Visualization Planning

Spotify Musical Data Model

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Description dataset

The dataset is collated from Spotify's API using two separate python scripts to extract popular and non-popular songs and their associated audio and descriptive features. Descriptive features of a song include information about the song such as the artist name, album name and release date. Audio features include key, valence , danceability and energy which are results of spotify's audio analysis. The combined features used in the experimentation phase of this project include:

Link : https://www.kaggle.com/datasets/solomonameh/spotify-music-dataset

Research questions

Justification: In order to analyze and compare musical data, there is a need for a common standardized visual model to equally compare musical sets, them being genres, subgenres or specific songs to other songs.

Thus we respond to the question;

Can we standardize a visual model for Musical features

Sub questions

What differences can be extracted from the musical genres listening habits of different countries?

How are music characteristics developing through time?. (Can we map the influence of music to events occurring in the world?)

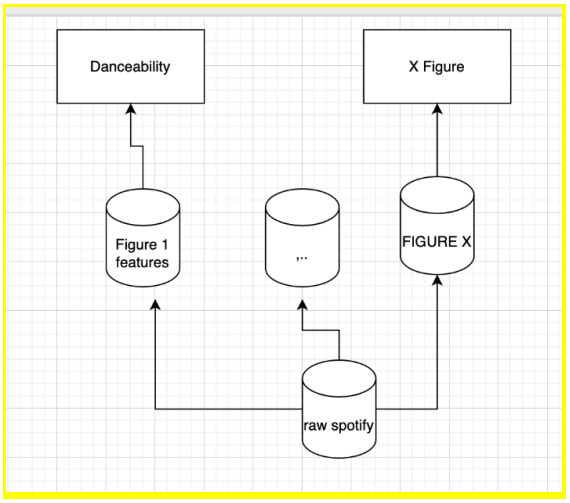
Initial tasks assignments to each of the group members.

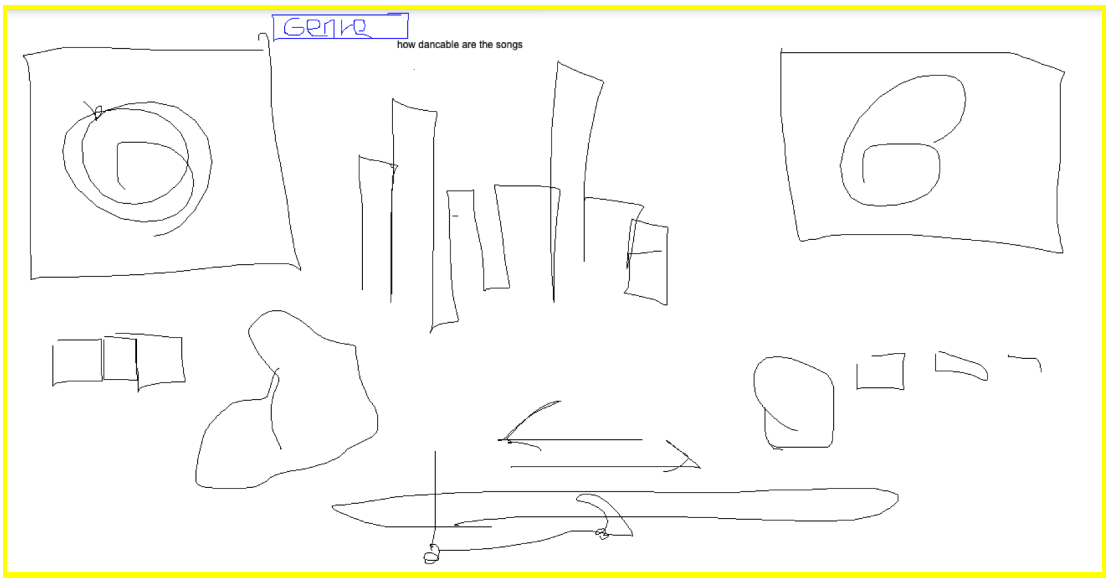
- Architecture of the model: (all)
    - GME: General workflow and System Design
    - Framework
    - Data engineering components
    - Dependencies
- Component development (figures) (Janis Filip)
    - Figures
        - General
        - Specific figures
- Feature analysis and exploration (Janis Filip)
    - Explore possibilities of representation: what can be exposed.
        - Dimensions
        - Variables
    - Engineer features for each figure
- Data Engineering (dragos)
    - Preprocessing and postprocessing:

        Preprocess and prepare data for the system and general and component level.

- Visuals: (Juan)
    - Design level.
        - CSS
        - Show how can we represent each of the features visually
        - Colors and visual choices.

(4) initial sketches and drawings, alternative considered (optional, only if you already have it).

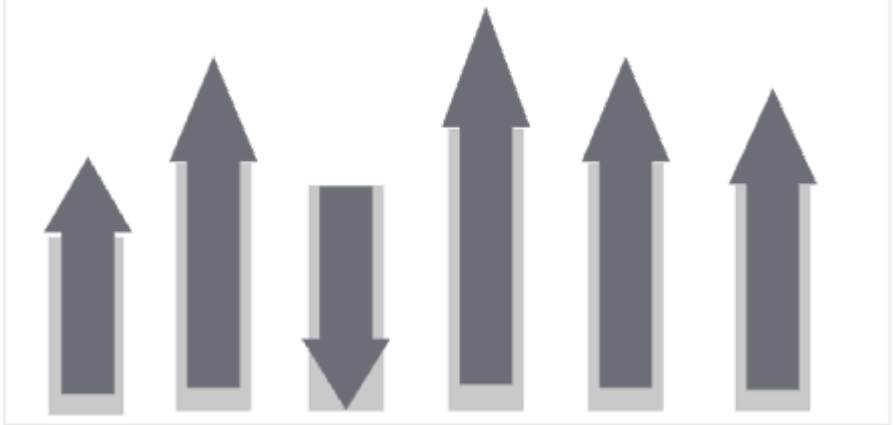




Dashboard Layout

50s 60s 70s 80s 90s 00s 10s 20s

Genres

just stacked barcharts nothing to see here :)

Genres