Spotify Insights Dashboard

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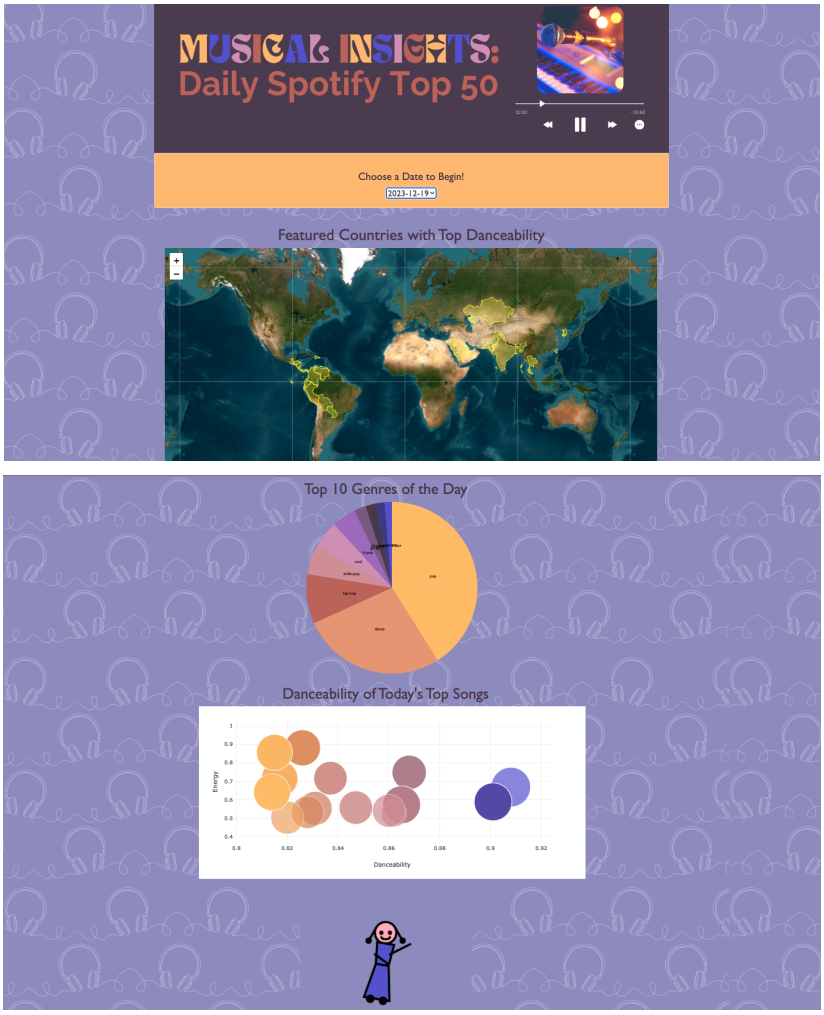
Overview

Welcome to our Spotify Insights Dashboard! This user-friendly dashboard is designed to provide a seamless experience for users interested in exploring the dynamic world of music. With a simple date selection feature, viewers can delve into comprehensive insights about the Top 50 Spotify songs across 70+ countries. The dashboard offers a visually rich interface displaying the geographical distribution of listeners on an interactive map, along with detailed analytics on top genres and danceability insights for the selected date. Whether you're a music enthusiast, data analyst, or simply curious about global music preferences, our dashboard aims to deliver an engaging and informative experience. Dive in and explore the captivating mosaic of Spotify's top tracks worldwide!



Purpose

The primary objective of our project is to empower musicians, including our team's two seasoned professionals (Audrey and Carter), by providing a comprehensive understanding of global music trends. In the ever-evolving music landscape, staying on top of the latest hits and genres holds significant relevance for performers. This knowledge proves particularly advantageous for tailoring performances at diverse events, such as weddings. By understanding the global musical pulse, musicians can strategically connect with their audience, ensuring a contemporary and resonant musical experience. Our project serves as a valuable resource, offering performers the insights needed to navigate diverse audiences with precision and relevance.

Instructions

Explore the dynamic world of music trends effortlessly with our user-friendly interface.

1. **Select Date**: Utilize the drop-down menu to choose a specific date.
2. **View Global Rankings**: Instantaneously observe insights for the top 50 Spotify tracks across 70+ countries for the selected date — Where listeners are located across the globe, top genres, and even danceability scores for the selected date.
3. **Explore Detailed Data**: Hover over places on the map to preview country names.

Ethical considerations

Developing this dashboard required minimal focus on privacy and transparency as, fortunately, the dataset provided by Spotify alleviates some concerns. Notably, the dataset excludes uniquely identifiable information for users, bolstering privacy measures. It is reassuring that Spotify's privacy policy addresses privacy concerns, explicitly outlining how user data is handled, used, and protected. Ensuring that users are informed about the absence of personally identifiable information in the dataset adds an extra layer of transparency. By aligning with Spotify's privacy practices, the dashboard can uphold ethical standards, providing users with a clear understanding of how their data is treated while enjoying the benefits of insightful visualizations on music trends.

Data Source References

https://www.kaggle.com/datasets/asaniczka/top-spotify-songs-in-73-countries-daily-updated
This dataset presents the top songs currently trending for over 70 countries — This is our primary data source, retrieved 12/19/2023

https://www.kaggle.com/datasets/amitanshjoshi/spotify-1million-tracks
This dataset was extracted from the Spotify platform using the Python library "Spotipy", which allows users to access music data provided via APIs. The dataset collected includes about 1 Million tracks with 19 features between 2000 and 2023. Also, there is a total of 61,445 unique artists and 82 genres in the data. — We used the genre information within this dataset to supplement the listed top songs in our primary dataset.

Individual Contributions

Project Proposal — Audrey, Lindsey

Data Cleaning — Carter, Mita
Database Creation — Omar, Mita, Anita
Flask App Creation — Mita, Anita
Dropdown menu — Mita, Anita
World Map Visualization — Carter, Mita
PieChart Visualization — Lindsey
Danceability “Betty” Visualization — Mita, Anita
Danceability Bubble Chart Visualization — Mita, Anita
Front-end Code — Audrey
Project Documentation, including README file — Lindsey
Presentation Slides — Audrey
Presentation Q&A — Omar

Additional Code References

Throughout the project development we leveraged Google, ChatGPT, and Stack Overflow as valuable resources for debugging and problem-solving in addition to insights provided by course TA’s (Shay, Alex, and Asim).