**Data Wrangling Project Proposal**

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**PROJECT TITLE:**

**Analyzing Music Emotions with Spotify API**

**DESCRIPTION:**

Music is a form of expression that can evoke various emotions in the listener. We can never predict how an audience would react to new music being released or if a certain album might do well or not. But we can analyze an artist’s albums over the years to observe changes in the style and emotions of their songs. Sentiment analysis is a powerful tool that can be used to analyze the feelings and opinions conveyed in text data.

In this project, we will explore sentiment analysis of music using the Spotify API in R to analyze an artist’s albums and dig deeper into the content and emotions of the songs using NLP techniques. This will enable us to explore the relationship between audio features and sentiment in music. Our project will involve several steps: data extraction, sentiment analysis, and visualization.

**OBJECTIVE:**

The project's main objective is to perform sentiment analysis on the music using NLP techniques and external libraries, focusing on exploring the sentiment of lyrics associated with a song or artist, as well as the sentiment of the audio features of the music. We also aim to investigate the relationship between audio elements and sentiment in music, using statistical techniques to identify patterns and correlations. The project will involve data visualization using R to help interpret the results.

DATA SOURCE:

[Spotify API](https://developer.spotify.com/documentation/web-api) - It is a tool provided by Spotify, which allows users to interact and access the data from the Spotify Streaming Platform. The API provides various endpoints that enable developers to retrieve data from millions of artists worldwide and also to control music playback in applications. It also provides access to the Spotify recommendation engine that suggests music based on a user’s recently played songs. We will be using this API to pull data regarding the albums of a selected artist.