Song Popularity Based on Streaming Platforms

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For our dashboard, we chose to use a Spotify dataset from Kaggle to explore the relationship between different music streaming platforms and the rankings of famous songs throughout 2023. The data includes insights regarding each song's audio features, popularity, and presence on the platforms Spotify, Apple Music, Deezer, and Shazam. For our first visualization, we chose to implement a drop-down component that would change the visualized scatter plot based on the chosen streaming platform. Each scatter plot shows the relationship between the number of appearances of a song in user playlists and its ranking on the charts for a chosen platform. It may indicate that different platforms may appeal to different demographics, accounting for the variety in scatter. While there wasn't much correlation shown on the scatter plots, if we were to draw a conclusion, songs that were in a greater number of playlists tend to do better in the rankings than those that appeared in fewer playlists. Our second visualization consisted of two dash components: a range slider and a dropdown menu. The dropdown menu lets the user choose whether to view the data in terms of months or days. Then the slider is used for choosing the range of months. It creates a visualization that will show a histogram of the number of songs released in that time period. It demonstrates how song release dates fluctuate based on the time of year. The graph showed that the greatest number of songs were released during January and May. We noticed that January 1st had the most songs released, but we think it may be possible that it was used as a default value for the date released if the information was not available. For our third visualization, we used an input component that prompts the user to type and enter the title of a song. Then, a bar chart is created that visualizes the rankings of the inputted song on the four streaming services. The lower the number in ranking, the more traction the song had. We wanted to determine if the rankings differed between streaming platforms and music preferences varied since the null hypothesis would be that famous songs would have a similar ranking throughout all platforms. We predict that the context of these platforms can account for these differences.