

# NETFLIX ANALYSIS USING TABLEAU

**Team: 115**

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## 1. Introduction

### 1.1. Overview

The project aims to perform a comprehensive data analysis of Netflix using Tableau. The analysis focuses on various aspects, including country, genre, movie or show title, release year, IMDb score, number of upvotes, duration, number of seasons, and content type (movie or show). By leveraging Tableau's powerful features, the project aims to gain insights into Netflix content and user preferences, identify trends, and provide a visual representation of the data.

The project addresses existing problems in Netflix data analysis, such as data collection and integration challenges, data quality and consistency issues, and limited visualization capabilities. It explores both existing methods employed to solve these problems and proposes new solutions utilizing Tableau for enhanced data analysis.

Tableau's visualization capabilities play a crucial role in the project. Researchers can leverage Tableau's features to create interactive and dynamic visualizations that enable the exploration and interpretation of Netflix data. Researchers can utilize filters, parameters, and drill-down functionality to analyze movies/shows based on specific criteria such as genre, IMDB score, or release year.

Additionally, Tableau's integration with external tools like MySQL allows for advanced data enrichment techniques.

Overall, the project aims to leverage Tableau's data analysis and visualization capabilities to gain valuable insights into Netflix data, exploring movie/show attributes, user preferences, and content trends. By addressing existing problems and proposing new solutions, the project contributes to enhancing the analysis of Netflix data using Tableau.

## 1.2. Purpose

The purpose of the project is to conduct a thorough data analysis of Netflix using Tableau, with the following objectives:

1. Gain Insights into Netflix Content: The project aims to analyze and understand various aspects of Netflix content, such as country preferences, genre trends, and characteristics of successful movies and shows.
2. Visualize Data for Effective Communication: The project aims to leverage Tableau's visualization capabilities to create interactive and visually appealing representations of Netflix data. The visualizations and dashboards produced will help stakeholders comprehend complex data relationships, trends, and patterns more effectively. By presenting data in an intuitive and interactive manner, the project aims to facilitate better communication and decision-making.
3. Inform Decision-Making Processes: Through the data analysis, the project intends to provide valuable insights that can inform decision-making processes at Netflix. These insights may include identifying potential content opportunities, understanding audience preferences, optimizing content strategies, or exploring new markets. By uncovering data-driven insights, the project aims to contribute to the strategic decision-making process within the entertainment industry.
4. Showcase the Power of Tableau: The project aims to demonstrate the capabilities of Tableau as a powerful tool for data analysis and visualization. By utilizing Tableau's features and functionalities, the project seeks to showcase how it can effectively handle and analyze large datasets, uncover hidden patterns, and provide actionable insights. The project intends

## 2. Literature Survey

### 2.1. Existing problem and solutions

1. **Data Volume and Variety:** Netflix generates massive amounts of data daily, including user behavior, content preferences, and streaming patterns. Analyzing and making sense of this vast and diverse dataset can be challenging.
2. **Data Quality and Cleansing:** Ensuring the accuracy, completeness, and consistency of the data is crucial for meaningful analysis. Data cleaning and preprocessing tasks are time-consuming and require expertise.
3. **Complex Data Relationships:** Netflix data contains complex relationships between users, content, genres, and other variables. Understanding and visualizing these relationships can be difficult without proper tools and techniques.
4. **Real-time Analysis:** Netflix operates in a fast-paced environment where real-time analysis is essential. Traditional analytical methods may not be efficient in processing and analyzing data in real-time.

#### **Existing Solutions**

1. **Traditional Business Intelligence Tools:** Many organizations use traditional business intelligence tools to analyze Netflix data. These tools provide basic visualization capabilities but may lack advanced features and interactivity.
2. **SQL and Data Warehousing:** SQL queries and data warehousing techniques are commonly used to extract, transform, and load Netflix data for analysis. These methods offer data aggregation and filtering capabilities.
3. **Statistical Analysis Tools:** Statistical analysis tools such as R and Python provide advanced statistical modeling and analysis

capabilities. They can be used to perform in-depth analyses of Netflix data.

## 2.2. Proposed Solution

**Interactive Visualizations:** Tableau offers a user-friendly interface with drag-and-drop functionality, enabling users to create interactive visualizations easily. This helps in exploring Netflix data visually and gaining insights quickly.

**Real-time Data Streaming:** Tableau supports real-time data streaming, enabling users to analyze streaming data from Netflix as it arrives. This feature allows for immediate insights and faster decision-making.

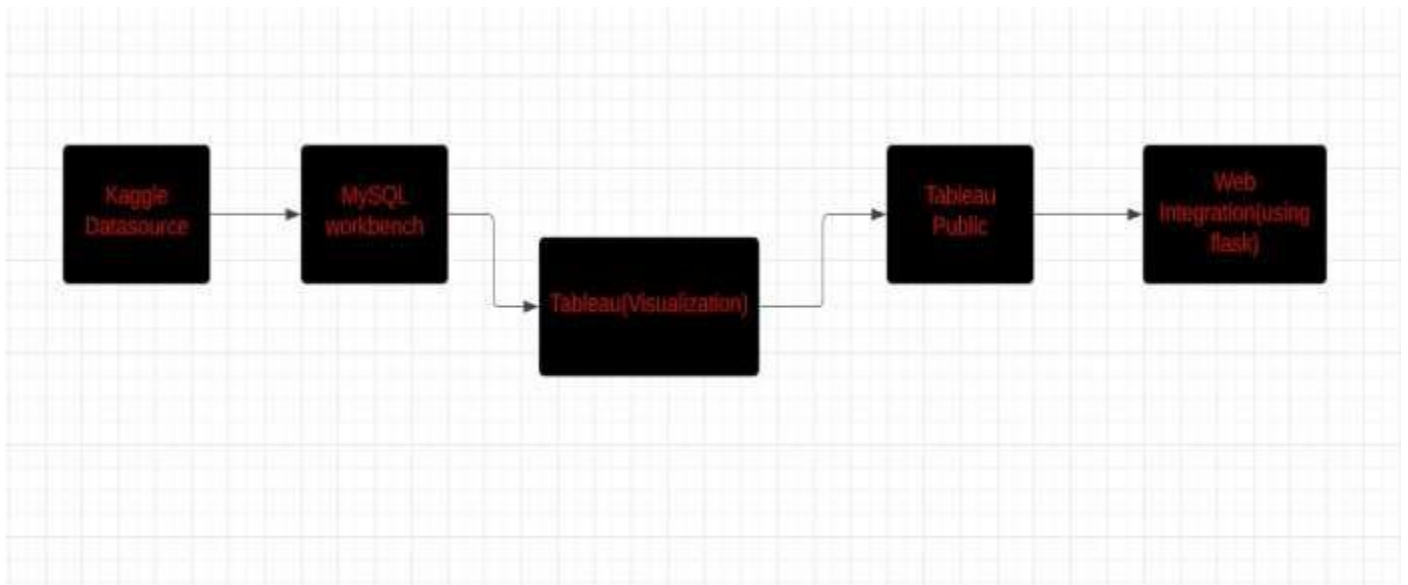
**Data Blending and Data Integration:** Tableau allows users to blend and integrate data from multiple sources, facilitating a comprehensive analysis of Netflix data. It enables combining Netflix data with external data sources to gain deeper insights.

**Storytelling and Dashboard Creation:** Tableau offers storytelling capabilities, allowing users to create interactive dashboards and present data-driven narratives. This feature helps communicate insights effectively and engage stakeholders.

**Cloud and Mobile Accessibility:** Tableau provides cloud-based and mobile solutions, allowing users to access and analyze Netflix data from anywhere, anytime. This enhances collaboration and enables remote data analysis.

## 3. THEORITICAL ANALYSIS

### 3.1 Block diagram



## 3.2 Hardware and Software

### Hardware used:

Laptop

### Software used:

MySQL workbench - MySQL is an open-source relational database management system based on SQL – Structured Query Language. The application is used for a wide range of purposes, including data warehousing, e-commerce, and logging applications. The most common use for MySQL however, is for the purpose of a web database. It can be used to store anything from a single record of information to an entire inventory of available products for an online store. This ease of use and scalability makes MySQL extremely popular, and a go-to for anyone needing a database solution.

Tableau - Tableau is a powerful data visualization and business intelligence software tool. It is designed to help people and organizations understand and communicate data effectively through interactive and visually appealing dashboards, reports,

and charts. Tableau provides a user-friendly interface that allows users to connect to various data sources, including spreadsheets, databases, cloud services, and more. Once connected, users can create visualizations by dragging and dropping data fields onto a canvas. Tableau supports a wide range of visualization types, such as bar charts, line charts, maps, scatter plots, and more.

Tableau Public – It is an online platform to share and publish interactive dashboard for business solutions.

Flask- Flask is a web framework, it's a Python module that lets you develop web applications easily. It has a small and easy-to-extend core: it's a microframework that doesn't include an ORM (Object Relational Manager) or such features. It is a WSGI web app framework.

Python- Python is a high-level programming language known for its simplicity and readability, often used for web development, data analysis, and automation tasks.

## 4. Experimental Investigations

During the project, several analyses and investigations were conducted while working on the solution. These analyses focused on various aspects of Netflix data and aimed to extract meaningful insights and findings. Some of the key analyses and investigations conducted include:

1. Country Analysis: The dataset was analyzed based on country preferences. The number of movies and shows available in different countries were investigated. This analysis aimed to identify top-performing countries and their preferred genres.

2. Movie and Show Analysis: In-depth analysis of movies and shows on Netflix was conducted. Factors such as release year, IMDb score, number of upvotes, duration, number of seasons, and content type were investigated to understand their impact on the success and popularity of movies and shows. This analysis aimed

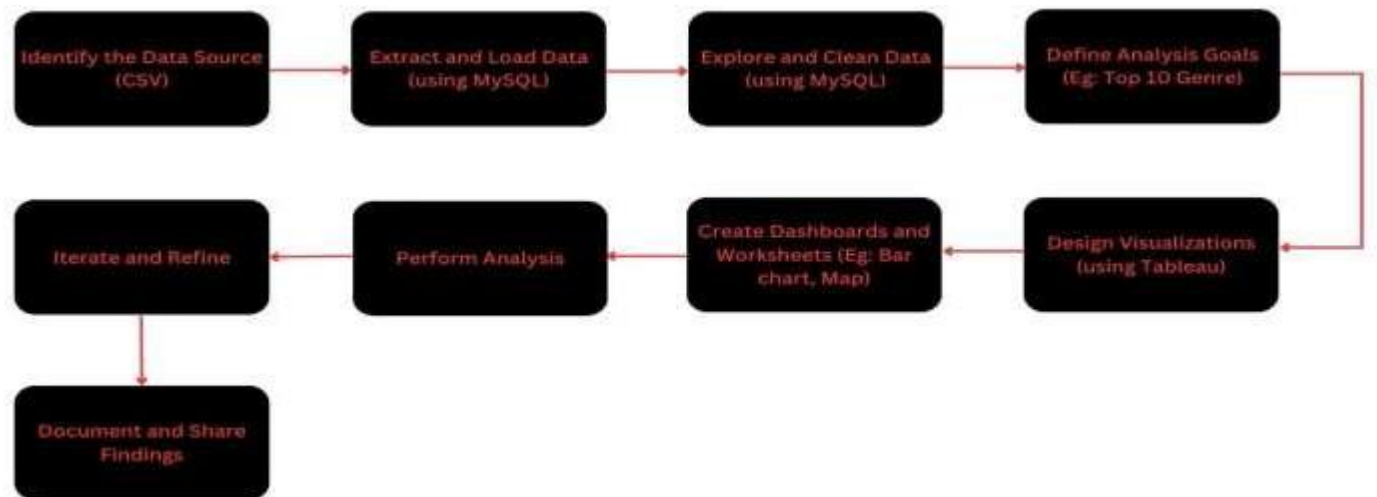
to identify highly-rated movies and shows, trends in movie durations, and preferred show formats.

3. Visualization and Dashboard Creation: Tableau was used to create interactive visualizations and dashboards to represent the analysis findings. Visualizations included bar charts, heatmaps, and other types of graphs to present data patterns and trends effectively. Dashboards were designed to provide an intuitive and interactive platform for stakeholders to explore the data and derive insights.

4. Comparative Analysis: Comparative analysis was conducted to compare different variables and identify relationships between them. For example, the relationship between IMDb scores and the number of upvotes or the correlation between content duration and user ratings. These comparative analyses helped identify key factors influencing content popularity and user preferences.

Throughout the project, statistical techniques, data mining, and visualization methods were employed to explore, analyze, and interpret the Netflix data. The investigations aimed to uncover insights that could inform decision-making processes, identify content opportunities, and contribute to a better understanding of Netflix's audience and content landscape.

## 5. Flowchart



## 6. Results

Data Preprocessing:

```
In [16]: import pandas as pd
import numpy as np
m=pd.read_csv('Best Movies Netflix.csv')
#find no of na
print(" ")
m["type"]=["Movies" for i in range(len(m.index))]
# m["NUMBER_OF_SEASONS"]=["none" for i in range(len(m.index))]
# df=m
m.insert(loc = len(m.columns)-3,column ="NUMBER_OF_SEASONS",value = [0 for i in range(len(m.index))])
movies_title=list(m.columns)
print(m.isna().sum())

index      0
TITLE      0
RELEASE_YEAR  0
SCORE      0
NUMBER_OF_VOTES  0
DURATION   0
NUMBER_OF_SEASONS  0
MAIN_GENRE  0
MAIN_PRODUCTION  0
type       0
dtype: int64

In [17]:
```



```
In [22]: if(movies_title==series_title):
          print("yes")
        else:
          print("no")
          print(movies_title)
          print(series_title)

yes
['index', 'TITLE', 'RELEASE_YEAR', 'SCORE', 'NUMBER_OF_VOTES', 'DURATION', 'NUMBER_OF_SEASONS', 'MAIN_GENRE', 'MAIN_PRODUCTIO
N', 'type']
['index', 'TITLE', 'RELEASE_YEAR', 'SCORE', 'NUMBER_OF_VOTES', 'DURATION', 'NUMBER_OF_SEASONS', 'MAIN_GENRE', 'MAIN_PRODUCTIO
N', 'type']

In [23]: import pandas as pd
          print('Dataframes:')
          display(m)
          display(x)
```

Dataframes:

	index	TITLE	RELEASE_YEAR	SCORE	NUMBER_OF_VOTES	DURATION	NUMBER_OF_SEASONS	MAIN_GENRE	MAIN_PRODUC
	0	David Attenborough: A Life on Our Planet	2020	9.0	31180	83	0	documentary	
1	1	Inception	2010	8.8	2268288	148	0	scifi	
2	2	Forrest Gump	1994	8.8	1994599	142	0	drama	
3	3	Anbe Sivam	2003	8.7	20595	160	0	comedy	

246 rows x 10 columns

```
In [24]: # merge two data frames
          print('After merging:')
          new_dataset=pd.concat([m, x], axis=0)
          new_dataset.reset_index(inplace=True)
          new_dataset.drop('index',axis=1,inplace=True)
          new_dataset
```

After merging:

	level_0	TITLE	RELEASE_YEAR	SCORE	NUMBER_OF_VOTES	DURATION	NUMBER_OF_SEASONS	MAIN_GENRE	MAIN_PROD
	0	David Attenborough: A Life on Our Planet	2020	9.0	31180	83	0	documentary	
1	1	Inception	2010	8.8	2268288	148	0	scifi	
2	2	Forrest Gump	1994	8.8	1994599	142	0	drama	
3	3	Anbe Sivam	2003	8.7	20595	160	0	comedy	
4	4	Bo Burnham: Inside	2021	8.7	44074	87	0	comedy	
...	...	...	...	...	...	...	...	...	...
628	241	Evil Genius	2018	7.5	27516	48	1	crime	
629	242	13 Reasons Why	2017	7.5	282373	58	4	drama	

633 rows x 10 columns

```
In [25]: import pandas as pd
          import re
          # to resolve utf uploading error
          def fn(df, column_name):
              df[column_name] = df[column_name].str.replace(r'["A-Za-z0-9\s.\'\`\~!@;#&*<(){}], ' ')
              return df

          fn(new_dataset,"TITLE")
          new_dataset.head(20)
```

	level_0	TITLE	RELEASE_YEAR	SCORE	NUMBER_OF_VOTES	DURATION	NUMBER_OF_SEASONS	MAIN_GENRE	MAIN_PROD
	0	David Attenborough: A Life on Our Planet	2020	9.0	31180	83	0	documentary	
1	1	Inception	2010	8.8	2268288	148	0	scifi	
2	2	Forrest Gump	1994	8.8	1994599	142	0	drama	
3	3	Anbe Sivam	2003	8.7	20595	160	0	comedy	
4	4	Bo Burnham: Inside	2021	8.7	44074	87	0	comedy	
5	5	Saving Private Ryan	1998	8.6	1346020	169	0	drama	

Index: 626, Value: Feel Good  
 Index: 627, Value: Dogs of Berlin  
 Index: 628, Value: Evil Genius  
 Index: 629, Value: 13 Reasons Why  
 Index: 631, Value: All of Us Are Dead  
 Index: 632, Value: I Am Not Okay with This

```
In [27]: translationTable = str.maketrans('â&ôùçà', 'æææouca')
          new_dataset["TITLE"] = new_dataset["TITLE"].apply(lambda x: x.translate(translationTable))
```

```
In [28]: def check_non_alphanumeric(df, column_name):
          non_alphanumeric_rows = df[df[column_name].str.contains(r'["A-Za-z0-9\s.\'\`\~!@;#&*<(){}], na=False)]
          for index, value in non_alphanumeric_rows[column_name].items():
              print("Index: {index}, Value: {value}")
          check_non_alphanumeric(new_dataset, "TITLE")
```

```
In [29]: #dealing with tableau maps
          import pandas as pd
          country_mapping = {
              'AR': 'Argentina',
              'AU': 'Australia',
              'BE': 'Belgium',
              'BR': 'Brazil',
              'CA': 'Canada',
              'CD': 'Democratic Republic of the Congo',
              'CN': 'China',
              'DE': 'Germany',
              'DK': 'Denmark',
              'ES': 'Spain',
              'FI': 'Finland',
              'FR': 'France',
              'GB': 'United Kingdom',
              'HK': 'Hong Kong',
              'HU': 'Hungary',
              'IN': 'India',
              'IT': 'Italy',
              'JP': 'Japan',
              'KR': 'South Korea',
              'LT': 'Lithuania',
              'LU': 'Luxembourg',
              'LV': 'Latvia',
              'NL': 'Netherlands',
              'NO': 'Norway',
              'NZ': 'New Zealand',
              'PE': 'Peru',
              'PL': 'Poland',
              'PT': 'Portugal',
              'RO': 'Romania',
              'RU': 'Russia',
              'SE': 'Sweden',
              'SG': 'Singapore',
              'SI': 'Slovenia',
              'SK': 'Slovakia',
              'TH': 'Thailand',
              'TR': 'Turkey',
              'US': 'United States',
              'VN': 'Vietnam',
              'ZA': 'South Africa'
          }
```

```

'NL': 'Netherlands',
'NO': 'Norway',
'NZ': 'New Zealand',
'PH': 'Philippines',
'PL': 'Poland',
'RU': 'Russia',
'SE': 'Sweden',
'SG': 'Singapore',
'US': 'United States',
'ZA': 'South Africa',
'MX': 'Mexico',
'TW': 'Taiwan',
'TH': 'Thailand',
'TR': 'Turkey',
'GR': 'Greece',
'RO': 'Romania',
'MW': 'Malawi',
'UA': 'Ukraine',
'PS': 'Palestine',
'LT': 'Lithuania',
'KH': 'Cambodia',

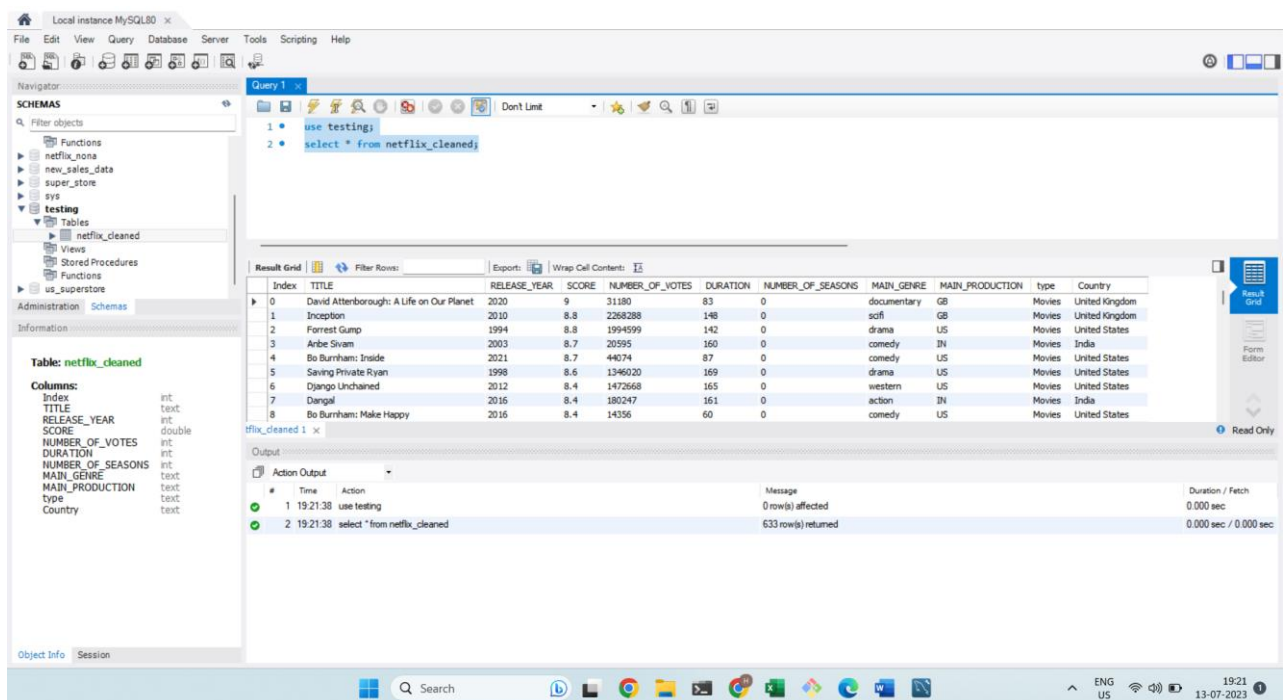
# Add more country code mappings as needed
}

# Replace country codes with full names
new_dataset['Country'] = new_dataset['MAIN_PRODUCTION'].replace(country_mapping)

In [30]:
#save to csv
new_dataset.drop('level_0',axis=1,inplace=True)
new_dataset.index.name='Index'
new_dataset.to_csv('netflix_cleaned.csv',index=True)
new_dataset
new_dataset["NUMBER_OF_SEASONS"].to_csv('nx.csv',index=True)

```

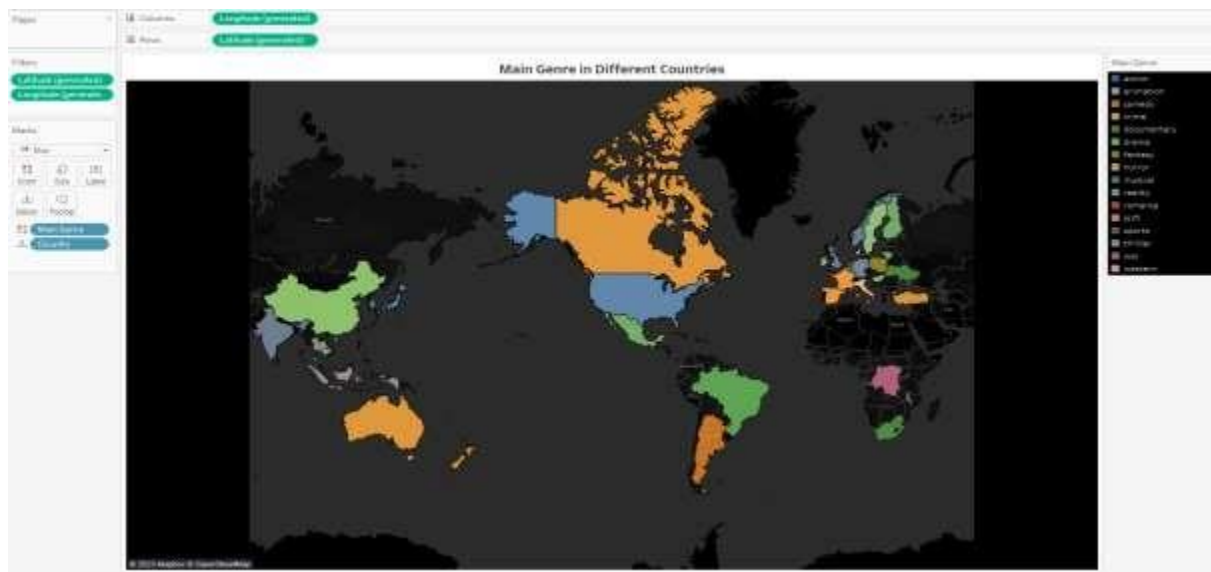
## MySQL Workbench



## Tableau

### Sheet1

This map displays the dominant genre in each nation. For instance, action is a popular genre in the USA. Likewise, main genre in Brazil is drama. War genre is only popular in Democratic Republic of the Congo. Fantasy genre in Poland.



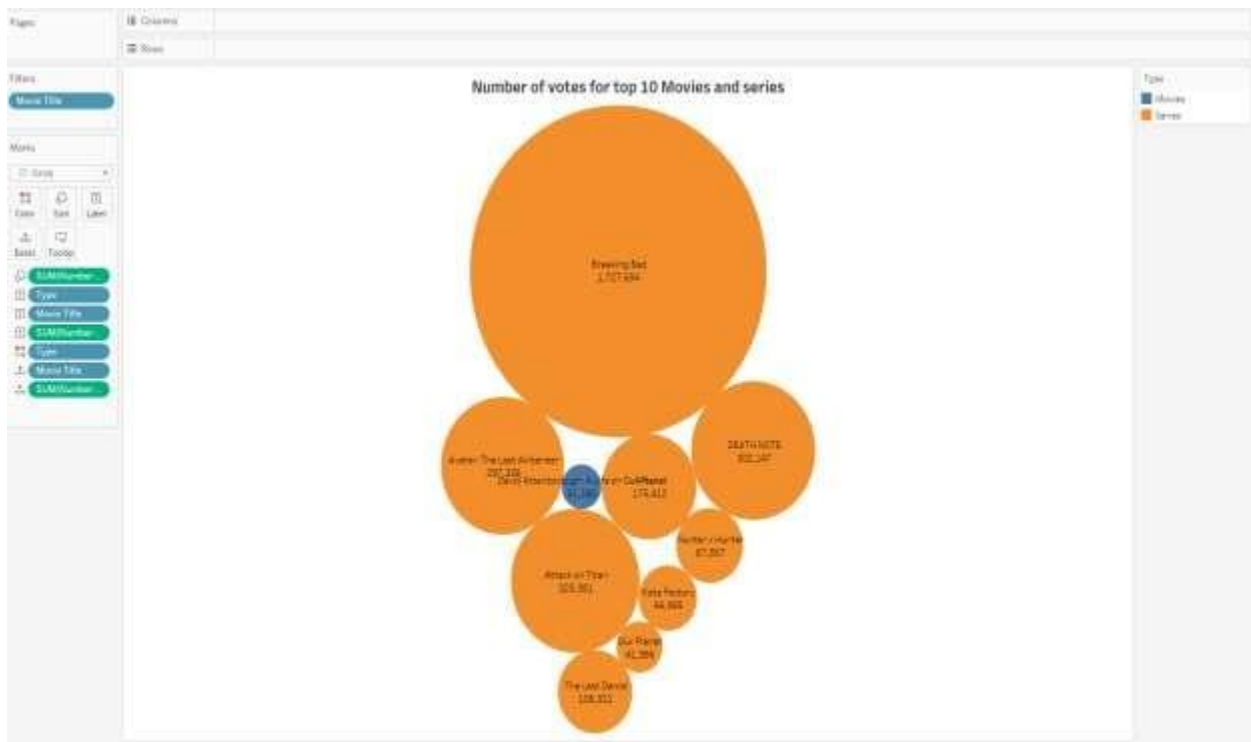
## Sheet2:

The average IMDB ratings for films and TV shows in each nation are displayed on this map. Japan has the highest average IMDB rating. Having the lowest overall IMDB rating is Indonesia.



Sheet3:

The top 10 films and TV shows with the most votes are displayed in this bubble chart. Breaking Bad is in the lead. Death Note is the second. Avatar: The Last Airbender comes in third.



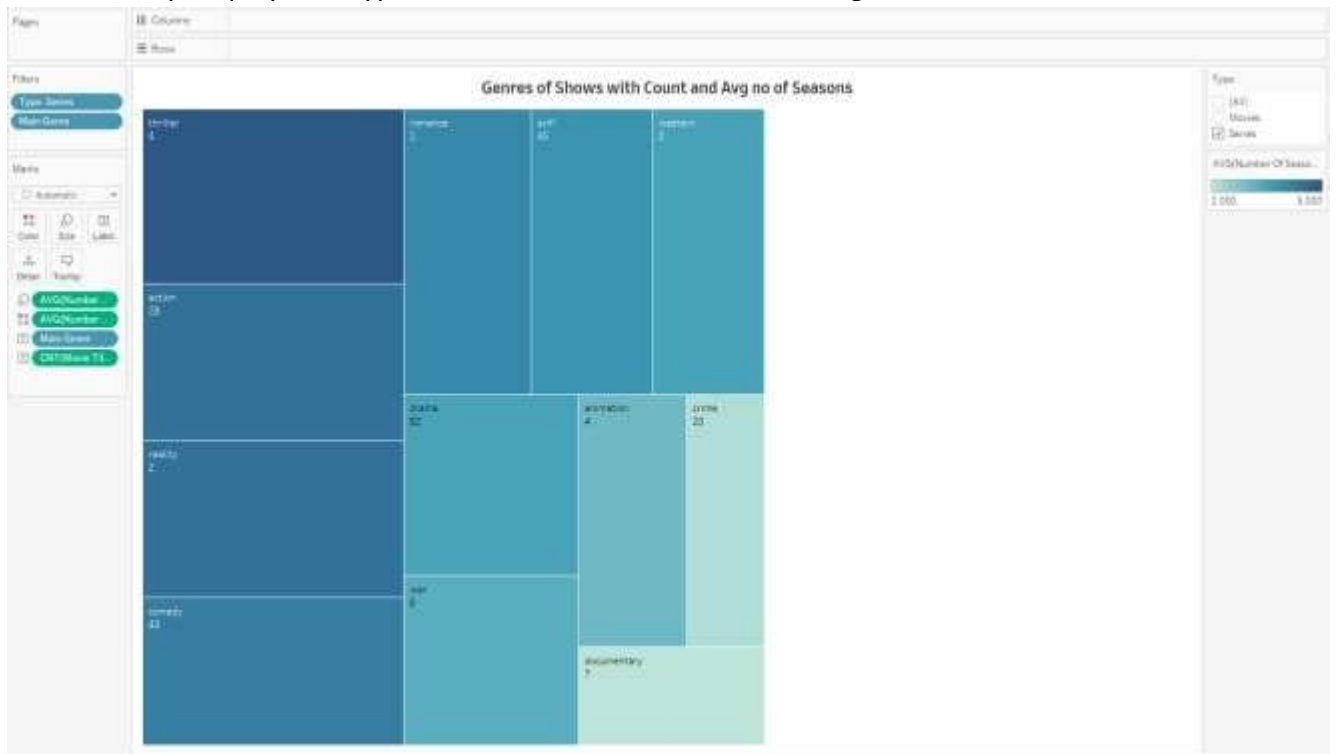
## Sheet4:

This heatmap displays films from India, Japan, and the USA along with their genre and IMDB rating.



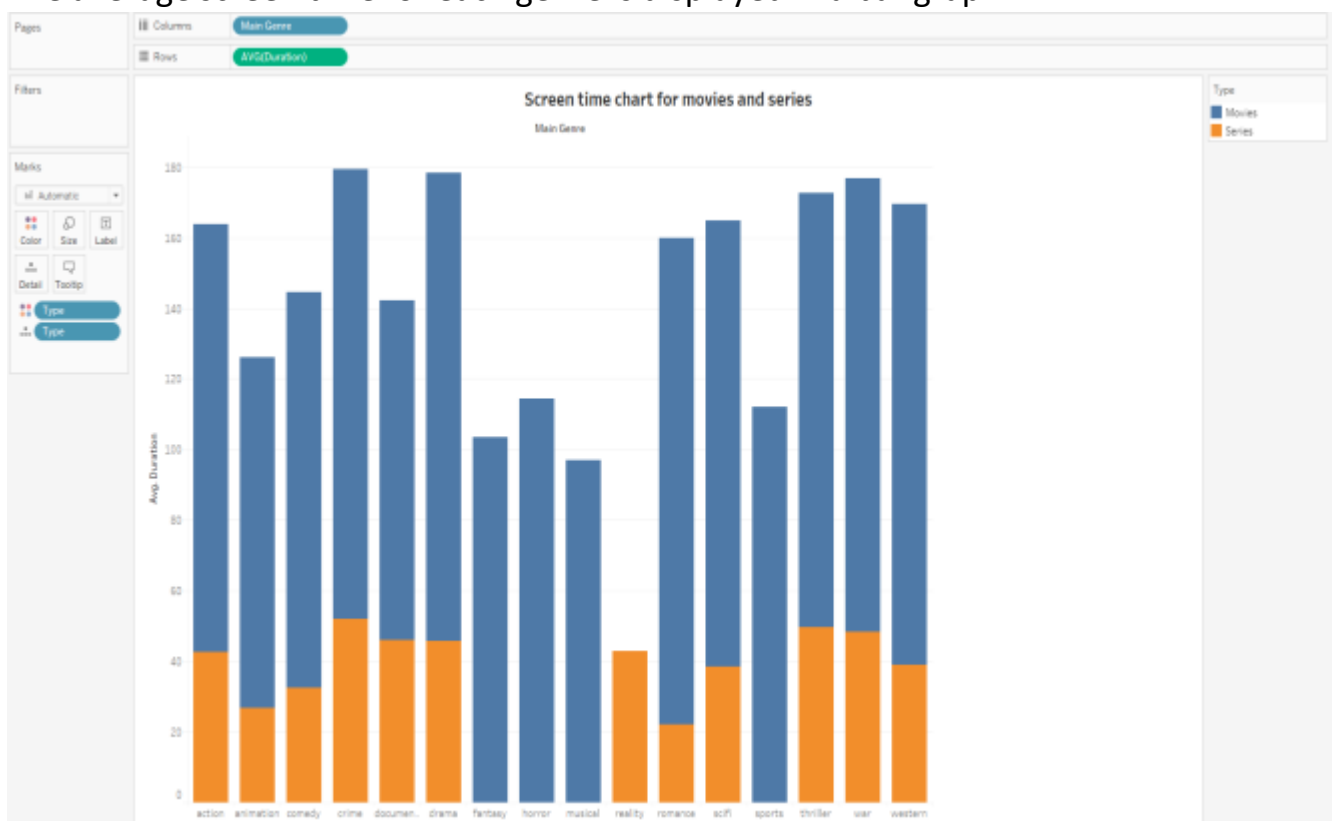
## Sheet5:

This tree map displays the typical number of TV seasons for each genre.



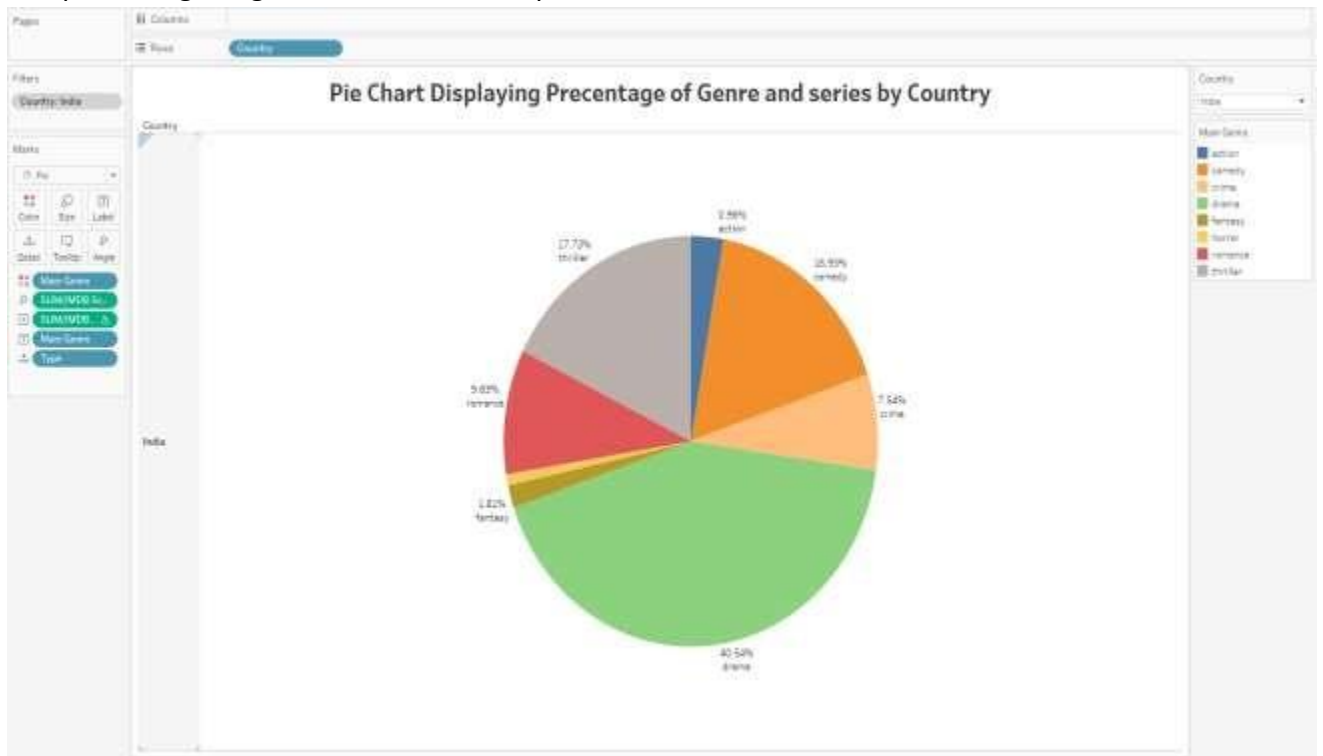
## Sheet6:

The average screen time for each genre is displayed in a bar graph.



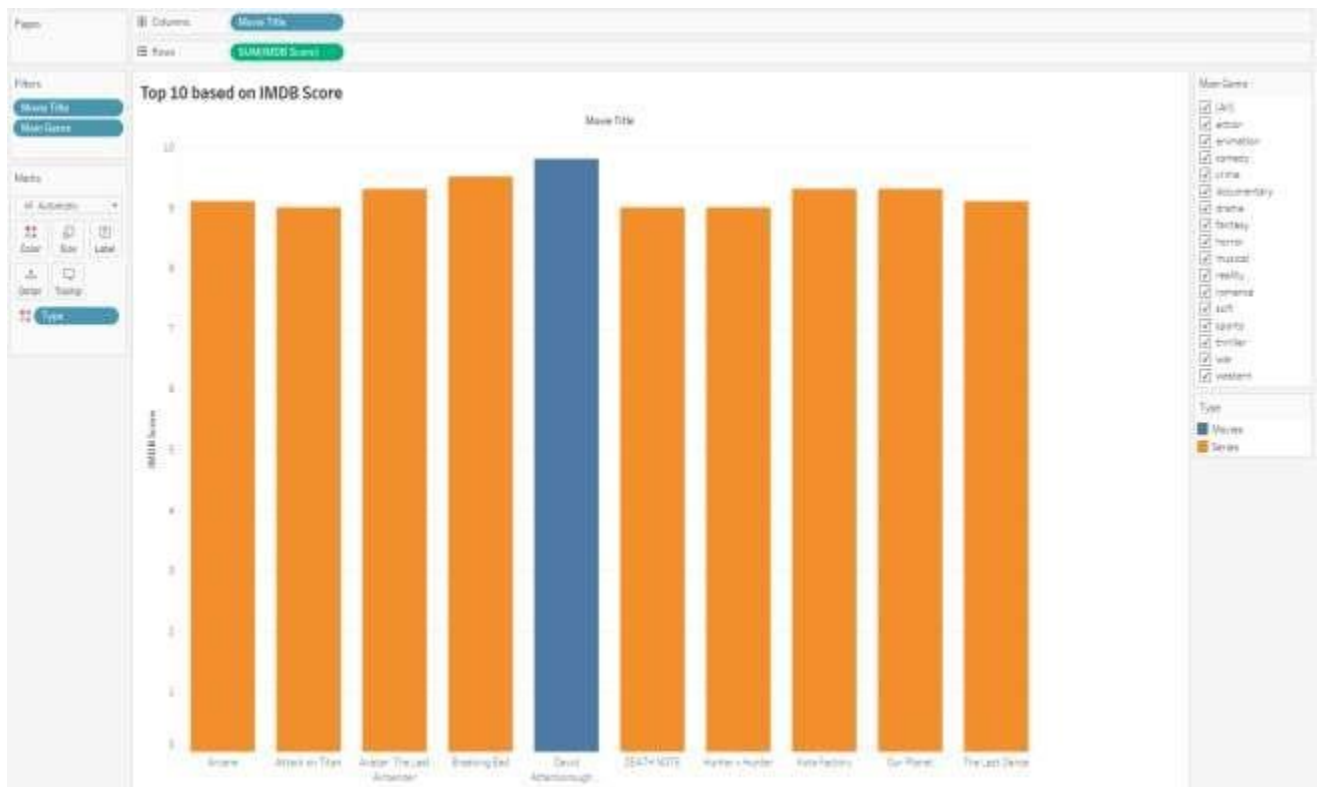
## Sheet7:

The percentage of genre is shown in this pie chart.



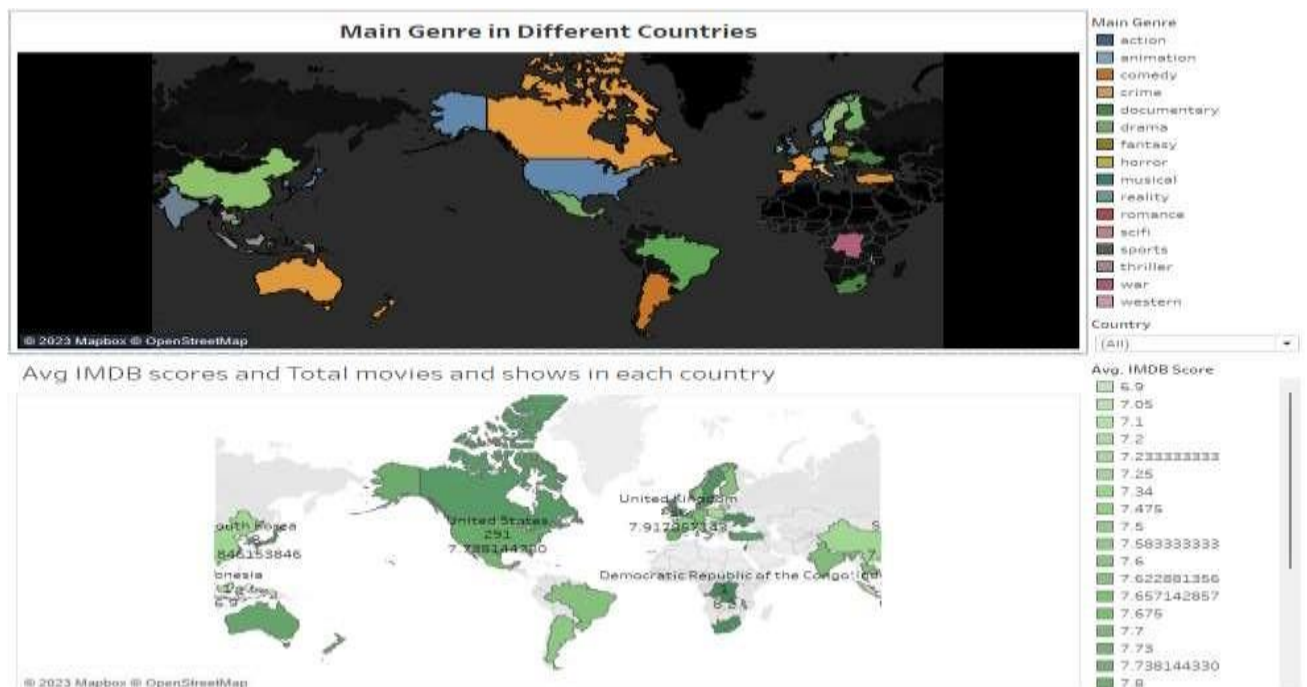
## Sheet8:

The top 10 films and TV shows with the most IMDB Score are displayed in this bar chart.



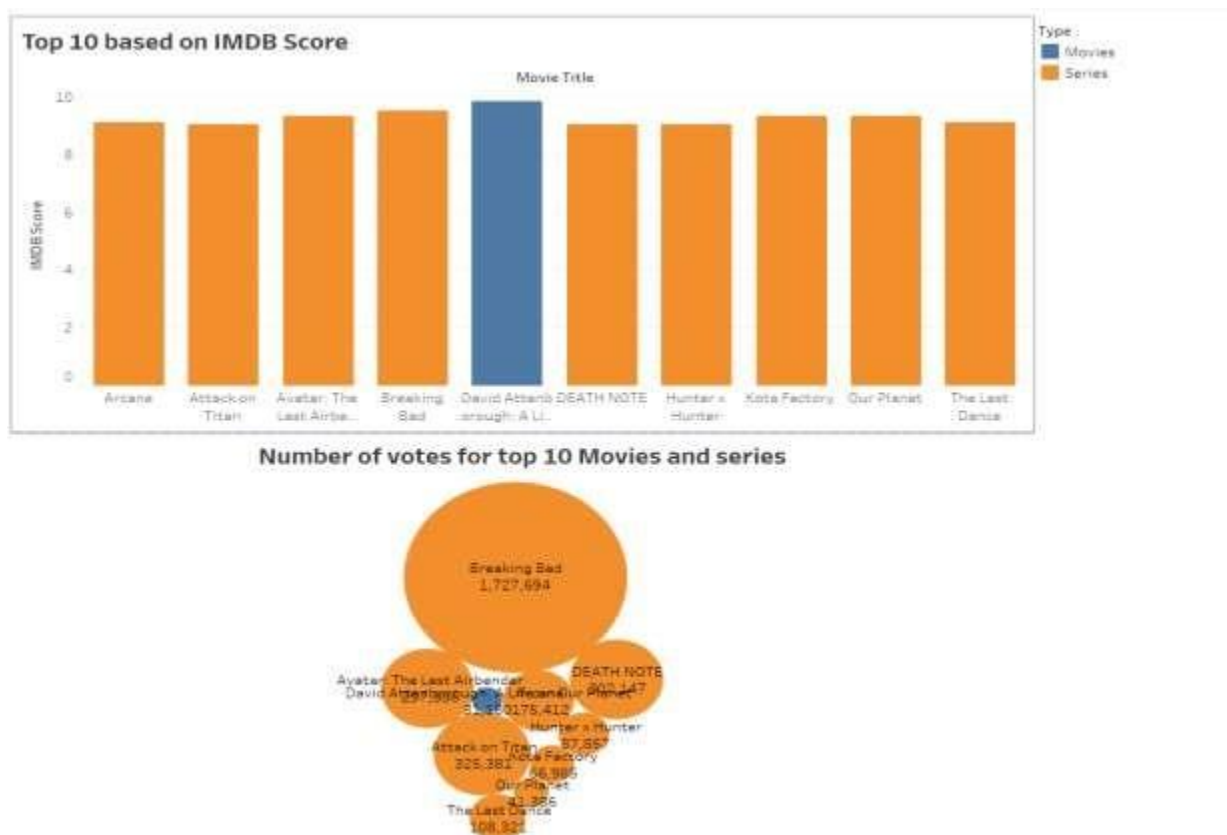
## Dashboard 1:

This dashboard displays two maps from Sheet1 and Sheet2.



## Dashboard 2:

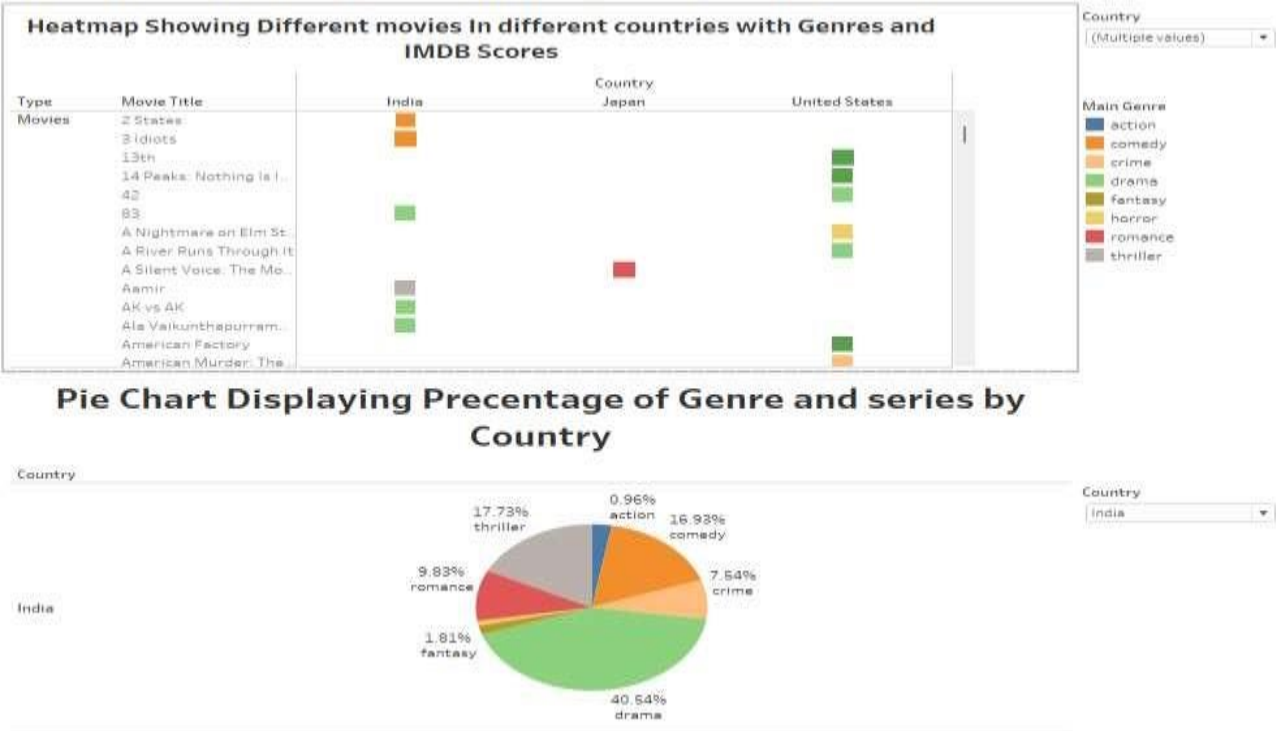
This dashboard shows visualization of Top 10 movies and TV shows according to IMDB score in bar chart and bubble chart.





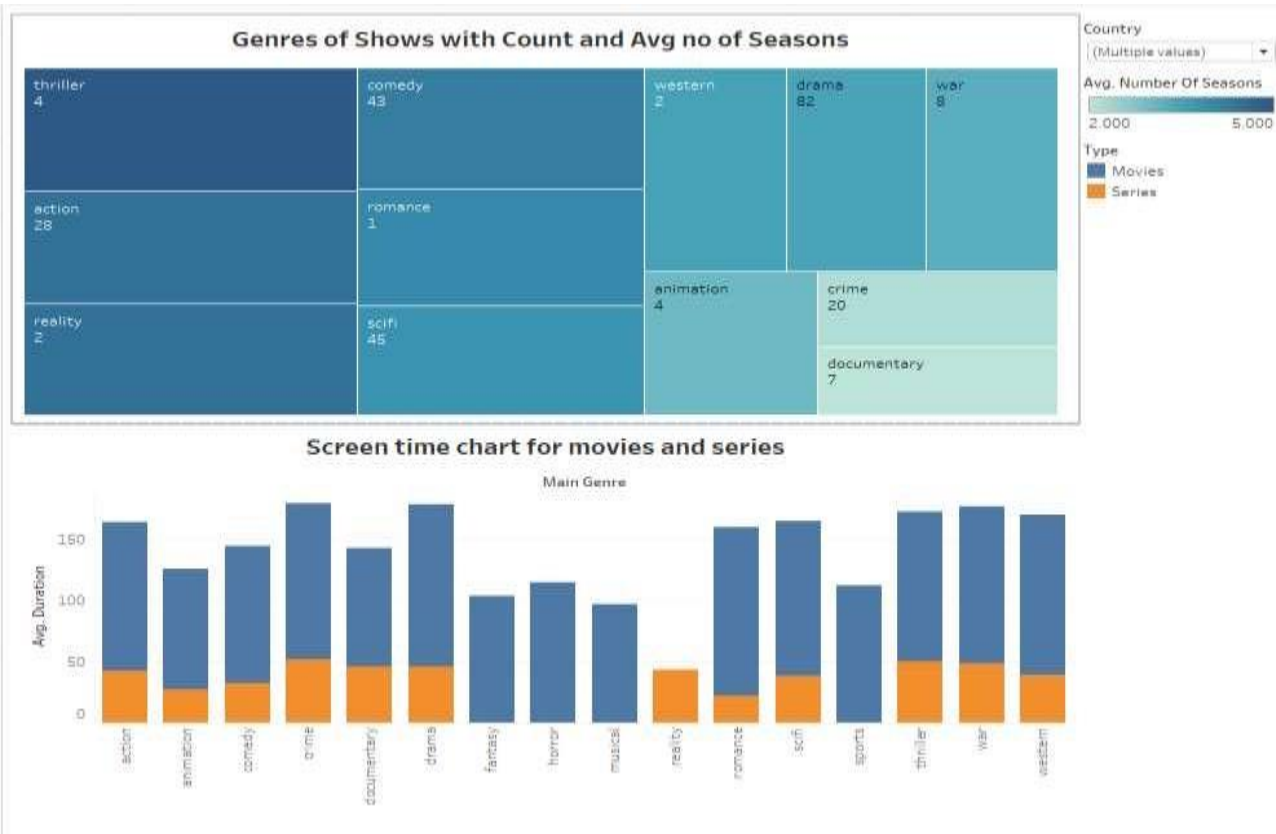
Dashboard 3:

Two visualizations from Sheets 4 and 7 are included in this dashboard.



Dashboard 4:

Two visualizations from Sheets 5 and 6 are included in this dashboard.



Screen time chart for movies and series

Main Genre

action

animation

comedy

crime

documentary

drama

fantasy

horror

musical

reality

romance

scifi

sports

thriller

war

western

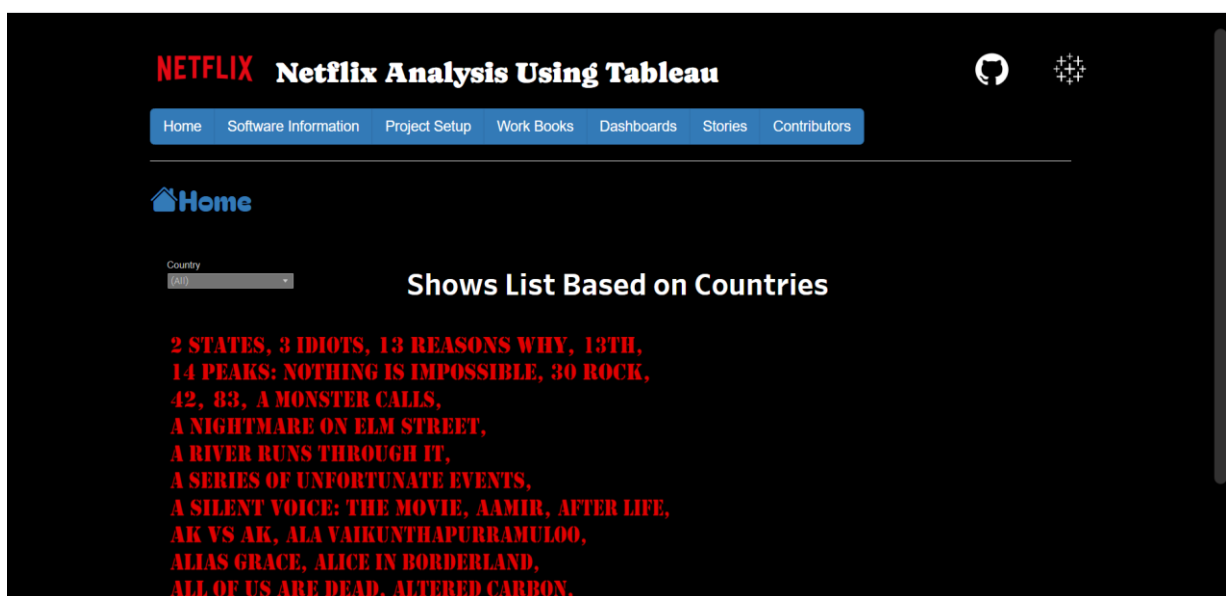
Main Genre	Series Avg. Duration	Movies Avg. Duration
action	45	125
animation	25	100
comedy	30	115
crime	55	135
documentary	45	100
drama	45	135
fantasy	0	105
horror	0	115
musical	0	95
reality	45	0
romance	20	140
scifi	35	125
sports	0	110
thriller	50	130
war	45	135
western	40	130

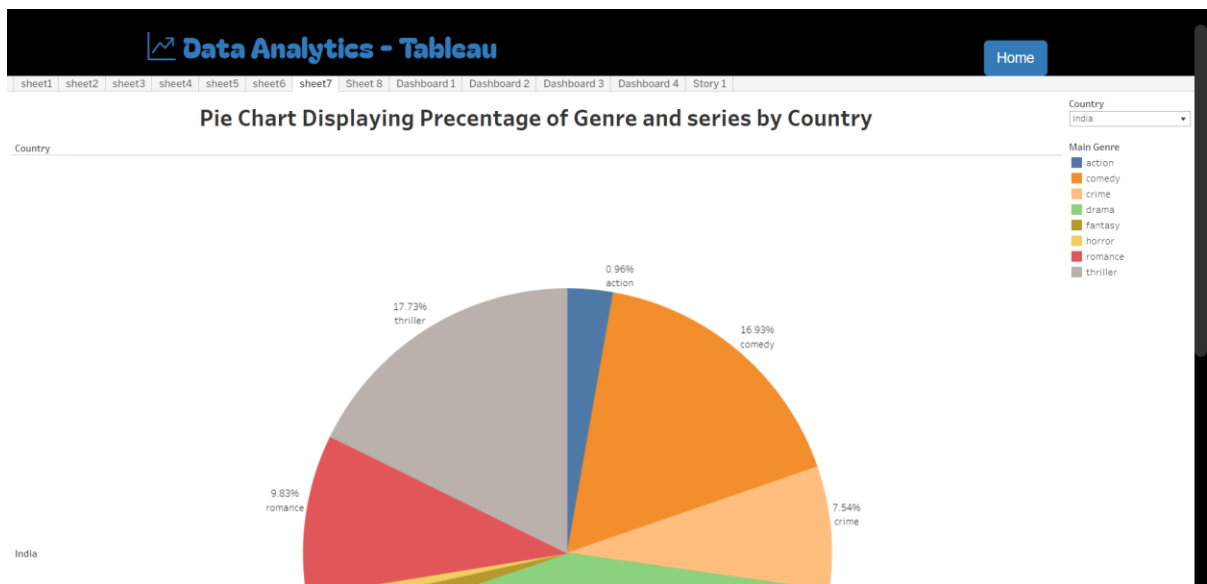
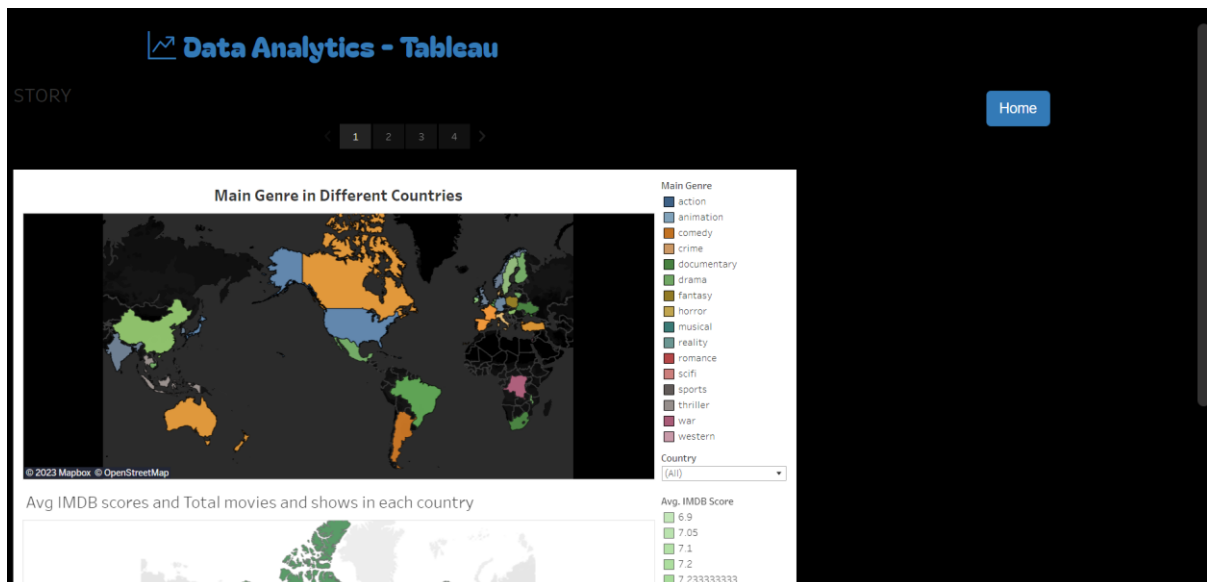
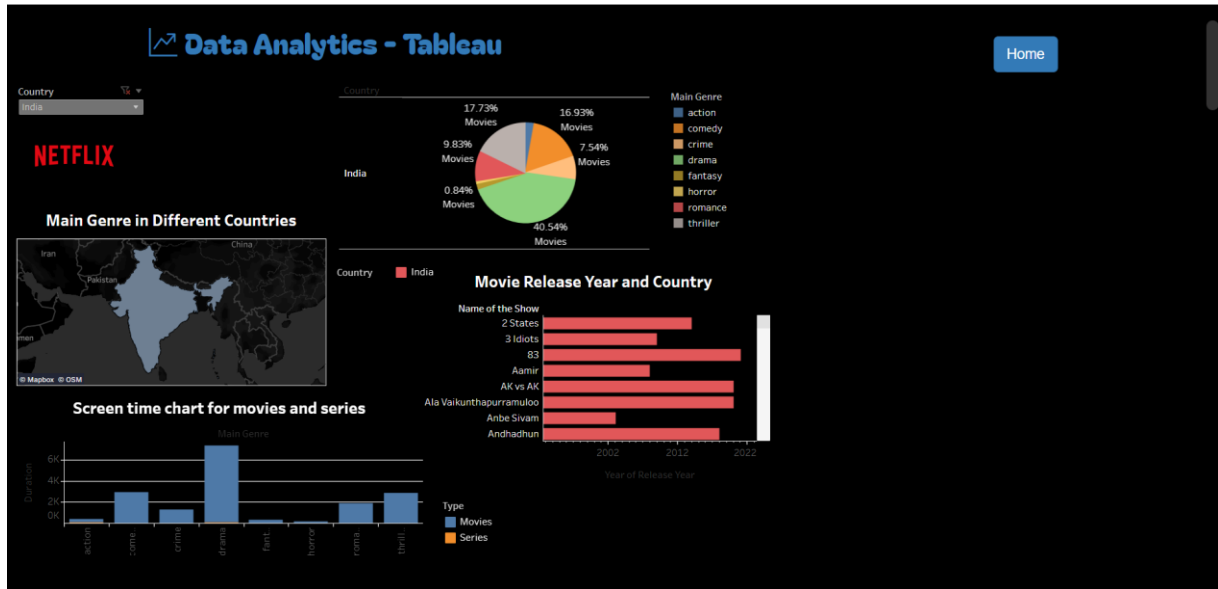
Story:

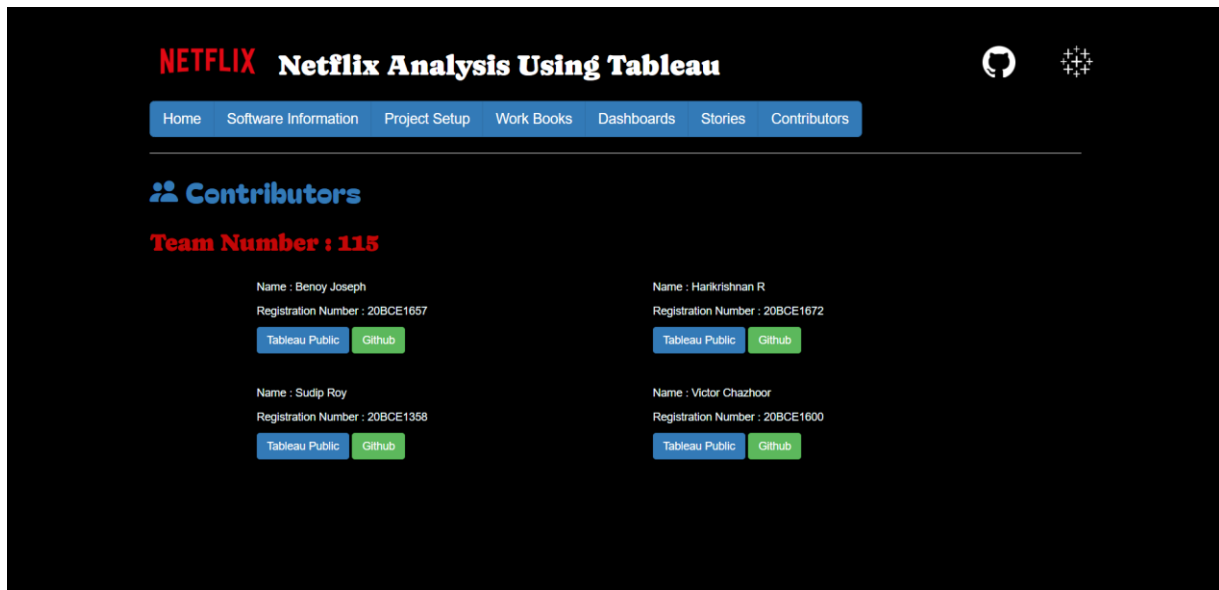
There are four dashboards in this story.



Netflix Application:







## 7. Advantages and Disadvantages

Advantages of the Solution:

1. **Comprehensive Data Analysis:** The solution enables comprehensive analysis of Netflix data, including movie/show attributes, user preferences, content popularity, and trends. It provides insights into various aspects of the Netflix platform, which can inform decision-making processes and strategic planning.
2. **Interactive Visualizations:** Tableau's visualization capabilities allow for the creation of interactive and visually appealing visualizations. This enhances the exploration and interpretation of

data, making it easier to identify patterns, trends, and relationships within the Netflix dataset.

3. Data-Driven Decision Making: By analyzing Netflix data using Tableau, the solution promotes data-driven decision-making. It provides insights and recommendations based on the analysis, empowering stakeholders to make informed decisions regarding content acquisition, production, marketing campaigns, and user experience improvements.

4. Flexibility and Customization: Tableau offers a range of features and functionalities that can be customized to suit specific analysis requirements. Researchers can adapt the solution to focus on particular attributes, perform advanced statistical analyses, or incorporate additional data sources for a more comprehensive analysis.

5. Iterative Analysis and Refinement: The solution supports an iterative analysis approach, allowing researchers to refine and enhance the analysis process based on feedback, new data, or evolving objectives. This ensures continuous improvement and adaptability to changing business needs.

#### Disadvantages of the Solution:

1. Data Integration Challenges: Integrating Netflix data from various sources can be complex and time-consuming. Data collection and consolidation may require significant effort, especially when dealing with diverse data formats or data coming from external sources.

2. Data Quality and Consistency: Ensuring data quality and consistency can be a challenge. Data cleansing, handling missing values, and standardizing formats are crucial steps in the analysis process, requiring careful attention to detail and potential manual interventions.

3. Skill and Expertise Requirement: Working with Tableau and performing advanced data analysis techniques requires a certain

level of skill and expertise. Researchers need to be familiar with Tableau's functionalities, statistical analysis methods, and data visualization principles to effectively utilize the solution.

4. Scalability and Performance: Analyzing large-scale Netflix datasets may pose scalability and performance challenges. As the dataset grows, processing and visualizing the data within Tableau may require additional computational resources and optimization techniques.

5. Data Privacy and Security: Handling sensitive user data, such as content ratings or personal preferences, requires ensuring data privacy and security. Researchers must comply with data protection regulations and implement appropriate security measures to protect the confidentiality of the data.

## 8. Applications

The solution of analyzing Netflix data using Tableau has several applications across different areas. Some of the key applications include:

1. Content Strategy and Acquisition: The insights derived from the analysis can inform content strategy and acquisition decisions for Netflix. By understanding user preferences, content popularity, and trends, Netflix can make data-driven decisions regarding the types of movies or shows to acquire or produce, thereby optimizing content offerings.

2. User Interface and Experience: The insights gained from the analysis can be utilized to improve the user interface and experience on the Netflix platform. By understanding user preferences and content popularity, Netflix can optimize the presentation and organization of content, making it easier for users to discover and access their preferred movies or shows.

3. Marketing and Promotions: The analysis can contribute to targeted marketing campaigns and promotions. By identifying popular genres, content categories, or countries of origin, Netflix can tailor marketing efforts to specific user segments or regions, maximizing the impact of promotional activities.

4. Content Localization and Expansion: The analysis can provide insights into regional preferences and opportunities for content localization. Netflix can leverage this information to expand its content library, acquire region-specific content, and cater to diverse audience preferences across different countries.

6. Business Strategy and Decision Making: The insights derived from the analysis can inform strategic decision-making processes within Netflix. The data-driven insights can help executives and stakeholders make informed decisions regarding business growth, investment priorities, and market expansion strategies.

7. Competitive Analysis: The analysis can be used to compare and benchmark Netflix's content offerings with those of competitors. By analyzing content popularity, user preferences, and trends, Netflix can gain a competitive advantage by identifying gaps in the market and addressing them effectively.

8. Market Research and Trend Analysis: The analysis of Netflix data can provide valuable insights into broader market trends and consumer behavior within the streaming industry. The findings can be utilized for market research purposes, understanding industry dynamics, and forecasting future trends.

Overall, the application of this solution spans content strategy, user experience enhancements, marketing efforts, business strategy, and market research. By leveraging the insights gained from analyzing Netflix data using Tableau, Netflix can make data-driven decisions and enhance its competitive position in the streaming industry.

## 9. Conclusion

The project aimed to perform a comprehensive data analysis of Netflix using Tableau, focusing on various aspects such as country preferences, genre trends, movie and show characteristics, and content type. Through extensive data exploration, analysis, and visualization, the project has provided valuable insights into Netflix's content landscape and user preferences.

By leveraging Tableau's visualization capabilities, interactive dashboards were created to present the analyzed data effectively, allowing stakeholders to explore and interpret the findings. The project showcased the power of Tableau as a tool for data analysis and visualization, demonstrating its potential in analyzing large-scale streaming platform data.

The project's findings have several implications for Netflix and its operations. The insights gained from the analysis can inform content strategy decisions, content acquisition, and production investments. They can also enhance user experience by optimizing content recommendations, improving the user interface, and tailoring marketing campaigns to align with user preferences.

Overall, the project has provided valuable insights into user preferences, content popularity, and trends within the Netflix platform. The findings and recommendations can drive strategic planning, content selection, user experience enhancements, and overall business performance on Netflix. By leveraging data analysis and visualization techniques, the project has contributed to an improved understanding of the Netflix ecosystem and its impact on user satisfaction and business success.

## 10. Future Scope



The project on analyzing Netflix data using Tableau has a wide scope for future development and expansion. Some potential areas for future exploration and enhancement include:

1. **User Segmentation:** The project can explore user segmentation based on various attributes such as viewing habits, content preferences, demographics, or geographic location. By segmenting users into distinct groups, Netflix can tailor content offerings, marketing campaigns, and user experiences to specific segments, maximizing user satisfaction and engagement.
2. **Comparative Analysis:** The project can be expanded to include a comparative analysis of Netflix data with data from other streaming platforms. This would allow for benchmarking Netflix's performance, content library, and user preferences against its competitors, providing insights into market positioning and identifying areas for improvement.
3. **Data Integration and Real-time Analysis:** The project can be enhanced by integrating real-time data sources, such as streaming metrics or user activity logs, to enable dynamic and up-to-date analysis. Real-time analysis can provide immediate insights into user behavior, content performance, and emerging trends, facilitating agile decision-making.
4. **Predictive Analytics:** The project can explore predictive analytics to forecast future content popularity, user engagement, or market trends. By analyzing historical data and incorporating external factors such as industry trends or seasonal patterns, Netflix can make informed predictions and adapt its content strategy and marketing efforts accordingly.
5. **Integration with Business Intelligence Systems:** The project can explore integrating Tableau's analysis and visualizations with broader business intelligence systems used by Netflix. This enables seamless data integration, reporting, and decision-making across different departments within the organization.

By embracing these advancements, the project can continue to provide valuable insights to Netflix and contribute to data-driven decision-making, user satisfaction, and business success.

## 11. Bibliography

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- <https://towardsdatascience.com/netflix-recommender-system-a-big-data-case-study-19cfa6d56ff5>
- <https://getbootstrap.com/docs/>
- <https://flask.palletsprojects.com/en/2.3.x/>
- <https://pythonhosted.org/Flask-Bootstrap/>

## 12. Source Code

### Data cleaning

```
import pandas as pd
import numpy as np
m=pd.read_csv('Best Movies Netflix.csv')
#find no of na
print("_____")
m["type"]=["Movies" for i in range(len(m.index))]
# m["NUMBER_OF_SEASONS"]=["none" for i in range(len(m.index))]
# df=m
m.insert(loc = len(m.columns)-3,column = "NUMBER_OF_SEASONS",value = [0 for i
in range(len(m.index))])
movies_title=list(m.columns)
print(m.isna().sum())
m.head()
import pandas as pd
import numpy as np
x=pd.read_csv('Best Shows Netflix.csv')
#find no of na
print("_____")
x["type"]=["Series" for i in range(len(x.index))]
```

```

series_title=list(x.columns)
print(x.isna().sum())
if(movies_title==series_title):
    print("yes")
else:
    print("no")
print(movies_title)
print(series_title)

```

```

import pandas as pd
print('Dataframes:')
display(m)
display(x)

# merge two data frames
print('After merging:')
new_dataset=pd.concat([m, x], axis=0)
new_dataset.reset_index(inplace=True)
new_dataset.drop('index',axis=1,inplace=True)
new_dataset

import pandas as pd
import re
# to resolve utf uploding error
def fn(df, column_name):
    df[column_name] = df[column_name].str.replace(r'^A-Za-z0-9\s.\'\"'-
?s!/@,,:#:$%^&*()', ' ')
    return df

fn(new_dataset,"TITLE")
new_dataset.head(28)

def check_non_alphanumeric(df, column_name):
    non_alphanumeric_rows = df[df[column_name].str.contains(r'^A-Za-z0-9',
na=False)]
    for index, value in non_alphanumeric_rows[column_name].items():
        print(f"Index: {index}, Value: {value}")
check_non_alphanumeric(new_dataset,"TITLE")

translationTable = str.maketrans('éàèâôûçã', 'eaeaeouca')
new_dataset["TITLE"] = new_dataset["TITLE"].apply(lambda x:
x.translate(translationTable))

```

```

def check_non_alphanumeric(df, column_name):
    non_alphanumeric_rows = df[df[column_name].str.contains(r'^A-Za-z0-
9\s.\'\"'-?s!/@,,:#:$%^&*()', na=False)]
    for index, value in non_alphanumeric_rows[column_name].items():

```

```
print(f"Index: {index}, Value: {value}")
check_non_alphanumeric(new_dataset,"TITLE")
```

```
#dealing with tableau maps
import pandas as pd
country_mapping = {
    'AR': 'Argentina',
    'AU': 'Australia',
    'BE': 'Belgium',
    'BR': 'Brazil',
    'CA': 'Canada',
    'CD': 'Democratic Republic of the Congo',
    'CN': 'China',
    'DE': 'Germany',
    'DK': 'Denmark',
    'ES': 'Spain',
    'FI': 'Finland',
    'FR': 'France',
    'GB': 'United Kingdom',
    'HK': 'Hong Kong',
    'HU': 'Hungary',
    'ID': 'Indonesia',
    'IE': 'Ireland',
    'IL': 'Israel',
    'IN': 'India',
    'IT': 'Italy',
    'JP': 'Japan',
    'KR': 'South Korea',
    'MX': 'Mexico',
    'NL': 'Netherlands',
    'NO': 'Norway',
    'NZ': 'New Zealand',
    'PH': 'Philippines',
    'PL': 'Poland',
    'RU': 'Russia',
    'SE': 'Sweden',
    'SG': 'Singapore',
    'US': 'United States',
    'ZA': 'South Africa',
    'MX' : 'Mexico',
    'TW' : 'Taiwan',
    'TH' : 'Thailand',
    'TR' : 'Turkey',
    'GR' : 'Greece',
    'RO' : 'Romania',
    'MW': 'Malawi',
```

```

    'UA': 'Ukraine',
    'PS': 'Palestine',
    'LT': 'Lithuania',
    'KH': 'Cambodia',

    # Add more country code mappings as needed
}

# Replace country codes with full names
new_dataset['Country'] =
new_dataset['MAIN_PRODUCTION'].replace(country_mapping)

```

```

#save to csv
new_dataset.drop('level_0',axis=1,inplace=True)
new_dataset.index.name='Index'
new_dataset.to_csv('netflix_cleaned.csv',index=True)
new_dataset
new_dataset["NUMBER_OF_SEASONS"].to_csv('nx.csv',index=True)

```

## 13. Netflix Flask Application

app.py

```

from flask import Flask,render_template

from flask_bootstrap import Bootstrap
app = Flask(__name__)
Bootstrap(app)

@app.route('/')
def home():
    return render_template('home.html')
@app.route('/project')
def project():
    return render_template('project.html')
@app.route('/workbook')
def tableau():
    return render_template('workbook.html')
@app.route('/stories')
def stories():
    return render_template('stories.html')
@app.route('/dashboard')
def dashboard():
    return render_template('dashboard.html')
@app.route('/contributors')
def contributors():

```

```

        return render_template('contributors.html')
@app.route('/software')
def software():
    return render_template('software.html')

```

## navbar.html

```

{% extends 'bootstrap/base.html' %}
{% block title %}Navbar{% endblock title %}
{% block body %}
<style>
    body::-webkit-scrollbar {
        width: 16px;
    }

    h5 {
        color: rgb(151, 252, 0);
        margin-inline-start: 5rem;
    }

    h2,
    li {
        color: azure;
    }

    body::-webkit-scrollbar-track {
        background: black;
        padding-top: 100px;
        margin-block: 2rem;
    }

    body::-webkit-scrollbar-thumb {
        box-sizing: border-box;
        border-radius: 20px;
        height: 10px;
        border: 20px solid rgb(50, 49, 49);
    }

    body::-webkit-scrollbar-thumb:hover {
        border: 20px solid rgb(75, 75, 75);
    }
</style>

<body style="background: black;">
    {{super()}}
</body>

{% endblock body %}

```

```

{% block style %}
{% endblock style %}

{%block head %}
{{super()}}
<link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap-
icons@1.3.0/font/bootstrap-icons.css">
<link rel="preconnect" href="https://fonts.googleapis.com">
<link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
<link
    href="https://fonts.googleapis.com/css2?family=Bagel+Fat+One&family=Capras
imo&family=Cherry+Bomb+One&family=Courgette&family=Lobster&display=swap"
    rel="stylesheet">
{% endblock head %}

{% block content %}
<div style="position:sticky;top:0;background:black;">
    <br>
    <div style="display: flex; align-content:center; align-items:center;
justify-content: space-around;">
        <div style="display: flex; align-content:center; align-items:center">
            
            <h1 style="text-align:center;font-family: 'Caprasimo', cursive;
color:white;">Netflix Analysis Using Tableau
        </div>
        <div>
            <a href="https://github.com/Harikrish-
rrk/Netflix_Analysis_Flask_Application_Tableau"></a>
                &nbsp;
                &nbsp;
                &nbsp;
            <a href="https://public.tableau.com/app/profile/benoy.joseph"></a>

        </div>
    </div>
    <div style="margin-inline: 180px;">
        <div class="btn-group btn-group-lg" role="group" aria-label="Basic
example">
            <a href="{{url_for('home')}}" class="btn btn-primary"
style="color:white;text-decoration:none;">Home</a>

```

```

        <a href="{{url_for('software')}}" class="btn btn-primary"
style="color:white;text-decoration:none;">Software
        Information</a>
        <a href="{{url_for('project')}}" class="btn btn-primary"
style="color:white;text-decoration:none;">Project
        Setup</a>
        <a href="{{url_for('tableau')}}" class="btn btn-primary"
style="color:white;text-decoration:none;">Work
        Books</a>
        <a href="{{url_for('dashboard')}}" class="btn btn-primary"
style="color:white;text-decoration:none;">Dashboards</a>
        <a href="{{url_for('stories')}}" class="btn btn-primary"
style="color:white;text-decoration:none;">Stories</a>
        <a href="{{url_for('contributors')}}" class="btn btn-primary"
style="color:white;text-decoration:none;">Contributors</a>
    </div>
    <hr>
</div>
</div>
{% endblock content %}

```

## home.html

```

{% extends "navbar.html" %}
{% block title %}Home{% endblock %}
{% block content %}
{{ super() }}
<h1 class="text-primary"
style="margin-left:180px;font-family: 'Bagel Fat One',
cursive;display:flex;align-items:center;"><i
class="bi bi-house-fill" style="padding-bottom: 10px;"></i>Home</h1>
<br>
<div style="display: block;margin-left:15rem;">
    <div class='tableauPlaceholder' id='viz1688135977183' style='position:
relative'><noscript><a href='#'><img
alt='Dashboard 2 '
src='https://public.tableau.com/static/images/ne/netflix_home/Dashboard2/1_rss.png'
style='border: none' /></a></noscript><object
class='tableauViz' style='display:none;'>
    <param name='host_url' value='https%3A%2F%2Fpublic.tableau.com%2F'
/>

    <param name='embed_code_version' value='3' />
    <param name='site_root' value='' />
    <param name='name' value='netflix_home/Dashboard2' />
    <param name='tabs' value='no' />
    <param name='toolbar' value='yes' />
    <param name='static_image'

```



```

        value='https://public.tableau.com/static/image
s/netflix_home/Dashboard2/1.png' />
        <param name='animate_transition' value='yes' />
        <param name='display_static_image' value='yes' />
        <param name='display_spinner' value='yes' />
        <param name='display_overlay' value='yes' />
        <param name='display_count' value='yes' />
        <param name='language' value='en-US' />
        <param name='filter' value='publish=yes' />
    </object></div>
    <script type='text/javascript'>
        var divElement = document.getElementById('viz1688135977183');
        var vizElement = divElement.getElementsByTagName('object')[0];
        if (divElement.offsetWidth > 800) { vizElement.style.width = '1200px';
vizElement.style.height = '627px'; }
        else if (divElement.offsetWidth > 500) { vizElement.style.width =
'1200px'; vizElement.style.height = '627px'; }
        else { vizElement.style.width = '100%'; vizElement.style.height =
'727px'; }
        var scriptElement = document.createElement('script');
        scriptElement.src =
'https://public.tableau.com/javascripts/api/viz_v1.js';
        vizElement.parentNode.insertBefore(scriptElement,
vizElement);
    </script>
</div>
{% endblock content %}

```

## Software.html

```

{% extends "navbar.html" %}
{% block title %}Softwares{% endblock %}
{% block content %}
{{ super() }}
<div>
    <h1 style="margin-left:180px;font-family: 'Bagel Fat One', cursive; color:
#c30707;">About this Dataset</h1>
    <div style="margin-left:200px;color:white;font-weight: 500;font-size:
medium;width: 100rem;">
        <div style="display:flex;justify-content:space-between; align-items:
center;">
            <h3>
                <div>
                    <h1 style="color: rgb(0, 132,
255);display:inline;">Kaggle&emsp;
                    <a class="btn btn-success"

```

```

https://www.kaggle.com/datasets/thedevastator/the-ultimate-netflix-tv-shows-and-movies-dataset>Kaggle
Dataset</a>
</h1>
</div>
</h3>
</div>
<div>
<p>
Kaggle is an online platform for data science and machine
learning enthusiasts. It provides a wide range
of
resources and tools to explore, analyze, and build machine
learning models using real-world datasets.
</p>
</div>
<h1 class="text-primary"
style="margin-left:180px;font-family: 'Bagel Fat One',
cursive;display:flex;align-items:center;"><i
class="bi bi-info-square-fill" style="padding-bottom:
10px;"></i>&emsp14;Software Information
</h1>
</div>
<h1 style="margin-left:180px;font-family: 'Bagel Fat One', cursive;color:
#c30707">Softwares Used</h1>
<div style="margin-left:200px;color:white;font-weight: 500;font-size:
medium;width: 100rem;">
<div style="display:flex;justify-content:space-between; align-items:
center;">
<h3>
<div>
<h1 style="color: rgb(0, 132,
255);display:inline;">Python&emsp;
</h1>
</div>
</h3>
</div>
<p>
Python is a high-level programming language known for its
simplicity and readability, often used for web
development, data analysis, and automation tasks.
</p>
</div>
<div style="margin-left:200px;color:white;font-weight: 500;font-size:
medium;width: 100rem;">
<div style="display:flex;justify-content:space-between; align-items:
center;">

```

```

    <h3>
      <div>

        <h1 style="color: rgb(0, 132,
255);display:inline;">MySQL&emsp;
        <a class="btn btn-success"
href="https://dev.mysql.com/downloads/installer/">MySQL</a>
      </h1>
    </div>
  </h3>
</div>
<p>
  MySQL is an open-source relational database management system
  based on SQL – Structured Query Language. The
  application is used for a wide range of purposes, including data
  warehousing, e-commerce, and logging
  applications. The most common use for mySQL however, is for the
  purpose of a web database. It can be used to
  store anything from a single record of information to an entire
  inventory of available products for an
  online store. This ease of use and scalability makes mySQL
  extremely popular, and a go-to for anyone
  needing a database solution.
</p>
</div>
<div style="margin-left:200px;color:white;font-weight: 500;font-size:
medium;width: 100rem;">
  <div style="display:flex;justify-content:space-between; align-items:
center;">
    <h3>
      <div>

        <h1 style="color: rgb(0, 132,
255);display:inline;">Tableau&emsp;
        <a class="btn btn-success"
href="https://community.tableau.com/s/elearning#ge
ttingstarted">Tableau</a>
      </h1>
    </div>
  </h3>
</div>
<p>
  Tableau is a powerful data visualization and business intelligence
  software tool. It is designed to help
  people and organizations understand and communicate data
  effectively through interactive and visually
  appealing dashboards, reports, and charts. Tableau provides a user-
  friendly interface that allows users to

```

connect to various data sources,  
including spreadsheets, databases, cloud services, and more. Once  
connected, users can create  
visualizations by dragging and dropping data fields onto a canvas.  
Tableau supports a wide range of  
visualization types, such as bar charts, line charts, maps,  
scatter plots, and more.

```
</p>
</div>
<div style="margin-left:200px;color:white;font-weight: 500;font-size:
medium;width: 100rem;">
  <div style="display:flex;justify-content:space-between; align-items:
center;">
```

```
    <h3>
      <div>

        <h1 style="color: rgb(0, 132,
255);display:inline;">Flask&emsp;
        <a class="btn btn-success"
href="https://flask.palletsprojects.com/en/2.3.x/">Flask
        Documentation</a>
        <a class="btn btn-success"
href="https://pythonhosted.org/Flask-Bootstrap/">Flask Bootstrap
        Documentation</a>
```

```
      </h1>
    </div>
  </h3>
</div>
<p>
```

Flask is a web framework, it's a Python module  
that lets you develop web applications easily. It's has a small  
and easy-to-extend core: it's a  
microframework that doesn't include an ORM (Object Relational  
Manager) or such features.  
It does have many cool features like url routing, template engine.  
It is a WSGI web app framework.

```
</p>
&emsp;&emsp;&emsp;
<div class="card bg bg-primary"
style="width: 28rem; padding:2rem; border-radius: 2rem;
border:1rem solid rgb(30, 30, 122);">
  <div class="card-body">
    <div style="margin-left: 25px;">
      <li>Python ( 3.11.3 )</li>
      <li>Flask ( 2.3.2 )</li>
      <li>Werkzeug ( 2.3.6 )</li>
      <li>pip ( 23.1.2 )</li>
    </div>
```

```

        </div>
    </div>
</div>
<br>
<br>
<br>
<br>
<br>
{% endblock content %}

```

## Project.html

```

{% extends "navbar.html" %}
{% block title %}Project{% endblock %}
{% block content %}
{{ super() }}

<h1 class="text-primary"
    style="margin-left:180px;font-family: 'Bagel Fat One',
cursive;display:flex;align-items:center;"><i
        class="bi bi-file-earmark-fill" style="padding-bottom:
10px;"></i>&emsp14;Project</h1>
<h1 style="margin-left:180px;font-family: 'Bagel Fat One', cursive;color:
#c30707;">MySQL Setup</h1>
<div
    style="margin-left:180px;padding:10px; display: flex; justify-
content:space-between; align-items: center;align-content:
center;width:450px;text-align: center;">
    <a class="btn btn-success"
href="https://dev.mysql.com/downloads/installer">MySQL Installation File</a>

    <a class="btn btn-info"
href="https://www.youtube.com/watch?v=qBBXBZXKi0w&ab_channel=AmitThinks">MySQL
Installation
        video</a>
</div>
<h3 style="margin-left:180px;color:#cc7e00; font-family: 'Bagel Fat One',
cursive;">Dont forget to download ODBC
    connector for MySQL !</h3>

<h1 style="margin-left:180px;font-family: 'Bagel Fat One', cursive;color:
#c30707;">Flask Application Setup
    (python
    commands)</h1>
<div style="margin-left:200px;">
    <h2>Change Directory</h2>

```

```

<h5>cd .\Netflix_Analysis_Flask_Application_Tableau\</h5>
<h2>Virtual Environment Setup (Optional)</h2>
<div style="margin-inline: 5rem;">
  <li>Installing Virtual Environment</li>
  <h5>pip install virtualenv (install library for virtual
environment)</h5>
  <h5>py -3 -m venv venv</h5>
  <li>Activate Virtual environment</li>
  <h5>venv\Scripts\activate</h5>
</div>
<h2>Change Directory to Netflix</h2>
<h5> cd .\Netflix\</h5>
<h2>Install dependencies</h2>
<h5> pip install flask, flask-bootstrap, Jinja2</h5>
<h2>Run flask application</h2>
<h5> flask run --debug</h5>
</div>
<br><br><br><br><br>
{% endblock content %}

```

## Workbook.html

```

{% extends "navbar.html" %}
{% block title %}worksheets{% endblock %}
{% block content %}
<a href="{{url_for('home')}}" class="btn btn-primary btn-lg"
  style="color:white;text-decoration:none; position:fixed;margin-
top:2rem;margin-left:125rem;">Home</a>
<h1 class="text-primary"
  style="margin-left:180px;font-family: 'Bagel Fat One',
cursive;display:flex;align-items:center;"><i
  class="bi bi-graph-up" style="padding-bottom: 10px;"></i>&ensp14;Data
Analytics - Tableau</h1>
<div style="display: block;margin: auto;">
  <div class='tableauPlaceholder' id='viz1688133266251' style='position:
relative'><noscript><a href='#'><img alt='
  src='https://public.tableau.com/static/images/Sh/Sheet1_16881286080920/sheet1_1_rss.png'
  style='border: none' /></a></noscript><object
class='tableauViz' style='display:none;'>
  <param name='host_url' value='https%3A%2F%2Fpublic.tableau.com%2F'
/>
  <param name='embed_code_version' value='3' />
  <param name='site_root' value='' />
  <param name='name' value='Sheet1_16881286080920/sheet1' />
  <param name='tabs' value='yes' />
  <param name='toolbar' value='yes' />
  <param name='static_image'

```

```

        value='https://public.tableau.com/static/images/Sh/Sheet1_16881286080920/sheet1/1.png' />
        <param name='animate_transition' value='yes' />
        <param name='display_static_image' value='yes' />
        <param name='display_spinner' value='yes' />
        <param name='display_overlay' value='yes' />
        <param name='display_count' value='yes' />
        <param name='language' value='en-US' />
    </object></div>
    <script type='text/javascript'>
        var divElement = document.getElementById('viz1688133266251');
        var vizElement = divElement.getElementsByTagName('object')[0];
        vizElement.style.width = '100%';
        vizElement.style.height = (divElement.offsetWidth * 0.75) + 'px'; var
scriptElement = document.createElement('script');
        scriptElement.src =
'https://public.tableau.com/javascripts/api/viz_v1.js';
        vizElement.parentNode.insertBefore(scriptElement,
vizElement);
    </script>
</div>
{% endblock content %}

```

## Dashboard.html

```

{% extends "navbar.html" %}
{% block title %}dashboards{% endblock %}
{% block content %}
<a href="{{url_for('home')}}" class="btn btn-primary btn-lg"
    style="color:white;text-decoration:none; position:fixed;margin-
top:2rem;margin-left:125rem;">Home</a>
<h1 class="text-primary"
    style="margin-left:180px;font-family: 'Bagel Fat One',
cursive;display:flex;align-items:center;"><i
    class="bi bi-graph-up" style="padding-bottom: 10px;">&emsp14;Data
Analytics - Tableau</h1>
<div>
    <div class='tableauPlaceholder' id='viz1688129991613' style='position:
relative'><noscript><a href='#'><img
        alt='Dashboard 1 '
        src='https://public.tableau.com/static/ima
ges/ne/netflix_dashboard2/Dashboard1/1_rss.png'
        style='border: none' /></a></noscript><object
class='tableauViz' style='display:none;'>
        <param name='host_url' value='https%3A%2F%2Fpublic.tableau.com%2F'
/>
        <param name='embed_code_version' value='3' />
        <param name='site_root' value='' />

```

```

        <param name='name' value='netflix_dashboard2&#47;Dashboard1' />
        <param name='tabs' value='no' />
        <param name='toolbar' value='yes' />
        <param name='static_image'
            value='https:&#47;&#47;public.tableau.com&#47;static&#47;image
s&#47;ne&#47;netflix_dashboard2&#47;Dashboard1&#47;1.png' />
        <param name='animate_transition' value='yes' />
        <param name='display_static_image' value='yes' />
        <param name='display_spinner' value='yes' />
        <param name='display_overlay' value='yes' />
        <param name='display_count' value='yes' />
        <param name='language' value='en-US' />
        <param name='filter' value='publish=yes' />
    </object></div>
    <script type='text/javascript'>
        var divElement = document.getElementById('viz1688129991613');
        var vizElement = divElement.getElementsByTagName('object')[0];
        if (divElement.offsetWidth > 800) { vizElement.style.width = '1000px';
vizElement.style.height = '827px'; }
        else if (divElement.offsetWidth > 500) { vizElement.style.width =
'1000px'; vizElement.style.height = '827px'; }
        else { vizElement.style.width = '100%'; vizElement.style.height =
'1377px'; }
        var scriptElement = document.createElement('script');
scriptElement.src = 'https://public.tableau.com/javascripts/api/viz_v1.js';
        vizElement.parentNode.insertBefore(scriptElement,
vizElement);
    </script>
</div>
</div>
<br>
<br><br><br>
<div>
    <div class='tableauPlaceholder' id='viz1688131007753' style='position:
relative'><noscript><a href='#'><img
        alt='Dashboard 1 '
        src='https:&#47;&#47;public.tableau.com&#47;static&#47;ima
ges&#47;Da&#47;Dashboard1_16881268788570&#47;Dashboard1&#47;1_rss.png'
        style='border: none' /></a></noscript><object
class='tableauViz' style='display:none;'>
        <param name='host_url' value='https%3A%2F%2Fpublic.tableau.com%2F'
/>

        <param name='embed_code_version' value='3' />
        <param name='site_root' value='' />
        <param name='name'
value='Dashboard1_16881268788570&#47;Dashboard1' />
        <param name='tabs' value='no' />
        <param name='toolbar' value='yes' />

```



```

        <param name='static_image'
            value='https://public.tableau.com/static/image
s/Dashboard1_16881268788570/Dashboard1/1.png' />
        <param name='animate_transition' value='yes' />
        <param name='display_static_image' value='yes' />
        <param name='display_spinner' value='yes' />
        <param name='display_overlay' value='yes' />
        <param name='display_count' value='yes' />
        <param name='language' value='en-US' />
    </object></div>
    <script
        type='text/javascript'>
        var divElement =
document.getElementById('viz1688131007753'); var vizElement =
divElement.getElementsByTagName('object')[0]; if (divElement.offsetWidth >
800) { vizElement.style.width = '1000px'; vizElement.style.height = '827px'; }
else if (divElement.offsetWidth > 500) { vizElement.style.width = '1000px';
vizElement.style.height = '827px'; } else { vizElement.style.width = '100%';
vizElement.style.height = '827px'; } var scriptElement =
document.createElement('script'); scriptElement.src =
'https://public.tableau.com/javascripts/api/viz_v1.js';
vizElement.parentNode.insertBefore(scriptElement,
vizElement);
    </script>
</div>
<br><br><br><br><br>
<div>
    <div class='tableauPlaceholder' id='viz1688131145000' style='position:
relative'><noscript><a href='#'><img
        alt='Dashboard 2 '
        src='https://public.tableau.com/static/ima
ges/Dashboard2_16881269982450/Dashboard2/1_rss.png'
        style='border: none' /></a></noscript><object
class='tableauViz' style='display:none;'>
        <param name='host_url' value='https%3A%2F%2Fpublic.tableau.com%2F'
/>
        <param name='embed_code_version' value='3' />
        <param name='site_root' value='' />
        <param name='name'
value='Dashboard2_16881269982450/Dashboard2' />
        <param name='tabs' value='no' />
        <param name='toolbar' value='yes' />
        <param name='static_image'
            value='https://public.tableau.com/static/image
s/Dashboard2_16881269982450/Dashboard2/1.png' />
        <param name='animate_transition' value='yes' />
        <param name='display_static_image' value='yes' />
        <param name='display_spinner' value='yes' />
        <param name='display_overlay' value='yes' />
        <param name='display_count' value='yes' />

```

```

        <param name='language' value='en-US' />
    </object></div>
    <script
        type='text/javascript'>
        var divElement =
document.getElementById('viz1688131145000'); var vizElement =
divElement.getElementsByTagName('object')[0]; if (divElement.offsetWidth >
800) { vizElement.style.width = '1000px'; vizElement.style.height = '827px'; }
else if (divElement.offsetWidth > 500) { vizElement.style.width = '1000px';
vizElement.style.height = '827px'; } else { vizElement.style.width = '100%';
vizElement.style.height = '727px'; } var scriptElement =
document.createElement('script'); scriptElement.src =
'https://public.tableau.com/javascripts/api/viz_v1.js';
vizElement.parentNode.insertBefore(scriptElement,
vizElement);
    </script>
</div>
<br><br><br><br><br>
<div>
    <div class='tableauPlaceholder' id='viz1688131271356' style='position:
relative'><noscript><a href='#'><img
        alt='Dashboard 3 '
        src='https://public.tableau.com/static/images/Da/Dashboard3_16881270426750/Dashboard3/1_rss.png'
        style='border: none' /></a></noscript><object
class='tableauViz' style='display:none;'>
        <param name='host_url' value='https%3A%2F%2Fpublic.tableau.com%2F'
/>

        <param name='embed_code_version' value='3' />
        <param name='site_root' value='' />
        <param name='name'
value='Dashboard3_16881270426750/Dashboard3' />
        <param name='tabs' value='no' />
        <param name='toolbar' value='yes' />
        <param name='static_image'
        value='https://public.tableau.com/static/image
s/Da/Dashboard3_16881270426750/Dashboard3/1.png' />
        <param name='animate_transition' value='yes' />
        <param name='display_static_image' value='yes' />
        <param name='display_spinner' value='yes' />
        <param name='display_overlay' value='yes' />
        <param name='display_count' value='yes' />
        <param name='language' value='en-US' />
    </object></div>
    <script
        type='text/javascript'>
        var divElement =
document.getElementById('viz1688131271356'); var vizElement =
divElement.getElementsByTagName('object')[0]; if (divElement.offsetWidth >
800) { vizElement.style.width = '1000px'; vizElement.style.height = '827px'; }
else if (divElement.offsetWidth > 500) { vizElement.style.width = '1000px';

```

```

vizElement.style.height = '827px'; } else { vizElement.style.width = '100%';
vizElement.style.height = '927px'; } var scriptElement =
document.createElement('script'); scriptElement.src =
'https://public.tableau.com/javascripts/api/viz_v1.js';
vizElement.parentNode.insertBefore(scriptElement,
vizElement);
</script>
</div>
<br><br><br><br><br>
<div>
  <div class='tableauPlaceholder' id='viz1688131380092' style='position:
relative'><noscript><a href='#'><img
      alt='Dashboard 4 '
      src='https://public.tableau.com/static/images/Da/Dashboard4_16881271011910/Dashboard4/1_rss.png'
      style='border: none' /></a></noscript><object
class='tableauViz' style='display:none;'>
    <param name='host_url' value='https%3A%2F%2Fpublic.tableau.com%2F'
/>
    <param name='embed_code_version' value='3' />
    <param name='site_root' value='' />
    <param name='name'
value='Dashboard4_16881271011910/Dashboard4' />
    <param name='tabs' value='no' />
    <param name='toolbar' value='yes' />
    <param name='static_image'
      value='https://public.tableau.com/static/images/Da/Dashboard4_16881271011910/Dashboard4/1.png' />
    <param name='animate_transition' value='yes' />
    <param name='display_static_image' value='yes' />
    <param name='display_spinner' value='yes' />
    <param name='display_overlay' value='yes' />
    <param name='display_count' value='yes' />
    <param name='language' value='en-US' />
  </object></div>
  <script type='text/javascript'>
    var divElement = document.getElementById('viz1688131380092');
    var vizElement = divElement.getElementsByTagName('object')[0];
    if (divElement.offsetWidth > 800) { vizElement.style.width = '1000px';
vizElement.style.height = '827px'; }
    else if (divElement.offsetWidth > 500) { vizElement.style.width =
'1000px'; vizElement.style.height = '827px'; }
    else { vizElement.style.width = '100%'; vizElement.style.height =
'827px'; }
    var scriptElement = document.createElement('script');
scriptElement.src = 'https://public.tableau.com/javascripts/api/viz_v1.js';
    vizElement.parentNode.insertBefore(scriptElement,
vizElement);
  </script>

```

```
</div>
{% endblock content %}
```

Stories.html

```
{% extends "navbar.html" %}
{% block title %}stories{% endblock %}
{% block content %}
<h1 class="text-primary"
    style="margin-left:180px;font-family: 'Bagel Fat One',
cursive;display:flex;align-items:center;"><i
    class="bi bi-graph-up" style="padding-bottom: 10px;">&emsp14;Data
Analytics - Tableau</h1>
<a href="{{url_for('home')}}" class="btn btn-primary btn-lg"
    style="color:white;text-decoration:none; position:fixed;margin-
top:2rem;margin-left:125rem;">Home</a>
<div>
    <div class='tableauPlaceholder' id='viz1688132593430' style='position:
relative'><noscript><a href='#'><img
        alt='STORY '
        src='https://public.tableau.com/static/images/St/Story_16881273663200/Story1/1_rss.png'
        style='border: none' /></a></noscript><object
class='tableauViz' style='display:none;'>
    <param name='host_url' value='https%3A%2F%2Fpublic.tableau.com%2F'
/>

    <param name='embed_code_version' value='3' />
    <param name='site_root' value='' />
    <param name='name' value='Story_16881273663200/Story1' />
    <param name='tabs' value='no' />
    <param name='toolbar' value='yes' />
    <param name='static_image'
        value='https://public.tableau.com/static/image
s/St/Story_16881273663200/Story1/1.png' />
    <param name='animate_transition' value='yes' />
    <param name='display_static_image' value='yes' />
    <param name='display_spinner' value='yes' />
    <param name='display_overlay' value='yes' />
    <param name='display_count' value='yes' />
    <param name='language' value='en-US' />
    </object></div>
    <script type='text/javascript'>
        var divElement = document.getElementById('viz1688132593430');
        var vizElement = divElement.getElementsByTagName('object')[0];
        vizElement.style.width = '1016px'; vizElement.style.height = '991px';
        var scriptElement = document.createElement('script');
        scriptElement.src =
'https://public.tableau.com/javascripts/api/viz_v1.js';
        vizElement.parentNode.insertBefore(scriptElement, vizElement);
```

```

    </script>
</div>
{% endblock content %}

```

## Contributors.html

```

{% extends "navbar.html" %}
{% block title %}Contributors{% endblock %}
{% block content %}
{{ super() }}
<div>
    <h1 class="text-primary"
        style="margin-left:180px;font-family: 'Bage1 Fat One',
cursive;display:flex;align-items:center;"><i
        class="bi bi-people-fill" style="padding-bottom:
10px;"></i>&emsp14;Contributors
    </h1>
    <h2 style="font-family: 'Caprasimo', cursive; margin-left:20px; color:
#c30707; margin-left:180px;">Team Number
        : 115</h2>
</div>
<br>
<div style=" color:azure;">
    <div class="row" style="margin-left:300px; width: 1000px;">
        <div class="col-sm-6 mb-4 mb-sm-0">
            <div class="card">
                <div class="card-body">
                    <p class="card-title">Name : Benoy Joseph</p>
                    <p class="card-text">Registration Number : 20BCE1657</p>
                    <a
href="https://public.tableau.com/app/profile/benoy.joseph" class="btn btn-
primary"> Tableau
                        Public </a>
                    <a
href="https://github.com/benoyj20/Netflix_Analysis_Flask_Application_Tableau"
                        class="btn btn-success">
                        Github </a>
                </div>
            </div>
        </div>
    </div>
    <div class="col-sm-6">
        <div class="card">
            <div class="card-body">
                <p class="card-title">Name : Harikrishnan R</p>
                <p class="card-text">Registration Number : 20BCE1672</p>
                <a
href="https://public.tableau.com/app/profile/harikrishnan.r7355" class="btn
btn-primary">
                    Tableau
                    Public </a>
            </div>
        </div>
    </div>

```

```

        <a href="https://github.com/Harikrish-
rrk/Netflix_Analysis_Flask_Application_Tableau"
        class="btn btn-success">
        Github </a>
    </div>
</div>
</div>
</div>
<br>
<br>
<div class="row" style="margin-left:300px;width: 1000px;">
    <div class="col-sm-6 mb-3 mb-sm-0">
        <div class="card">
            <div class="card-body">
                <p class="card-title">Name : Sudip Roy</p>
                <p class="card-text">Registration Number : 20BCE1358</p>
                <a
href="https://public.tableau.com/app/profile/sudip.roy5205/" class="btn btn-
primary"> Tableau
                Public </a>
                <a
href="https://github.com/sudip646/Netflix_Analysis_Flask_Application_Tableau"
                class="btn btn-success">
                Github </a>
            </div>
        </div>
    </div>
    <div class="col-sm-6">
        <div class="card">
            <div class="card-body">
                <p class="card-title">Name : Victor Chazhoor</p>
                <p class="card-text">Registration Number : 20BCE1600</p>
                <a
href="https://public.tableau.com/app/profile/victor.chazhoor" class="btn btn-
primary">
                Tableau
                Public </a>
                <a
href="https://github.com/VictorChazhoor/Netflix_Analysis_Flask_Application_Tab
leau"
                class="btn btn-success">
                Github </a>
            </div>
        </div>
    </div>
</div>
</div>
</div>

```

```
<br>  
<br>  
<br>  
<br>  
<br>  
{% endblock content %}
```