Spotify Track Analysis Case Study

# Objective

To analyze the trends and patterns in Spotify track data for 2023, with a focus on understanding the characteristics of popular music and its distribution across different platforms. The case study aims to identify key factors contributing to a track's popularity and how these factors vary across different genres and artists.

# Data Analysis Tasks

- Data Cleaning and Preparation: Check for and handle missing values. Convert categorical variables into a format suitable for analysis.

- Exploratory Data Analysis (EDA): Distribution of tracks by release month, impact of playlist inclusion on popularity, genre analysis.

- Feature Analysis: Correlation between musical attributes and streams, comparison of major vs. minor key tracks.

- Comparative Analysis: Comparison between Spotify and Apple Music, artist analysis.

- Time Series Analysis: Trends over time in streams and playlist appearances, seasonal analysis.

# Tools and Technologies

- \*\*Python\*\*: For data cleaning, EDA, feature analysis, and time series analysis.

- \*\*SQL\*\*: To query and manipulate the data for comparative analysis.

# Deliverables

- A comprehensive report detailing the findings from the EDA, feature analysis, comparative analysis, and time series analysis.

- Visualizations to illustrate trends, patterns, and correlations within the data.

- Recommendations for artists and record labels based on the analysis.