Sprint 1 Plan

BitWide Boi by BluHaus FX

Sprint Completed on 10/21/18
v1 : 10/10/18

Goals For the Sprint:

For this sprint, we will fully set up the sound input and output configurations as well as the basic framework for building our plugin and allowing sound manipulation functionality. Additionally, we will begin by creating a stereo imaging plugin that accepts mono sound input and outputs stereo sound input after being processed through pitch changes and sample delay based off the Haas effect.

(2 SP) As a producer, I want the plugin to be in a VST/AU format so that it is compatible with my DAW.

Tasks:

1. *Read Martin Finke's tutorial on basic audio plugin framework (wdl-ol) (2 hours).*
2. *Setup repository to include all of the necessary dependencies, build wrappers, and download necessary software for building the app (1 hour).*
3. *Configure proper folders and audio input/output formats to work with modern DAW's and setup VST/AU format (1 hour).*

Total for User Story 1: *4 hours*

(5 SP) As a musician, I want a tool that I can use to achieve complex mixing techniques without having to reinvent the wheel and do them myself.

Tasks:

1. *Initialize the necessary UI knobs and buttons to modulate parameters for the delay-based stereo effect (wet/dry mix knob, delay length (ms) knob, dominant ear button, effect-on button) (1.5 hour).*
2. *For wet mix, send mono input to the dominant ear and replicate the signal to the other ear at the delay length specified (3 hours).*
3. *Add functionality to mix audio output between the dry output (unaffected) and wet output (processed output) (4 hours).*
4. *Add ability to toggle which ear is the dominant ear (which ear receives audio first) (3 hours).*
5. *Implement button to bypass effect (on/off) (2 hours).*

Total for User Story 2: *13.5 hours*

(3 SP) As a producer, I want an audio plugin that creates stereo depth so I can make my mixes sound wider and full.

Tasks:

1. *Initialize necessary UI knobs and buttons to modulate parameters for the pitch based effect (wet/dry mix, pitch detune, pitch shift speed, delay, effect-on button) (1 hour).*
2. *Implement pitch detune function by copying mono signal to the L and R channels and making the modulation value tune one up and the other down by identical but opposite amounts (5 hours).*
3. *Modulate pitch shift speed (2 hours).*
4. *Add delayed voice to create a chorus effect (4 hours).*
5. *Mimic wet/dry and effect-on modulators from the previous story point (identical in function) (0.5 hours).*

Total for User Story 3: *12.5 hours*

Team Roles:

- Franky : *Project Owner*
- Zac : *Scrum Master*

Initial Task Assignment:

- Franky : User Story 1, Task 1
- Zac : User Story 1, Task 3

Scrum Times:

- Tuesdays - 2pm (TA Meeting)
- Wednesdays - 12 pm
- Mondays - 12 pm