Spotify Advanced Data Analytics Dashboard 🎵

A comprehensive, end-to-end Power BI project designed to analyze music streaming trends, user behavior, and content performance. This project transforms raw streaming data into actionable insights through advanced data modeling and interactive visualizations.

📌 Project Overview

This project simulates a real-world data analyst workflow, focusing on three core areas of music streaming: **Albums**, **Artists**, and **Tracks**. The dashboard provides a dynamic environment to track listening frequency, platform distribution, and engagement across different timeframes.

Key Insights & Questions Answered:

- **Listening Patterns:** How does music consumption differ between weekdays and weekends?
- **Platform Performance:** Which devices (iOS, Android, Web, etc.) are most popular for streaming?
- **Top Performers:** Who are the top 5 most-played artists and what are the top 5 albums by count?
- **Year-over-Year Trends:** How has the streaming frequency changed compared to previous years?

🚀 Features

- **Advanced DAX Modeling:** Implementation of complex measures for Year-to-Date (YTD), Previous Year (PY), and growth metrics.
- **Dynamic Filtering:** Slicers for Platform selection (iOS, Android, Windows, Mac) and Time Intelligence.
- **Advanced Navigation: - Drill-Through:** Deep dive from overview charts into specific record details.
  - **Page Navigator:** Seamless movement between Overview and Detailed analysis pages.
- **Custom Tooltips & Bookmarks:** Enhanced user experience for better data storytelling.

🛠️ Tech Stack & Tools

- **Power BI Desktop:** For data cleaning (Power Query), modeling, and visualization.
- **DAX (Data Analysis Expressions):** For advanced calculations and time-intelligence logic.
- **Excel/CSV:** Source data format.

📊 Dashboard Preview

The dashboard is divided into three primary views:

1. **Album Analysis:** Focusing on total album counts and weekday vs. weekend distribution.
2. **Artist Analysis:** Tracking artist popularity and streaming frequency.
3. **Details Page:** A granular view of every track played, accessible via drill-through.