COM480 Data Visualization - Milestone 2

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Project goal

Our project challenges the common assumption that it's possible to accurately gauge a person's mental health solely from their music profile. We aim to show that no such strong correlation exists and to highlight other, more meaningful factors related to mental health. To make this message memorable, we structure the user experience in three parts:

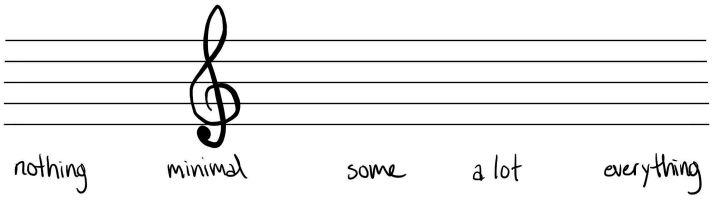
- **Initial Guess:** The user sees three sample music profiles and must guess which one is associated with high self-reported mental health problems. They also need to state how strongly they believe music preferences can reveal a person's mental health.
- **Data Exploration:** The user then explores a dataset of self-reported mental health metrics and music characteristics in interactive visualizations to discover any potential patterns.
- **Stating the facts:** After some searching (and likely frustration), the user realizes there is no strong correlation. We conclude by introducing factors that genuinely affect mental health.

Outline and sketches

Our website is structured as a data story. The introduction makes the user take a stance on how music and mental health are related. Initially, the user will be presented with three music profiles and asked to identify the one person that has reported high values of mental health problems.

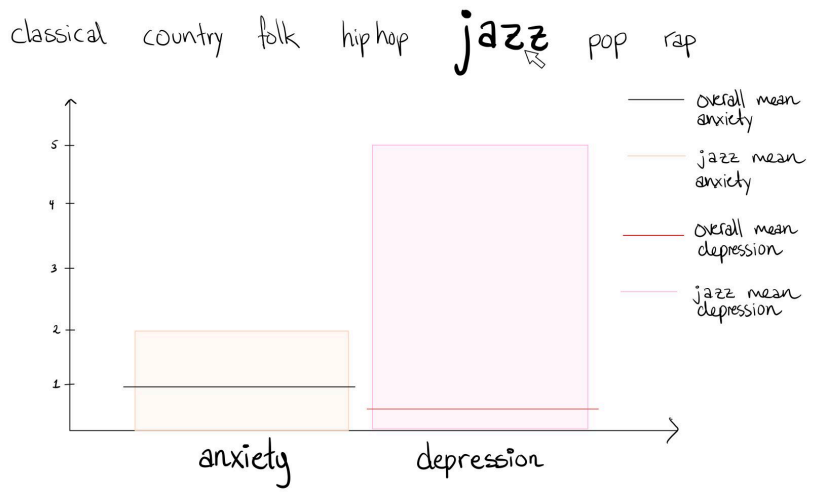
Then the user is given the correct answer, and asked to answer the following question with a slider:

How much do you think you can tell about a person's mental health based on their music profile?

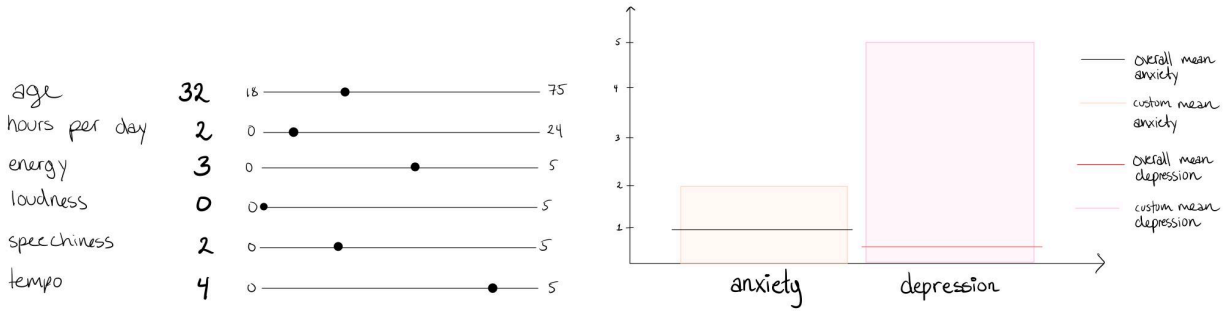


When they have answered it displays a message of their hypothesis based on their answer.

In the second part the user will explore the music-mental health data. It will start with a visualization exploring how people's self-reported anxiety and depression varies depending on what genre they listen to.



They will then be able to explore how people's self-reported anxiety and depression varies depending on other features.



After most likely some frustration of not finding a pattern, the user will be given feedback that there is no pattern to find. Through the hopefully somewhat emotional exploration we hope that the user will experience the feeling of "having it wrong", as this is correlated to better remember "the actual answer". And that is what we will present in the final part. We intentionally use area as a visualizer for our metric, since differences in area are less obvious to the observer, and we don't want to give the impression that certain factors have a significantly greater effect on mental health.

We will also provide links to websites and helplines for users seeking support with mental health concerns.

Technologies and tools

In this project we plan to use D3.js for building our interactive charts. HTML, CSS, and JavaScript will serve as the foundation for the site's structure and interactivity. The lectures we will mainly use are Basic web development + JS + D3.js (Lec 1-4), Tabular data (Lec 11), Sound (Lec 11) and more general Do and Don't (Lec 7) and Storytelling (Lec 12).

Extra ideas

Adding music: Either background music, music that changes depending on the genre you choose etc.
Having the bubbles bounce slowly around on the screen.