## W209 Usability Test - Historical Trends in Popular Music

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#### Instructions:

Users will answer a list of questions using the dashboards we have provided. Interactions may include clicking, hovering, dragging, highlighting, and typing.

- 1. Please open the following links to the dashboards in separate tabs:
  - a. Dashboard 1
  - b. Dashboard 2
  - c. Dashboard 3
- 2. Please answer the questions in writing in the order they are asked, using information from the dashboards.
- 3. At the end, please answer the debriefing questions.

### Tasks:

- 1. Is the percentage of rock songs increasing or decreasing over time?
- 2. What was the percentage of pop songs in 2018?
  - a. List the values of their audio features:
    - i. Danceability:
    - ii. Energy:
    - iii. Speechiness
    - iv. Acousticness
    - v. Liveness
    - vi. Valence
- 3. Which year has the most number of hits?
  - a. What genre has the most hits?
- 4. How has the average duration of songs in the rap genre changed over time?
- 5. Compare and contrast two genres in a year of your choice.
- 6. Compare and contrast how the different audio features have changed over time for R&B and pop music.
- 7. Find the valence and energy score for "We Are Never Getting Back Together" and "Cool For The Summer."
- 8. Which song has the lowest valence and highest energy?
- 9. Look at two of your favorite artists that are in the database & Compare the average valence and energy
- 10. Look up the valence and energy for your favorite song and find 3 closely related songs and compare how different their valence and energy values are.
- 11. Compare the audio feature values of one genre for hit songs vs non-hit songs from 1980 to 2020.

## **Debriefing Questions:**

- 1. What was your overall impression of the dashboards?
- 2. What was the best and worst part of the dashboards?

- 3. Are there any changes you would make?
- 4. Is there anything else you would like to share?

Thank you for your participation!

# **MoSCoW Prioritization**:

## Must Have:

- Have checkbox for genres and have some instructions (1st viz)
- Remove "average" in front of audio features (1st viz)
- Get rid of liveness and loudness (1st + 2nd + 3rd vizzes)
- Splitting up first viz charts to separate pages
  - Audio features of songs by genre this is too big and it should be its own blown up (1st viz)
- Lots of data on one page → may cause page to freeze (2nd viz)
  - o Add genre filter / song year filter
  - Initialize pop songs of last 5 years
- Average Valence Tooltip bug fix (2nd viz)
- Write instructions for hover over songs (2nd viz)

## **Should Have:**

- Have dropdown for artist, in addition to song name search (2nd viz)
- Percentage instead of number of hits by genre (1st viz)
- Percentage instead of number for songs released by genre (1st viz)
- Have dropdown for artist, in addition to song name search (2nd viz)
- Artist name in the tooltip as well (2nd viz)
- Get rid of average on the reference lines (2nd viz)

### Could Have:

- Modify noisy/choppy lines to be smoother (3rd viz)
- Have filter zoom in once a person selects a song for easier viewing and finding related songs (2nd viz)
- Show related songs once selection has been made (maybe through filter zoom or a table) (2nd viz)
- Get rid of "all" in selection (3rd viz)

### Will Not Have:

• Trend line for hit and non-hit songs to add to line charts (3rd viz)