

# Visualize data with QuickSight





Amazon QuickSight



## Introducing Amazon QuickSight!

#### What it does & how it's useful

Amazon QuickSight is a scalable, serverless business intelligence (BI) service that enables data visualization and analysis. Developers and teams use Amazon QuickSight because it offers fast, easy-to-use, and cost-effective data analysis, interactive dashboards, and seamless integration with other AWS services.

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

I'm using Amazon QuickSight in this project to analyze a Netflix dataset and create a dynamic dashboard with various visualizations. This will help extract key insights about the content on Netflix and present them in an easy-to-understand format.

#### This project took me...

This project took me about 1 hours to complete. Documentation took me around 15 minutes to write.

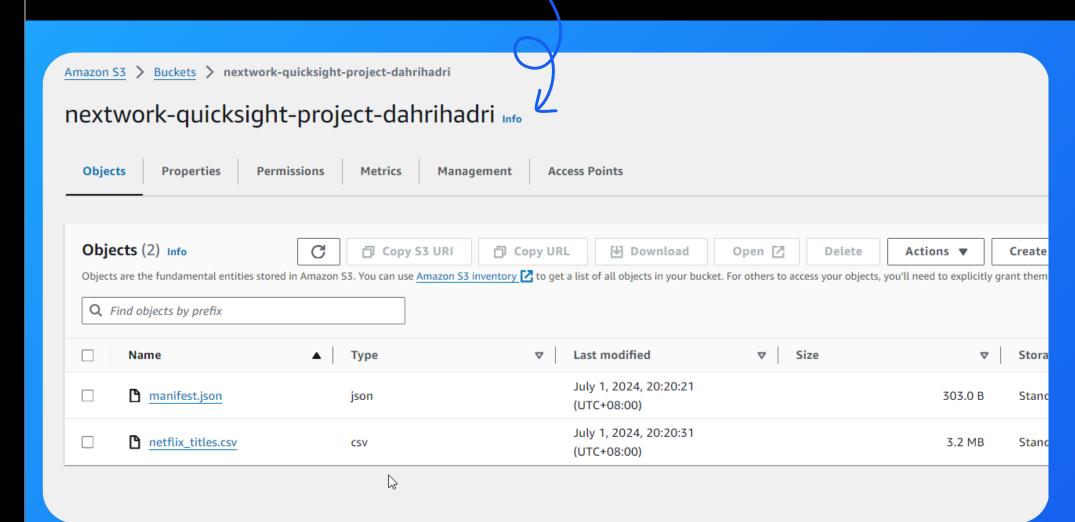




### Upload project files into S3

- S3 is used in this project to store two files, which are 'netflix\_titles.csv', which contains all the data we're analyzing, and 'manifest.json', which guides Amazon QuickSight on how to read the data.
- I edited the manifest.json file by replacing the URL with the S3 URL of my dataset. It's important to edit this file because it directs Amazon QuickSight to the correct data location, ensuring accurate data visualization.

Here's my bucket with the CSV file and manifest.json!

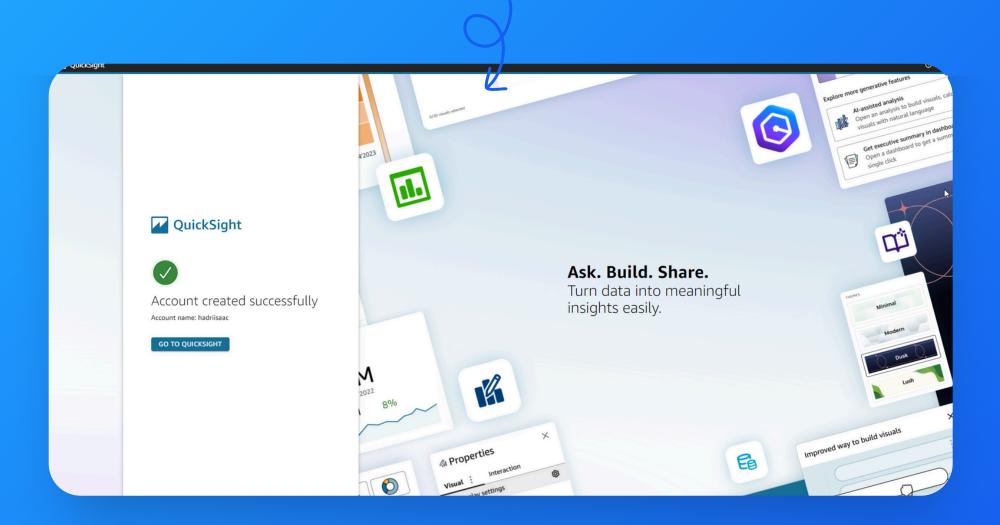




### Create QuickSight account

- It cost \$0 to use QuickSight for this project since it offers a free trial. Just remember to delete your QuickSight account after completing the project to avoid any charges.
- Creating a QuickSight account took me about 3 minutes.
- I also had to enable QuickSight's access to S3 because it allows QuickSight to retrieve and use the data stored in the S3 bucket for visualization and analysis.

Voila! I created my QuickSight account successfully.

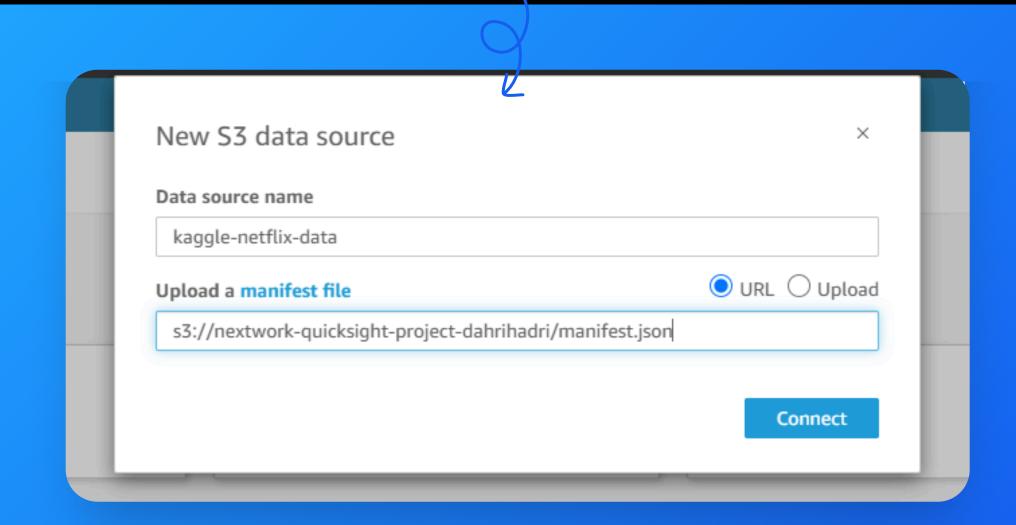




#### Connect S3 + QuickSight

- I connected the S3 bucket to QuickSight by specifying the S3 bucket name and uploading the manifest.json file containing metadata about the dataset structure.
- The manifest.json file helps QuickSight understand how to interpret and visualize the data correctly.

Entering the manifest.json URL.

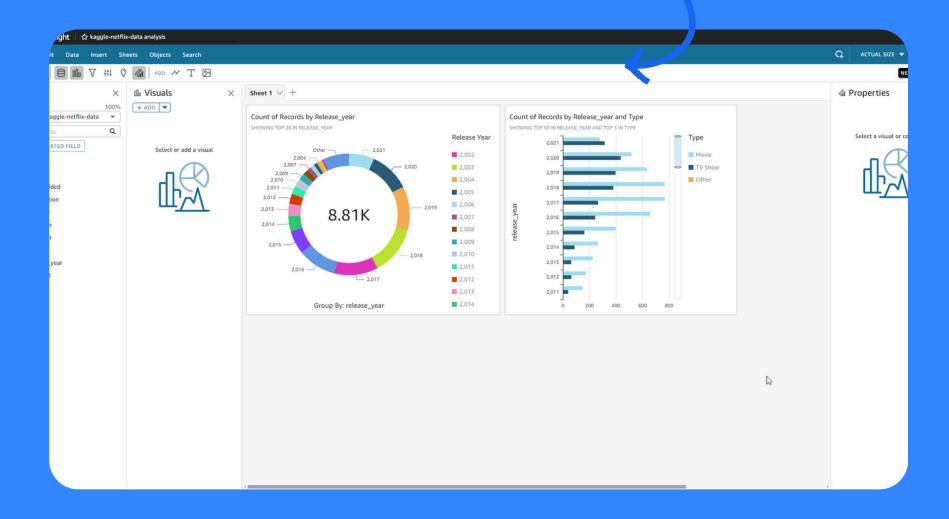




#### Let's make visualisations!

- To create visualizations on QuickSight, you'll need to select your dataset, choose the appropriate visualization type (like bar charts or line graphs), and drag and drop fields to define axes or groupings.
   QuickSight's intuitive interface makes exploring data and creating impactful visuals straightforward.
- The chart/graph shown here is a breakdown of the number of Netflix titles by genre. It visualizes the distribution of titles across different genres, highlighting trends and proportions within the dataset.
- I created this graph by selecting the genre field and applying a count aggregation to visualize the distribution of Netflix titles across various genres.

One of my first visualisations.

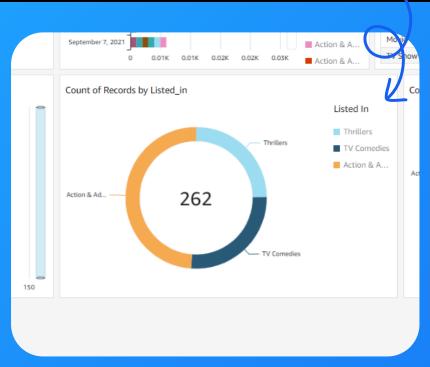




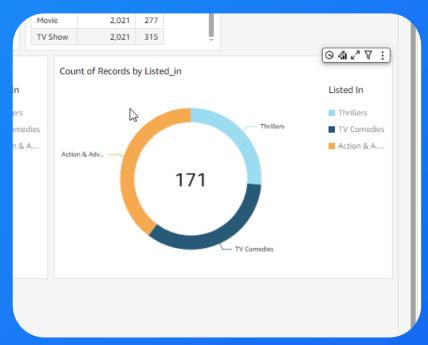
## Using filters

- Filters are useful for narrowing down data subsets based on specific criteria, such as date ranges, categories, or values, to focus analysis and create targeted visualizations in Amazon QuickSight.
- Here I added a filter by genre (Action, Thriller, and Comedies). This helped me create a visualization on the distribution of these specific genres over different years, providing insights into trends and patterns in the release dates.

A visualisation set up after adding filters.





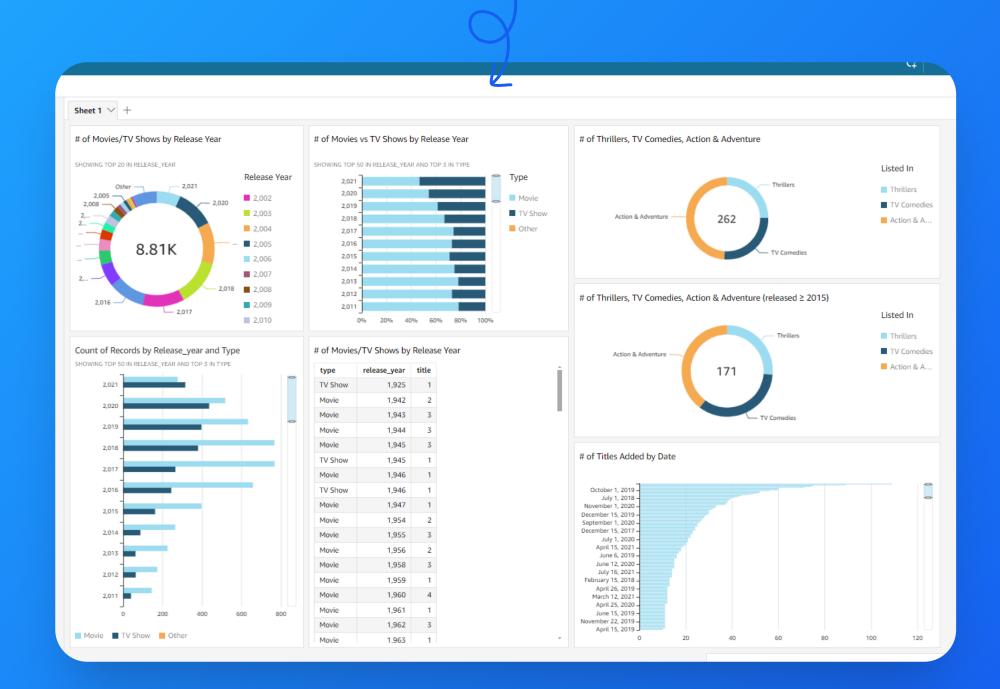




#### Set up your dashboard!

- As a finishing touch, I edited the titles of each chart to clearly reflect their content. This ensures viewers can quickly understand the insights presented in my dashboard without confusion.
- Did you know you could export your dashboard as PDFs too? I did this by selecting the Export icon, choosing Generate PDFs, and then downloading the PDF once it was ready. It's a handy way to share and archive your visual insights from Amazon QuickSight!

Voila! Here's the finished dashboard!





### My key learnings

- An S3 bucket was used in this project to securely store and manage the dataset of Netflix shows and movies, allowing Amazon QuickSight to seamlessly access and analyze the data for creating insightful visualizations and dashboards.
- To connect the data stored in S3 with QuickSight, I had to use the manifest.json file. This file acts as a schema that guides QuickSight on how to interpret and visualize the dataset stored in the S3 bucket.
- Creating visualizations on QuickSight was surprisingly intuitive and easier than I expected. The drag-and-drop interface and variety of chart options made it straightforward to explore and present insights from the dataset effectively.
- One thing I didn't expect was how seamlessly QuickSight integrated with S3 and how quickly I could generate meaningful visualizations. It made data analysis feel more accessible and enjoyable than I initially anticipated.





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