### **Data Analysis and Visualisation in Tableau**

### Please download the 'Extension\_Task\_Spotify Features' dataset <a href="here.">here.</a>

#### **Objectives:**

The goal of this analysis is to use the Spotify dataset to uncover trends and key insights that can be valuable for organisations looking to shape future projects, marketing strategies, or product offerings. By examining the data, we aim to identify patterns related to music genres, track characteristics, artist performance, and more, which can inform decision-making for various initiatives.

#### **Procedure:**

#### 1. Compare Genre Popularity:

Begin by analysing the popularity of different music genres within the dataset. This can involve calculating the average popularity score for each genre or visualising the number of tracks within each genre to identify which genres dominate in terms of listener engagement.

#### 2. Track Characteristics by Genre:

Dive deeper into the attributes of tracks, such as energy, acousticness, or danceability, and compare how these characteristics differ across genres. This analysis can provide insights into the sonic qualities that define the most popular genres and how they appeal to listeners.

#### 3. **Popularity & Other Measures:**

Examine how the popularity of tracks correlates with other metrics, such as track duration, energy, or danceability. Understanding these relationships can reveal patterns, such as whether shorter songs tend to be more popular or if certain energy levels are linked to higher listener engagement.

#### 4. Artist Analysis:

Analyse the performance of individual artists, focusing on their most popular tracks, trends in their musical output, and how their popularity has evolved over time. This can help identify rising stars or provide insights into established artists' most successful strategies.

#### 5. **Duration Analysis:**

Investigate the impact of track duration on its popularity and other metrics. Determine whether shorter or longer tracks tend to perform better and assess how duration interacts with other features like tempo or loudness.

#### 6. Create a Dashboard in Tableau:

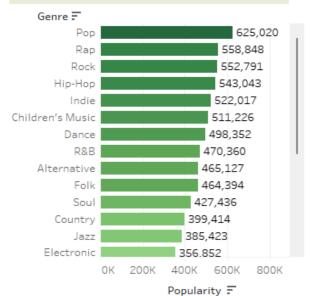
Once the analysis is complete, compile the findings into an interactive and visually appealing dashboard using Tableau. The dashboard should include key visualisations, such as bar charts, scatter plots, and trend lines, that make it easy to explore the relationships between different variables, track characteristics, and overall trends in the Spotify data. This dashboard can serve as a valuable tool for organisations to gain insights and make informed decisions based on the analysis.

### **Key findings:**

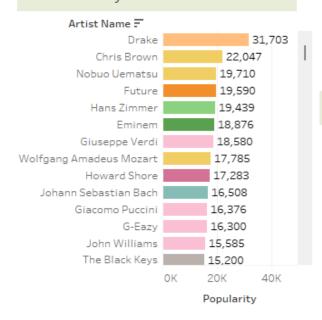
- **Pop** is the most popular music genre, followed by **Rap**.
- The most popular artist is **Drake**, closely followed by **Chris Brown**.
- Songs that are neither too long nor too short tend to be more popular, with the majority of popular genres falling between 3.5 to 4 minutes in length.
- There's a noticeable cluster of genres with very similar average song lengths.
- Danceability and Acousticness are within a similar range when compared to Energy.

# Music Industry Dashboard

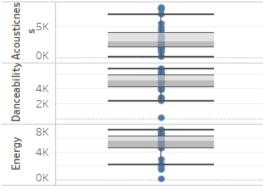




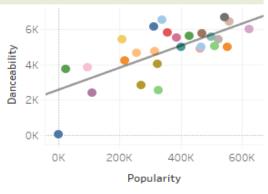
### Artist Analysis



### Characteristics



## Popularity



### Length & Popularity

