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# Narrative Visualization of Spotify's Most Streamed Songs in 2024

# Messaging

The core message of this narrative visualization is to offer a comprehensive analysis of Spotify's most streamed songs in 2024. The visualization highlights key metrics such as total streams, cross-platform popularity, and playlist inclusion to provide a detailed view of the songs' performance. This analysis is aimed at music analysts, industry professionals, and enthusiasts, offering insights into the trends and dynamics of music consumption in the digital age. The goal is to inform and facilitate data-driven decisions within the music industry by showcasing how different factors contribute to a song's success.

## **Narrative Structure**

The narrative visualization is designed as an interactive slide show. This structure allows users to explore the data step-by-step, providing a guided yet flexible journey through the dataset. The interactive slide show was chosen to engage users more deeply, allowing them to interact with each scene to uncover detailed information and insights. Each scene builds upon the previous one, gradually revealing more complex layers of the data, while still allowing users the freedom to explore specific details as needed.

#### Visual Structure

The visual structure of each scene is carefully crafted to ensure clarity, engagement, and ease of navigation:

- Scene 1: Top 50 Streamed Songs on Spotify
  - Visualization: Bar chart
  - Purpose: To provide an overview of the most streamed songs on Spotify, emphasizing their total stream counts.
  - Design Elements: Bars are color-coded for easy distinction, and tooltips provide additional information on hover. The x-axis features rotated labels for readability, and the y-axis displays stream counts.
  - Navigation: Users can hover over bars to see detailed information in tooltips.
- Scene 2: Popularity Across Platforms
  - Visualization: Normalized bar chart
  - Purpose: To compare the popularity of the top 50 songs across Spotify, YouTube, and TikTok, using normalized values for better comparison.

- Design Elements: Multiple bars per song, each representing a different platform.
  Colors are used consistently to represent each platform. Tooltips offer detailed data for each platform.
- Navigation: Sorting by average normalized popularity ensures the most broadly popular songs are highlighted.
- Scene 3: Spotify Playlist Reach and Count
  - Visualization: Scatter plot
  - Purpose: To illustrate the relationship between playlist inclusion and reach on Spotify.
  - Design Elements: Data points represent songs, with x-axis showing playlist count and y-axis showing playlist reach. Tooltips provide comprehensive details on hover.
  - Navigation: Users can hover over data points to explore individual song metrics.

These visual structures ensure that users can quickly understand the data presented in each scene, focus on key insights, and smoothly transition between scenes to see how different aspects of the data interconnect.

#### Scenes

The visualization is structured into three main scenes, each focusing on a distinct aspect of the data:

- 1. Scene 1: Top 50 Streamed Songs on Spotify
  - o Content: Displays the top 50 streamed songs, ranked by total streams.
  - Order: The scene is ordered by descending stream counts to immediately highlight the most popular songs.
  - Rationale: Provides a clear starting point by showcasing the overall popularity of songs on Spotify.
- 2. Scene 2: Popularity Across Platforms
  - Content: Compares the normalized popularity of the top 50 songs across Spotify, YouTube, and TikTok.
  - Order: Songs are ordered by their average normalized popularity to highlight cross-platform success.
  - Rationale: This scene builds on the first by showing how these popular songs perform on other platforms, offering a broader view of their reach.
- 3. Scene 3: Spotify Playlist Reach and Count
  - Content: Shows the relationship between the number of playlists a song is included in and its reach on Spotify.
  - Order: Songs are plotted with playlist count on the x-axis and playlist reach on the y-axis.
  - Rationale: This scene provides insights into the role of playlists in a song's popularity, emphasizing the impact of playlist inclusion.

Each scene is designed to build on the previous one, offering a progressively deeper understanding of the data.

## **Annotations**

Annotations are a crucial part of the visualization, used to highlight key data points and trends:

- Template: Tooltips are used across all scenes, providing detailed information when users hover over data points. The tooltips include the album cover, track name, artist, release date, and relevant metrics for each scene.
- Consistency: The consistent use of tooltips ensures a uniform user experience, making it easy for users to access additional information without cluttering the visual space.
- Support for Messaging: Annotations are strategically placed to reinforce key insights and help users focus on the most important aspects of the data. In Scene 2, for example, tooltips highlight cross-platform popularity, emphasizing the broader reach of songs.

## **Parameters**

Key parameters are used to control the state and behavior of the narrative visualization:

- Current Scene: Tracks the currently active scene, allowing for seamless navigation.
- Data: Stores the dataset for each scene, ensuring the correct data is used for visualization.
- Tooltip Content: Manages the content displayed in tooltips, maintaining consistency and relevance across scenes.

These parameters are essential for defining the state of the visualization, ensuring accurate rendering, and handling user interactions effectively.

# **Triggers**

Triggers are used to connect user actions with changes in the state of the narrative visualization:

- Navigation Buttons: Users can click navigation buttons to switch between scenes.
  The data-scene attribute on each button specifies the target scene.
- Mouseover Events: Hovering over data points triggers tooltips, providing additional information. This interaction encourages exploration and deeper engagement with the

These triggers provide clear affordances, making it easy for users to navigate the visualization and access detailed information.

#### Conclusion

This narrative visualization of Spotify's most streamed songs in 2024 effectively communicates key insights into music consumption trends through a carefully designed interactive slide show structure. By leveraging consistent visual designs, informative annotations, and intuitive user interactions, the visualization provides a comprehensive analysis that is both engaging and informative. The thoughtful design of parameters and triggers ensures a seamless user experience, facilitating a deeper understanding of the data and supporting data-driven decision-making in the music industry.