Young People Survey: Music Preferences

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Dataset Source: https://www.kaggle.com/miroslavsabo/young-people-survey

The donut chart is an overview of the dataset that shows and compares the percentages of amount of people who answered different levels of music enjoyment. I chose a donut chart because I wanted a simple visualization that is appropriate for comparing the percentages of different answers by the survey responders. By hovering the mouse over a slice of the donut chart, users can see the total amount of people who answered that specific answer and what percentage of the total amount of responders that is. By clicking on that slice, users can change the views of the radar chart and the parallel coordinates graph by filtering the total dataset to those with that selected answer.

The radar chart provides a more detailed view of the chosen dataset. The radar chart is connected to the donut chart; the radar chart displays the average rating of music genres, filtered to only the entries of the music enjoyment level selected in the donut chart legend. Higher average ratings have a higher amplitude on the radar chart, and lower average rating have a lower amplitude on the chart. By selecting different music enjoyment levels on the donut chart legend, we can see that the "Do Not Enjoy Music At All" music enjoyment level has a lower average rating of music genres all around the radar chart.

The parallel coordinates visualization is another detailed view. I chose a parallel coordinates graph because I wanted users to be able to see the different connections between what preference levels of genres that survey responders had. By clicking and dragging on the genre names above the axes, users are able to move axes around. The lines on the parallel coordinates visualization are filtered based on the selection made on the donut chart. The lines that are selected are a blue color, while the rest of the lines in the entire dataset are made grey, in order for users to compare them.

When I asked a classmate to test the application, they said that they initially did not know how to interact with the system by first glance. Since interacting with the donut chart is only noticeable by hovering over slices of the chart, they suggested making buttons, so that users will immediately know to interact with them. They also said that they could not see any large noticeable difference in the average values on the radar chart. I think that their criticisms are valid, and I definitely agree. I think that one way I can improve the radar chart is by making the music genre axes filterable, so that users can fill er the axes to see only the average values of the genres they care about. I think I can also improve the parallel coordinates visualization by letting users be able to select sections of genre axes and be able to filter the lines in the graph to show only the lines in those sections.