**Administrative:**

Team Name: The Jam Club

Team Members: Bishoy Pramanik, Brayden Smith, Johnathan Gaskin-Paulsen

GitHub URL: <https://github.com/bishyboi/DSAProj_3>

Link to Video:

**Proposal:**

Problem: How common have swears become over time in music?

Motivation:

As new music comes along with each new generation, older generations often claim that music has become more inappropriate over time. To test this assumption, we realized that we could analyze the prevalence of explicit lyrics in songs.

Features:

Our program is able to find the average number of explicit lyrics in a song per year, across several different languages. Our program supports a search across thirty-six languages, including English, Spanish, Portuguese, Romanian, German, and many more. The search ranges from 1950 to 2020 for each language.

Description of Data and Tools:

We used the WASABI database, a collection of songs and their metadata from several other databases on the internet, that have already been processed for lyrics, chord sequences, and emotions using natural language processing techniques. For quick over-arching scans of data, we used the pandas library for Python to determine other characteristics of the dataset, as well as filter out

Using SFML, we created the GUI for the program and the rest was implemented using the STL library in C++.

Additional implemented:

Distribution of Roles:

**Analysis:**

Changes and Rationale:

Time Complexity:

**Reflection:**

Overall Experience? Challenges? Changes to Project and Workflow?

Bishoy:

Brayden: Experience overall went pretty smoothly. The biggest challenge that I faced was trying to parse the original massive csv file as it was near 5 GB and in a formatting that was original to itself. Once I could cut away most of the unused data it became easy to use. The other hard part of the project was that I didn’t know if a part of the code worked until the full functionality was done and I could see the data loaded into the graph.

Johnathan: