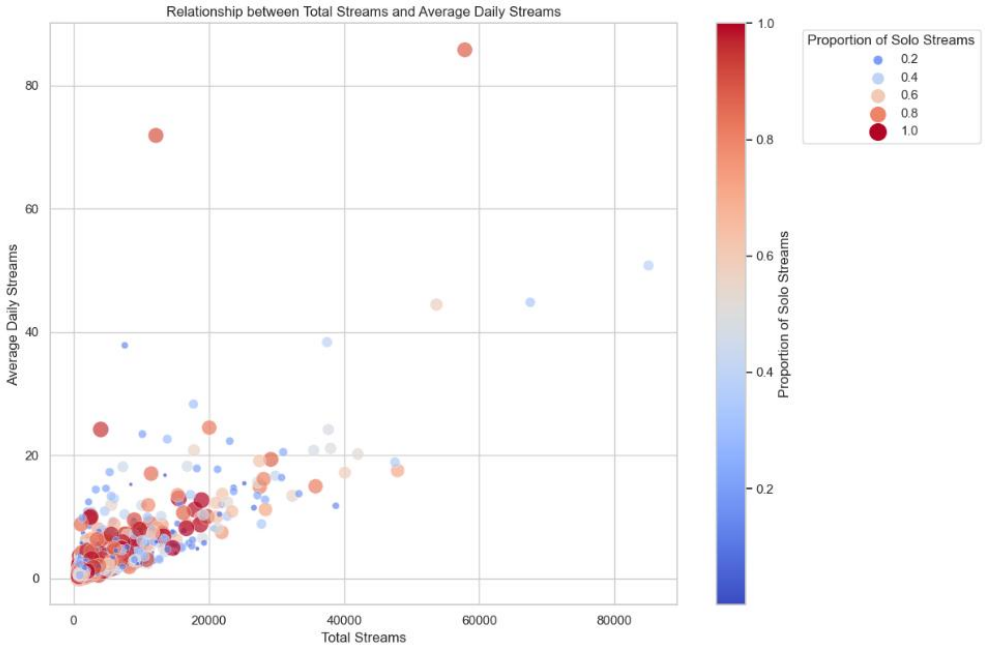
Final Report

Spotify most streamed artists of all time

Figure 1: Scatter Plot



Legend explained

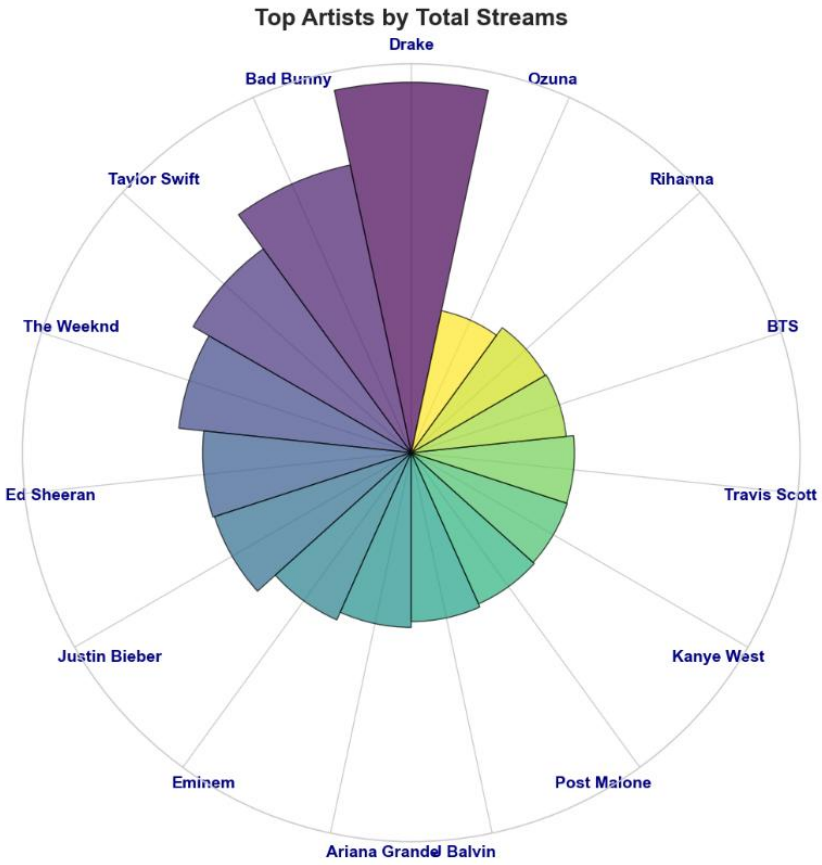
- The x-axis represents the total number of streams for the singers
- The y-axis represents the average daily streams for the singers
- The color intensity indicates the proportion of solo streams to total streams
- The size of the circles indicates the percentage of solo streams

Highlights of the produced figure

- High Density at Lower Streams: Most artists have streams in the lower range, indicating only a few achieve top streaming numbers.
- Solo Stream Significance: Many artists, irrespective of total streams, derive a major portion of their listens from solo projects, showcasing their individual brand strength.
- Daily Stream Variations: Artists with similar total streams can have differing daily stream counts, suggesting variations in current popularity or listener consistency.

Data gathered from:
https://www.kaggle.com/datasets/meeratif/spotify-most-streamed-artists-of-all-time/data
GitHub: https://github.com/ChirsRRRR/INFSCI2415_FinalProject

Figure 2: Radial Bar Chart



Legend explained

- Colored Bars: Each bar represents an artist, with the color being purely aesthetic.The y-axis represents the average daily streams for the singers
- Circumference: The length of each bar is proportional to the artist's total streams normalized against the highest streaming artist.The size of the circles indicates the percentage of solo streams

Highlights of the produced figure

- A striking visual depiction of each artist's streaming volume is offered by the radial bar chart.
- Artists who have longer bars are more likely to stand out as they have the highest total streams.
- When highlighting the distinctions between the top achievers and the others, this visualization technique works especially well.

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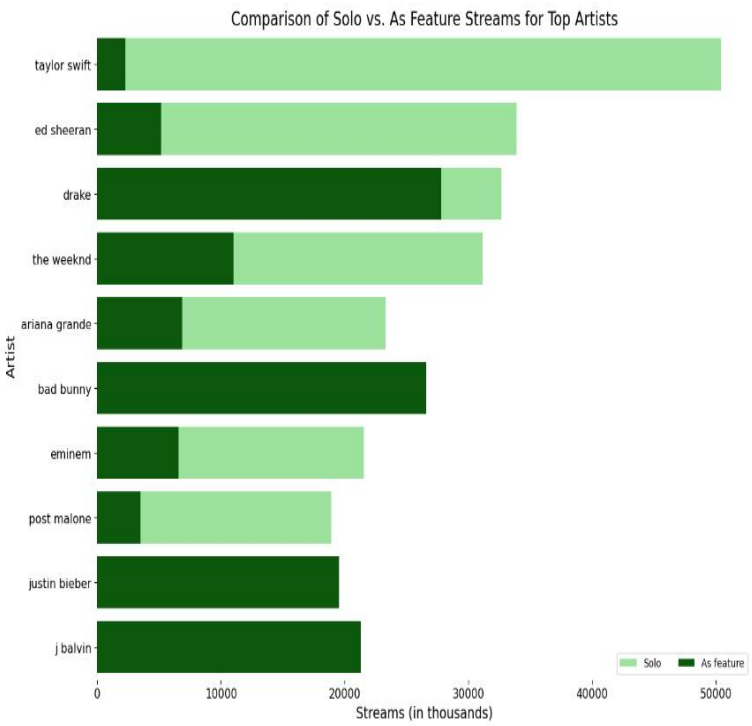
Figure 3: Comparison of Solo vs. As Feature Streams for Top Artists



Legend explained

- The x-axis is number of streams for the artists
- The y-axis is names for the artists
- Light Green Bars: streams where the artist is performing solo.
- Dark Green Bars: streams where the artist is featured with others.

Highlights of the produced figure

- Solo streams show that some artists are very popular, as evidenced by their dominance.
- It's possible that a sizable percentage of other artists' streams come from features, which might indicate fruitful partnerships.

Data and method text describing the data and method used in this process

- `Matplotlib` used for base plotting and `seaborn` for enhanced bar plotting.
- In the drawing process, different colors were used to enhance the contrast. This is used to make the final picture easier to view.
- While creating these figures, standard `matplotlib.pyplot` functions like `figure`, `title`, `xlabel`, `ylabel`, `show` are for setting up the figure and displaying it.
- Use `barplot` from `seaborn` for creating the bar charts.

Significance statement on why the presented figure is important

- The figures offer a clear picture of the music industry's competitive environment by highlighting which artists are top in streaming and how their solo work stacks up against group efforts.
- With this figures, artists and their management teams can decide whether to concentrate on solo work or look for collaborations for next projects.
- On the other hand, the figures make it possible for record labels, musicians, and marketers to make well-informed decisions about possible partnerships, market trends, and promotional strategies based on streaming patterns.

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