80'S SYNTH AUDIO AFFECTS

Team Members

Kelsey Larson, kelsey36@pdx.edu

Adam La Fleur, alafleur@pdx.edu

Maeve Hoffer, dhoffer@pdx.edu

Topic Area

We will be writing an audio effects application that has a specific theme such as 80s synth or 8-bit music. Upon running software a GUI application pops up that is an 80's synth environment. We are aiming to have an array of sounds to choose from and depending on which are selected the desired audio effects are applied. An ambitious goal is to have the software not just playback effects but be able to loop and layer. The goal would be to have a fun environment to simulate and play from a group of provided sounds and effects.

Project Vision

An application where a user may choose different sound effects.

Ex: (funky bass, siren, guitar riff). And then modify the sounds with effect bars. For example, a bass line could have the flanging effect heavily applied or lightly.

Concerns

The biggest concern is that creating a GUI for this project may be too ambitious. That would require javascript/HTML/CSS on top of the challenge of creating significant sound effects. I am also concerned that it will be hard to create effects that stick to a "theme" like 80's synth. There may be an easier theme to stick to, such as 8 bit since it's more restrictive and clippy sounding and easier to identify.

A possible way to address the ambitiousness of creating a GUI is to start with merely the sound effects. Once we have achieved a satisfactory sound effect, we can work on implementing a GUI.

Effects to Consider

Chorus effect Flanging Delay

Loop Diode Clipping Etc. (to be determined)

GitHub Repo