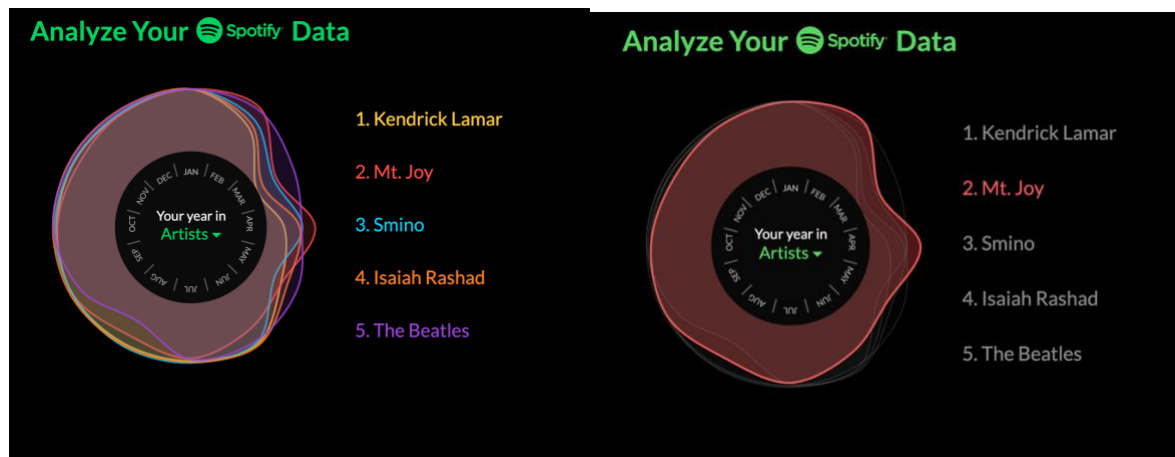


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I chose to use my Spotify streaming history data, along with metadata around artists and songs that Spotify provides. When Spotify came out with their 2023 Wrapped, I found the results quite confusing. There were artists and songs that I had not recognized, along with some I swore I had not listened to as much as Spotify was claiming. Through this project, I was able to find that most of these confusing results were songs that I would play while I fell asleep, resulting in them repeating many times throughout the night.

At first, I did not really have an idea of a story in mind. However, as I explored, I found myself asking some key questions about the data, such as, “what songs could I have possibly listened to from this genre,” and, “what even is this genre?” I created the main chart to better understand how my listening history varied throughout the year, based on artist, song, or genre. I made this chart radial because it is time-series data. Then, I created the more detailed weekly view to allow users to dig further into the data. The bar chart was an idea that was added later in the project. This chart is also interactive, hover over individual bars causing the styles to change to point out the active bar and causes a tooltip to appear with information about the specific week. I also include summary information to the left of this chart to give users more detail.





The final interactive visualization breaks down into two components, the main chart and the summary area. The main chart has a dropdown in the center allowing the user to switch between 3 modes—artists, songs, genres—, each with their own data. The user can hover over the legend items (to the right of the radial chart) which will focus the visualization on the corresponding item, by turning the other items grey and making them slightly less opaque (see right image). Clicking on a legend item brings up the visual below the radial chart (see image below), this visual includes a bar graph designed like common, layman soundwave imagery. This graph shows weekly listening time for the selection.



I made a lot of tradeoffs in the end. The largest one being sleep. I spent a lot of time figuring out how to work with radial axes in d3. I finished the main visual and a simpler version of the summary view and felt like the page was not enough for this assignment, so I added more to the box on the left, such as top artists within a genre, as well as the bar chart. With the summary view, there were many features I wanted to add that I left out due to time, such as including more images (i.e., album covers) from Spotify, as these might be more familiar or recognizable to some users. I worked hard to style the visual so that the colors are

harmonious, but pop against the black, the text is reminiscent of Spotify's typography, and the general style matches that of the Spotify application. Many of my interactions focus on showing the user what they are selecting or filtering the data to their selections. After taking a lesson from Camille Lee on color theory, I learned to use opacity, color intensity, and size (both width and height as well as bold/regular) to focus users attention. For example, the interaction in the bar graph (hovering over bars) changes the style of the bars, first by making all other bars grey, then by making the hovered bar wider. One unfortunate tradeoff I made was spending more time adding interactions rather than making them clear to the user. I fear it may be difficult to understand what one can do off of first glance.

I worked alone on this assignment. I got a bit carried away and spent an embarrassing amount of time on it. However, I still hope to return to this project and continue building it soon. I spent the most time on processing the data and refining interactions. Building the charts, making design decisions, and adding the transitions were all faster than these components.

Data citation: <https://support.spotify.com/us/article/understanding-my-data/>