

How I used Amazon QuickSight to visualise data



[Brian Kimemia N]



BRIAN KIMEMIA N



<https://github.com/BrianKN019>

—

BEFORE WE START...

What is Amazon QuickSight?

What it does:

- Amazon QuickSight is a cloud-based business intelligence service by AWS that enables users to analyze and visualize data quickly and easily. It provides intuitive dashboards, interactive visualizations, and seamless integration with other AWS services for efficient data analysis and decision-making.

Why it's useful:

- QuickSight is useful for its ability to quickly analyze and visualize data, enabling informed decision-making and enhancing business intelligence

How I'm using it in today's project:

- In today's project, I'm using Amazon QuickSight to analyze and visualize Netflix data from Kaggle platform, providing actionable insights identifying trends, patterns, and correlations, optimizing processes, improving efficiency, detecting anomalies, and fostering innovation.



BRIAN KIMEMIA N



<https://github.com/BrianKN019>



step one

UPLOAD THE DATASET AND A MANIFEST.JSON FILE INTO S3

- S3 is used in this project to provide seamless integration with QuickSight, enabling efficient data ingestion and access for analysis.
- I edited the manifest.json file by Replacing the URL in the "manifest.json" file with the S3 URL of my dataset.
- It's important to edit this file because we can tailor the project to specific requirements, ensuring optimal performance and functionality

The screenshot shows the AWS S3 console interface. On the left, there is a list of objects: 'manifest.json' (json type) and 'netflix_titles.csv' (csv type). On the right, a Sublime Text window is open with the file 'manifest.json'. The file contains the following JSON code:

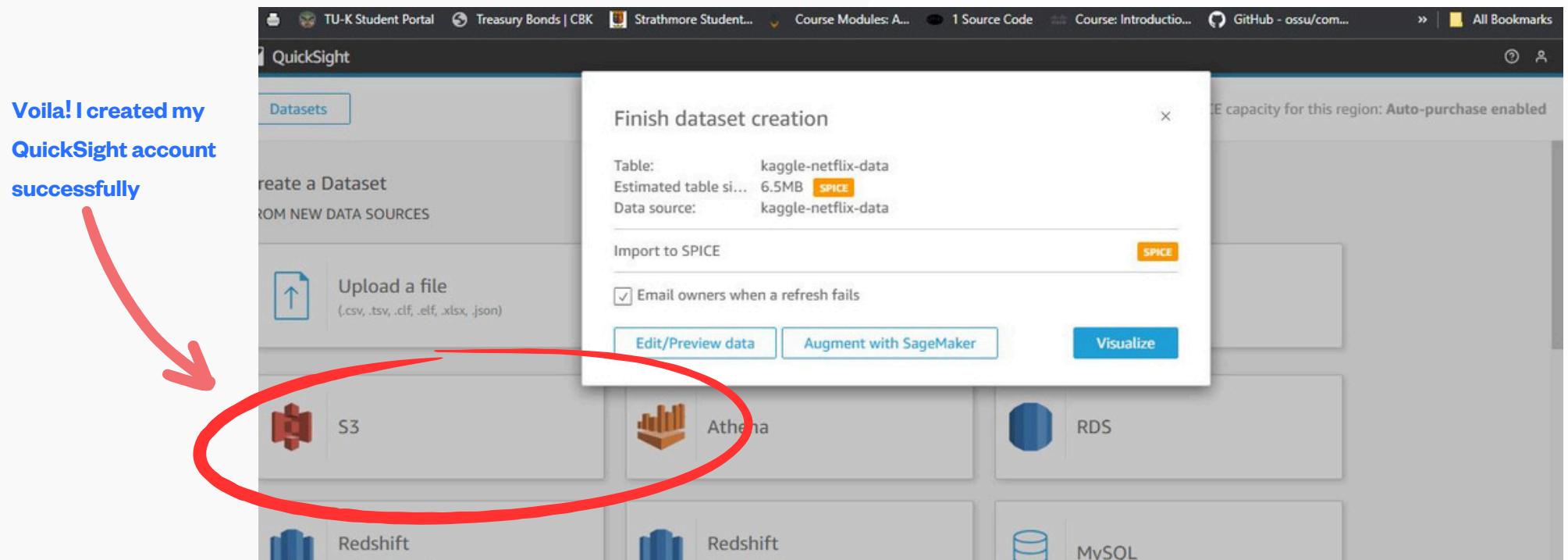
```
{  
  "fileLocations": [  
    {  
      "URIs": [  
        "s3://nextwork-quicksight-project-brayo/netflix_titles.csv"  
      ]  
    }  
  ],  
  "globalUploadSettings": {  
    "format": "CSV",  
    "delimiter": ",",  
    "textqualifier": "\"",  
    "containsHeader": "true"  
  }  
}
```

The URL 's3://nextwork-quicksight-project-brayo/netflix_titles.csv' is highlighted with a red box.

STEP TWO

Create Amazon Quicksight account

- By granting QuickSight appropriate permissions to access S3, we ensure seamless integration between the two services, facilitating smooth data ingestion and analysis workflows. This access enables QuickSight to efficiently retrieve, process, and visualize data directly from S3, eliminating the need for manual data transfers or intermediaries.



BRIAN KIMEMIA N

<https://github.com/BrianKN019>

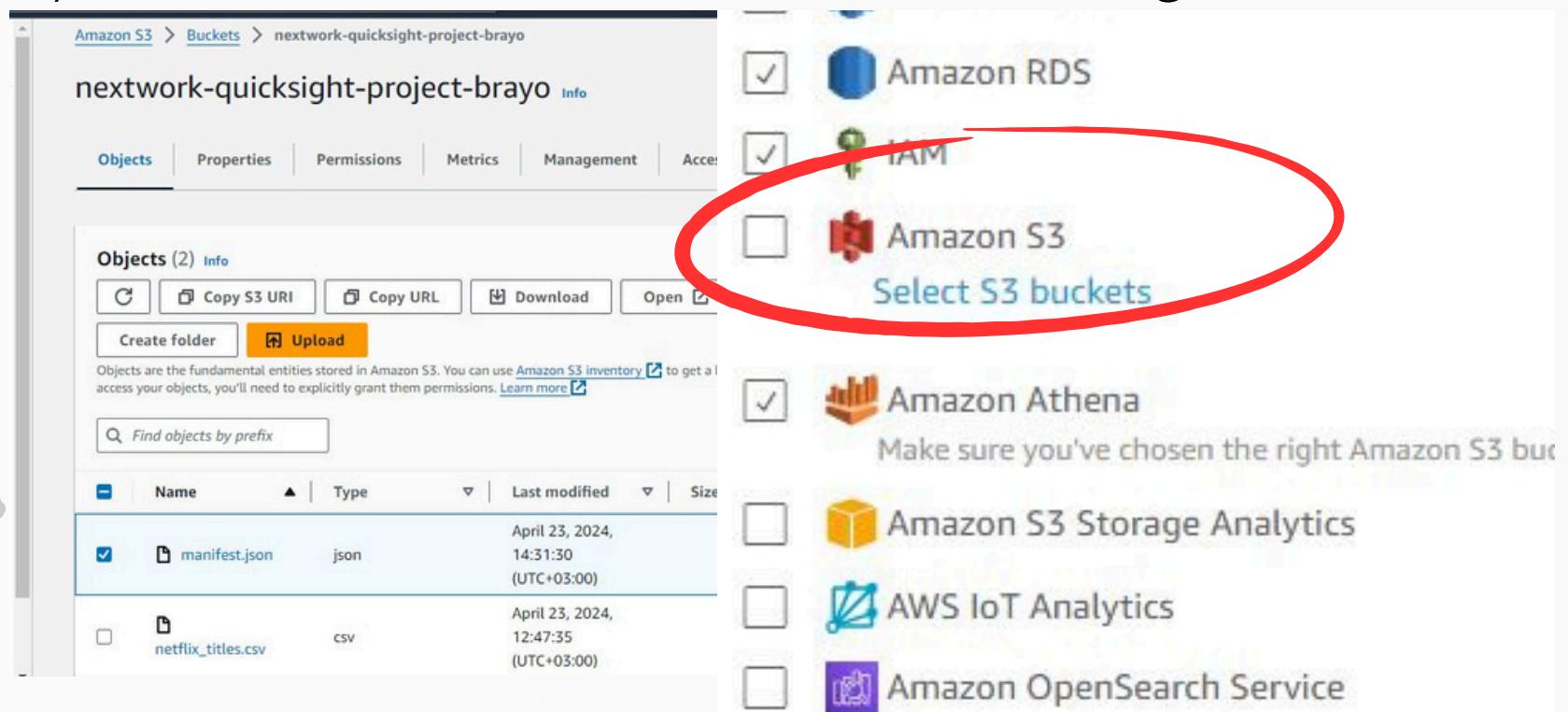


STEP THREE

Connect your S3 bucket to Amazon QuickSight

- I connected the S3 bucket to QuickSight by specifying the bucket's ARN (Amazon Resource Name) during the data source setup process in QuickSight's console.
- The manifest.json file was important in this step because it provides essential configuration details, including data source settings, ensuring accurate connectivity and data retrieval between the S3 bucket and QuickSight.

Entering the
manifest.json URL



BRIAN KIMEMIA N

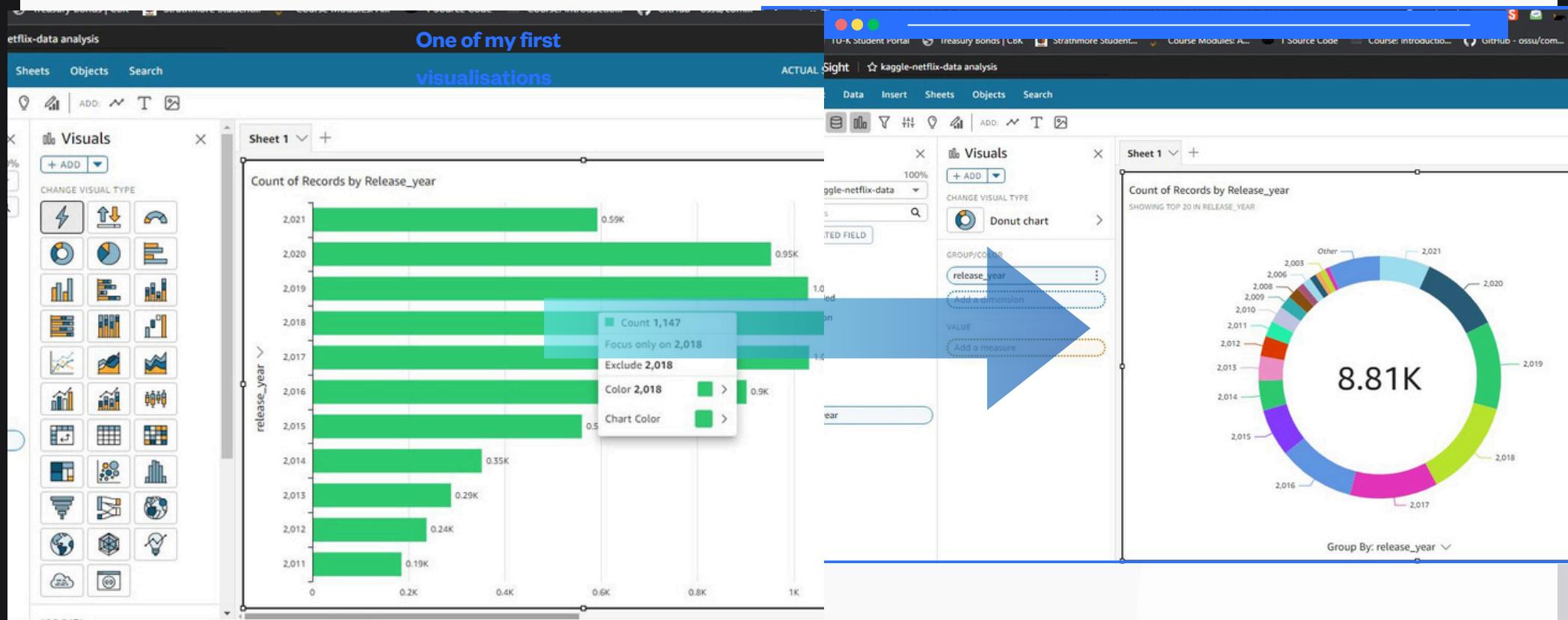
<https://github.com/BrianKN019>



STEP FOUR

Let's make visualisations!

- To create visualizations on QuickSight, navigate to the "Analysis" tab , select "New analysis."
- Choose appropriate data source ,build visualizations using intuitive drag-and-drop interface. QuickSight provides a wide range of visualization options, eg. line graphs, bar & pie charts,maps etc



BRIAN KIMEMIA N

<https://github.com/BrianKN019>



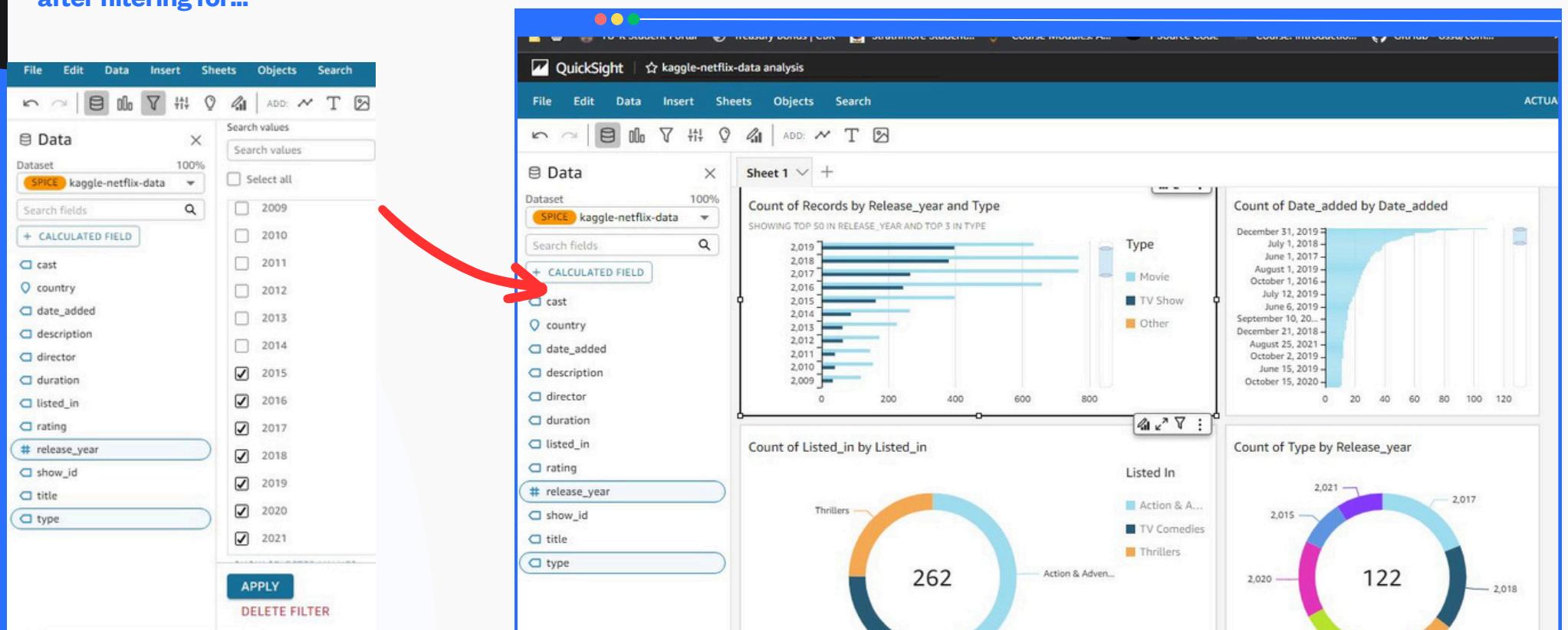
STEP FIVE

Using filters

- Filters are useful for refining data visualizations by allowing users to focus on specific subsets of data based on defined criteria. They enable users to narrow down the scope of analysis, highlight relevant information, and uncover insights that might otherwise be obscured by large datasets.

A visualisation set up

after filtering for...



BRIAN KIMEMIA N

<https://github.com/BrianKN019>

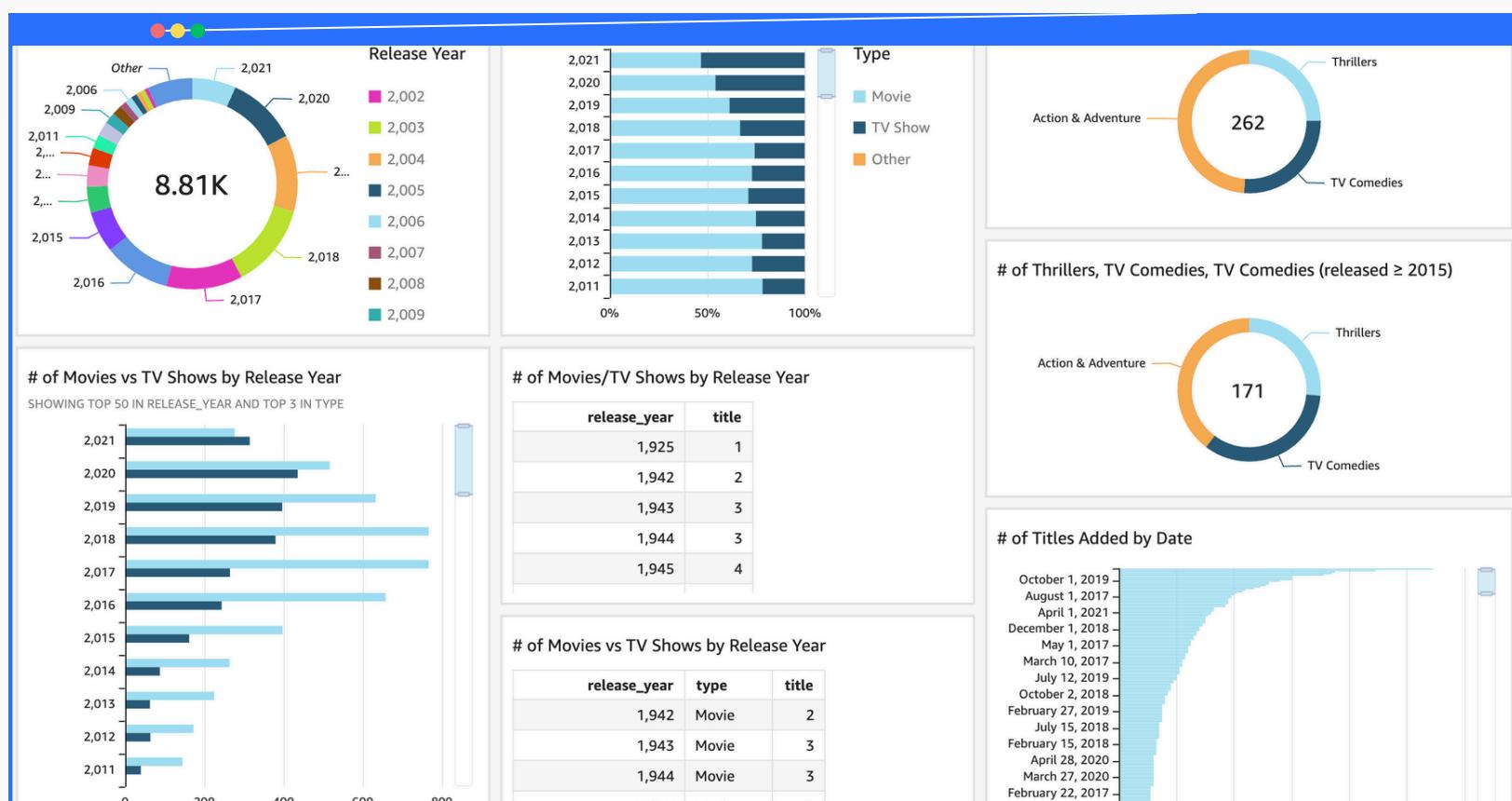


STEP SIX

Set up your dashboard!

- As a finishing touch, I ensured the visualization adhered to best practices in data visualization design by optimizing its readability, clarity, and aesthetics. This involved adjusting formatting options such as color schemes, font sizes, and axis labels to enhance visual appeal and ensure that key insights are easily discernible at a glance

Voila! Here's the finished dashboard!



BRIAN KIMEMIA N

<https://github.com/BrianKN019>



My Key Learnings

01

QuickSight is a cloud-based business intelligence tool by AWS that empowers users to analyze and visualize their data effortlessly, enabling informed decision-making through intuitive dashboards and interactive insights.

02

This usage of manifest.json streamlines the setup process and enhances the overall functionality and performance of the QuickSight project.

03

Creating visualizations on QuickSight was surprisingly easy. The intuitive interface and drag-and-drop functionality made it a smooth process, and the wide range of options provided flexibility.

04

Integration with other Amazon services was also valuable. It allowed seamless utilization of services like S3 for data storage, Athena for ad-hoc querying, and Redshift for data warehousing, enhancing our analytics infrastructure's capabilities and scalability.



BRIAN KIMEMIA N

 <https://github.com/BrianKN019>



Final thoughts...

- Delete EVERYTHING at the end! Let's keep this project free :)
- Now that I know how to use QuickSight, in the future I'd integrate with other AWS services , eg Amazon S3, Amazon Redshift, Amazon RDS, Amazon Aurora, Amazon Athena, Amazon EMR, to include, and facilitate streamlining reporting processes, monitoring business metrics in real-time, identifying trends and anomalies, conducting ad-hoc analysis, and derive actionable insights for informed decision-making.



BRIAN KIMEMIA N

 <https://github.com/BrianKN019>



Find this helpful?

- thumb up Like this post
- comment Leave a comment
- bookmark Save for later
- heart Let's connect!



BRIAN KIMEMIA N



<https://github.com/BrianKN019>



www.linkedin.com/in/nbriankimemia019b

Thanks NextWork for the
free project guide!