School of Computer Science and Engineering

PROJECT REPORT

(Project Term March-April 2024)

Amazon Prime Video: An Interactive Tableau Dashboard Analysis

Submitted by:

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REGISTRATION NO.: 12204913

SECTION: K21BG

COURSE CODE: INTB233

Under the Guidance of

(Mrs. AASHIMA, Professor)

DECLARATION

I hereby declare that the project work entitled "Amazon Prime Video: An Interactive Tableau Dashboard Analysis" is an authentic record of my own work carried out as part of my B. Tech degree in Computer Science and Engineering from Lovely Professional University, Phagwara. This project was conducted under the guidance of Mrs. Aashima during the period of March to April 2024. All the information provided in this project report is based on my own intensive work and is genuine.

Name of student : Anand Mandkikar
Registration Number : 12204913

(Signature of Student)
Date: 19/04/2024

CERTIFICATE

- This is to certify that the declaration statement made by the student is correct to the best of my knowledge and belief.
- This project has been completed under my guidance and supervision. The present work is the result of the student's original investigation, effort, and study. No part of the work has ever been submitted for any other degree at any university. The project is suitable for submission as partial fulfillment of the requirements for the award of a B. Tech degree in Computer Science and Engineering from Lovely Professional University, Phagwara.

Mrs. Aashima, Professor,
School of Computer Science and Engineering,
Lovely Professional University,
Phagwara, Punjab.

Date: 19/04/2024

ACKNOWLEDGEMENT

I would like to express my heartfelt gratitude to all those who provided guidance and support, acting as guiding lights throughout this project, and contributing to its successful and satisfactory completion.

I am particularly grateful to Mrs. Aashima for giving me the opportunity to work on this project and providing me with the necessary resources. Her active support, valuable time, advice, and wholehearted guidance were instrumental in my successful completion of this assignment within the given timeframe.

I also want to thank my friends and peers who created a positive, collaborative environment during this project. Their innovative ideas and continuous support played a crucial role in helping me prepare this project efficiently and effectively.

Without the assistance of all these individuals, the completion of this project would not have been possible within the given timeframe. Thank you all for your invaluable contributions.

INDEX

CONTENTS OF THE REPORT

- Cover page
- Declaration
- Certificate
- Acknowledgement

1. Introduction
2. Objectives
3. Source of dataset
4. Analysis on dataset (for each analysis)
    i. Introduction
    ii. General Description
    iii. Specific Requirements, functions, and formulas
    iv. Analysis results
    v. Visualization
5. List of Analysis with results
6. References
7. Bibliography

INTRODUCTION

In today's digital landscape, streaming platforms have revolutionized the way we consume entertainment. Among these platforms, Amazon Prime Video stands as a prominent player, offering a vast library of movies, TV shows, and original content to millions of subscribers worldwide. Understanding the dynamics of such a platform is not only crucial for its operators but also for consumers and stakeholders interested in its performance and trends.

This project delves into the realm of data analytics to provide a comprehensive analysis of Amazon Prime Video's content catalog, user engagement, and performance metrics. Leveraging the powerful visualization tool Tableau, we aim to uncover valuable insights that shed light on the platform's strengths, weaknesses, and opportunities for growth.

OBJECTIVES

- **Content Analysis:** Explore the diversity and popularity of content available on Amazon Prime Video, including movies, TV shows, and original productions.
- **User Engagement:** Investigate user behavior patterns, such as viewing preferences, frequency, and duration of streaming sessions.
- **Performance Metrics:** Evaluate the platform's performance indicators, including subscriber growth, churn rates, and revenue trends.
- **Interactive Dashboard:** Develop an interactive Tableau dashboard to visualize key findings and facilitate data-driven decision-making.

Methodology

This analysis utilizes a combination of data extraction, transformation, and visualization techniques to derive meaningful insights from raw data sourced from Amazon Prime Video's database. The data encompasses various dimensions, including content metadata, user interactions, and business metrics.

SOURCE OF DATASET

The dataset used in this analysis was obtained from the Our World in Data COVID-19 repository (https://geekforgeeks). The dataset contains daily data on COVID-19 cases, deaths, and vaccinations for various countries and regions.

ANALYSIS ON DATASET

Analysis of Prime Video Dataset

Introduction:
The Prime Video dataset offers a comprehensive view of the content available on the Prime Video streaming platform. This analysis aims to uncover key insights into the platform's content landscape, user engagement, and potential areas for strategic improvement.

Key Findings:

1. Content Catalog Overview:
- The dataset comprises a vast array of content, including movies, TV shows, documentaries, and original productions.
- Analysis reveals the distribution of content across different categories and genres, providing insights into the platform's content diversity.

2. Genre Distribution:
- By examining genre distribution, we identify the most prevalent genres on Prime Video.
- Understanding genre popularity helps inform content acquisition and production strategies to cater to diverse audience preferences.

3. Rating Trends:
- Analysis of rating trends over time offers insights into viewer satisfaction and content quality.
- Identifying trends in ratings enables the platform to assess the performance of its content library and make data-driven decisions for content curation.

4. User Engagement Metrics:
- Metrics such as watch time, views, and user ratings provide valuable indicators of user engagement with specific titles.
- Analyzing user engagement patterns helps identify popular content and optimize recommendations to enhance user experience.

5. Geographical Patterns:
- Geographical analysis reveals regional variations in content preferences and viewing habits.
- Understanding geographical patterns informs localization efforts and targeted content marketing strategies to better serve diverse audiences worldwide.

6. Performance of Original Content:
- Evaluating the performance of original productions sheds light on their impact on subscriber retention and acquisition.
- Assessing the popularity and reception of original content helps justify investment decisions and refine the platform's original content strategy.

Implications and Recommendations:

1. Content Acquisition Strategy:
- Based on genre popularity and user engagement metrics, Prime Video can optimize its content acquisition strategy to license or produce content that resonates with its audience.

2. Quality Assurance:
- Continuous monitoring of ratings and viewer feedback enables Prime Video to maintain high content quality standards and address any issues promptly.

3. Localization and Personalization:
- Leveraging insights from geographical analysis and user engagement metrics, Prime Video can tailor its content offerings and recommendations to specific regions and user preferences.

4. Investment in Original Content:
- Given the significance of original content in driving subscriber growth, Prime Video should continue investing in compelling original productions while ensuring they align with audience preferences and expectations.

Conclusion:
The analysis of the Prime Video dataset provides valuable insights into content trends, user behavior, and strategic opportunities for the platform. By leveraging these insights, Prime Video can refine its content strategy, enhance user experience, and maintain its competitive position in the streaming market.

Feel free to elaborate on these points or include additional analyses as needed for your project report. Let me know if you require further assistance!

Screenshots:-

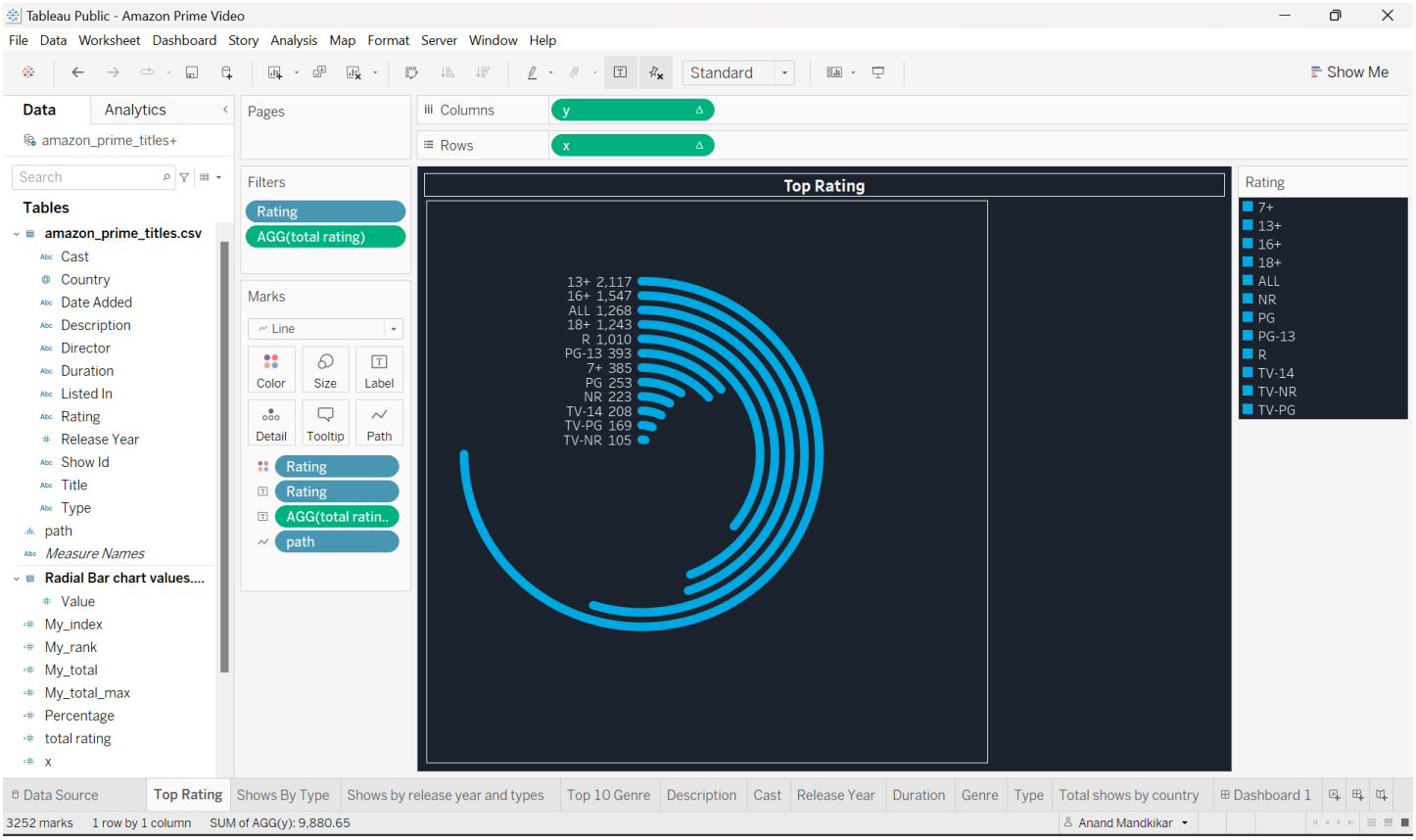
Tableau Public - Amazon Prime Video
File Data Worksheet Dashboard Story Analysis Map Format Server Window Help
Standard
Show Me
Data
Analytics
amazon_prime_titles+
Search
Tables
amazon_prime_titles.csv
Cast
Country
Date Added
Description
Director
Duration
Listed In
Rating
Release Year
Show Id
Title
Type
path
Measure Names
Radial Bar chart values....
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My_index
My_rank
My_total
My_total_max
Percentage
total rating
x
Pages
Filters
Rating
AGG(total rating)
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18+
ALL
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PG
PG-13
R
TV-14
TV-NR
TV-PG
Data Source
Top Rating
Shows By Type
Shows by release year and types
Top 10 Genre
Description
Cast
Release Year
Duration
Genre
Type
Total shows by country
Dashboard 1
3252 marks
1 row by 1 column
SUM of AGG(y): 9,880.65
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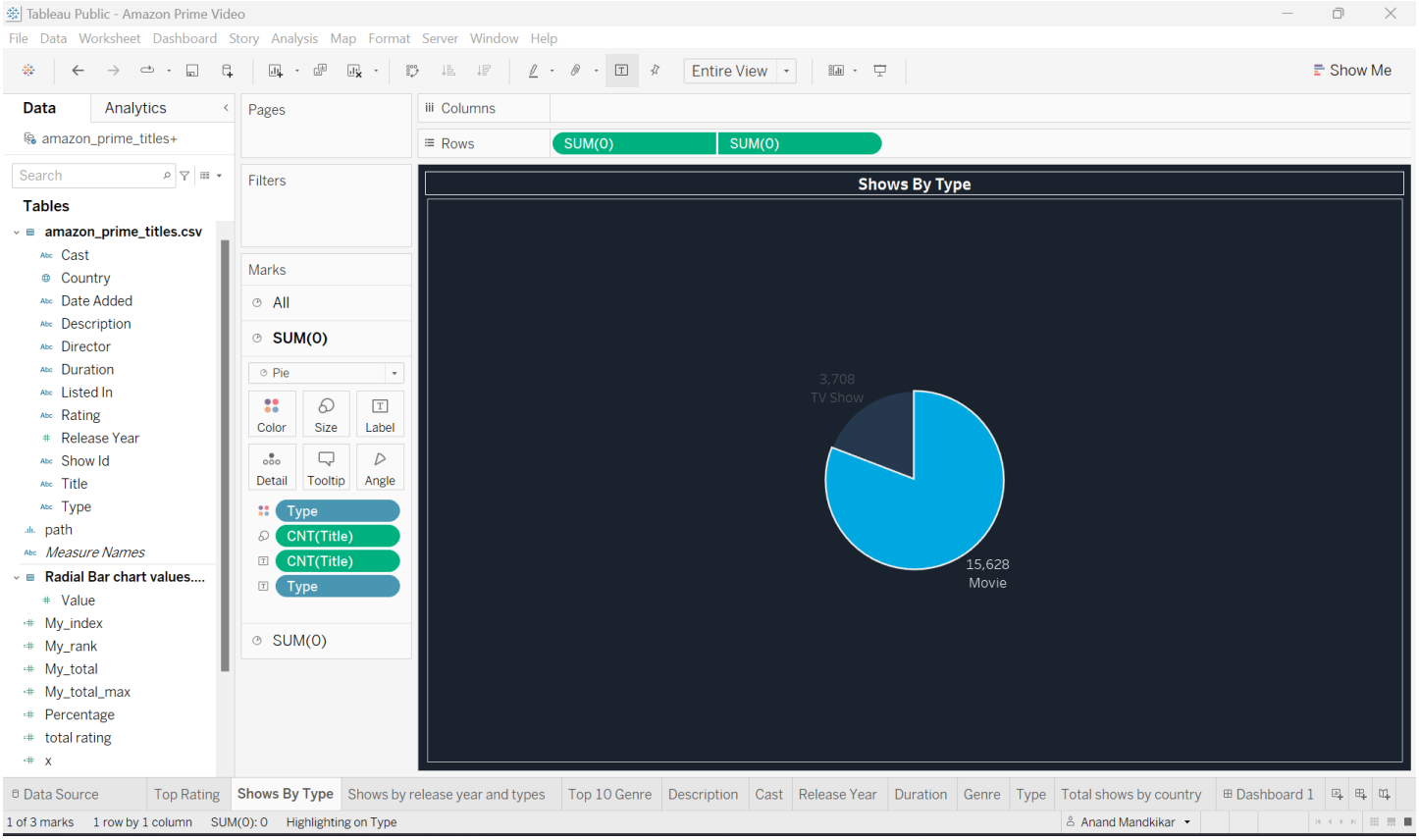
Tableau Public - Amazon Prime Video
File Data Worksheet Dashboard Story Analysis Map Format Server Window Help
Entire View
Show Me
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Cast
Country
Date Added
Description
Director
Duration
Listed In
Rating
Release Year
Show Id
Title
Type
path
Measure Names
Radial Bar chart values....
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My_rank
My_total
My_total_max
Percentage
total rating
x
Pages
Filters
Marks
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Size
Label
Detail
Tooltip
Angle
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CNT(Title)
Type
SUM(0)
Columns
Rows
SUM(0)
SUM(0)
Shows By Type
3,708
TV Show
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Movie
Data Source
Top Rating
Shows By Type
Shows by release year and types
Top 10 Genre
Description
Cast
Release Year
Duration
Genre
Type
Total shows by country
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1 of 3 marks
1 row by 1 column
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Highlighting on Type
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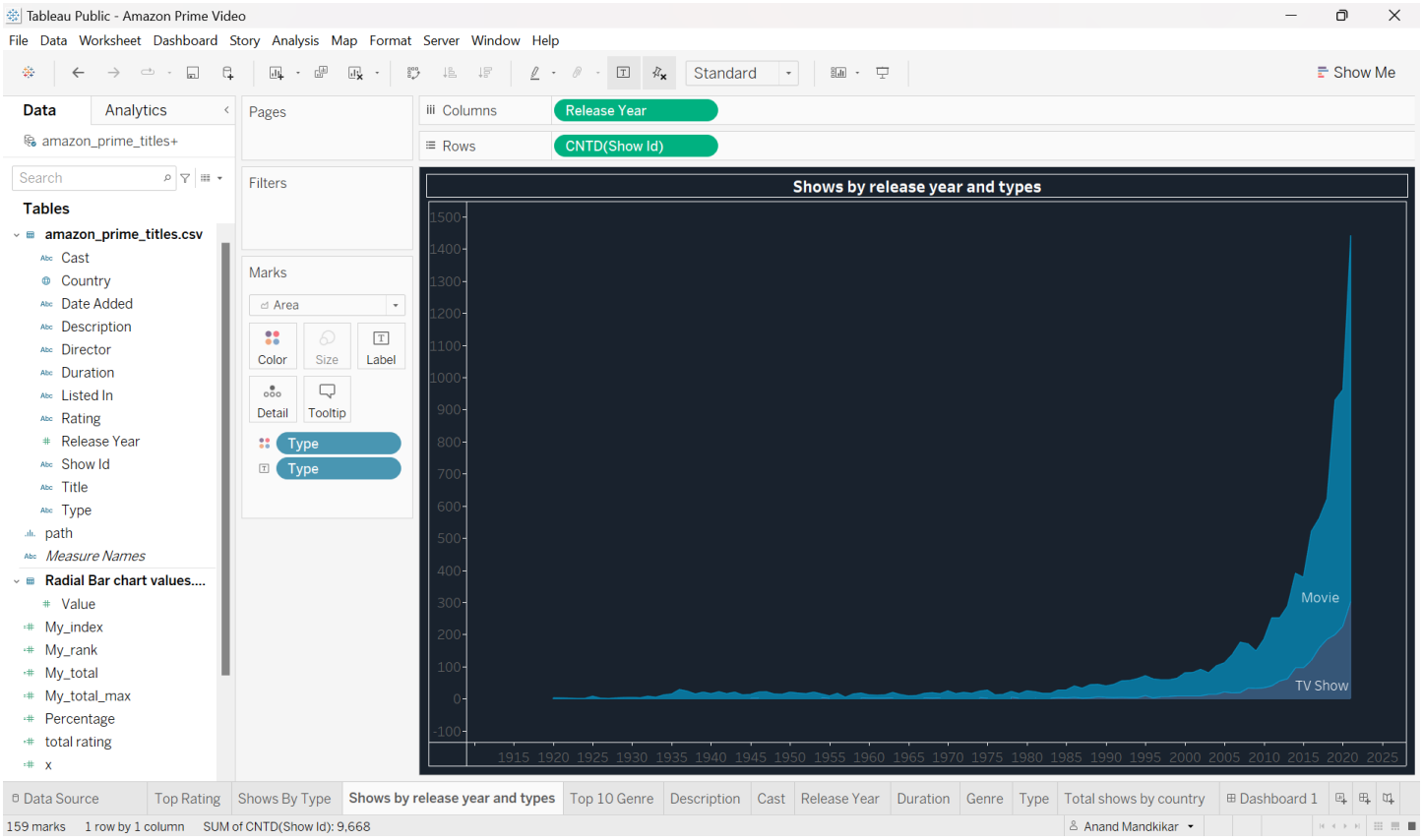
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My_index
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Label
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Tooltip
Type
Type
Columns
Release Year
Rows
CNTD(Show Id)
Shows by release year and types
Movie
TV Show
Data Source
Top Rating
Shows By Type
Shows by release year and types
Top 10 Genre
Description
Cast
Release Year
Duration
Genre
Type
Total shows by country
Dashboard 1
159 marks
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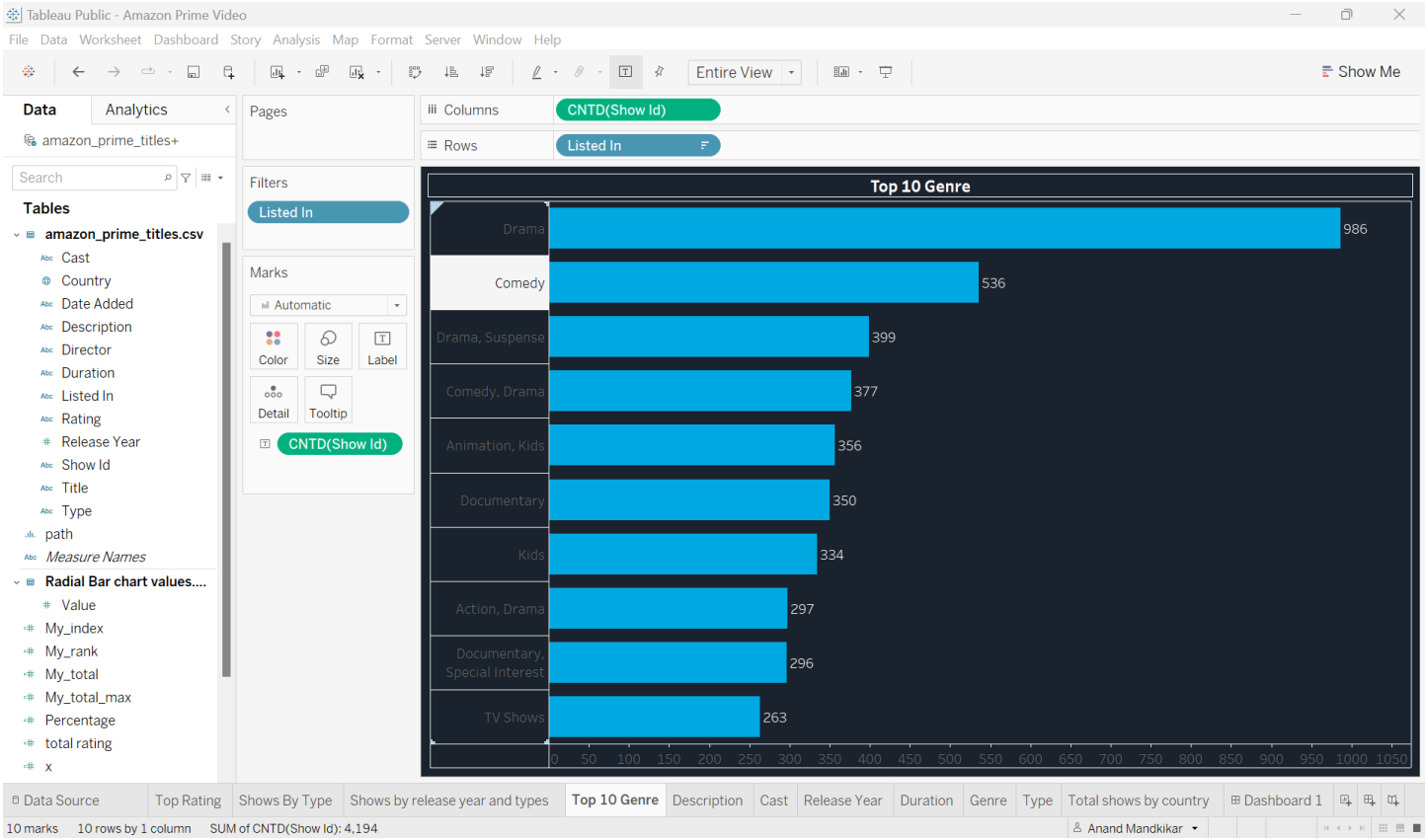
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Percentage
total rating
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Pages
Filters
Listed In
Marks
Automatic
Color
Size
Label
Detail
Tooltip
CNTD(Show Id)
Columns
CNTD(Show Id)
Rows
Listed In
Top 10 Genre
Drama
Comedy
Drama, Suspense
Comedy, Drama
Animation, Kids
Documentary
Kids
Action, Drama
Documentary, Special Interest
TV Shows
986
536
399
377
356
350
334
297
296
263
Data Source
Top Rating
Shows By Type
Shows by release year and types
Top 10 Genre
Description
Cast
Release Year
Duration
Genre
Type
Total shows by country
Dashboard 1
10 marks
10 rows by 1 column
SUM of CNTD(Show Id): 4,194
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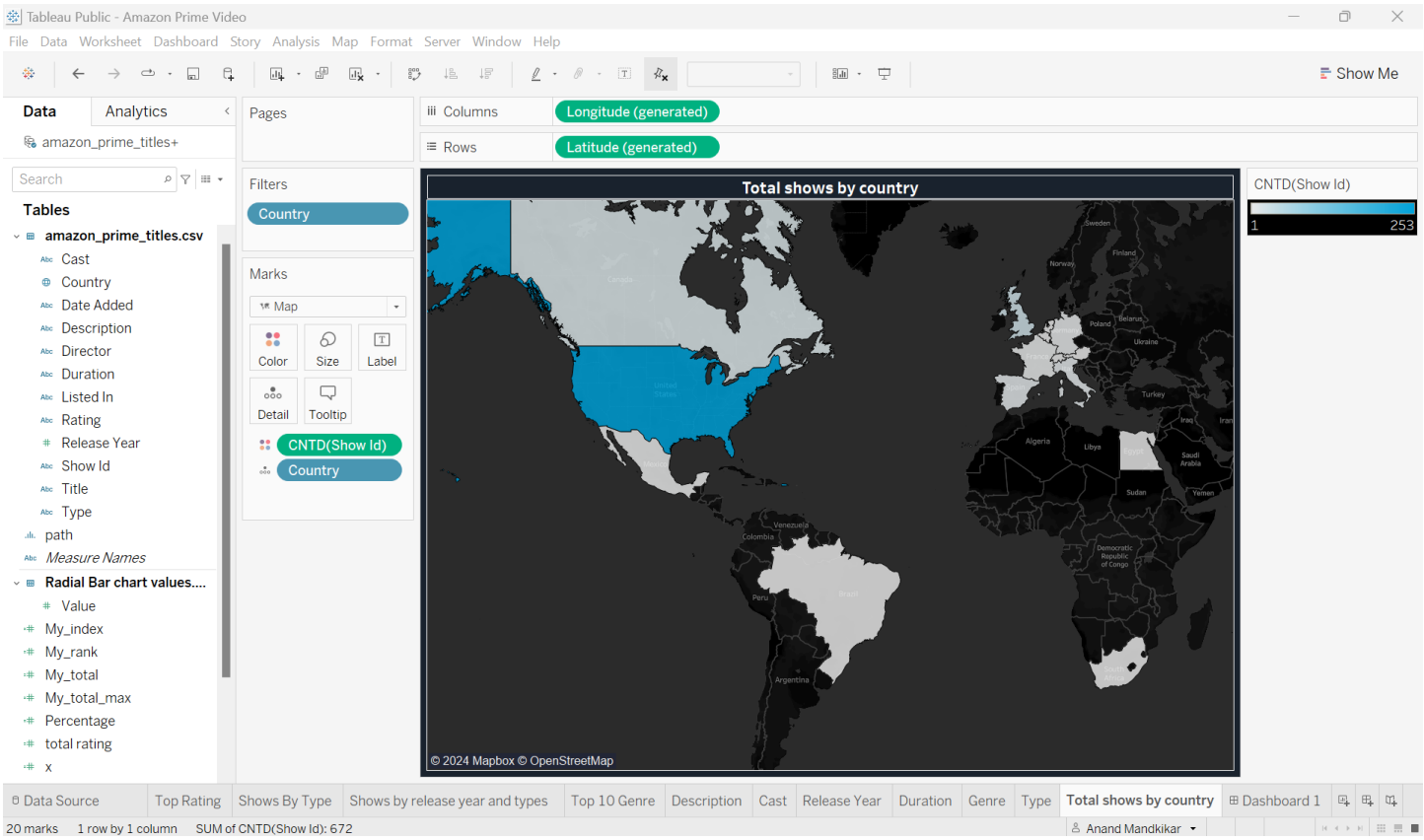

BIBLOGRAPHY

Geek for Geeks An interactive web-based dashboard to track Prime Video in real time.