

Seasonal Shifts in Music Mood

Final Project – Spotify Music Mood Across Seasons

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Course: Data Mining Final Project

Goal: Explore how Spotify listening preferences and music mood (valence) change across seasons.

Project Overview

This project investigates whether **people listen to happier music in summer and sadder music in autumn/winter**.

We use **Spotify AF Valence**, a numerical measure between 0 and 1: - 1 → Happy / Cheerful / Positive songs - 0 → Sad / Depressing / Angry songs

Dataset Information

We used the dataset:

Spotify Charts – All Audio Data

<https://www.kaggle.com/datasets/sunnykakar/spotify-charts-all-audio-data/>

- Original file size: **27 GB** (`merged_data.csv`)
 - Contains **daily Top 200 Spotify charts** for over 60 countries (2017–2024)
 - Includes track metadata + 13 audio features from Spotify API
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Sample Datasets Included in This Repo

To make this project easier to run, we created **sample versions of the original dataset**:

File	Description
<code>data/merged_data_sample.csv</code>	Small sample from original data
<code>data/merged_data_filtered_sample.csv</code>	Only Canada + 2017 data

File	Description
<code>data/merged_data_trimmed_sample.csv</code>	Unnecessary columns removed

Full dataset is not uploaded to GitHub due to size limits. You can download it from Kaggle.

Research Question

“Do people listen to happier music during summer compared to autumn and winter?”

How to Run This Project

1. Clone the repository: “`bash git clone https://github.com/ErkaGlt/finalproject-spotify-mood.git`