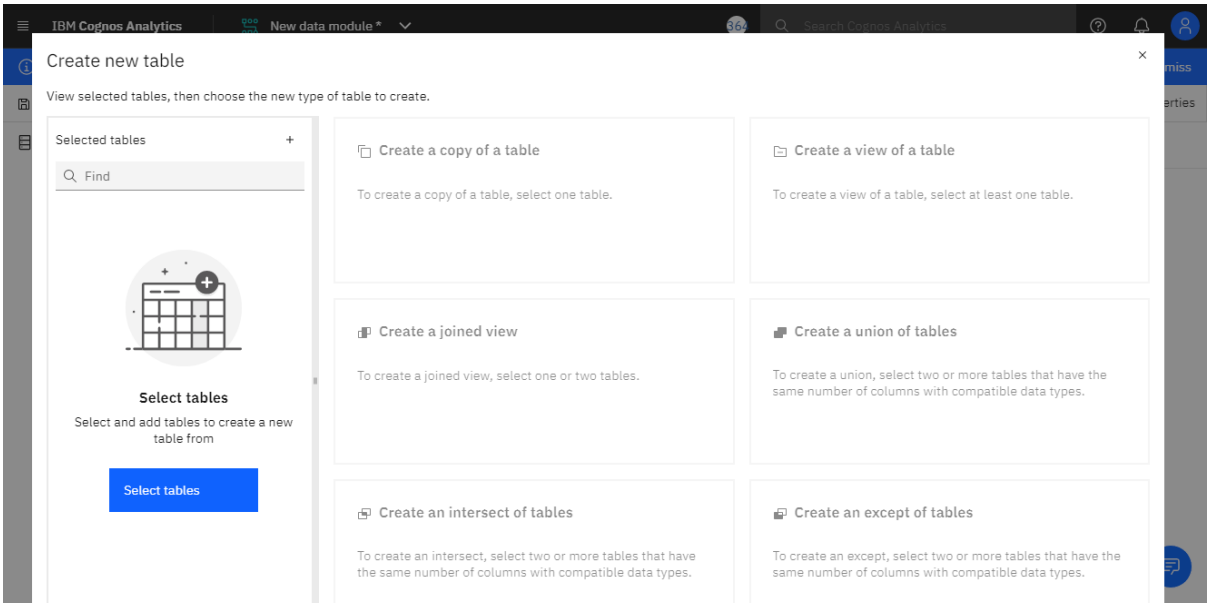
10. After successfully choosing the dataset we land on the below page:



11. We can click on grid to view the data.



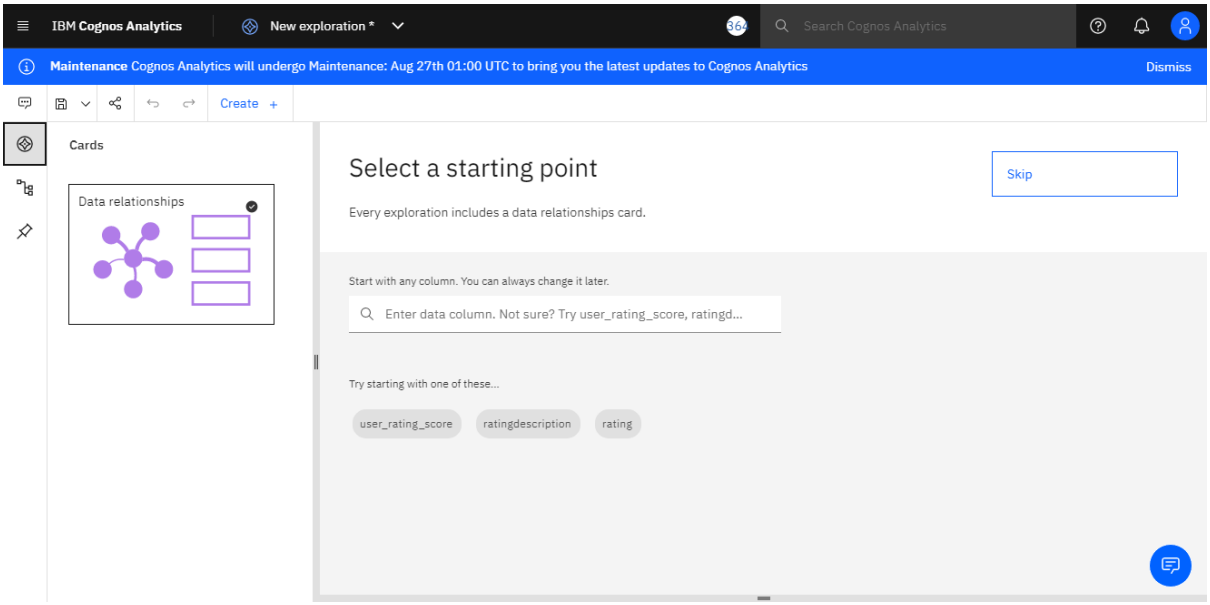
12. By clicking on relationships we can create secondary & view existing dataset & by clicking on the custom table we can create a copy of the table, view of a table, joined view, union of table, intersect of table , excepts of table.



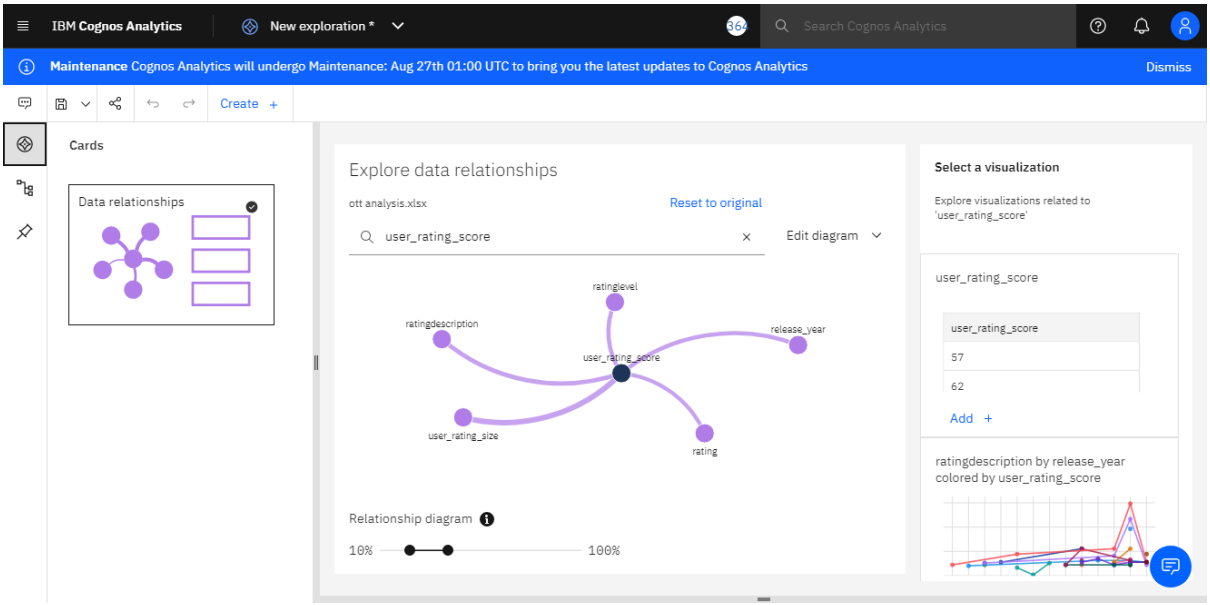
13. Next we move to the exploration to find unbiased answers of the trend in our data.

    Remember: We need to add the source of the data everytime.

14. We can view the relationship between various dataset by clicking on data relationship. Also, if required we can create relation between dataset.

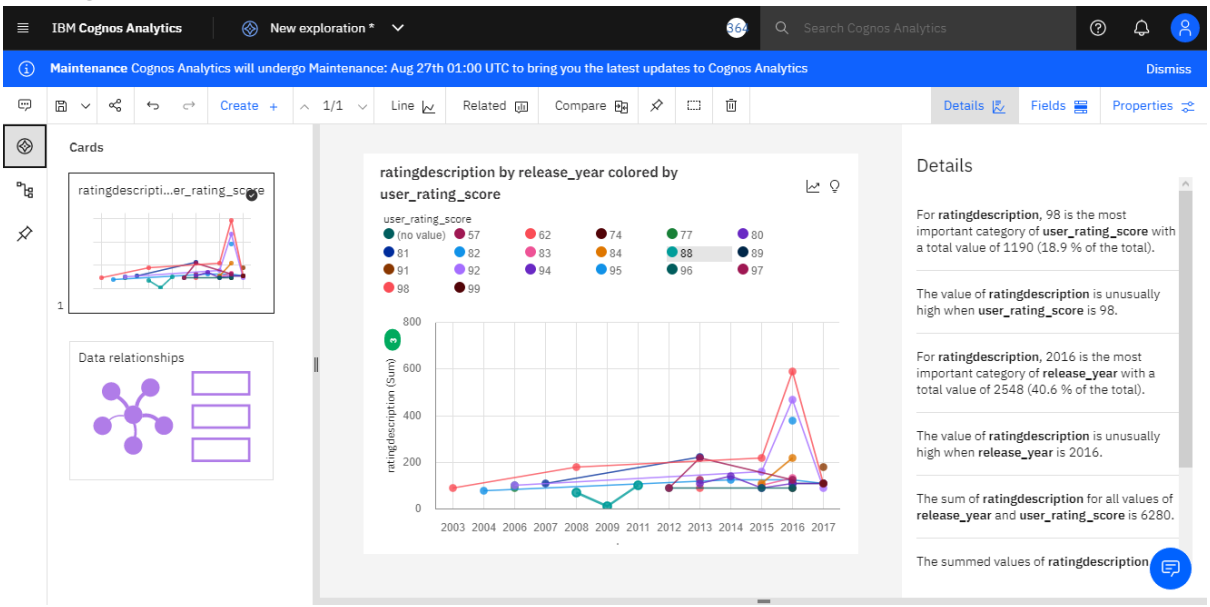


For example:

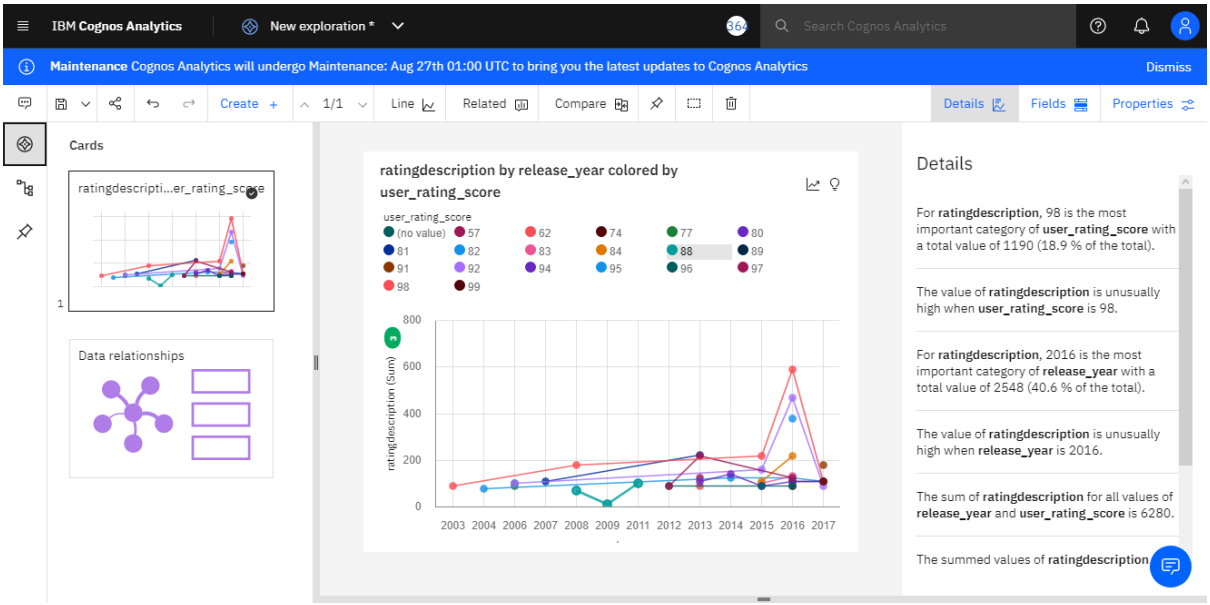


15. Other than this we can also visualize our data for better understanding of the trend.

For eg: a.

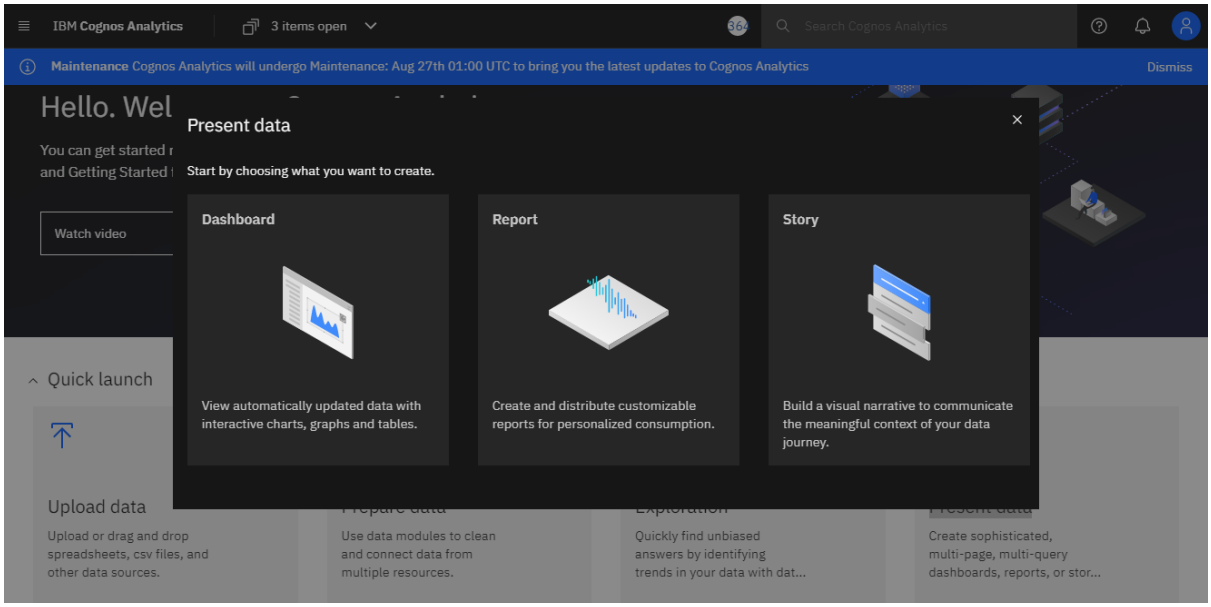


b.

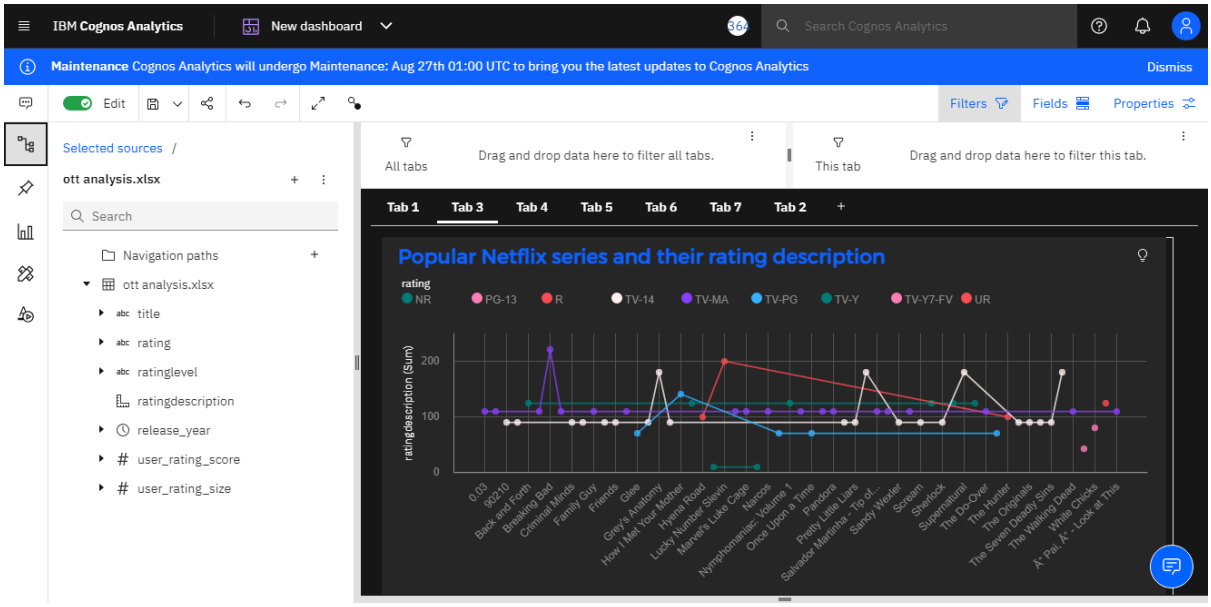


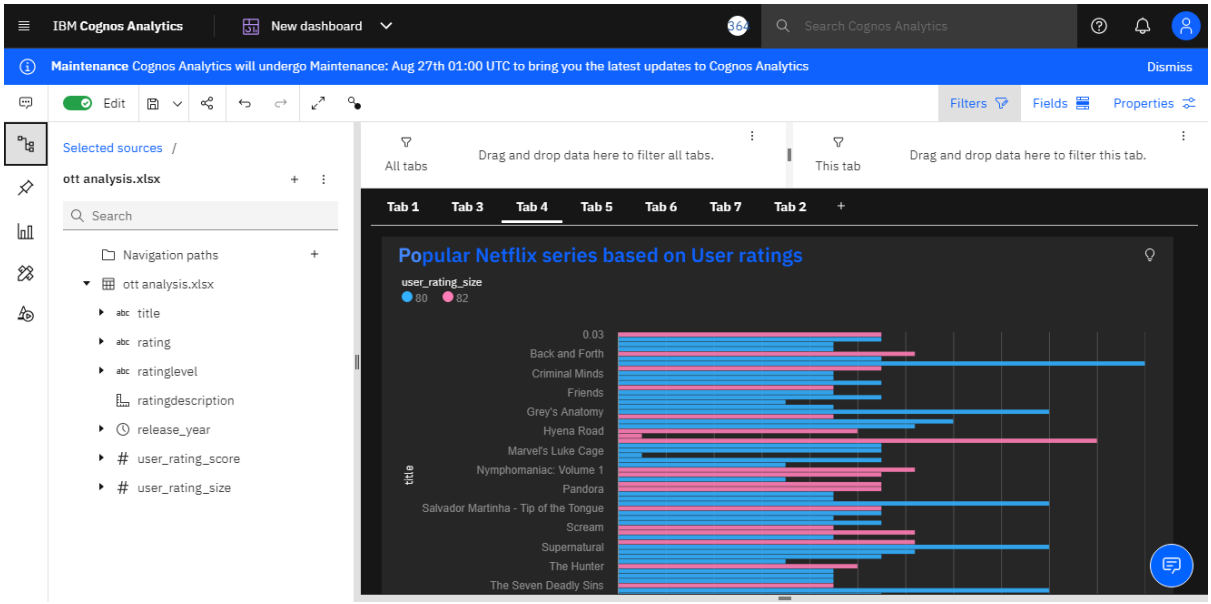
16. Next comes the main process of presenting the data.
    We can present the data in the below format:

    16.1 Dashboard
    16.2 Report
    16.3 Story



For this project I have choosen dashboard. The below are the few images of the dashboard.


IBM Cognos Analytics
New dashboard
Search Cognos Analytics
Maintenance Cognos Analytics will undergo Maintenance: Aug 27th 01:00 UTC to bring you the latest updates to Cognos Analytics
Dismiss
Edit
Filters
Fields
Properties
Selected sources /
ott analysis.xlsx
Search
Navigation paths
ott analysis.xlsx
title
rating
ratinglevel
ratingdescription
release_year
user_rating_score
user_rating_size
All tabs
Drag and drop data here to filter all tabs.
This tab
Drag and drop data here to filter this tab.
Tab 1
Tab 3
Tab 4
Tab 5
Tab 6
Tab 7
Tab 2
Popular Netflix series and their rating description
rating
NR
PG-13
R
TV-14
TV-MA
TV-PG
TV-Y
TV-Y7-FV
UR
ratingdescription (Sum)
200
100
0
0.03
90210
Back and Forth
Breaking Bad
Criminal Minds
Family Guy
Friends
Glee
Grey's Anatomy
How I Met Your Mother
Hyena Road
Lucky Number Slevin
Marvel's Luke Cage
Narcos
Nymphomaniac: Volume 1
Once Upon a Time
Pandora
Pretty Little Liars
Salvador Martinha - Tip of...
Sandy Weiler
Scream
Sherlock
Supernatural
The Do-Over
The Hunter
The Originals
The Seven Deadly Sins
The Walking Dead
White Chicks
A' Pai, A' - Look at This


IBM Cognos Analytics
New dashboard
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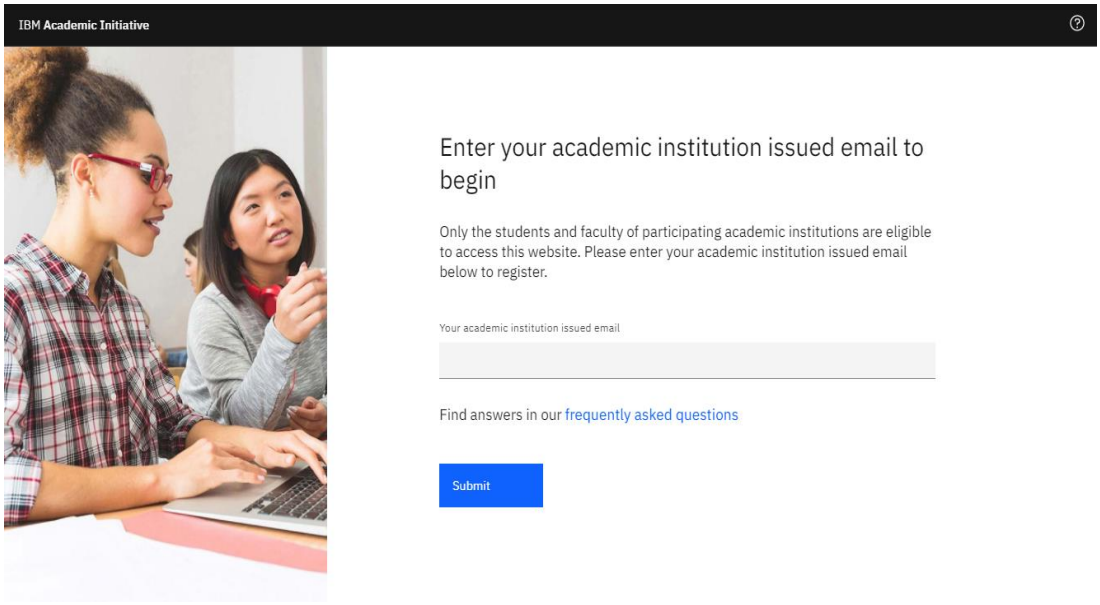
Dismiss
Edit
Filters
Fields
Properties
Selected sources /
ott analysis.xlsx
Search
Navigation paths
ott analysis.xlsx
title
rating
ratinglevel
ratingdescription
release_year
user_rating_score
user_rating_size
All tabs
Drag and drop data here to filter all tabs.
This tab
Drag and drop data here to filter this tab.
Tab 1
Tab 3
Tab 4
Tab 5
Tab 6
Tab 7
Tab 2
Popular Netflix series based on User ratings
user_rating_size
80
82
title
0.03
Back and Forth
Criminal Minds
Friends
Grey's Anatomy
Hyena Road
Marvel's Luke Cage
Nymphomaniac: Volume 1
Pandora
Salvador Martinha - Tip of the Tongue
Scream
Supernatural
The Hunter
The Seven Deadly Sins

B: Using Watson Studio for the deployment of the model.

1. 1. Visit https://www.ibm.com/academic/home



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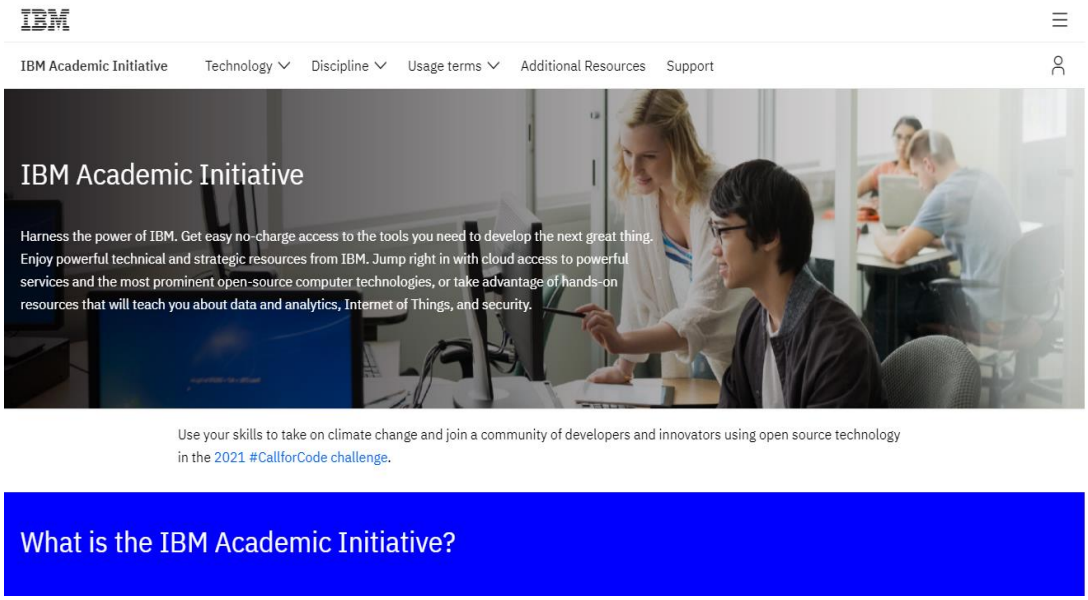
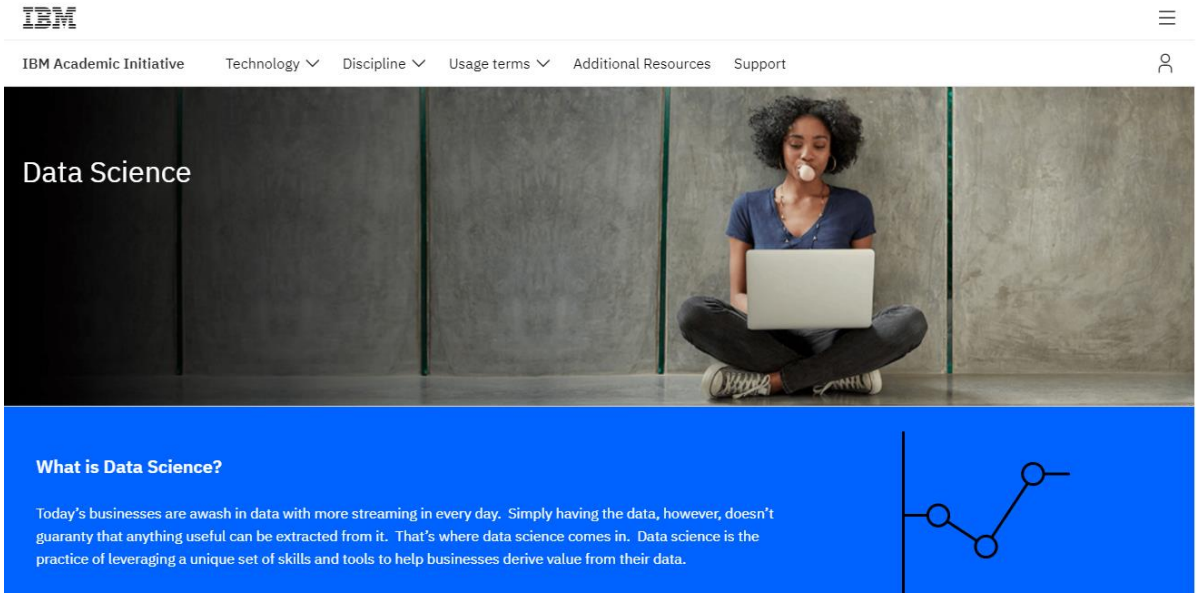
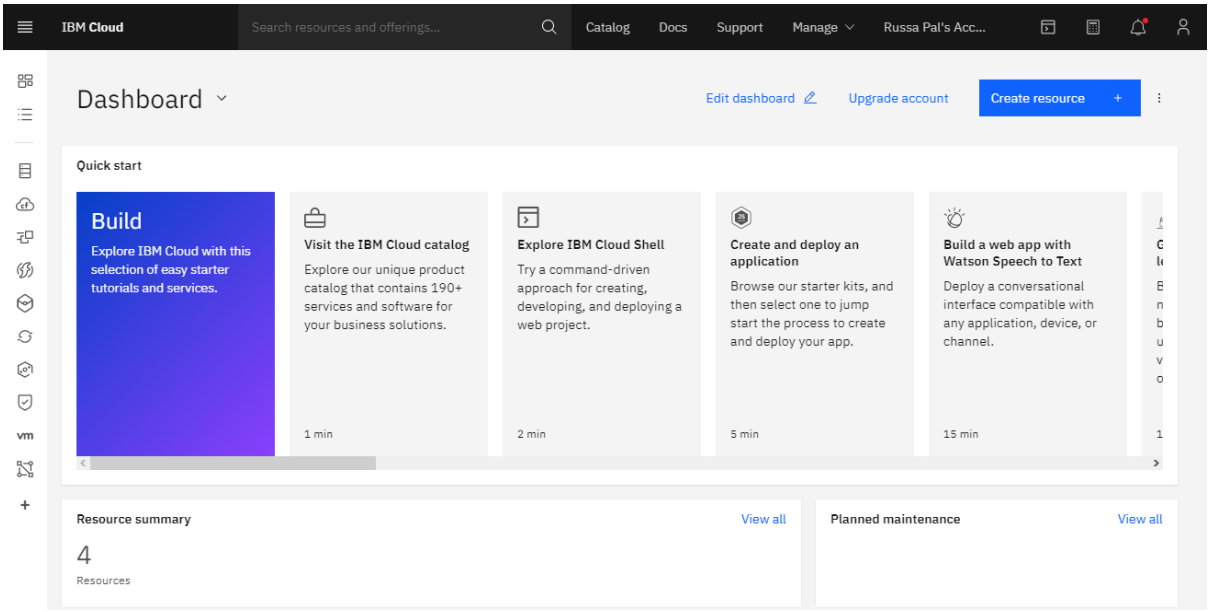


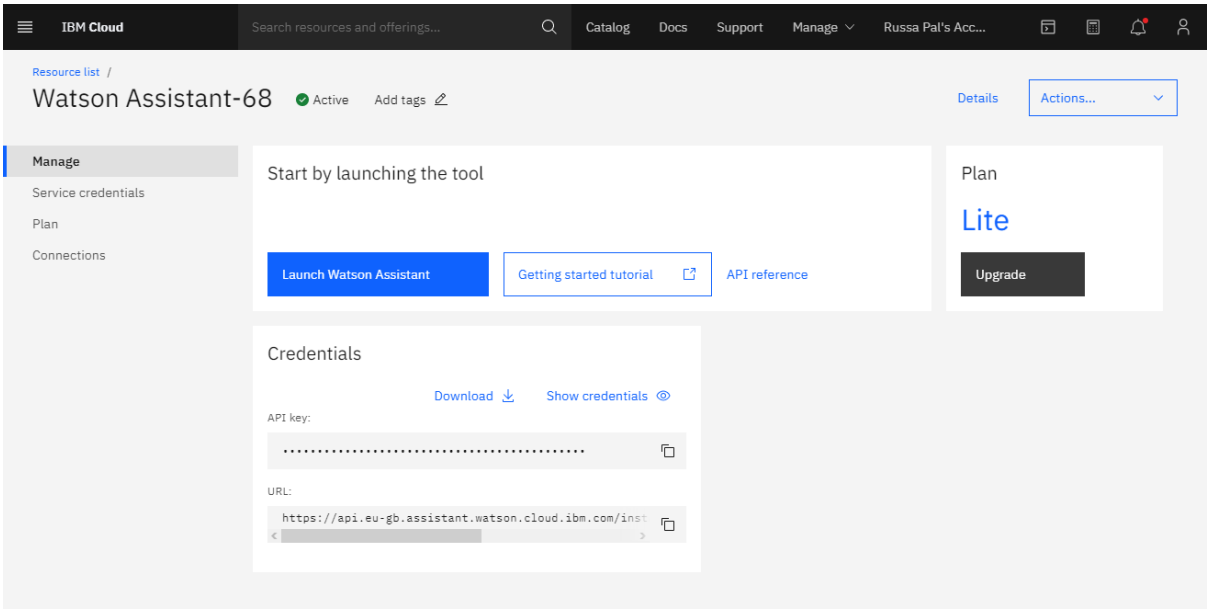
4. Click on Technology drop-down menu . Choose Datascience



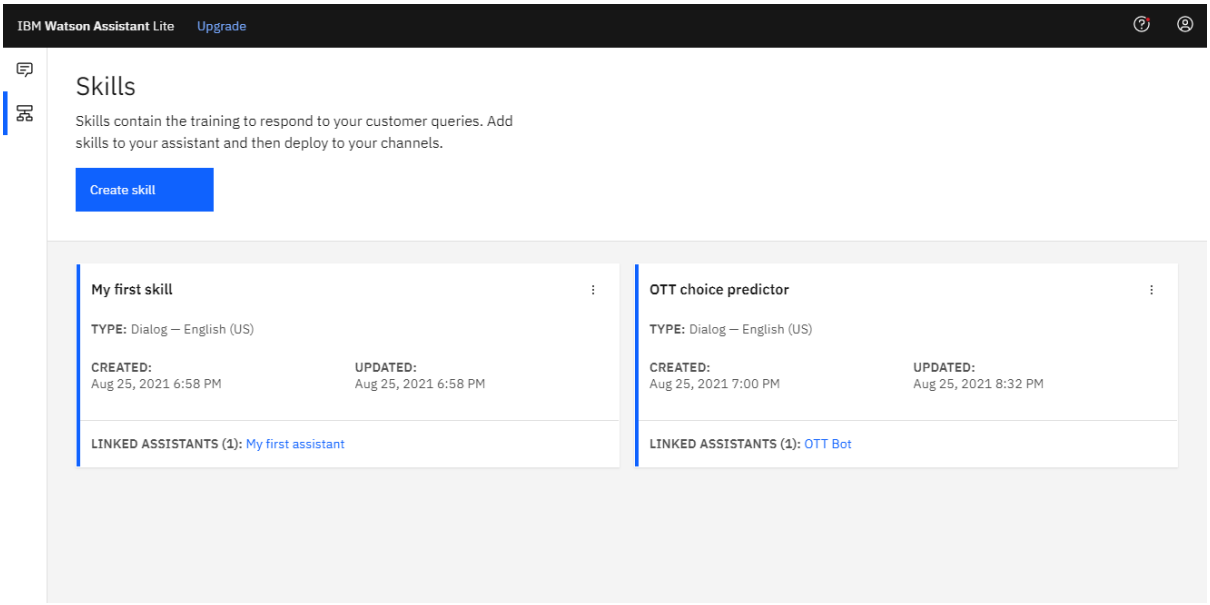
5. Go to IBM Cloud.

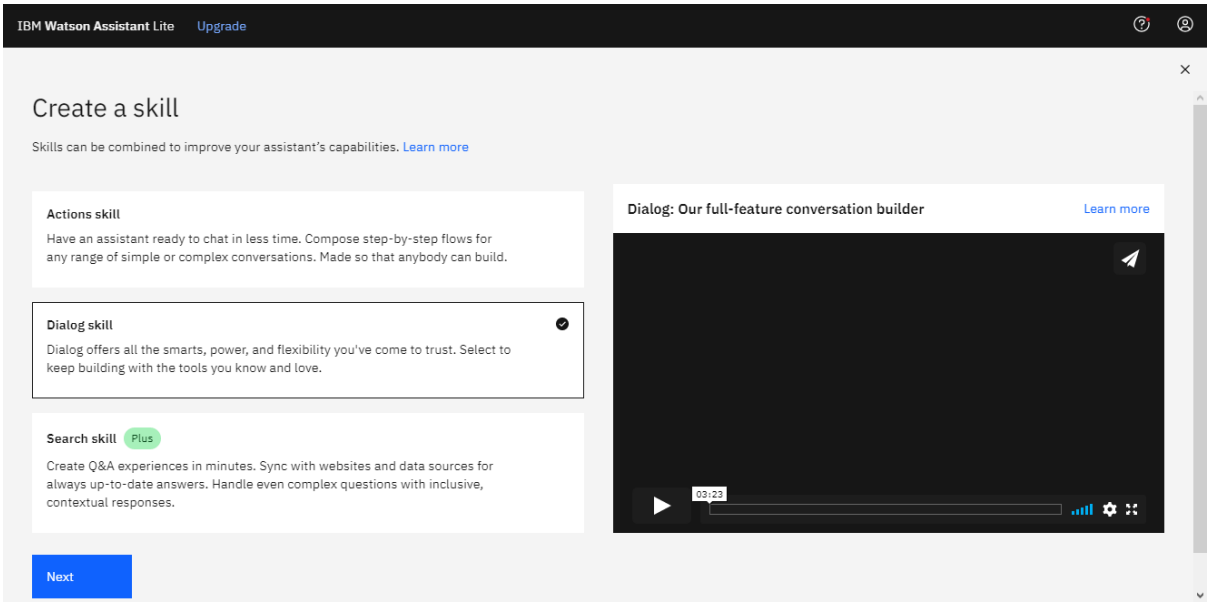


6. Click on resource list and then go to Watson assistant. Then click on launch assistant studio.

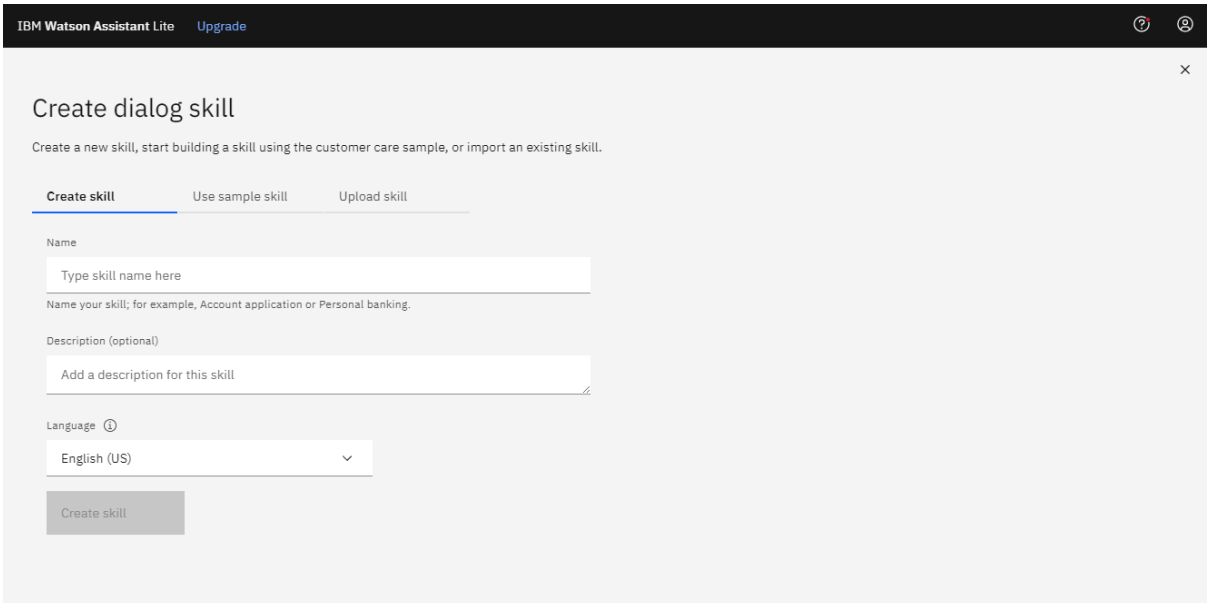


7. Next create skill & click on dialog skill . Then click next

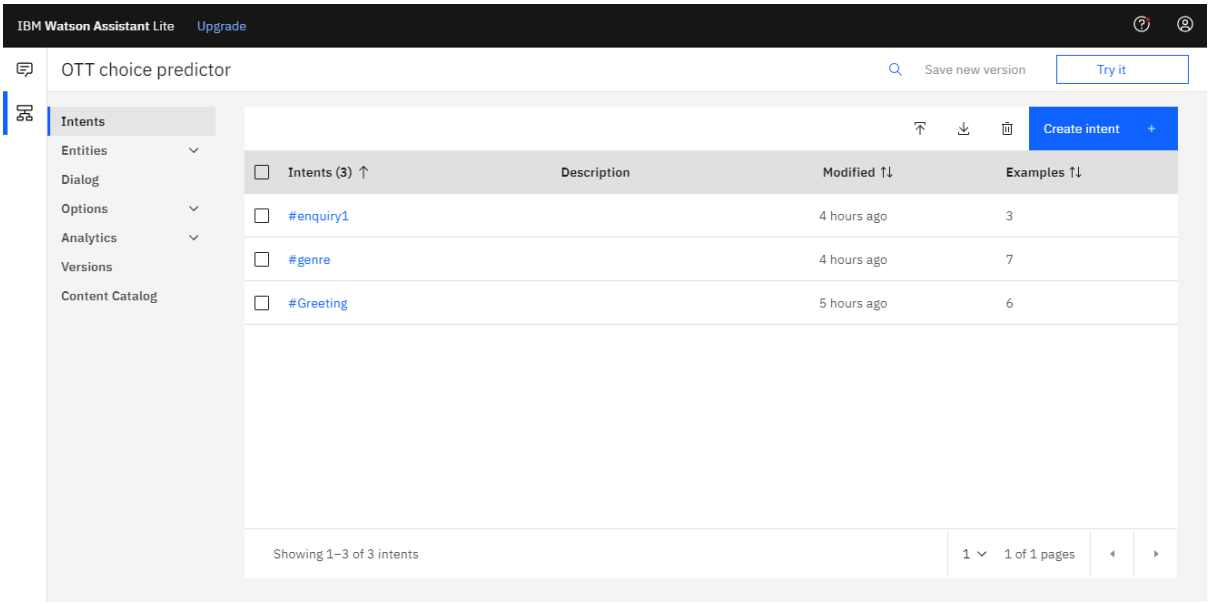




8. Next it depends he create a new dialog skill or upload skill or use sample skill.

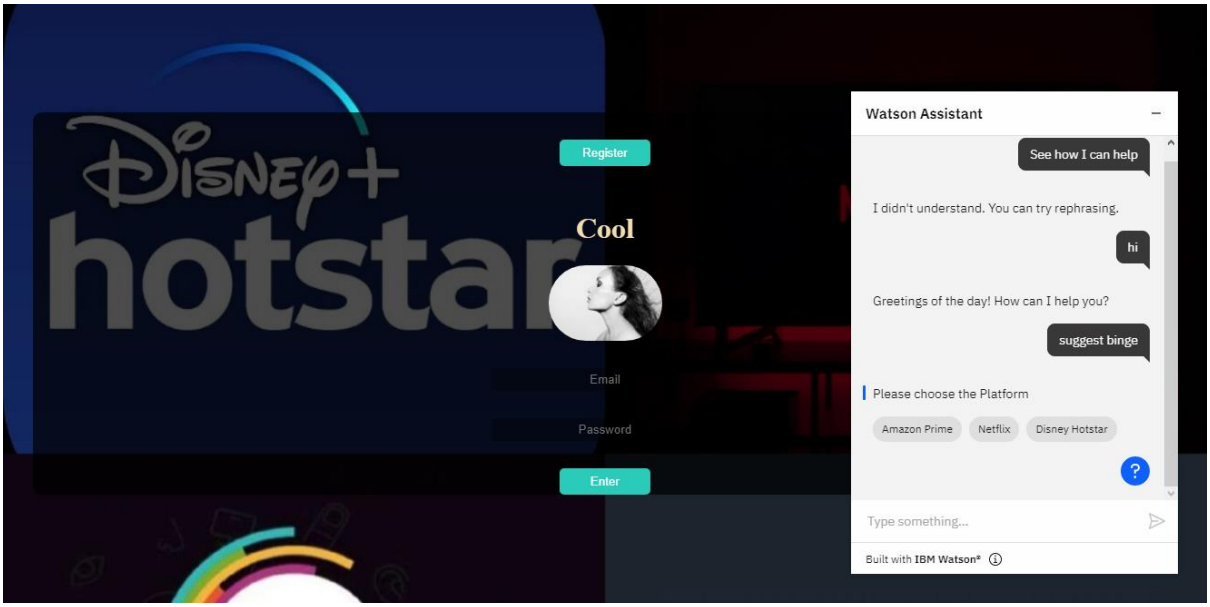


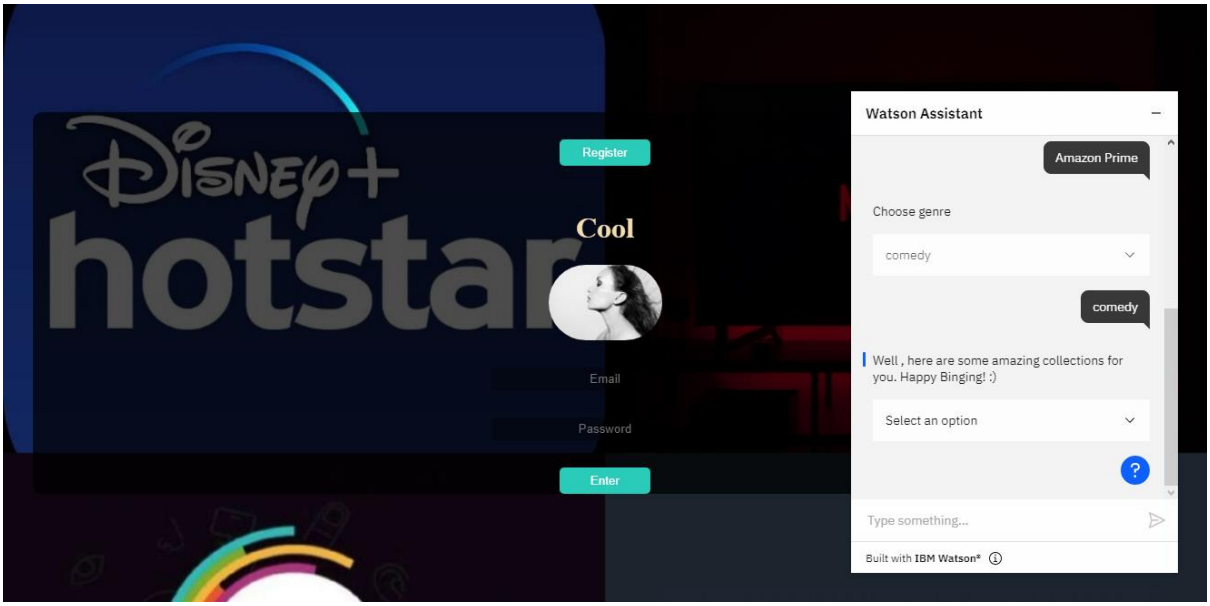
9. After that we need to create intents & entities along with modifying the dialog.



10. Next we need to create Assistant. After creation of assistant we can download the json. File or we can copy the code that is found in the embed section to out HTML webpage in script section.

    The below are screenshots of bot created in this project.


Register
Cool
Email
Password
Enter
Watson Assistant
See how I can help
I didn't understand. You can try rephrasing.
hi
Greetings of the day! How can I help you?
suggest binge
Please choose the Platform
Amazon Prime
Netflix
Disney Hotstar
Type something...
Built with IBM Watson®


Register
Cool
Email
Password
Enter
Watson Assistant
Amazon Prime
Choose genre
comedy
comedy
Well , here are some amazing collections for you. Happy Binging! :)
Select an option
Type something...
Built with IBM Watson®

Conclusion

Completed the project successfully. Screenshots of the same are attached for better understanding of how we can solve and utilize various features of IBM Cloud.

I would like to thank the Smartinternz team for guiding me throughout the project.