



Visualizing Music Through Time

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01 Introduction

Goal, Data, Technologies

Goal

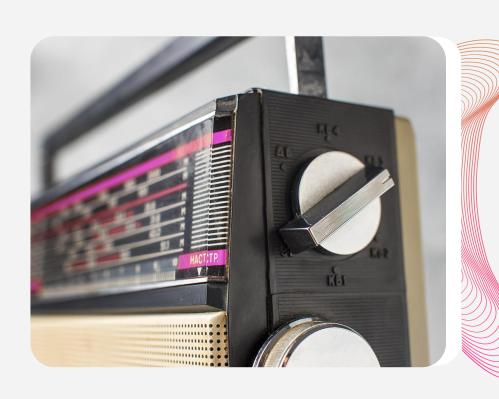
- Explore how music has changed over time
- Showcase some musical qualities in top songs today

Data

- Scraped <u>SpotifyCharts.com</u> for Top 200 Songs
- Kaggle Dataset on Music Through Decades
- Kaggle Dataset on Spotify Music

Technology

- Python to scrape and clean our data
- **Tableau** for visualizations
- **HTML**, **CSS** for our web app



02Usability

Results of Usability Study and Iterations



EXPLORING MUSIC THROUGH VISUALISATIONS

VISUALISATIONS ABOUT OUR TEAM

Welcome Music Lovers 😜 🎸 🤘





In this project, we hope to explore the different qualities of music thorughout history.

We hope this will be of use to all you music lovers, or those who have more specific intentions of exploring the different aspects of music.

Some tasks that can be carried out after viewing our visualisations include deciding what kind of musical investments record companies may make in the future. Musicians may also benefit, as they can also adjust their styles to better suit the current trends in music.

Some insights that can be gained from the information presented on this page incude predicting the nect big trends in music, learning musical preferences in different parts of the world, and learning about seasonal shifts in music preferences.

Data has been collected from multiple sources including directly from Spotify, as well as Kaggle projects (of which some are authored by Spotify).

Participants said:

"There is too much text and I didn't feel very inclined to read all of it. The text was also under each visual so if I didn't scroll I would miss it"

Our Solution:

- Added collapsible buttons to show insights and details on interactivity on-click rather than all on the screen
- Moved all text details above the visuals

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Confusing Order of Visuals

VISUALISATIONS ABOUT OUR TEAM 4. Musical Feature Map In this section we illustrate our exploration of the hypothesis; What are the trends in top songs lists worldwide in 2020? Average Features Over Time Musical Features Example of high musical feature: arious Artists Example of low musical feature: #+ableau \leftarrow \rightarrow \leftarrow \ll \Box Interactivity: Click on the name of the musical feature in the top left hand corner to see the definition and an example of a song that scores high and low for this feature. Area graph of the average scores of musicality in songs produced over time -- larger areas mean that the average song in that specified year scored (on average) highly in any given category. Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in

Participants said:

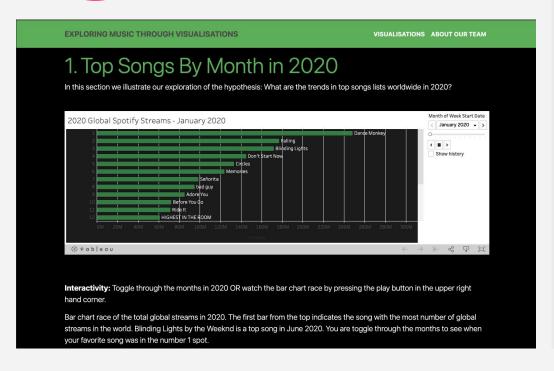
"The feature map visualization and the feature definition visualization should be put next to each other because one describes the other."

Our Solution:

- Reordered our visualizations so the feature map preceded other features related to music qualities
- Removed placeholder text at the bottom

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Mismatched Coloring



Participants said:

"The color of the visuals didn't always match the color of the background and had a lot of contrast in color"

Our Solution:

 Standardized the color of all of the backgrounds in the visualizations



03 Demo

Live Demo of Our Final Project

Thanks!

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