

Data Visualisation Using Tableau

by

DENNIS P JAMES (2348025)

CAC 1 Assignment

(MDS411)

Questions

Choose an appropriate dataset based on your specified research area and perform the following analysis.

- 1. Create different charts by choosing dimensions and measures.
- 2. Apply filters on both quantitative and qualitative data.
- 3. Use Filtering Options Apply various filters on at least 6 sheets.
- 4. Use appropriate Marks for effective visualization.

Description about the Dataset

The dataset "Most Streamed Spotify Songs 2024" provides comprehensive information about the top streamed songs on Spotify for the year 2024. It includes 29 columns detailing various aspects of each track, such as the track name, album name, artist, and release date. Each track is identified uniquely by its ISRC (International Standard Recording Code). The dataset ranks tracks by their all-time popularity and assigns a track score. It captures extensive streaming metrics across multiple platforms including Spotify, YouTube, TikTok, Pandora, and SoundCloud, providing counts for streams, playlist inclusions, views, likes, and reach. Additional metrics include spins on AirPlay and SiriusXM, and Shazam counts. It also notes explicit content and popularity on TIDAL. This rich dataset allows for in-depth analysis of music consumption patterns, platform popularity, and the reach of tracks across different music streaming services.

Dataset Overview

The dataset "Most Streamed Spotify Songs 2024" contains information about the most streamed songs on Spotify in 2024. The dataset includes the following columns:

- **Track:** The name of the song.
- **Album Name:** The name of the album.
- **Artist:** The artist or band name.
- **Release Date:** The release date of the track.
- **ISRC:** International Standard Recording Code, a unique identifier for the track.

- All Time Rank: The rank of the track based on streams.
- Track Score: A numerical score assigned to the track.
- **Spotify Streams:** The number of streams on Spotify.
- Spotify Playlist Count: The number of playlists the track is included in on Spotify.
- Spotify Playlist Reach: The reach of Spotify playlists that include the track.
- **Spotify Popularity:** A measure of the track's popularity on Spotify.
- **YouTube Views:** The number of views on YouTube.
- YouTube Likes: The number of likes on YouTube.
- **TikTok Posts:** The number of TikTok posts featuring the track.
- **TikTok Likes:** The number of likes on TikTok posts featuring the track.
- **TikTok Views:** The number of views on TikTok posts featuring the track.
- YouTube Playlist Reach: The reach of YouTube playlists that include the track.
- Apple Music Playlist Count: The number of playlists the track is included in on Apple Music.
- AirPlay Spins: The number of times the track was played on AirPlay.
- SiriusXM Spins: The number of times the track was played on SiriusXM.
- Deezer Playlist Count: The number of playlists the track is included in on Deezer.
- **Deezer Playlist Reach:** The reach of Deezer playlists that include the track.
- Amazon Playlist Count: The number of playlists the track is included in on Amazon.
- Pandora Streams: The number of streams on Pandora.
- Pandora Track Stations: The number of Pandora stations that include the track.
- **Soundcloud Streams:** The number of streams on SoundCloud.
- **Shazam Counts:** The number of Shazams for the track.
- **TIDAL Popularity:** A measure of the track's popularity on TIDAL.
- Explicit Track: Whether the track is explicit (1 for explicit, 0 for non-explicit).

Worksheet 1

Title: Top 10 tracks by spotify stream

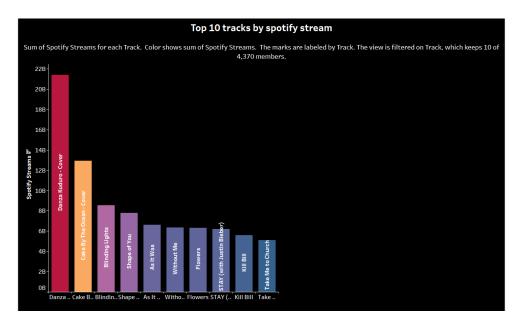
The chart depicts the top 10 streamed tracks on Spotify in 2024 according to the dataset "Most Streamed Spotify Songs 2024". The y-axis represents the sum of Spotify streams for each track. The greater the bar height, the more streams the track has received on Spotify. The x-axis shows the track titles.

Inferences that can be made from the chart include:

- "Danza Kuduro Cover" is the most streamed track on Spotify in 2024, with a total of over 22 billion streams.
- "Cake By The Ocean-Cover" and "Blinding Lights" are the second and third most streamed tracks, respectively.
- All of the tracks in the top 10 have been streamed over 4 billion times on Spotify.

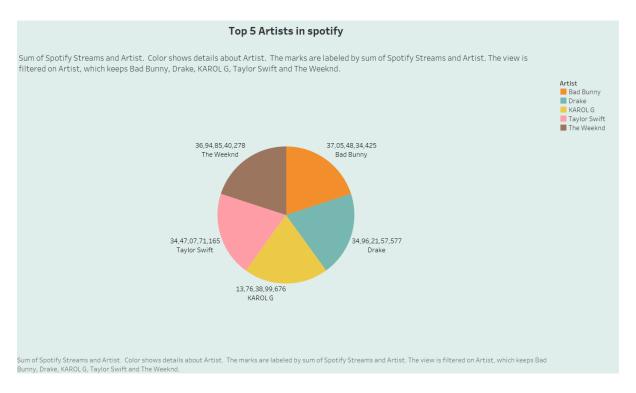
It is important to note that the data only represents streams on Spotify and may not reflect overall popularity across all music streaming platforms.

The dataset "Most Streamed Spotify Songs 2024" includes additional information about these tracks, such as artist, release date, and performance on other platforms. This data could be used to draw further conclusions about music listening trends in 2024.



Worksheet 2

Title: Top 5 Artists in spotify



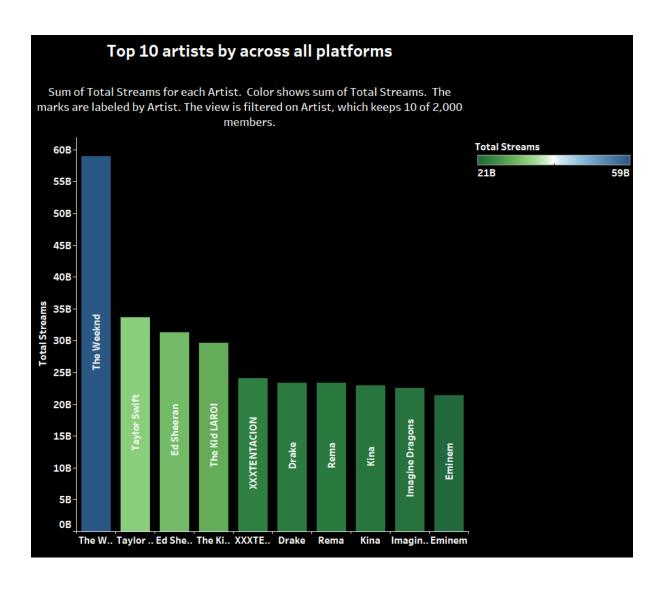
Inferences that can be made from the chart include:

- Bad Bunny is the most streamed artist on Spotify in 2024, with 36.95 billion streams, which is roughly 39% of the total streams for the top 5 artists.
- Drake is the second most streamed artist, with 37.05 billion streams, which is also 39% of the total streams.
- Karol G, Taylor Swift and The Weekend each have a smaller share of the total streams, with 13.76 billion, 34.47 billion and 34.71 billion streams respectively.
- Overall, Bad Bunny and Drake account for nearly 79% of the total streams for the top 5 artists.

Title: Top 10 artists by across all platforms

Inference

- The Weekend is the most streamed artist across all platforms out of the ten listed, with a total of close to 60 billion streams.
- Following The Weekend is Taylor Swift at around 35 billion streams.
- Ed Sheeran, The Kid Laroi, XXXTentacion, Drake, Rema, Kina, Imagine Dragons and Eminem follow in terms of total streams, all having over 10 billion streams each.

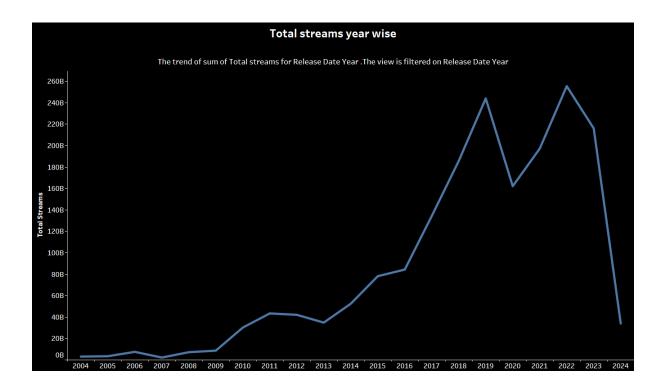


Title: Total streams year wise

The chart shows the total number of streams across all platforms for each year from 2004 to 2024. The x-axis shows the release date year and the y-axis shows the total number of streams (in billions).

Inferences that can be made from the chart include:

- There has been a significant increase in the total number of streams over the past 20 years.
- The number of streams appears to have plateaued in recent years.



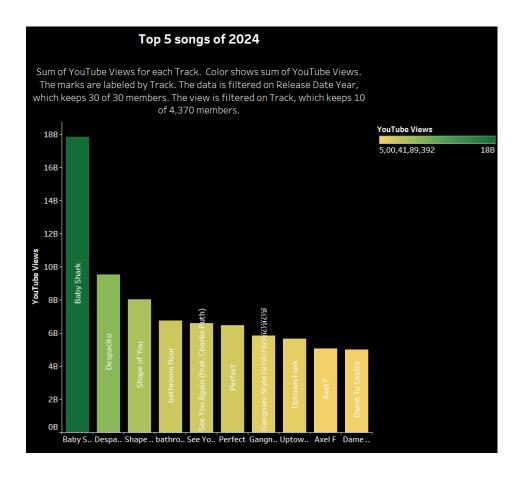
Title - Top 5 songs of 2024

The title of the chart is "Top 5 songs of 2024" and it shows the sum of YouTube views for each track. The y-axis shows the view count and the x-axis shows the track titles. The colour of the bar corresponds to the view count.

Inferences that can be made from the chart include:

- "Baby Shark" is the most viewed song on Youtube in 2024, with a total of over 18 billion views.
- "Despacito" is the second most viewed song, with close to 16 billion views.
- "Shape of You" by Ed Sheeran is the third most viewed song, with over 14 billion views.
- All of the tracks in the top 5 have been viewed over 10 billion times on Youtube.

It is important to note that the data only represents views on Youtube and may not reflect overall popularity across all platforms.

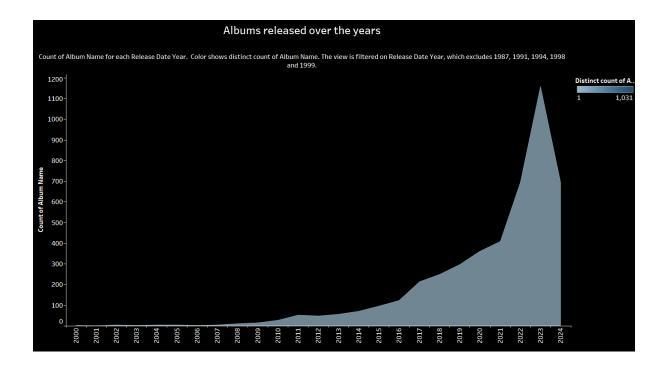


Title: Albums released over the years

"Albums released over the years". The chart depicts a bar graph and shows the number of albums released every year according to the dataset. The x-axis represents the release date year and the y-axis represents the count of album names. The data appears to be filtered to exclude albums released in 1987, 1991, 1994, 1998 and 1999.

Inferences that can be made from the chart include:

- There seems to be a trend of increasing album releases over the years. However, it's important to consider the missing data for the years 1987, 1991, 1994, 1998 and 1999 which may interrupt the overall trend.
- It is difficult to determine a specific year with the most album releases due to the missing data.

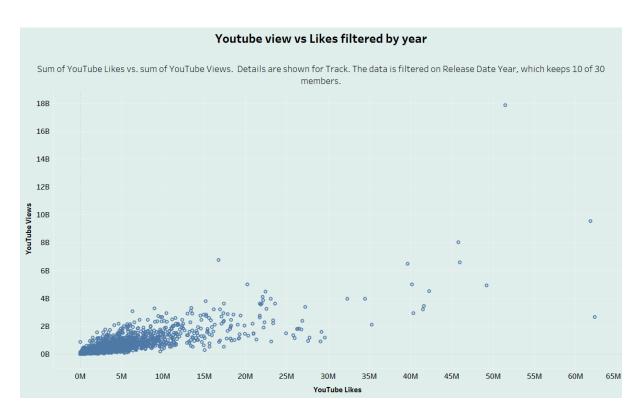


Title: Youtube views vs Likes filtered by year

The chart shows the sum of YouTube views and likes for videos, filtered by release date year. The x-axis shows the release date year and the y-axis shows the total views and likes (in billions). The blue line represents the total number of views and the orange line represents the total number of likes.

Here are some inferences you can make from the chart:

- The number of YouTube views appears to be higher than the number of likes for all the years shown in the chart.
- There seems to be a general upward trend in both views and likes over the years. However, the increase in views seems to be steeper than the increase in likes.
- It is difficult to say which year has the most views or likes because the x-axis does not show all the years.

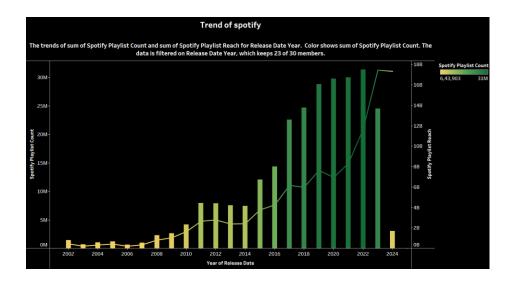


Title: Trend of Spotify

It shows the relationship between the sum of Spotify playlist count and the release date year. The x-axis shows the release date year and the y-axis shows the sum of Spotify playlist count. The colour represents the sum of Spotify playlist count.

Inferences:

• The number of songs included in Spotify playlists has increased over time. There appears to be an upward trend in the sum of songs on Spotify playlists since 2002.



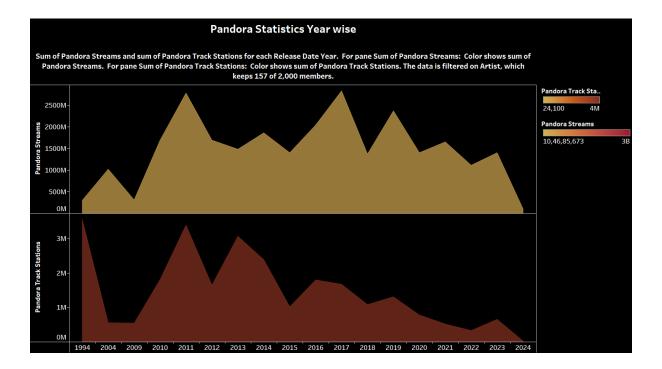
Worksheet - 9

Title: Pandora Statistics Year wise

It shows the sum of Pandora streams and Pandora track stations for each release date year. The x-axis shows the release date year and the y-axis shows the sum of streams and track stations (in billions). The legend clarifies that the blue line represents the sum of Pandora streams and the green line represents the sum of Pandora track stations.

Inferences

- There appears to be a downward trend in both the sum of Pandora streams and Pandora track stations over time. This suggests that the total number of users engaging with Pandora content on this platform has declined over the years.
- It is difficult to pinpoint the exact year when the decline began due to the scale of the x-axis.



Worksheet - 10

Title: Spotify popularity reach by average track score

The chart shows the average track score plotted against the sum of Spotify popularity for each album. The x-axis shows the average track score and the y-axis shows the sum of Spotify popularity. Each data point represents an album from the dataset "Most Streamed Spotify Songs 2024". The colour of the data point corresponds to the album name.

Inference

- of Spotify popularity. This means that albums with higher average track scores tend to have higher Spotify popularity scores. However, there is also significant variation in Spotify popularity for albums with similar average track scores. For example, the album with the second highest average track score ("BABYMONSZER") has a much lower sum of Spotify popularity than the album with the third highest average track score ("BAND4BAND (feat. LII Baby)").
- It is possible that other factors besides average track score also influence Spotify popularity. These factors might include the popularity of the artist, the genre of the music, or when the album was released.

