Development Progress Report 1 - Negar Ghasemi

In the attached document, I have delivered the following:

- **analysis.js:**
    - <u>Use:</u> the script responsible for executing the main part of the analysis. These tasks include
        - Enabling WebAudio API
        - Filtering the audio
        - RMS calculation
        - Comparison of the RMS of three ranges in the uploaded audio and reference audio
        - Conversion to dB
        - Handling upload feature, and event listeners for buttons using the upload.js module
        - Returning the results to the user
    - <u>Developments:</u>
        - In the current version, the decibel conversion was relocated to be done after the comparison.
        - Comparison function was added
    - <u>Challenges:</u>
        - The script is in circular interaction with the other module upload.js; the code does not function past the upload and capture upload process, hence fails to return the rms value. As of the last upload, it was fully functioning. However, when I began to use the previous version, it failed to work properly, resulting in errors such as wrong syntax, or upload button not working, or undefined elements. If no error was detected, the code was still unable to function for the RMS calculation and result returning. I also added a feature to check whether the button is working. I believe it is that a circular interaction between the two modules is causing the issue. I have to further debug it.
- **upload.js:**
    - The script is only responsible for the upload function.
- **Html document**
- **CSS Document**
    - This is a demo of a UI design that I think fulfills the minimum requirements. Upon having more time, I plan to develop it.

Main Challenge

As of now, my main challenge is to debug and figure out why the code is not able to do RMS calculation. Meanwhile, because the code is not working properly, I am not really sure whether

the features that I have added such as dB conversion or return of results after calculation is working or not.