



Groupify

A Song Recommendation System for Groups

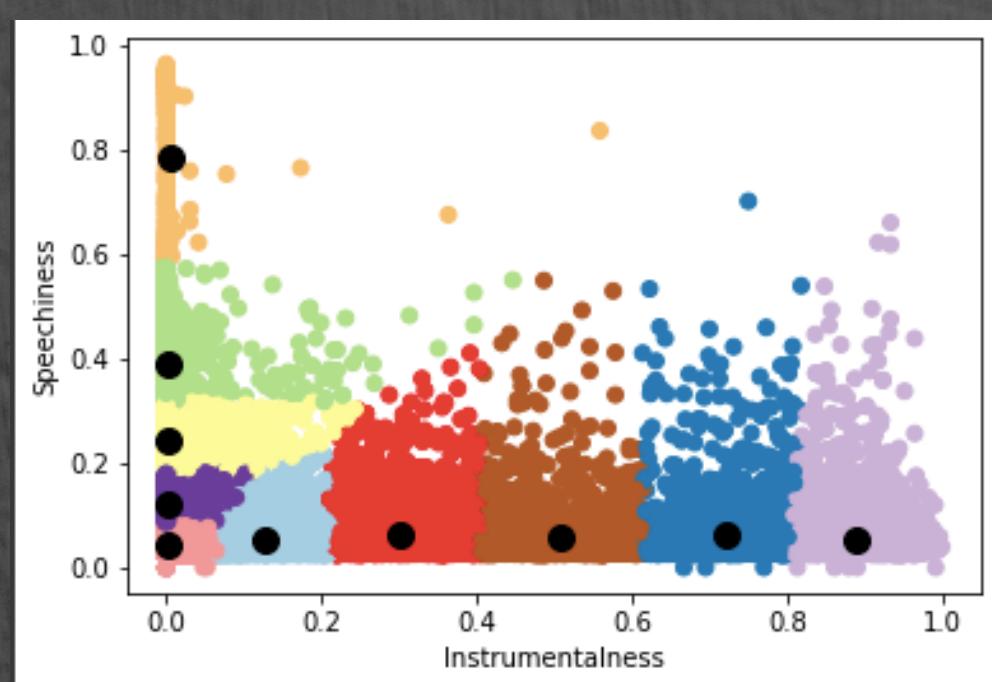
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In this project, we developed an interactive visualization tool for recommending music to groups of individuals. Our tool takes Spotify login information from groups of users (2-5 individuals) as input. The output of our tool is a playlist that combines the music taste of all users in the group. We realized that there was no current software that included both the collaboration and recommendation aspects in one place and this project aims to tackle that by providing a fun and useful platform for all Spotify users!

1. Multiple users sign-in to the platform with their Spotify log-in and authentication



The screenshot shows the Spotify login interface. At the top, it says "Spotify". Below that, it says "CX4242 Project" and "You agree that CX4242 Project will be able to:". There are two sections: "View your Spotify account data" (which includes viewing name, username, profile picture, follower count, and public playlists) and "View your activity on Spotify" (which includes viewing top artists and content). At the bottom, it says "Logged in as sheepman. (Not you?)".



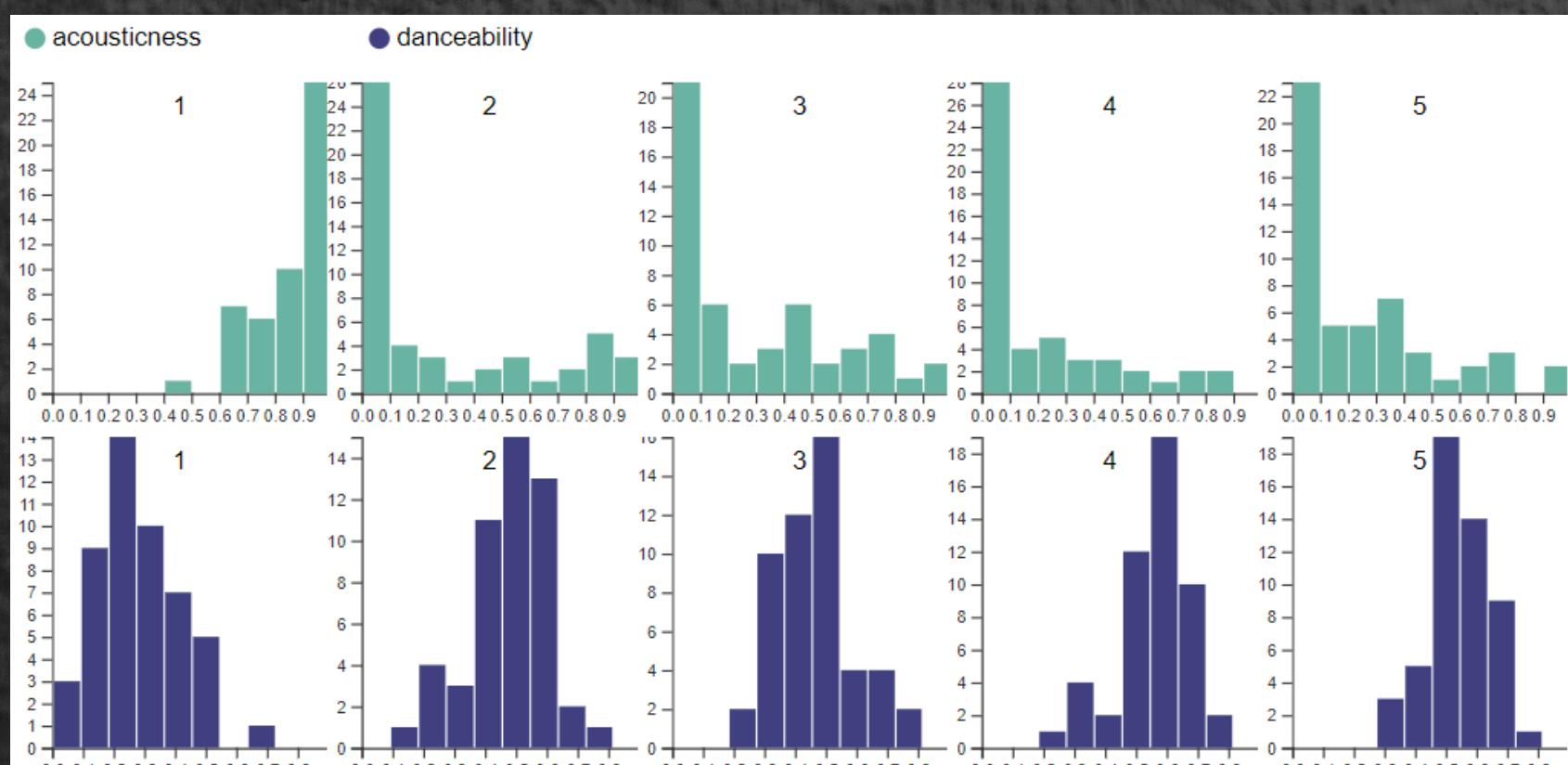
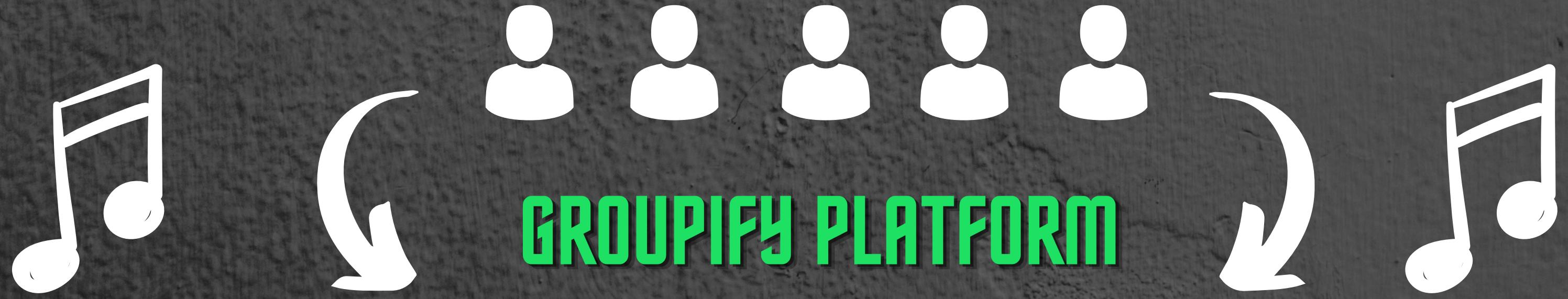
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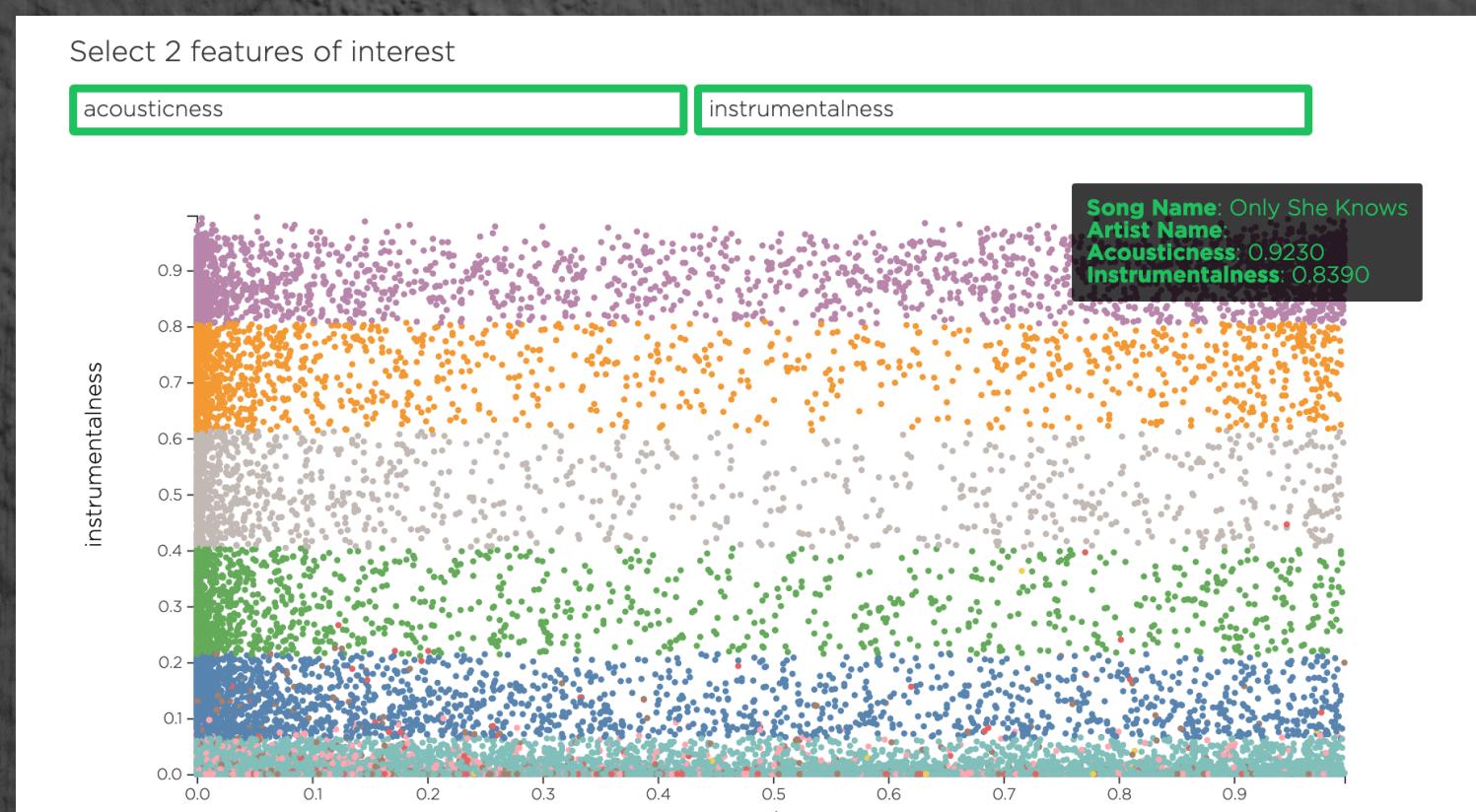
The screenshot shows a list of recommended songs for a user group. The title says "Here are the recommended songs for your group:". The list includes 20 songs with their titles and artists:

- 1. Gravy
- 2. When I'm Bored
- 3. Our Day Will Come
- 4. Action Figures
- 5. Trouble Sleeping
- 6. Straightjacket
- 7. 03 Altima
- 8. Right Now (feat. ELHAE, D.R.A.M. & H.E.R.)
- 9. Wyclef Jean
- 10. Brown Skin
- 11. Phamus As Phuck
- 12. All I Say
- 13. Scoreboard
- 14. Don't Let Go (Love)
- 15. Rumble
- 16. My Favourite Game
- 17. Got Damn
- 18. This One's On Me
- 19. Recognize (feat. JoJo)
- 20. Ain't No Sunshine

3. We use this clustering to recommend a shared playlist for the inputted users and visualizations of the given songs seen below



Histogram showing the difference in users for selected song attributes



Interactive scatterplot showing correlation of selected song attributes, each point representing a song