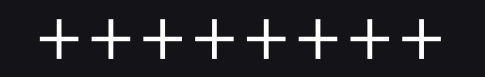


An abstract, colorful visualization featuring a glowing, flowing ribbon in shades of blue, purple, and red. A wireframe sphere is positioned within the upper loop of the ribbon.

SPOTIFY DATA VISUALIZATIONS

By Madison Hamby, Josh Mares, Carlos Araujo,
Jacqueline Rosales



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DATA SOURCES

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Koverha, Mark. (2022). Top Hits Spotify from 2000-2019. Kaggle.

<https://www.kaggle.com/datasets/paradisejoy/top-hits-spotify-from-20002019/data>

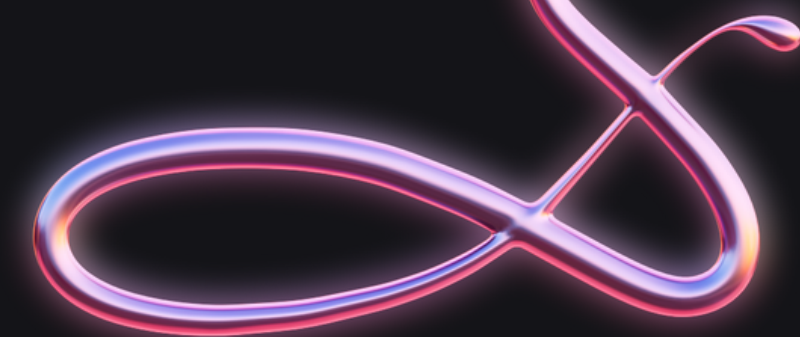
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PROJECT GOALS

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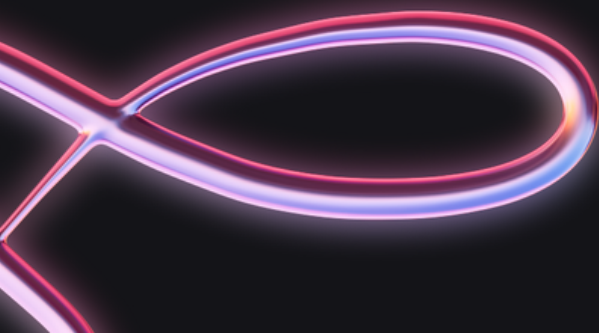
- Dataset: Top Hits Spotify from 2000-2019
- Overall Objective: Understand and analyze Spotify music dataset for patterns and trends
- Specific Goals:
 - Investigate how average trends of different variables have evolved over time such as
 - Speechiness
 - Acousticness
 - Energy
 - Explicitness
 - Song duration
- Generate interactive visualizations





CONSIDERATIONS & LIMITATIONS

- Limited dataset size
- Data completeness
- Genre and/or cultural shifts
- Metadata limitations
- User preferences
- Datapoints not uniform across time



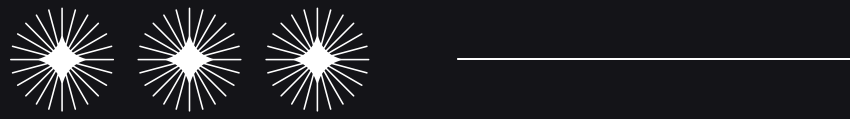


DATA PROCESS



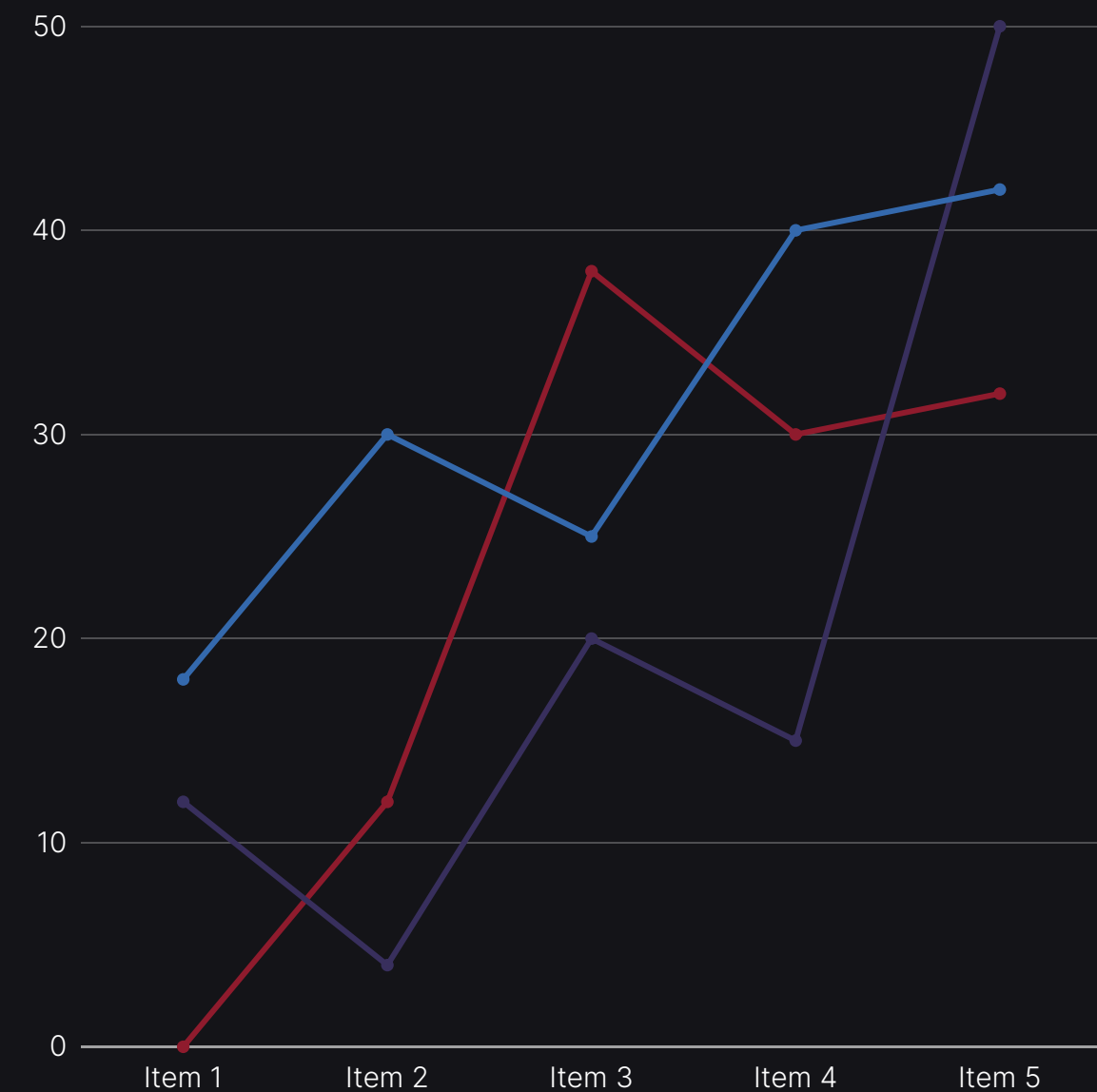
- SQL
 - Data stored and extracted from SQL
 - Used SQLite to manipulate data with queries
- HTML
 - JavaScript library - Chart.js and Axios
 - Flask used for querying
- Visualizations
 - Displayed through 3 separate applications





VISUALIZATIONS

- Visualizations created through applications
- Established through chart.js
- Interactive bar chart & line graph
- Using SQL language in Python
- Chart.js
 - Library that creates visualizations
- Axios
 - Library that pulls the requests, pulls data through interactive API route





CONCLUSION



- Visualizations provide great overview of genre and metric
- Songs are getting shorter in duration over time
- Explicit content has an upwards trend
- Caveat: reasoning for each pattern/trend is speculation



WORKS CITED

Koverha, Mark. (2022). Top Hits Spotify from 2000-2019. Kaggle.

<https://www.kaggle.com/datasets/paradisejoy/top-hits-spotify-from-20002019/data>

