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Visualize data with Amazon QuickSight

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Introducing Today's Project!

What is Amazon QuickSight?

Amazon QuickSight is a cloud-based business intelligence (BI) service. Itś' useful because it helps you create interactive dashboards and visualizations from your data. Itś' fast, scalable, and easy to use, making data insights accessible to everyone

How I used Amazon QuickSight in this project

I used Amazon QuickSight to analyze and visualize data stored in an S3 bucket. By creating graphs, applying filters, and customizing dashboards, I gained insights into release trends for movies and TV shows, which I exported for shar ing.

One thing I didn't expect in this project was...

One thing I didn't expect in this project was how easy it was to create visualizations with QuickSight. The drag-and-drop interface and filtering options made exploring my data surprisingly quick and intuitive.

This project took me...

This project took me 1.5 hours to complete. Setting up the QuickSight account and connecting the S3 bucket was quick, but creating visualizations, adding filters, and refining the dashboard took more time to ensure accuracy and clarity.

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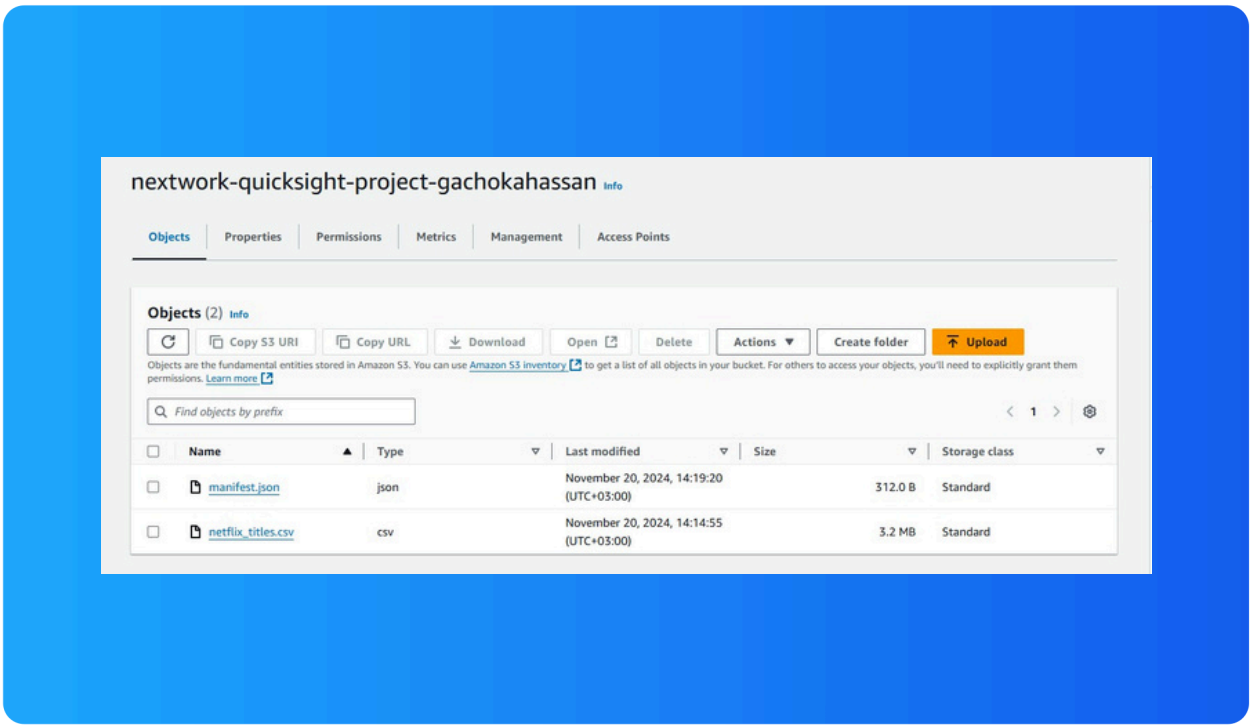
Upload project files into S3

S3 is used in this project to store two files, which are: netflix_titles.csv, the dataset with Netflix's TV shows and movies, and manifest.json, a file that helps QuickSight understand the dataset's structure and location for visualizations.

I edited the manifest.json file by replacing its placeholder URL with the S3 URL of netflix_titles.csv. It’s important to edit this file because it ensures QuickSight can locate and correctly interpret the dataset for visualizations.



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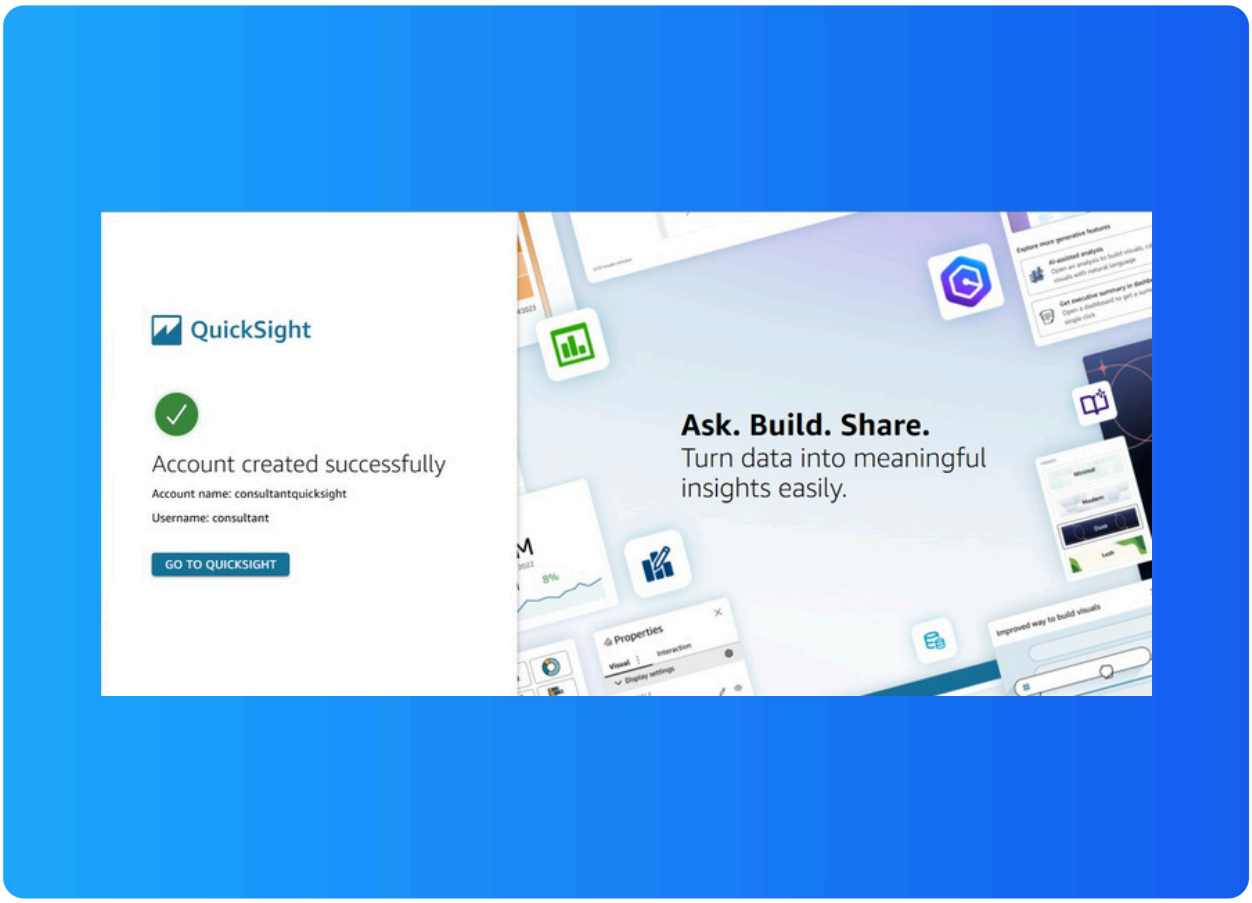
Create QuickSight account

Creating a QuickSight account cost me nothing initially because it comes with a free trial. However, I made sure to uncheck paid features like Paginated Reports because I did not need it in this project.

Creating an account took me about two minutes. The process was quick and straightforward, requiring just a few steps to set up the free trial and connect it to my S3 bucket since QuickSight needs access to the dataset stored there.



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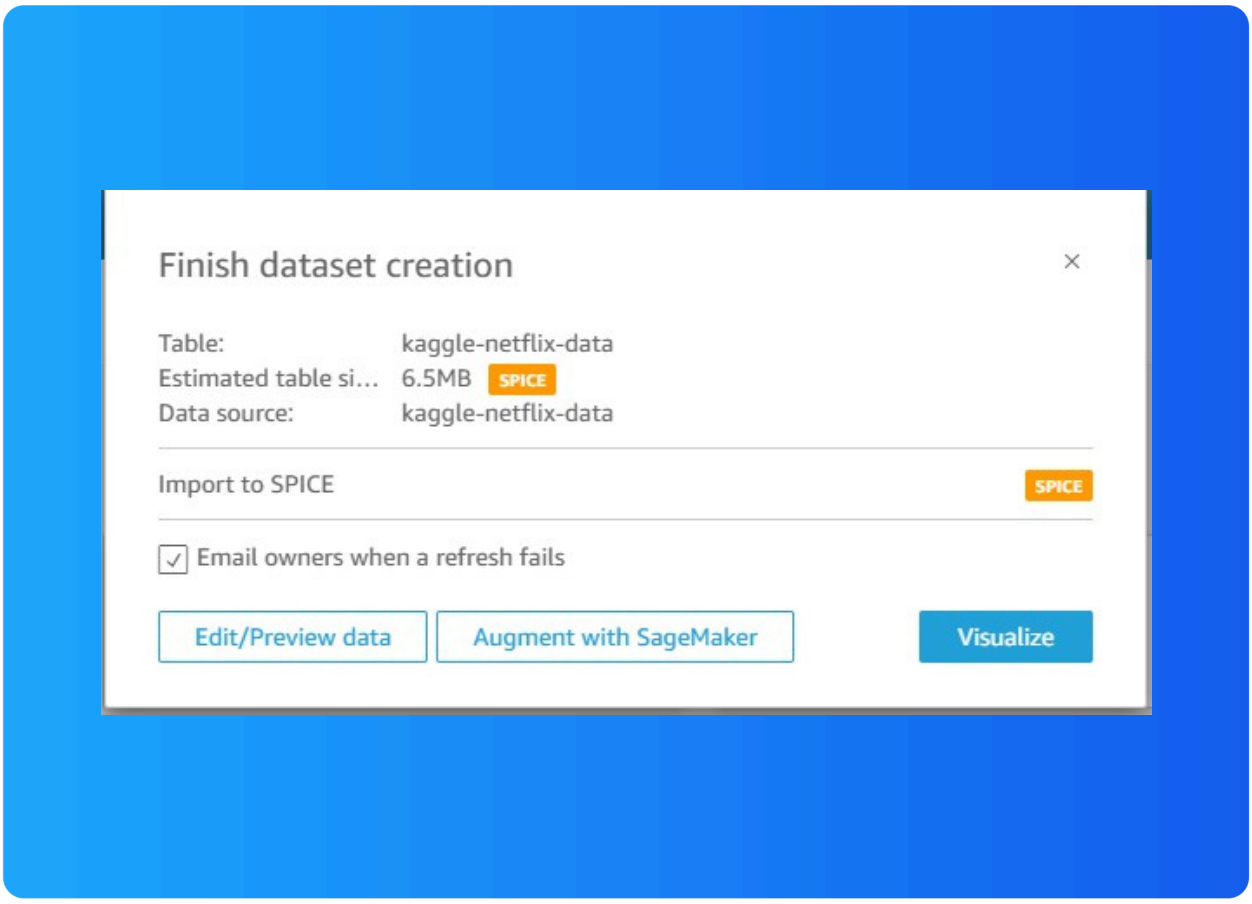
Download the Dataset

I connected the S3 bucket to QuickSight by visiting the Datasets page and selecting "New dataset." From there, I chose S3 as the source and entered the S3 URL and manifest.json details to link the dataset.

The manifest.json file was important in this step because it tells QuickSight how to interpret the dataset. It provides the necessary metadata, like the file's structure and location, so QuickSight can correctly process and visualize the data.



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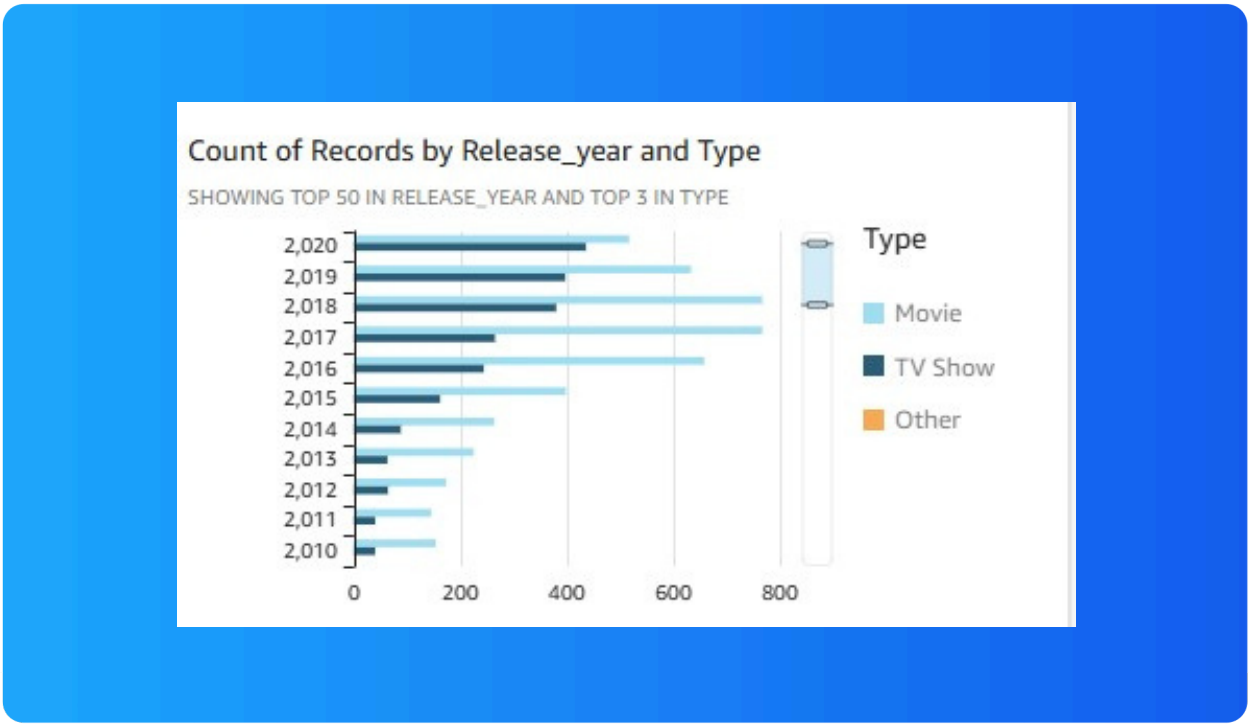
My first visualization

To create visualizations on QuickSight, I selected a dataset, then dragged fields into the visual editor. I customized chart types, added filters, and adjusted settings to display the data in various formats like bar charts, tables, and pie charts.

The chart shown here is a breakdown of Netflix titles by release year, comparing movies and TV shows. It visualizes the count of each type per year, making it easy to identify trends in content production over time.

I created this graph by dragging and dropping the "Release Year" field to the Y-axis and "Type," i.e., movie or TV show, as the grouping variable. This setup visualizes the number of titles released each year, categorized by type.



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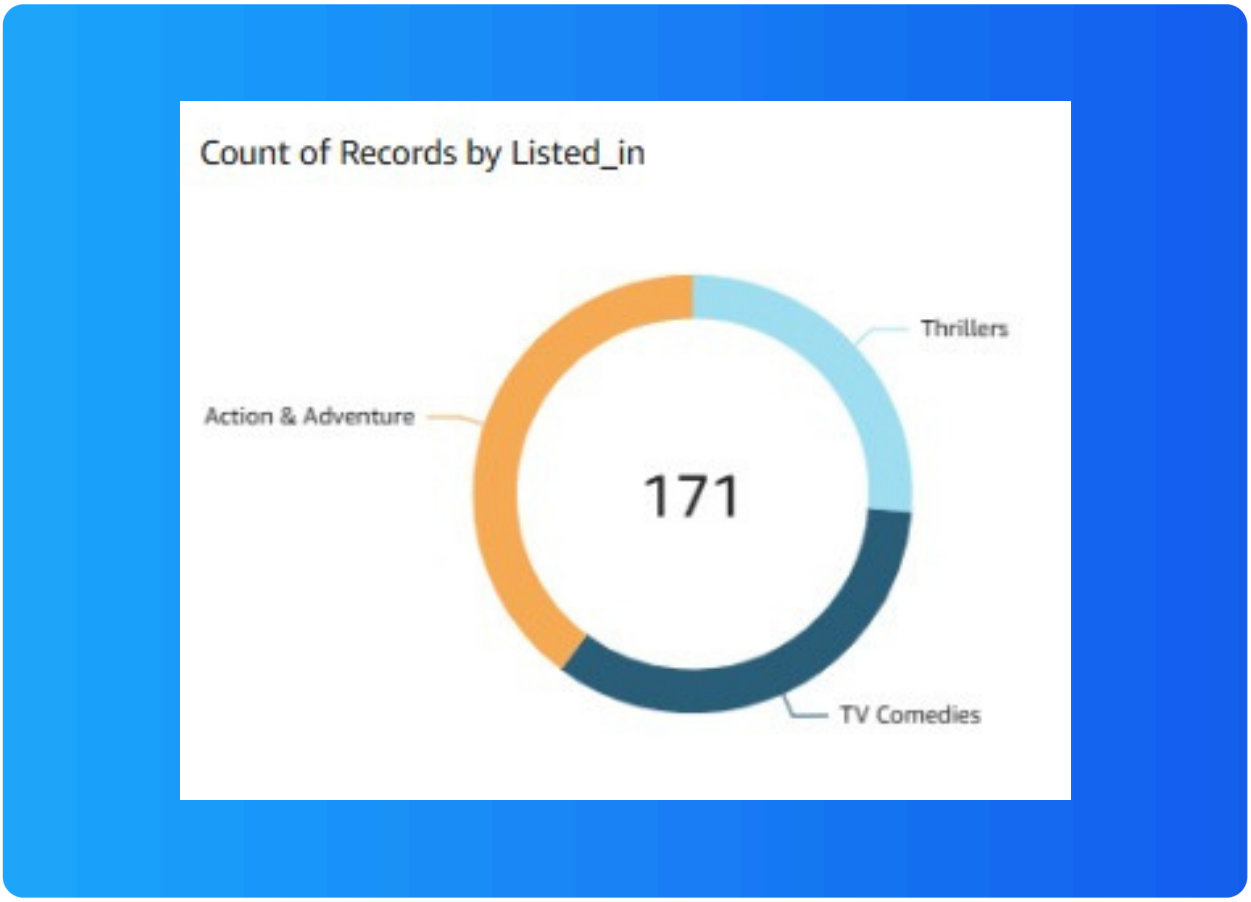
Using filters

Filters are useful for narrowing down the data displayed in a visualization, allowing you to focus on specific subsets of information. They help improve clarity, highlight trends, and make insights more relevant to your analysis or audience.

This visualization is a breakdown of the release years of movies and TV shows. Here, I added a filter by "release_date" to show only movies and TV shows released from 2015 onwards, allowing me to focus on the three genres released during that time.



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Setting up a dashboard

As a finishing touch, I reviewed the dashboard for clarity and ensured all filters and visualizations were displaying the correct data. I also edited the graph titles and adjusted the layout to make everything well-organized before publishing it.

Did you know you could export your dashboard as PDFs too? I did this by clicking on the "Share" button in QuickSight, selecting "Export to PDF," and waiting for the download link to save the file in your computer.