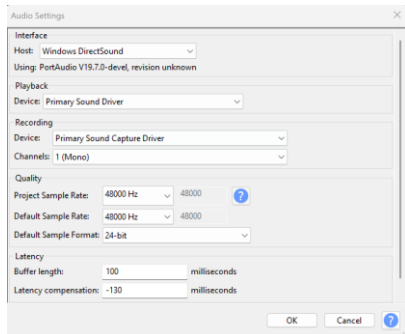


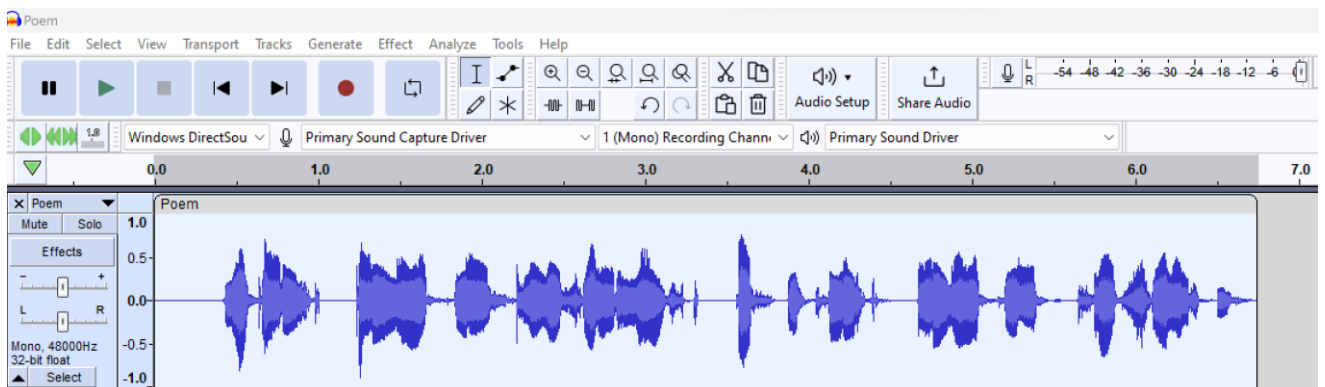
Audio recording

The audio was recorded using the Audacity. The frequency was set to 48KHz, the bit width was set to 24 and the mono channel was used.

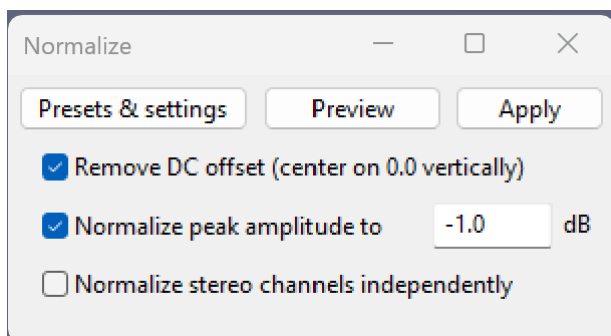


After recording the audio file, I truncated the silent part of the pre, and post audio manually and then applied the “Truncate silence” effect from the “special” tab of the effect menu.

After



I also normalised the audio using the following settings.



This has mapped the signal between -1 to 1.0.

Finally, the file has been exported as Poem.wav and saved under the project.

Low pass filter

It allows low level frequencies and blocking the higher one. This sounds like heavy voice.

Wave shaper distortion

it adds some distortion or noise to the audio, may sometimes make it sound like more natural. But it depends on the amount.

Dynamic compressor

It helps to smoothen the audio.

Reverb

It adds effects like space and delay effect to the audio.

Master volume

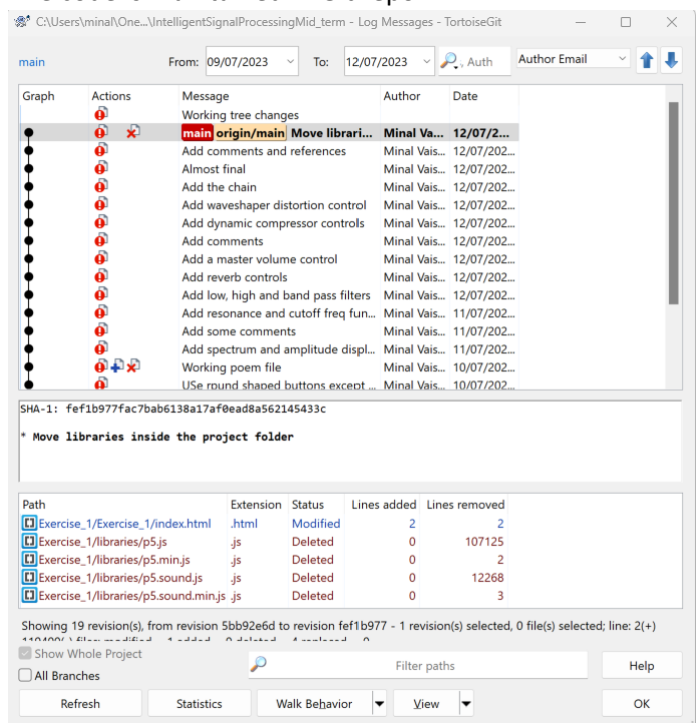
IT controls the main volume of the audio, or it can overwrite the other volume related controls.

Additional features applied in this project-

- **A filter type selection**
User could select between low pass, high-pass, or band-pass filters.
 - **High pass**- allows to pass/play higher range frequencies (as set in the program).
 - **Band pass** – Allows to pass the notch frequencies or a band of the frequencies as set in the program.
- **Amplitude** – a basic feature extraction is done and mapped to the rectangle dimension which it shows in the left side canvas.
- **Reset** – A reset button is given to reset all filters at one go so it might help user to quickly go back to the default settings.

Some points worth to mention-

1. The code is maintained in Git repo.



2. The code is well commented and tried maintaining the readability.
3. The code is divided into GUI and functionality by having the GUI elements in HHTML and control under sketch.js.

Future development path-

1. Currently only buttons are given but I would like to give a better user interface by giving dial buttons and showing the number which is selected.
2. Audio file button is given but currently not implemented and in future, audio source can be selected using this button.