Spotify Analysis Dashboard

This document presents my interactive Power BI dashboard project analyzing Spotify listening data. It demonstrates skills in data visualization, modeling, and storytelling with data.

Portfolio Project Presentation   **Zofia Pllitowska**

Business Requirements

The goal of this dashboard is to provide clear insights into user listening behavior on Spotify. The following business requirements were identified:

- Track overall engagement: albums, artists, and tracks played.

- Compare year-over-year listening trends.

- Identify top-performing albums, artists, and tracks.

- Analyze listening behavior by time of day and day of week.

- Understand track engagement through frequency and average listening time.

- Provide detailed breakdowns for further exploration and validation.

Overview Page

KPIs & Trends:
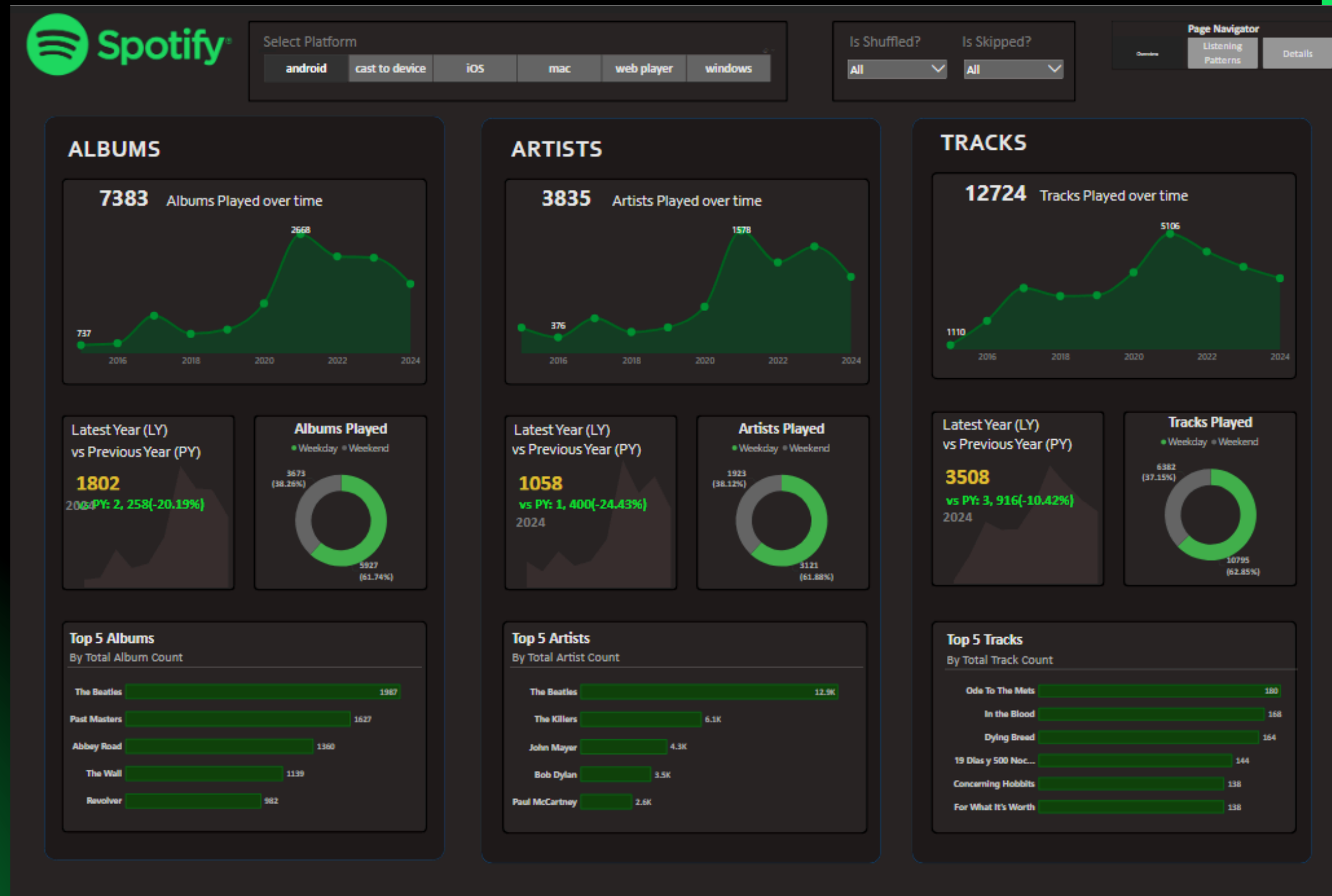Displays total albums, artists, and tracks played.

Yearly Comparison:
Highlights growth between latest year and previous year.

Top Insights:
Identifies the Top 5 Albums, Artists, and Tracks.

Visualization Style:
Line charts, donut charts, and bar charts in a dark theme.

Listening Patterns

Heatmap Analysis:

Visualizes listening hours across the week, highlighting peak listening times and trends.

Scatter Plot:

Plots average listening time (in minutes) against track frequency, helping understand the correlation between how often users listen to certain tracks and the time spent per session.

Interactive Filters:

Allows filtering by year, shuffle mode, and skip rate.
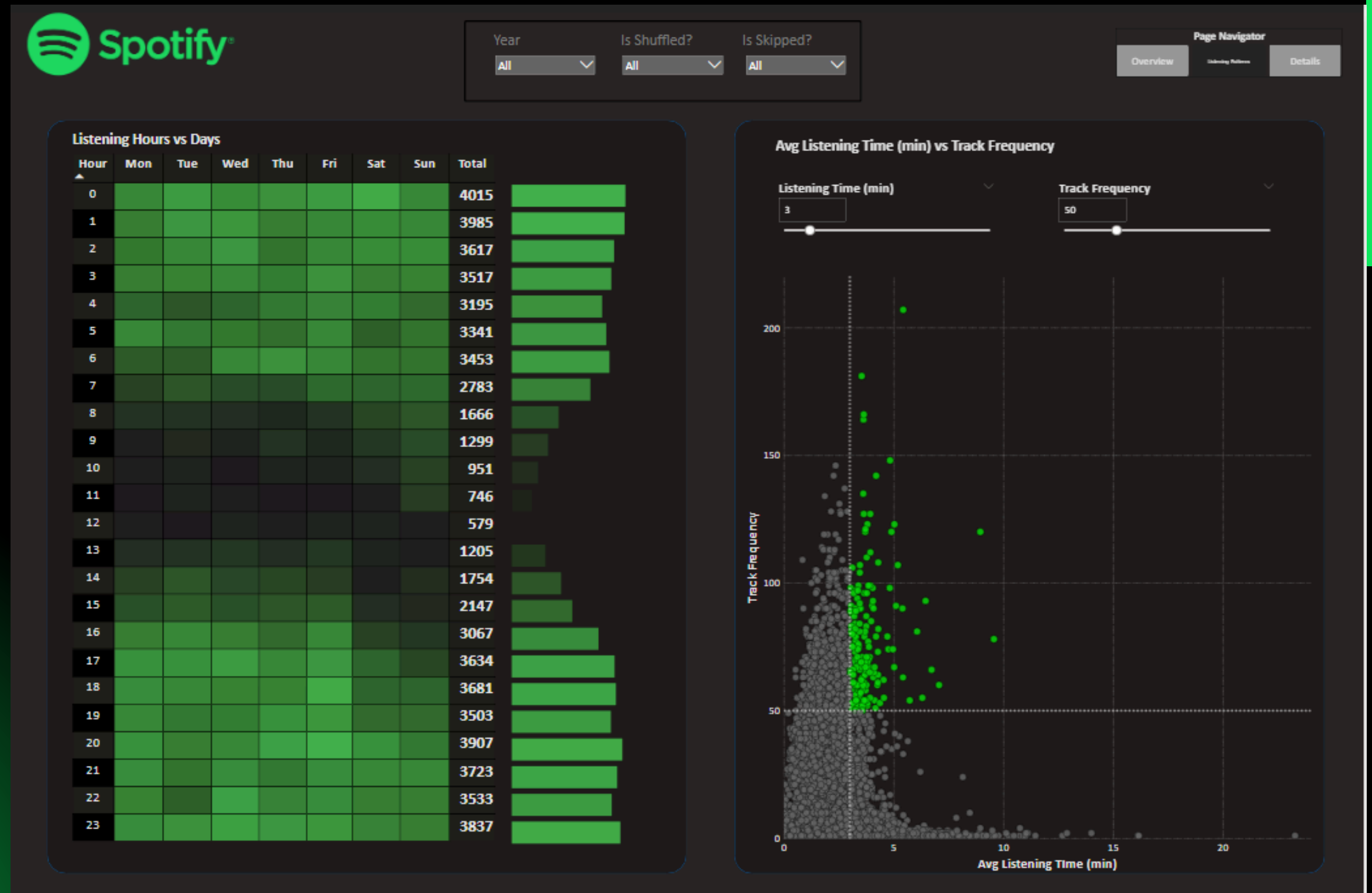
Details Page

Tabular View:
Displays detailed records of albums, artists, tracks, and listening time, allowing precise tracking of music activity.

Aggregated Totals:
Summarizes overall listening activity, giving a quick snapshot of listening habits.

Drill-Through Functionality:
Enables users to navigate from visualizations on other pages directly to this detailed view for deeper exploration. Allows exporting filtered or complete tables for further analysis or record-keeping.

Spotify

album_name	No of Albums	No of Artists	No of Tracks	Milliseconds Played	Avg Listening Time (min)
!!Going Places!!	1	1	1	2206762	1.47
"Awaken, My Love!"	1	1	2	5446862	3.78
"Feel Flows" The Sunflower & Surf's Up Sessions 1969-1971	1	1	1	155480	2.59
"Heroes"	1	1	1	8206237	3.80
"Hit the Quan" #HTQ	1	1	1	215516	1.20
"Let's Rock"	1	1	12	31905749	2.76
"The Opera Gala - Live from Baden-Baden"	1	1	1	11130456	5.15
#1 Record	1	1	2	276870	2.31
#1 Spot	1	1	1	275018	4.58
#1s ... and then some	1	1	1	208106	3.47
#3 Deluxe Version	1	1	5	12912289	1.19
#Golosinas2018	1	1	1	212092	3.53
#Idiota	1	1	1	183903	3.07
#SELFIE	1	1	1	4563	0.08
(What's The Story) Morning Glory?	1	1	5	42501539	3.23
...And Out Come The Wolves	1	1	1	157525	2.63
...baby one more time	1	1	1	3894	0.06
...but i'd rather be with you	1	1	1	229507	3.83
...E Penso A Te	1	1	1	184546	3.08
@dannocean	1	1	1	665161	2.22
~how i'm feeling~	1	1	1	8539988	3.39
¡DOS!	1	1	1	59904	1.00
¡MÉXICO Por Siempre!	1	1	11	4838258	1.83
¡TRÉ!	1	1	1	3032726	1.58
¡UNO!	1	1	1	303293	5.05
¿Con Quién Se Queda El Perro?	1	1	3	1667856	2.14
¿Dónde estás? (feat. Bunbury, Andrés Calamaro y Loquillo)	1	1	1	226813	3.78
¿Dónde Jugarán Los Niños?	1	1	1	263306	4.39
¿Dónde Nos Quedamos?	1	1	1	6639085	3.07
¿QUE ESPERAS BEBE? REMIX	1	1	1	184285	3.07
Total	7907	4112	13665	19229530935	2.14

Key Features & Skills Demonstrated

Power BI Dashboard Development

Designed advanced visuals, implemented interactive filters, and created drill-through navigation for seamless exploration.

Storytelling with Data

Identified trends, patterns, and insights in music consumption, translating complex data into intuitive visual narratives.

Analytical Thinking

Applied statistical and exploratory techniques to uncover hidden correlations between listening time, track frequency, and user behavior.

Reporting & Exporting

Enabled easy extraction of detailed reports and visualizations for further analysis or presentation purposes.

Value

This dashboard provides a clear view of music consumption trends, enabling analysts to uncover patterns and insights. Interactive features like drill-through and filtering support in-depth exploration, turning raw data into actionable intelligence for strategic decision-making.