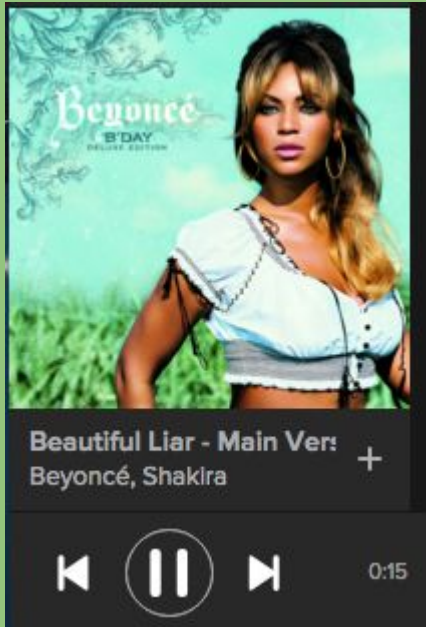
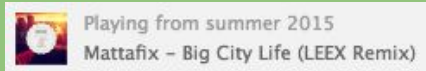

Audio Features Fun*

Joanne Jang | Zheng Wu

* also taking name suggestions

Problem and Solution



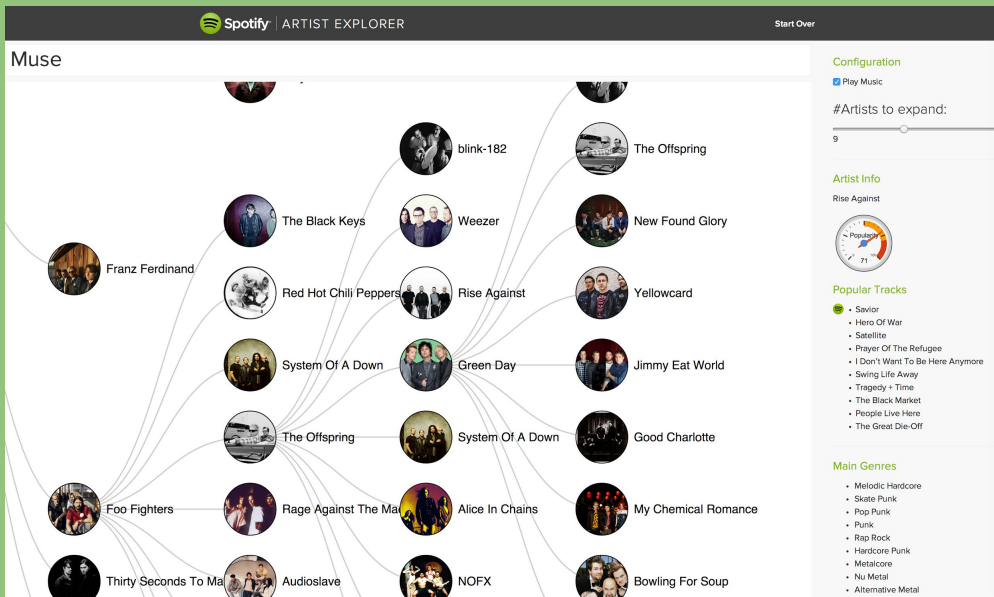
- On music streaming platforms listeners only get to see the album cover photo, title, and artist name; rarely any additional metadata
 - No reliable + objective metric to compare two songs
 - Audio features might explain why a user likes a certain track and facilitate comparison
-

Audio Features



- Acousticness
 - Danceability
 - Energy
 - Key
 - Instrumentalness
 - Liveness
 - Loudness
 - Speechiness
 - Tempo (BPM)
 - Music Valence
-

Prior Work - Artist Explorer

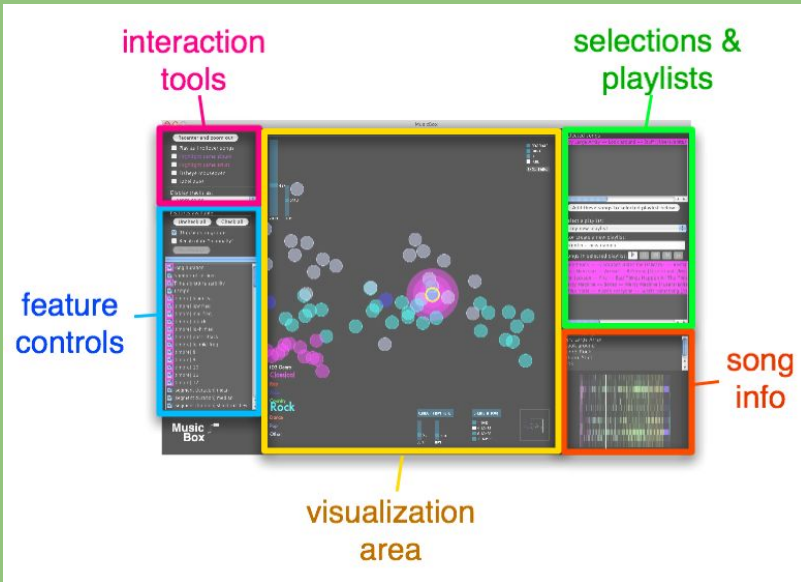


- Uses (deprecated) Spotify-Echo Nest APIs in conjunction with D3
- Visualizes artist relationships (influences)

How our project is different:

- Track-specific information meant to enhance the listening experience
- Visualizes and juxtaposes audio features

Prior Work - MusicBox



- Maps a music collection into a 2D space by applying PCA to features of tracks
- Users can add or remove features to be considered in mapping

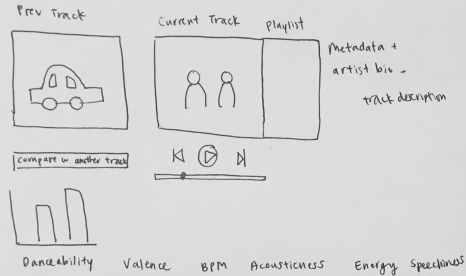
How our project is different:

- Audio features meant to help the listeners learn more about their own preferences
- Allows for direct comparison between two songs

Current Progress

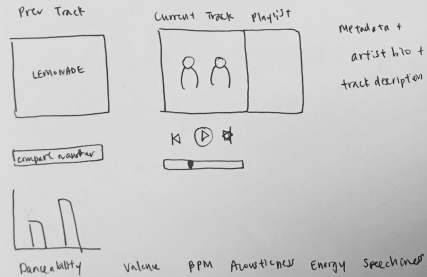
Storyboard

Audio Features Fun

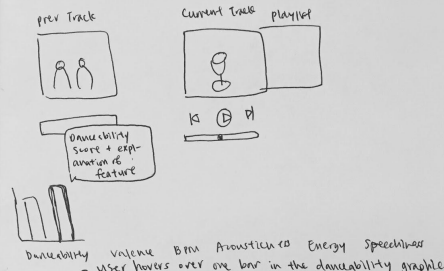


click on "compare to another track" field + populate it with Formation - Beyoncé

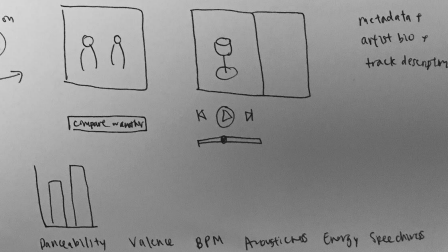
Audio Features Fun



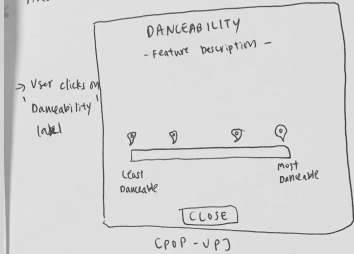
Audio Features Fun



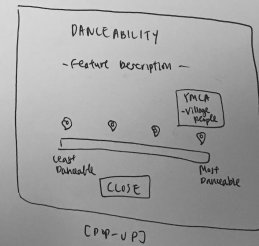
Audio Features Fun



Audio Features Fun




Hover over rightmost tooltip





Connecting to the (new) Spotify API


Audio Features Fun


Bey


 Search for a Track


Beyoncé


Above & Beyond


Mos Def


Styles Of Beyond


Amandine Beyer

Milestones

- Storyboarding
 - ~~Connecting to the Spotify API~~
 - Feeding D3 the relevant data
 - Generating interactive charts for track comparison
 - Adding the audio player functionality
 - Creating the feature description pop-up/tooltip
 - Usability Testing
 - UI/UX Iterations
-

Questions for You

- How can we effectively visualize the different float values (for each feature) without abusing the bar chart?
 - How can we best put the audio features in context and make the float values more meaningful for the users?
 - How can we make our web app stand out?
 - What are some ways to evaluate whether the visualization is working (i.e. communicating effectively)?
-

Thank you!
