Understanding My Music Taste Evolution Over a Period of Time

Motivation:

My main motivation behind this Spotify playlist analysis project was to discover how my music taste changed over time, and learn the degree to which my playlist reflects these changes. One's experiences, feelings and emotions are some of the events that affect a person's music taste to a greater extent. One of my main goals was to find out certain patterns, changes as well as characteristics to display how the genres of the songs changed in the playlist over time, which reflects the evolution in my song and artist preferences.

Data Source:

Two main sources of information I used to analyze the playlist data are a CSV file containing all of the necessary information on all of the songs in the playlist 'playlist #' and a .json file that includes the streaming information. By using the two data sources, I was able to get a thorough understanding of my music preferences. The CSV file includes the songs' artist, tempo, overall mood, date added etc., while the .json file gives an overview of the songs streamed.

Data Analysis:

Exploratory Data Analysis (EDA) was used to obtain the statistical data of the songs, genre/artists visualizations through plots and graphs, and comprehension of patterns. Firstly, the two data sources were used and transformed into a DataFrame that contains

all of the needed information for further analysis. I used the timing data, specifically the date each of the songs were added to the playlist, to gain an understanding of how the genres changed throughout the months from January to September. To further display the data analyzed, visualization tools such as charts and plots were used to display top genres, top artists, some specific qualities of the genres/songs in the playlist, correlation matrix to represent the relationship between the numerical qualities and top genres/artists at the beginning of the playlist as well as at the end of it.

Findings:

According to the data analyzed, the main genres that stayed consistent throughout the entire playlist were ‘rap’ and ‘hip hop’. A shift can be observed in the time period between the months of April and June, such that while in the month of January the main genre observed was ‘r&b’, ‘pop’ and ‘rap’, towards the middle of the year top genres gradually changed to ‘hip hop’, ‘rap’ and ‘west coast rap’. Furthermore, in terms of artists, SZA was the top artist both at the beginning and the end of the year. Even though there was a shift in the genres over this period of time, main themes and music styles that stayed constant throughout the playlist were ‘hip hop’ and ‘rap’. Exploring other features of the songs such as ‘Dance’, for example, provided great information on the characteristics of music that resonated the most with me, such that upbeat songs remained at the top.

Limitations and Future Work:

There might be minor issues in the analysis of the data since the DataFrame mainly relies on the accuracy of streaming history. In terms of further analysis, predictive modeling and machine learning can be used to predict certain trends and recommend songs and artists similar to one's music taste.