

Harmony Insights

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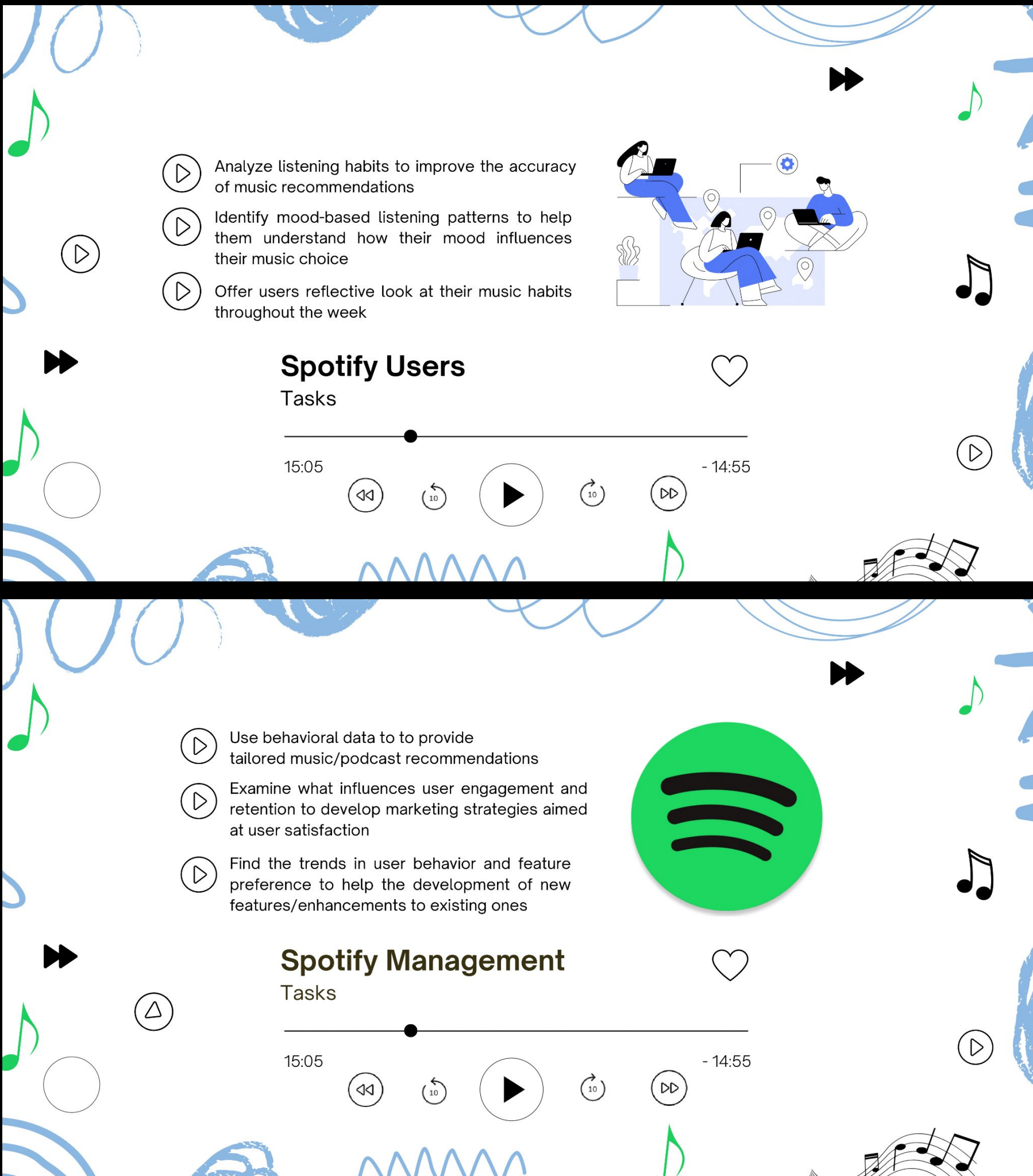


Introduction

Harmony Insights is a powerful data analysis tool designed to provide valuable insights into Spotify music trends and user behavior. Developed by a team of data experts, this innovative application aims to cater to the diverse needs of Spotify's management, users, and artists.

Objectives

The primary objective of Harmony Insights is to leverage Spotify's user data and streaming history to deliver the actionable insights and recommendations tailored to the unique needs of the stakeholder. For Spotify Users, Harmony Insights delves into individual listening patterns to deliver an unparalleled personalized experience.



Method

- The core data was directly provided by Spotify, including detailed music streaming histories of users with granular information such as timestamps, dates, song metadata, and other relevant details about users' listening activities.
- Then we performed extensive data processing, data cleaning, feature extraction and data integration.
- We created Tableau samples for initial designs, then developed low-fidelity prototypes based on feedback to refine the design.
- After the prototyping we decided to implement the final iteration in d3.js, so that we could create highly interactive visualizations.

Collected Data

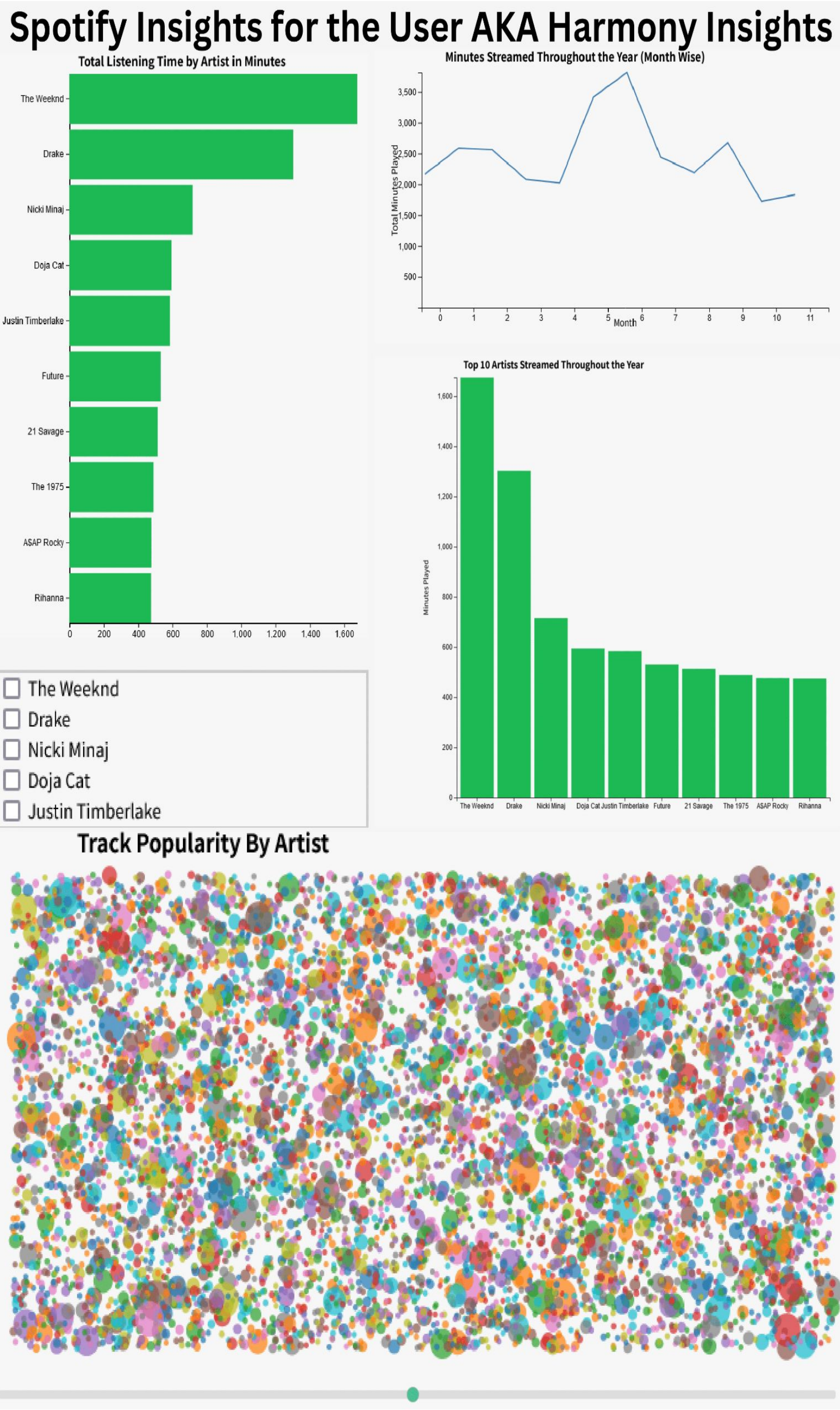
The core data powering the harmony insights dashboard was obtained directly from Spotify user streaming histories. This comprehensive dataset included detailed information about individual users' music listening activities.

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1 endTime,artistName,trackName,asPlayed
2 2023-02-28 23:11,Frank Ocean,Pink + White,146410
3 2023-03-01 02:54,Frank Ocean,Pink + White,2358
4 2023-03-01 02:55,Lady London,Pop Ya Shit (Freestyle),98533
5 2023-03-01 02:58,Frank Ocean,Pink + White,143661
6 2023-03-01 02:58,Megan Thee Stallion,Anxiety,1718
7 2023-03-01 02:59,Lola Brooke,Don't Play With It (feat. Billy B),2948
8 2023-03-01 02:59,Hikidd,F.N.F. (Let's Go),2252
9 2023-03-01 02:59,PARTYNEXTDOOR,Her Way,1462
10 2023-03-01 02:59,PinkPantheress,Boy's a liar Pt. 2,47693
11 2023-03-01 03:00,Ice Spice,In Ha Mood,53622
12 2023-03-01 03:04,Claire,Bags,16928
13 2023-03-01 03:04,Lorde,Ribs,4272
14 2023-03-01 03:07,Suki Waterhouse,Moves,2274
15 2023-03-01 03:06,Still Woozy,Goodie Bag,59528
16 2023-03-01 03:07,SZA,Drew Barrymore,1927
17 2023-03-01 03:07,Dream,Ivory,welcome and goodbye,38588
18 2023-03-01 03:07,Suki Waterhouse,Moves,2274
19 2023-03-01 03:11,Declan McKenna,Brazil,252386
20 2023-03-01 03:14,Claire,4EMER,159595
21 2023-03-01 03:14,TKA Biggs,cellophane,1462
22 2023-03-01 03:14,The Marías,Only in My Dreams,22389
23 2023-03-01 03:15,Lorde,Hard Feelings/Loveless,4133
24 2023-03-01 03:15,Tame Impala,The Less I Know The Better,85519
25 2023-03-01 03:18,Claire,Hello?,135816
26 2023-03-01 03:20,No Vacation,LoveFool,136961
27 2023-03-01 03:22,Crumb,Ghostride,126128
28 2023-03-01 03:22,The 1975,Love It If We Made It,14957
29 2023-03-01 03:25,beabadoobee,1999,191129
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How the dataset looks like

Results

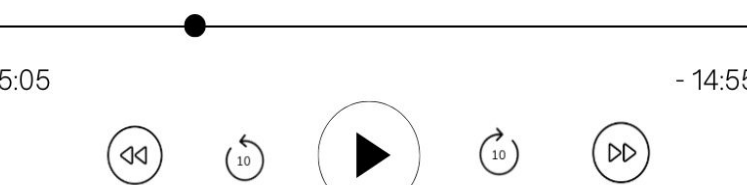
The dashboard highlights the user's top artists based on total listening time, with The Weeknd and Drake leading the way. It visualizes monthly streaming patterns, revealing peaks and dips in activity throughout the year. A bubble chart shows track popularity by artist, with bubble size representing an individual track's popularity. The visualizations provide insights into the user's artist preferences, listening behaviors, and potential opportunities for personalized recommendations based on their most popular tracks and artists.



Charts that analyze user's listening habits

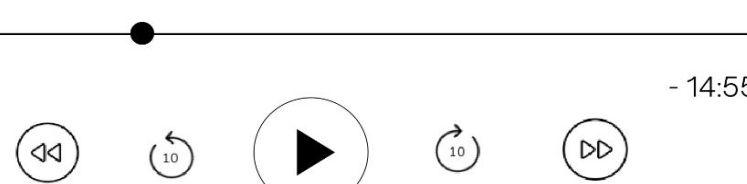
Harmony Insights

Now Presenting
A Spotify Music trends Analysis Tool



Spotify Management
Spotify Users

Target Users
For our Application



Conclusions

- The Harmony Insights dashboard leverages rich user data to deliver personalized insights into individual listening behaviors and preferences.
- Through interactive visualizations, it empowers users to understand their habits and music trends.
- By presenting these valuable insights, the dashboard fosters a more meaningful and tailored music experience for users on Spotify's platform.
- By presenting these valuable insights in an intuitive and user-friendly manner, the dashboard serves as a powerful tool for enhancing user satisfaction and engagement within the Spotify ecosystem.