Written Report (Prototype)
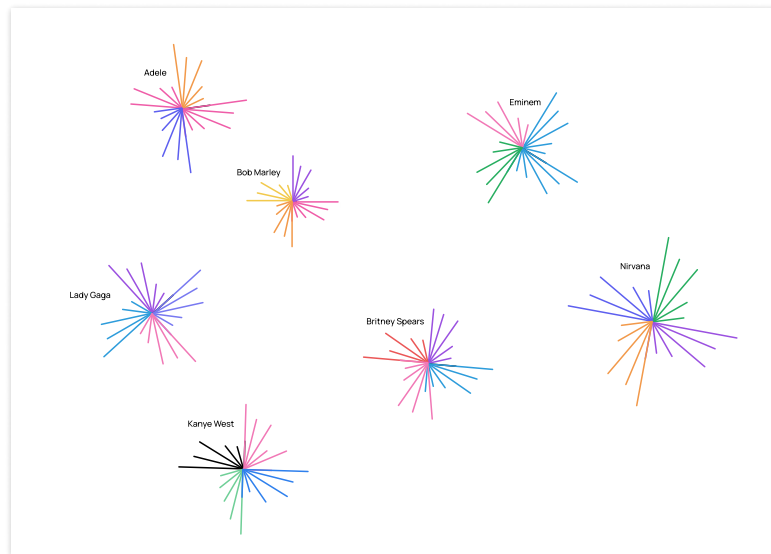
Song Lyrics Analyzer

Valentine Sénégas

Project Description

This project aims to analyze song's lyrics from more than 40 major artists from the 20th and the 21st century. The main goal is to compare word similarities or differences between all the artists. A graphic representation will show the relationships by creating a set of words for each artist, which will be linked to others. Clusters that are closer to each other are more similar that ones that are far apart.

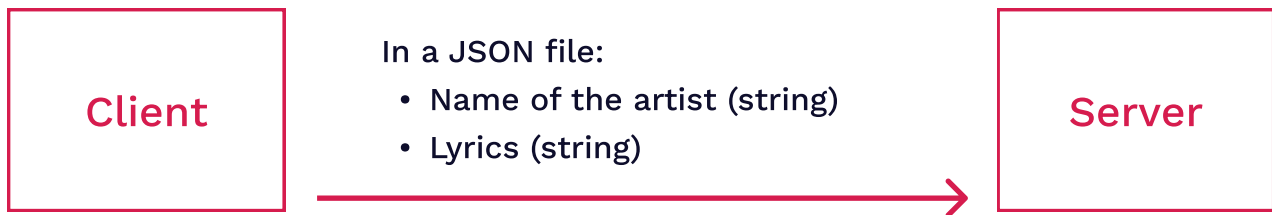# Current stage in the project

Currently, I have setup my database and my data. I have not done any interface work now. I am behind on my initial planning. I expected to have more done at this point.

I have spent a long time editing each file from the dataset correctly write and format the text in order to avoid problems with special symbols that could interfere in the code such as quotation marks, semicolons and brackets. I then had to transform the text files into json files, which took some time.
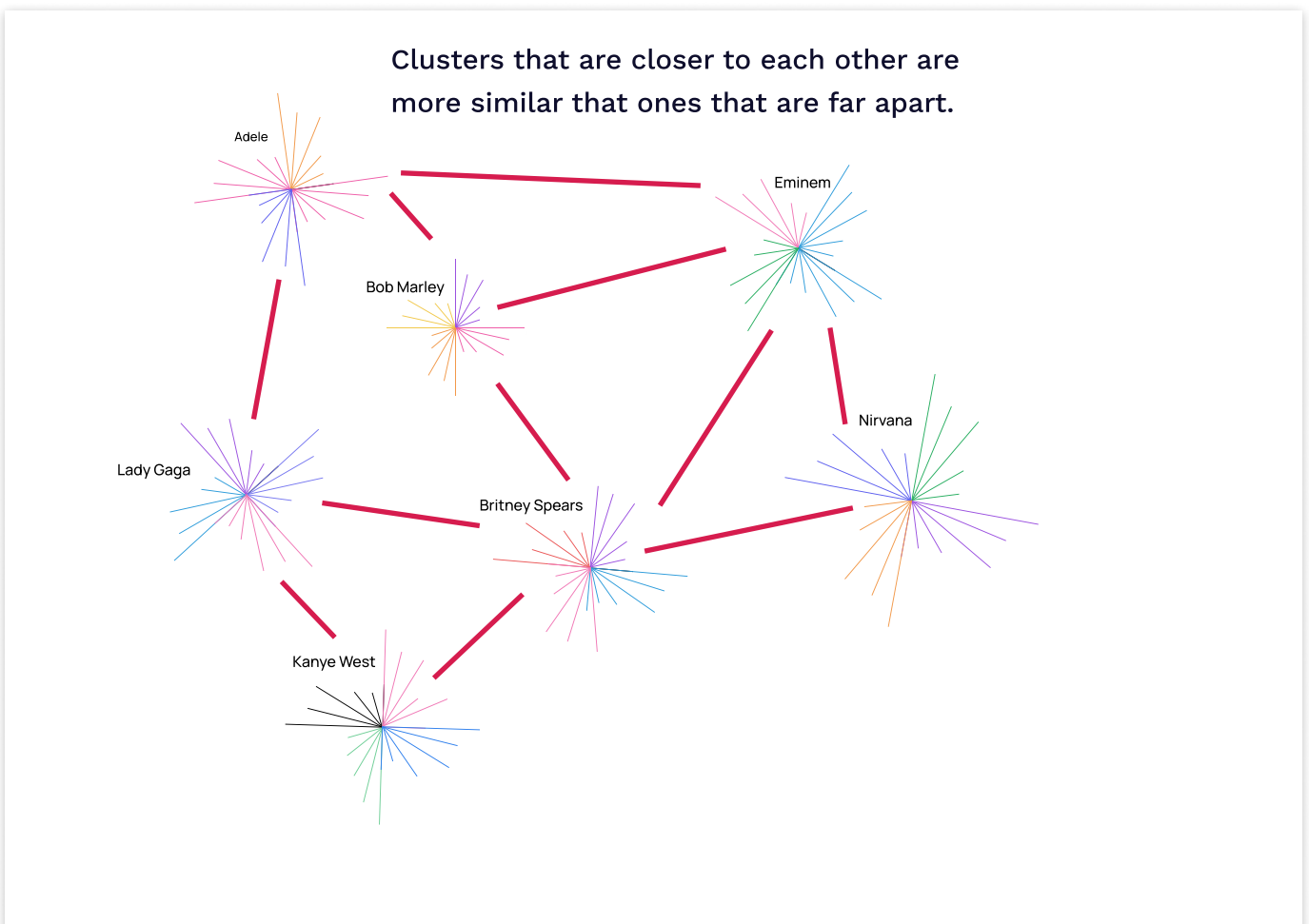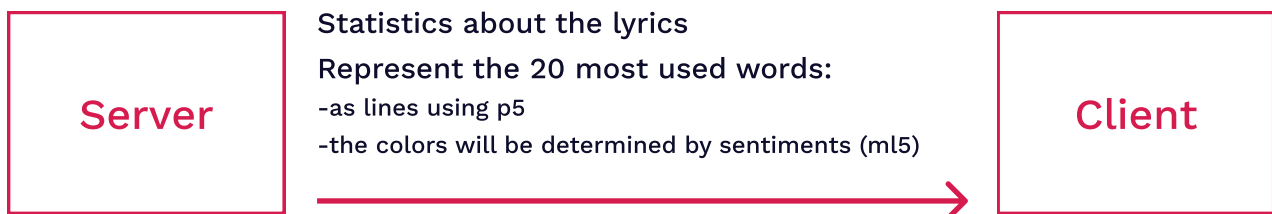
There is still a lot that needs to be done. I focused my attention on the Figma prototype for the presentation.

Detailed images/diagrams of the overall system

Adding an artist and their lyrics to the database

Client	In a JSON file: • Name of the artist (string) • Lyrics (string) →	Server

Show the visual representation

Server	Statistics about the lyrics Represent the 20 most used words: -as lines using p5 -the colors will be determined by sentiments (ml5) →	Client

Clusters that are closer to each other are more similar that ones that are far apart.

Adele
Eminem
Bob Marley
Nirvana
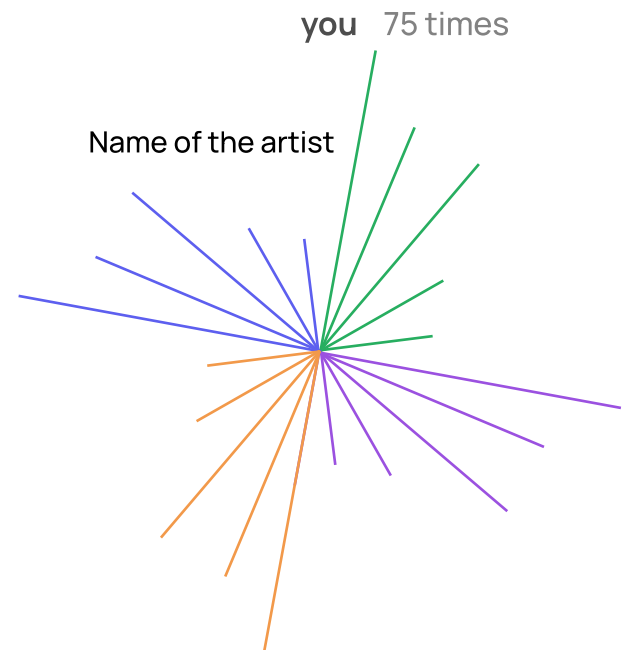Lady Gaga
Britney Spears
Kanye West

Features & components

"Stars" are the main feature of my project. Each star represents the diversity of an artist's lyrics. A star contains twenty lines, which all represent a single word. The longer the line is, the more times the word was found in the database for this artist.
The lines will be drawn using **p5.js**. The color will be determined using **Sentiment**, a model of **ml5**. Words with a positive connotation will have warm colors and words with a negative connotation will have cold colors.

you 75 times

Name of the artist

When hovering a line, the associated word will appear with the number of times found.

The feature of letting users add a new artist may not be realistic to add in the time that I have left. It would be a really nice feature to have, as it would become collaborative, but for now I need to focus on finishing the minimal viable product.

×

Add your own artist!

Name of the artist

Enter the lyrics of their songs. Do not input [] {} or ;

Send