

writeUpSpotify

After looking at this data, I new that I first wanted to evaluate the differences in the track features between clean and explicit songs.

To do this, I first knew that I would have to clean and merge the data a bit. I could have used the spotify api again but since I have python and pandas experience, I knew that I could do this pretty quickly.

To clean and merge the data, I had to rename a few columns and then merge on the track id. I would use the trackFeatures data to get all the danceability and energy and would use trackInfo to get whether the track was explicit or not.

Here's the code for doing that:

```
#importing data
trackInfo= pd.read_csv("spotify_data-1/trackInfo.csv")
trackFeatures = pd.read_csv("spotify_data-1/trackFeatures.csv")

#only care about singles
trackInfo = trackInfo[trackInfo["Album Type"] == "single"]

#give trackFeatures and trackInfo the same column name to make merging
easier
trackFeatures["Track Id"] = trackFeatures.id

#merge the data on the track id column.
# inner gets data ONLY in both files

df = pd.merge(trackFeatures, trackInfo,how='inner', on='Track

#now I have two subsetted datasets
df_exp = df [ df['Explicit'] == True]
df_clean = df [~ df['Explicit'] == True]
```

Using these new subsetted dataframes, I can now get the mean of every feature and compare them.

I originally planned on including four features but I found four to be more convoluted. I thought danceability and energy would be the most interesting.

```
df_clean.danceability.mean()
df_exp.danceability.mean()
df_clean.energy.mean()
df_exp.energy.mean()
```

Since they values were bounded in range from (0,1), I thought that I could treat them as percentiles and use them like a pie chart. However, I wanted to do something more than a normal pie chart.

Now, I could create all the separate components. My process would work like this. Using an online pie chart generator, I'd generate a graph that looks like this.

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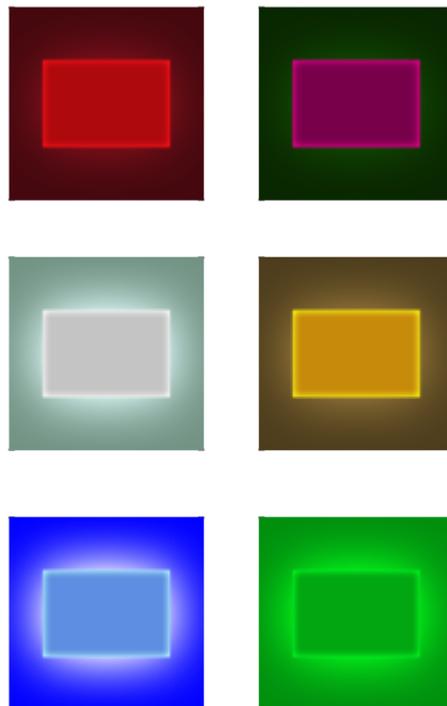
Then for danceability, I would overlay it onto a disco ball. Since they were both circles, I was able to correctly scale it and map it correctly.

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For energy, I placed the pie chart below an energy diagram and then color the surrounding dashes.

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I did all of this for each variation (energy-explicit, energy-clean, dance-explicit,dance-clean). I based on my color palette on this [discussion](#) which was talking about good vs evil palettes



for video games.

As I began putting the components together, I was struck with inspiration! I wanted my visualization to be in the style of an album!

At first, I was a bit frustrated because my color scheme appeared to be too convoluted and the distinction between blue and red appeared too harsh.

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Next, I decide to use stock images of a dance floor. image-20210330212947196

I settled on this image, but like it even more when I dissolved it because it created a speckle effect that felt very album-y to me.

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After I added the title, I really felt like it was starting to look like a real album!

Finally, I added labels to the features because I had noticed it came up in a lot of our feedback sections.

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