# Wolf-shapper issues:

1. **Feature Implementation Requests**:
   * **Description**: Requests or suggestions for adding new features or functionalities to the software.
   * **Example Quotes**:
     + "I need to implement the following NanoWidgets: - [x] NanoSwitch - [x] NanoButton - [x] NanoWheel - [x] NanoKnob"
     + "I need it, because I could scale the GUI."
     + "This would allow maximizing the window, resizing it without grabbing the resize handle, etc."
2. **Bug Reports**:
   * **Description**: Reports of issues or malfunctions within the software.
   * **Example Quotes**:
     + "Sound is much more distorted than it should."
     + "Plugin outputs garbage values"
     + "I've been able to reproduce the issue. Still investigating."
     + "So OBS has support for VST Plugins and wolfshaper has a problem where the UI does not move at all when opened in OBS Studio and here is a gif to prove it."
     + "Right now, the plugin sends the peaks at every period, and the UI can only catch *some* of these messages."
3. **User Interface/Experience Improvement**:
   * **Description**: Suggestions for enhancing the usability, interface design, or overall user experience of the software.
   * **Example Quotes**:
     + "Please make the context menu an actual one that has the right Xorg flags."
     + "Right now, warp calculations are made every time we call getX()/getY() on a vertex. Instead, the warped position"
     + "This separate the HPF for stereo I/O and also resets the state when toggling it."
     + "tar.gz is problematic to handle on Windows, ZIP would make it easier to install the plug-in."
4. **Documentation Improvement**:
   * **Description**: Suggestions or comments aimed at improving the clarity, completeness, or organization of the documentation.
   * **Example Quotes**:
     + "Useful for a user/reader point of view since, at least, we know what is the version which this doc has been."
     + "Actuellement, on a Ã§a : Suggestion : "
     + "I see you already did some work on trying to ease the work for package maintainers and the like in #42. However, I have some questions and notes on it: \* it doesn't make sense to maintain your PKGBUILD within this repository."

**5.Installation Instructions Clarification**:

* + **Description**: Comments or suggestions related to the installation process or instructions.
  + **Example Quotes**:
    - "I was able to install and get wolf-shaper working by pointing the install to the disco release."
    - "Before you add the ppa repository, you have to run sudo apt update (it won't run after)."
    - "If you don't do #3, any package you've installed via apt, which is the main package manager you should be using to install most things into Ubuntu, ***WILL NOT UPDATE*** (so #3 is very important if you don't wanna fuck up your shit up)."

**6.Dependency Management Issues**:

* + **Description**: Issues or difficulties related to dependencies or package management.
  + **Example Quotes**:
    - "Ardour users are recommended by the core Ardour dev team to not use apt to install."
    - "clang-10 fails to compile."
    - "Whenever the plugin window in Waveform Free gets closed and reopened it gets bigger, this can get out of hand."

**7.Software Configuration Suggestions**:

* + **Description**: Suggestions or recommendations for configuring or managing the software.
  + **Example Quotes**:
    - "Get rid of this fork: <https://github.com/wolf-plugins/DPF> Switch to <https://github.com/DISTRHO/DPF> instead, to make maintenance easier."
    - "I don't think .ini file support is relevant in this plugin."
    - "This shouldn't be too difficult to reproduce. But just adding some nodes and trying to change wave types for."

**8.Bug Report - Display Issue**:

* + **Description**: Reports of display issues or anomalies within the software interface.
  + **Example Quotes**:
    - "I recorded the screenshot video: <https://people.freebsd.org/~yuri/wolf-shaper-2021-03-15_19.36.48.mp4> In order to clear black I had to move the window a bit."
    - "Whenever the plugin window in Waveform Free gets closed and reopened it gets bigger, this can get out of hand."

**9.Code Modification - Build Configuration**:

* + **Description**: Changes or suggestions related to build configurations or dependencies.
  + **Example Quotes**:
    - "Disable DGL's file browser."
    - "Fix missing GL include while building Wolf Common."

**10.Issue Resolution Confirmation**:

* + **Description**: Indications that an issue has been resolved or fixed.
  + **Example Quotes**:
    - "Fixes <https://github.com/wolf-plugins/wolf-shaper/issues/134>."
    - "Fixes <https://github.com/wolf-plugins/wolf-shaper/issues/132>."

**11.Documentation Reference**:

* + **Description**: References to specific sections or files in the project documentation.
  + **Example Quotes**:
    - "See <https://github.com/wolf-plugins/wolf-shaper/issues/132#issuecomment-797226488>."
    - "This line of code: <https://github.com/wolf-plugins/wolf-shaper/blob/b5c8c457abbe2212ce20644895be4243a2ba5740/plugins/wolf-shaper/WolfShaperPlugin.cpp#L312> is followed by: <https://github.com/wolf-plugins/wolf-shaper/blob/b5c8c457abbe2212ce20644895be4243a2ba5740/plugins/wolf-shaper/WolfShaperPlugin.cpp#L403>."

**12.User Feedback - User Experience (UX)**:

* + **Description**: Comments or suggestions related to the user interface or user experience.
  + **Example Quotes**:
    - "The UI feels very unresponsive in Ardour."
    - "A resize handle would be nice."

**13.Feature Request - Functionality Enhancement**:

* + **Description**: Requests for new features or improvements in functionality.
  + **Example Quotes**:
    - "Bend +/- on graph vertices, or add some way to manipulate the tension of all the curves using a knob."
    - "pre-gain, wet, post-gain, oversampling while vertexes save just fine Bitwig 1.3.15, vst version."

**14.Installation Issue - Dependency Missing**:

* + **Description**: Reports or indications of missing dependencies during the installation process.
  + **Example Quotes**:
    - "There is no pugl git submodule."
    - "Build breaks with the latest pugl revision. FreeBSD 13.1."

**15.Segmentation fault issue (SIGSEGV)**: "Thread 1 'wolf-shaper' received signal SIGSEGV, Segmentation fault."

**16.Window resizing issue**: "Resizing the window into the corner of the screen causes the window to grow very fast."

**17.Dependency issue**: "I've tried to build Wolf Shaper on a different Linux Mint 18.3 system and I got this: **src/Window.cpp:40:33: fatal error: X11/Xcursor/Xcursor.h: No such file or directory**."

**18.Building issue with space in directory path**: "Another attempt to build Wolf Shaper ended like this: **make: /data/unfa/Wolf: Command not found...**"

**19.Graphical glitch issue**: "I don't really like how the graph's function is drawn using two lines stacked on top of each other."

**20.Cursor warping issue**: "Either in setCursorPos or clipCursor. See cursor warping in NanoKnob."

**21.Missing feature suggestion**: "Either in setCursorPos or clipCursor. See cursor warping in NanoKnob."

**22.UI responsiveness issue**: "For instance, pretty much all widgets would benefit from having a onMouseEnter / onMouseLeave event."

**23.Banding issue with gradients**: "Large and subtle gradients seem to have some banding issues??"

**24.Building issue with non-escaped space character**: "Looks like a non-escaped space character broke make."

**25.DC offset concern**: "I don't know if anyone would want to produce DC offset by default when using asymmetrical functions. Would he?"

**26.UI tweak suggestion**: "This would help making the UI easier to tweak."

**27.Recommendation to add installation information for dependency**: "Added information to install **libxcursor-dev** prior to building, as it seems to be a common problem people have."

**28.Hover effect suggestion for menu items**: "Tweaking menu items' appearance on mouse hover would be good."

**29.Reporting a recurring issue**: "It just gets stuck in the corners of the window. Other widgets have a similar issue, but it's not as major."

**30.Recommendation to compile as Linux VST**: "Since it compiles a linux-vst (lxvst), installs it as such."

**31.Notifying about building without LADSPA support**: "Since there is no way to compile it as a LADSPA, it avoids make install to rumble."

# Arplinger issues:

1. **Expired Artifacts Issue**
   * Description: Refers to the problem of expired artifacts in the latest builds, making it impossible to download them.
   * Example Quote: "The artifacts in the latest builds (4 months ago) are expired so we can't download it, e.g."
2. **Creation of Gitter Chat Room**
   * Description: Indicates the creation of a Gitter chat room for the repository.
   * Example Quote: "YPares/arpligner now has a Chat Room on Gitter@YPares has just created a chat room."
3. **Bitwig Compatibility Issue**
   * Description: Describes an issue related to Bitwig software, specifically version 4.4.6 on Windows, where certain parameters are not properly reloaded.
   * Example Quote: "Noticed this behaviour on Bitwig 4.4.6 on Windows: After reloading a project with Arpligner instances, or deactivating/reactivating an Arpligner instance, **only** the int parameter (Global chord track lookahead) is properly reloaded at its latest value. All the other parameters (choices) are reset to defaut."

# Noise-suppresion-for-voice issues:

1. **LV2 Plugin Limitation Inquiry**
   * Description: Inquires about the limitation of 48 kHz and 16 bit for the inputs when working on an LV2 plugin.
   * Example Quote: "I couldn't work out the limitation of 48 Khz and 16 bit for the inputs. Did you had any luck with that?"
2. **Equalizer APO Plugin Loading Issue**
   * Description: Describes an issue with loading VST plugins into Equalizer APO on Windows 10 Pro.
   * Example Quote: "Add filter -> Plugins -> VST Plugins -> Choose any of the dll's of the latest release (Feb 13) -> 'Library could not be loaded' v0.1 (22 Jan 2018) works fine."
3. **Stereo Output Configuration Issue**
   * Description: Describes difficulty in configuring the VST plugin to output in stereo for streaming purposes.
   * Example Quote: "I like what the VST is doing and how it is working, but perhaps I am not as technical for this and I do not understand how to get it to output in stereo for the stream."
4. **Platform-Specific Plugin Availability Inquiry**
   * Description: Inquires about the availability of the plugin for macOS (m1) platform.
   * Example Quote: "Just moved to macOS (m1) -- is there anyway to use it there, please? I don't find it in the releases, but it would."
5. **OBS Interface Issue**
   * Description: Reports an issue where OBS detects the plugin but fails to open its interface.
   * Example Quote: "However, as the title says, OBS does see it but it won't open the interface for some reason..."
6. **Equalizer APO Setting Display Issue**
   * Description: Describes an issue where Equalizer APO isn't able to show any settings, preventing the adjustment of VOD levels.
   * Example Quote: "For some reason Apo equalizer isnt able to show any settings, so you cant set vod levels."
7. **Pipewire Configuration**
   * "I followed the Pipewire section, and I got it working successfully."
   * "Software Setup OS: EndeavourOS Linux x86\_64 Kernel: 5.18.5-arch1-1 DE: Plasma 5.25.0"
   * "The pipewire config"
8. **Compilation Issue**
   * "There is no code to install the compiled plugins in <https://github.com/werman/noise-suppression-for-voice/blob/v1.0/src/juce_plugin/CMakeLists.txt> so the plugins are compiled but **cmake --install** does not install them."
   * "In file included from /disk-samsung/freebsd-ports/audio/noise-suppression-for-voice-lv2/work/noise-suppression-for-voice-1.03/external/JUCE/modules/juce\_audio\_plugin\_client/LV2/juce\_LV2\_Client.cpp:48"
   * "In file included from /disk-samsung/freebsd-ports/audio/noise-suppression-for-voice-lv2/work/noise-suppression-for-voice-1.03/external/JUCE/modules/juce\_audio\_processors/format\_types/juce\_LV2Common.h:30"
9. **GUI Glitch**
   * "When moving the mouse over the controls in the new GUI (thanks btw!), the controls themselves glitch out:"
   * "When moving the mouse over the controls in the new GUI (thanks btw!), the controls themselves glitch out:"
10. **Default Settings**
    * "Hey, The default VAD threshold was 0.60 for me. The README states that anything between 0.85 and 0.95 should be sufficient. Shouldn't the default be 0.85 then?"
    * "Hey, The default VAD threshold was 0.60 for me. The README states that anything between 0.85 and 0.95 should be sufficient. Shouldn't the default be 0.85 then?"
11. **Plugin Compatibility**
    * "When switching VST2 dll from 0.91 to 1.01 in EqualizerAPO, It will cause EqualizerAPO crash during open dll or turn VST plugin on/off on EqualizerAPO Configuration Editor panel."
    * "This commit changes the LADSPA plugin and the LV2 plugin installation location."
12. **Compatibility Issues**
    * "Hi I've tested the vst in Ableton Live on Mac OS, when moving the knobs they overlap and data becomes"
    * "I put the rn-noise "vst" stero file into my VST folder and when I scan in wavelink it crashes the program and will"
13. **VAD (Voice Activity Detection) Configuration**
    * "When using Retroactive Grace Period I think the normal grace period breaks."
    * "I'm a pt-br speaker (not sure if it's relevant). And words starting with the "S" sound get a cut when they start the phrase."
14. **Build System Issue**
    * "I hate to be that guy but this is a bit over my head. I tried the command line x64 install on windows with powershell and it isnt working having an issue with ninja."
    * "I tried to run the cross-compiling command with having **mingw64** replaced by **mingw32**, which probably obviously doesn't work."
15. **Documentation Issue**
    * "There's a command to compile for x32 on the readme, but "cross-compiling for windows" is separately listed and only for x64."
16. **Dependency Issue**
    * "I'm on Fedora 36 and couldn't get the noise-cancelling working with pipewire, so I went through the issues and found #79 as well as #116 which seemed related to my issue."
17. **Issue with Noise-Cancelling on Fedora 36:**
    * "I'm on Fedora 36 and couldn't get the noise-cancelling working with pipewire"
    * "A quick dnf command shows that this plugin is still in v0.9 whereas the fix was passed in [v1.01](https://github.com/werman/noise-suppression-for-voice/issues/116#issuecomment-1193120837)"
18. **RNNoise Behavior Issues:**
    * "When I try to play music on Spotify or Youtube, RNNoise will make the music cut in and out as if it's trying to suppress the music as the plugin thinks it's background noise."
    * "This isn't proper behavior, so I would like a new"
19. **Compatibility with juce-7.0.3 on FreeBSD:**
    * "We have the juce-7.0.3 package that works fine on FreeBSD. Is there any way to use it? Version: 1.03 FreeBSD 13.1"
20. **Building and Compilation Issues:**
    * "Beginner to this sort of stuff here."
    * "I downloaded what I think to be the requirements of this plugin: cmake, MinGW, and the VST SDK's"
    * "Just tried this on video conference, the quality is amazing!"
    * "I'm having problems building the ladspa variant of this plugin"
    * "I followed an example in the LV2 plugin for creating **enum class Parameters**."
    * "I don't know how to configure this since I'm new to this part of Linux."
21. **Troubleshooting and Debugging:**
    * "I don't know how to configure this since I'm new to this part of Linux."
    * "Any help would be appreciated."
    * "Any tips for debugging or configuration?"
22. **Compatibility Issues with Applications:**
    * "It is very desirable to use this with video conferencing, unfortunately it is difficult to understand how to set it up."
    * "I can not configure this in a way that works with Google Meet."
    * "It is observed that Chrome/Chromium doesn't work correctly with the monitor of null sink we create."
23. **Crashes and Stability Issues:**
    * "I've got a new Linux machine and I have twice now hard crashed while in a Zoom call with this plugin enabled."
    * "I certainly cannot blame the plugin as I don't really have any detail about the crash."
24. **Feature Requests:**
    * "It'd be nice if there was an option to offload the NN to the host GPU."
    * "it would be great if this thing could play negative noise waves into headphones to provide active noise."
25. **Patch and Update Related:**
    * "This patch is mostly cosmetic."
    * "This patch allows users to selectively turn off plugin builds via CMake options."
    * "This patch updates the PulseAudio section in the README file."
26. **Request for ARM Support:**
    * "Would love to have arm support for this plugin."
27. **Noise Suppression Configuration**
    * "Is there some way to control the amount of noise suppression?"
    * "Any chance of a VST release in the future with a GUI for tweaking some values like VAD threshold, reduction amount, release ms etc?"
    * "When specifying the rate to 48khz (my microphones have either 16 or 44.1khz but not 48, I get intermittent pauses that sound like they are artifacts from resampling. When leaving out the parameter sound seems fine."
28. **Plugin Usage and Installation**
    * "I found it a bit difficult to figure out how to configure this plugin on windows."
    * "I compared the quality of the noise suppression on Streamlabs/OBS (with RNNoise) to the VST2 plugin in equalizerAPO."
    * "I followed the guide for Linux step by step, but the new device is listed as an output instead of an input."
29. **Issues with Output Channels**
    * "When i use that plugin in obs studio mic filter, the plugin works like charm but my viewers i mean the stream output audio only appears on left ear not right ear. how do i fix that?"
30. **Compatibility and Platform Support**
    * "Hi there. I was using this plugin successfully and quite enjoying it on Windows but have moved to a Mac and would love to be able to use it on there."
    * "[Fedora 34] has a change proposal route all audio to pipewire by default. Is it possible to make this noise-suppression-for-voice plugin work with pulseaudio drop-in replacement?"
    * "Good day! I would like to know if this works with Raspberry Pi 4 running on Raspberry Pi OS (Debian)?"
31. **Technical Issues and Errors**
    * "Today after a system update I noticed my denoised microphone source wasn't outputting any sound."
    * "I don't know exactly for what reason this happens, but sometimes the denoised-mic output is robotic, I have a robotic voice with it."
    * "I have already implemented this but I won't make it a PR as my coding style is very different from yours. Currently it's hard coded to support 192KHz and will need some work to get it to build on other platforms."
32. **Feature Requests**
    * "I have an idea for the plugin, I know it seems crazy, but it would be possible to add speech recognition?"
    * "This should fix #33. I have tested it in Audacity and it seems to work."
33. **Compilation and Build Issues**
    * "I can't get the LV2 version working, but I don't know what to put in the the VST folders. Can anyone help?"
    * "This removes the lib prefix from the lv2 plugin binary and should fix #66. Should we do the same with the ladspa plugin? No other ladspa plugin seems to have a lib prefix, but this would."
    * "When copying VST SDK files over to src/vst\_plugin/vst2.x & src/vst\_plugin/plugininterfaces/vst2.x (the filepaths in the documentation seems to have a slightly incorrect filepath), the cmake command that compiles the VST checks for aeffect.h, and spits back the following CMake warning: CMake Warning at CMakeLists.txt:23 (message): pluginterfaces/vst2.x/aeffect.h does not exist."
34. **Latency Issues**
    * "While setting this up, I had problems with latency. The longer I had the noise suppression module loaded, the more input latency appeared on the sink. After about an hour it was up to two seconds."
35. **Core Dump/Error Message:**
    * Description: Mention of core dumps or specific error messages encountered during execution.
    * Example Quote: "It cause core dumped with following error: ... Assertion '\_\_n < this->size()' failed."
36. **Compatibility/Installation Issues:**
    * Description: Issues related to compatibility with different systems or difficulty in following installation instructions.
    * Example Quote: "I have trouble following this guide because directories, files needed, and the PipeWire wiki is also unclear."
37. **Latency/Delay:**
    * Description: Mention of delays or latency experienced during use.
    * Example Quote: "I just set this up using pulseaudio however there is a severe delay (1-3 whole seconds) in discord."
38. **Compilation/Build Errors:**
    * Description: Errors or issues encountered during the compilation or build process.
    * Example Quote: "I am trying to compile and run the ladspa plugin for ffmpeg...But when I execute ffmpeg, I get a hard segfault crash."
39. **Usage/Configuration Queries:**
    * Description: Queries related to usage, configuration options, or modifications.
    * Example Quote: "Is it possible to get this to loop through all devices?"
40. **Feature Request:**
    * Description: Requests for new features or functionalities.
    * Example Quote: "Is there a way to make the windows VST 2 channel audio?"
41. **Documentation Clarification:**
    * Description: Requests for clarification or improvement in the provided documentation.
    * Example Quote: "Can you also answer these questions in the README?"
42. **System/System Configuration Mention:**
    * Description: Mentions of specific systems or system configurations.
    * Example Quote: "I am on Ubuntu 20.4LTS, x86 PC."

# Note-effects-vst issues:

1. **Data Passing Between Plugins:**
   * Description: Mention of passing audio buffers between plugins for transferring arbitrary data.
   * Example Quote: "This shows that audio buffers are passed unaltered, byte by byte from one device to the other, and can thus be used to pass arbitrary data from one plugin to the other."
2. **Buffer Size Configuration:**
   * Description: Discussion about buffer size configuration and its implications.
   * Example Quote: "According to buffer size configuration in bitwig, the smallest buffer would be 32 samples."
3. **Proof of Concept/Experimental Results:**
   * Description: Reference to a proof of concept or experimental results demonstrating a specific concept or behavior.
   * Example Quote: "This proof of concept passes the system time between plugins and show the difference."
4. **UDP Sending and Thread Handling:**
   * Description: Discussion about UDP sending happening in a thread and investigating potential sources for blocking.
   * Example Quote: "UDP sending happens in a thread already, see if there are other sources for actively blocking."
5. **MIDI Communication:**
   * Description: Description of MIDI communication related to channel pressure and aftertouch.
   * Example Quote: "Channel pressure: - ok when VST is in MPE mode - sent before the note on, with same delta frame aftertouch: what sees MIDI monitor that is set in non-MPE. otherwise channel pressure."

# OS-251 issues:

1. **macOS Deployment Issues**: "Maybe I should use **CMAKE\_OSX\_DEPLOYMENT\_TARGET**."
2. **Plugin Compatibility Issue**: "Fix the problem that OS-251 doesn't work in macOS 10.12, 10.13, 10.14."
3. **Linux Compilation Issue**: "Only problem encountered was that it stored the VST3 plugin under ~./vst3/OS-251.vst3/Contents/arm64-linux/ . Instead it should be ~./vst3/OS-"
4. **Request for LV2 Support**: "The age old question to JUCE projects: will you add LV2 support?"
5. **JUCE Version Upgrade**: "Upgrade JUCE from 6.0.5 to 6.1.0."
6. **Plugin Noise Issue**: "there is a crackling noise that doesn't seem to be a feature."
7. **Code Signing Warning**: "I got warnings due to lack of code signing on mac."
8. **Android Porting Challenge**: "it's getting closer to working state. But I'm stuck at **Os251AudioProcessorEditor::getBundle()** which tries to load resources from my local development host."
9. **Universal Binary Build**: "Build universal binary instead of x64 binary for mac."
10. **Font Size Issue**: "Font size is different between macOS/Linux and Windows."
11. **Presets Management Feature**: "Add Preset Manager that allows users to save/load presets in GUI with extension '.oapreset'."
12. **Oscillator State Reset Issue**: "After finishing release in ADSR, oscillator's state should be reset."
13. **Voice Number Adjustment**: "Change the max number of voices to 24 - Change the default number of voices to 8."
14. **GitHub Actions Fix**: "Fix GitHub Actions."
15. **Clipping Issue Fix**: "Fix wrong oscillator gain values."
16. **Dependency Update**: "Bumps [glob-parent](https://github.com/gulpjs/glob-parent) from 3.1.0 to 5.1.2."
17. **Webpack Dependency Update**: "Bumps [webpack](https://github.com/webpack/webpack) from 5.75.0 to 5.76.0."

# Uberton issues:

1. **Feature Request: UI Enhancement**
   * "Create UI for TesseractFx - resizable (double-size bitmaps)"
   * "Create UI for TesseractFx - resizable (double-size bitmaps)"
   * "First version of **Ãoeberton** / the **Tesseract Fx** plugin"
   * "First version of **Ãoeberton** / the **Tesseract Fx** plugin"
2. **Feature Request: Audio Processing Enhancement**
   * "Logarithmic VU meter"
   * "Logarithmic VU meter"
   * "Tesseract 1.0.2 - fix cracks with certain parameters"
   * "Tesseract 1.0.2 - fix cracks with certain parameters"
   * "Tesseract 1.0.2 - fix manual input control Hypersphere"
   * "Tesseract 1.0.2 - fix manual input control Hypersphere"
   * "Tesseract 1.0.2 - fixes and improvements Common lib - oscillator, adsr"
   * "Tesseract 1.0.2 - fixes and improvements Common lib - oscillator, adsr"
3. **Technical Issue: Bug Fixing**
   * "Release Tesseract 1.0.1"
   * "Release Tesseract 1.0.1"
   * "Tesseract 1.0.2 - fix cracks with certain parameters"
   * "Tesseract 1.0.2 - fix cracks with certain parameters"
   * "Tesseract 1.0.2 - fix manual input control Hypersphere"
   * "Tesseract 1.0.2 - fix manual input control Hypersphere"
   * "Tesseract 1.0.2 - fixes and improvements Common lib - oscillator, adsr"
   * "Tesseract 1.0.2 - fixes and improvements Common lib - oscillator, adsr"
4. **Mathematical Equation: Presentation Slide**
   * "(Presentation Slide 13) omega= b i + sqrt(k^2c^2-b^2)"
   * "(Presentation Slide 13) omega= b i + sqrt(k^2c^2-b^2)"

# Surge issues:

1. **Bug Report: Reaper Crash on Mac**
   * "Reported by discord user 0xk1tt3n in march and we never made it to GitHub for the 11 milestone :("
   * "Escape-closing surge with the patch menu open would segv because we didn't do the safe pointer thing."
   * "We had a bunch of lambdas which referenced 'this' rather than 'that = SafePointer' for callbacks on timers and I think perhaps one of those is what caused the very occasional crash-on close in reaper reported in #6421 so review them and push a change. Keep the issue open for a bit while we look for crashes tho"
2. **Bug Fixing: Reaper Crash Resolution**
   * "Escape-closing surge with the patch menu open would segv because we didn't do the safe pointer thing."
   * "We had a bunch of lambdas which referenced 'this' rather than 'that = SafePointer' for callbacks on timers and I think perhaps one of those is what caused the very occasional crash-on close in reaper reported in #6421 so review them and push a change. Keep the issue open for a bit while we look for crashes tho"
3. **Feature Request: User Interface Enhancement**
   * "Shift-F10 selects the right component without pressing enter"
   * "Add a 'decativate' toggle"
   * "Deactivate Clear if you are already on OFF"
   * "Label the clear and deactivate wiht th eslot name"
   * "Have expanded voiceover text for the custom item so it announces the slot and type"
4. **Bug Report: Patch Loading Issue**
   * "Everytime i change patches i get a pop up message saying patch version mismatch and i cant get rid of it and it slows my work flow down i redownload the plug in and i ask went to [http://surge-synthesizer.github.io](http://surge-synthesizer.github.io/) and i couldnt find anything on updated patches is there a way to disable pop up messages in general ?"
5. **Code Optimization: Variable Usage**
   * "We used ${CMAKE\_SORUCE\_DIRECTORY} too freely; so set a SURGE\_SOURCE\_DIRECTORY at the top cmake and use that for some of our paths and stuff."
6. **Bug Report: Audio Distortion Issue**
   * "Playing very many notes with multiple sine OSC with unison voices will produce a lot of clicking/fuzz/digitial distortion."
7. **Bug Fixing: Preset Loader Issue**
   * "If you load a new preset with SurgeXT's preset loader, no values refreshed in host. It seemed first time like a takeover issue, but it's basically just this: no automation 'actual' value, nor GUI knobs on host side refresh to their real value when you load a new preset."
8. **Feature Request: Accessibility Improvement**
   * "It would be very useful while working if the screen reader would announce the selected scene or oscillator via the shortcuts."
9. **Code Revision: Variable Reset**
   * "**blockPos** needs to be reset."
10. **Bug Fixing: External Device Handling**

* "After connecting to and selecting a (somewhat flakey) external usb device then quitting, removing that connection and restarting, got a hard crash (even after plugging external speakers back in."

**12.Bug: CLAP Note Dialect Issue**

* + Example Quote: "When using CLAP version of Surge-XT (x64 and x32) and sending notes in CLAP\_NOTE\_DIALECT\_CLAP mode, Surge-XT does not stop playing notes when it receives Note on, velocity 0 on the general channel."

**13.Bug: Scene LFO Decay Issue**

* + Example Quote: "Scene LFO decay was not disabled for per voice processing, one liner fix..."

**14.Bug: Velocity 0 Note Off Issue**

* + Example Quote: "Velocity 0 == Note Off was not working in the CLAP\_NOTE\_EVENT stream."

**16.Feature Request: Announce Version in About Screen**

* + Example Quote: "Announce version when you open the about screen. Closes #6617"

**17.Feature Request: Configuration File for Rack Mode**

* + Example Quote: "Allow config.xml file if in rack mode - provide scan from xml function for a preset manager"

**18.User Report: Surge Crash on Patch Save**

* + Example Quote: "User Miles on Discord reports: 'I must have borked my settings file or something when I was trying to deal with audio problems earlier. Or maybe a bad patch file. In any case, whenever I save a patch, Surge crashes.'"

**19.Bug: Filter Analysis Window Issue**

* + Example Quote: "Filter Analysis Window: Visualization does not move when Cutoff/Resonance is changed via CC (MIDI learn with + external Midi controller)"

**20.Feature Request: Standard and Advanced Mode**

* + Example Quote: "I would like to' request a feature that can set Surge into standard or advanced mode."

**21.Feature Request: AppImage for Linux**

* + Example Quote: "Maybe it's a good idea to provide an appimage for Linux?"

**22.Feature Request: Improved ADSR Editing**

* + Example Quote: "It would be great if we could click the current EG graph and a bigger windows pops up with a Exakt Lite's similar bigger graph with editable (with the mouse) ADSR points..."

**23.User Query: Assistance with GitHub Usage**

* + Example Quote: "What happened here on github? To @baconpaul and @mkruselj : please read private message on KvR forum..."

1. **Per-channel modulation not working:** "Surge XT publishes parameters for per-channel modulation in the Clap plugin version. However, those don't actually currently work per channel."
2. **Surge parameters publishing issue:** "Surge XT publishes parameters for per-channel modulation in the Clap plugin version."
3. **Surge XT version:** "Surge XT Version Latest nightly Version Plugin Type: Clap Bitness: 64-bit"
4. **Deprecated function warning:** "surge/src/common/UnitConversions.h:30:5: warning: 'sprintf' is deprecated: This function is provided for compatibility reasons only."
5. **Standalone Surge installation issue on Ubuntu:** "I have installed this file surge-xt-linux-x64-1.1.2.deb but now I don't know how I can run the standalone Surge."
6. **Shortcut key functionality query:** "Is making these shortcut keys work from anywhere an option?"
7. **Shortcut key conflicts on Linux:** "On certain Linux distributions, those shortcuts and gestures may cause conflicts between Surge and the desktop environment."
8. **Executable naming convention on Linux:** "On Linux, the custom is not to have spaces in the name of the executable file because it causes all sorts of problems."
9. **LFO envelope retriggering issue:** "This diff allows LFO envelopes to retrigger from non-zero values when either attacking or just envelope retriggering."
10. **Wavetable frame size tag handling:** "If the wav doesn't have a frame size tag, we default to one shot."
11. **Filter routing control limitation:** "The only thing that makes me reach for Vital over Surge, despite Vital being very resource hungry, is the fact that we have so little control over the routing and mixing of the filters."
12. **Surge standalone launch issue on macOS:** "Surge standalone hangs on launch on my Mac."
13. **String oscillator memory leak:** "The string oscillator assumed that 'init' was only called once per instance, so checked out a delay line from the pre-allocated pool in init."
14. **Surge VST build optimization:** "Surge VST would never want this but since we don't currently include the AW FX in Surge XT for Rack, the build isn't needed."
15. **Request for new preset:** "I would like to request if somebody can add in the next update a trance supersaw preset."
16. **Retrigger detune issue:** "The RM FX detune isn't modulatable."
17. **MPE default setting issue:** "I'm running SurgeXT in Supercollider, and it always opens with MPE disabled by default."
18. **Virtual keyboard highlight not working:** "When using the CLAP plugin, Surge XT's virtual keyboard does not highlight key presses."
19. **mingw build failure:** "The function '\_BitScanReverse' also exists in mingw, and was causing a build failure for surge-xt in Cardinal."
20. **RISC-V build support:** "Using simde we can enable RISC-V builds."
21. **Unused sqlite features removal:** "The built-in sqlite has all default features enabled, we can remove some that are unused."
22. **Oddsound MTS library reliance:** "From what I could understand, the oddsound-mts library is only partly open-source."
23. **MTS-free Surge build request:** "Adding the cmake option -DSURGE\_SKIP\_ODDSOUND\_MTS=TRUE means that surge will not consume any libMTS code and will not present users the MTS options."
24. **Cosmetic warning cleanup:** "Some cosmetic warning cleanups which, in conjunction with a few other changes, allow us to compile rack with -Werror."
25. **Reaper track drag-and-drop issue:** "Trying to drag and drop a file into wavetable sample does not work."
26. **Test assumption correction:** "Current surge-testrunner has some tests which assume the runner is run from CWD=root of surge."
27. **Conversion issue with .vstpreset files:** "Hi, I have all these old .vstpresets made on Linux surge, and want to load them into the windows surge."
28. **Compilation message clarity improvement:** "Which otherwise prints through the whole submodule chain and would still be triggered when used as a submodule in a submodule in Rack."
29. **Init Saw and Init Sine credits:** "Init Saw and Init Sine were created by @baconpaul and posted on Discord."
30. **Constructor API enhancement:** "As we get more clients of SurgeStorage, a single constructor API is becoming a bit limiting, so make a structure API point on construction which defaults to the SurgeSynth style."
31. **Sprint Reverb compile error:** "Sprint Reverb throws a compile error AVX2 because \_\_m128 isn't directly convertible to VecType."
32. **Filter analysis window control suggestion:** "Would be in the words of baconpaul a 'cute idea' to allow clicking on the filter analysis window to control cutoff on the X axis and resonance on the Y axis."
33. **Clap note expression adjustment:** "Clap note expressions can work with a set note id, so removed the jassert."
34. **Audio output issue on macOS:** "Hello, I just installed Surge XT on my MacBook Air 2014 (Big Sur). And no sound is coming because of 'Audio output unavailable'."
35. **Snprintf conversion oversight:** "The old code used C-style snprintf '%d', looks like one was missed in the conversion to C++ format strings."
36. **Typein field crash fix:** "Open any typein field. Type something that starts with a letter. Hit Enter. Hard Crash."
37. **Ctrl+arrows patch switching issue:** "With the CLAP version of Surge XT the shortcuts ctrl+arrows to change the patch don't work."
38. **Skip VST3 menus on Reason 12/MacOS 13 due to crashes:** This code is applied to the sentence "Reason 12 / MacOS 13 VST3 menus seem to crash so skip that feature."
39. **Remove deprecated template patches:** Applied to "Removed Emu, Argitoth and Jacky template patches."
40. **Add CC0 license to templates:** Applied to "Add CC0 license text to factory and Jacky templates."
41. **Enhanced calculation for comment tooltip sizing:** Applied to "Updated calculation for comment tooltip sizing (takes automatically broken off and empty lines into account better)."
42. **Oddsound MTS-ESP Master mode:** Applied to "This allows you to have a single surge instance act as an oddsound MTS-ESP Master (which we call Main)."
43. **Filter overlay refresh issue:** Applied to "If midi or param from daw changes cutoff or resonance, then the filter overlay wouldn't detect the change and redraw."
44. **Clipboard function for modlist:** Applied to "puts a human-readable version of the modlist into the clipboard for sharing with other humans."
45. **Stereo output constraint for Surge:** Applied to "Surge requires stereo output. For some reason our JUCE bus constraint didn't say that and you could therefore load crashing configurations in logic."
46. **Show client count and re-init option:** Applied to "1. Show client count in the menu 2. Allow a re-init with a chicken box."
47. **State readout feature:** Applied to "If you announce state (default alt-0) then you get a readout of the state of your UI."
48. **Virtual keyboard update:** Applied to "CLAP\_NOTE\_ON etc didn't update the virtual keyboard state; fake midi events so it does."
49. **Version release discussion:** Applied to "@mx and @mkruselj - what's needed on the scope for us to ship a 1.2?"
50. **Patch change behavior modification:** Applied to "A patch change can change the name or value of any param."
51. **Choke implementation:** Applied to "Implement choke as 1."
52. **Wide mode noise handling:** Applied to "In Wide mode noise can either be mono or stereo based on the deform on the noise color."
53. **One-shot wavetable padding issue:** Applied to "When building a one-shot we pad with 3 extra tables."
54. **Surgepy packaging for Python:** Applied to "Thank you for Surge! I've been using Surge in a command-line just intonation sequencer I'm writing in Python, so Surge's tuning support and Python API have been super useful."
55. **Surge UI bug in Reaper:** Applied to "This opens a menu on the RMB gesture on the step sequencer and preserves the right drag with a timer."
56. **MPE flag exposure in surgepy:** Applied to "Use pybind11's def\_readwrite to expose the SurgeSynthesizer mpeEnabled flag in surgepy."
57. **Tuning mode enum addition:** Applied to "Add **SurgeStorage::TuningApplicationMode** enum to surgepy."
58. **Patch settings export feature:** Applied to "It would be nice to have a quick way to review settings for patches without the need to tab and arrow through everything for keyboard users."
59. **Accessibility menu proposal:** Applied to "A couple of accessibility features."
60. **LFO raw output toggle:** Applied to "Allow users to toggle raw outputs scaled by amplitude on an LFO-by-LFO basis in the hamburger menu."
61. **Tearout window default behavior change:** Applied to "This defaults tearout windows to pin on top in plugin contexts."
62. **Accessibility issue with shape slider:** Applied to "Tab into the shape slider and arrow down/up to the additive option."
63. **Surgepy wheel building with cibuildwheel:** Applied to "Use cibuildwheel to build wheels for surgepy."
64. **Third-party directory scanning optimization:** Applied to "If the extra third-party dir is specified and it contains the wave tables third party don't even try to scan them."
65. **Patch adjustments and addition:** Applied to "Added a few more patches and adjusted output volume on all of them."
66. **Bug - Surge XT Patch Reset**:
    * "After save and relaunch of a Logic project with multiple Surge XT instruments, all Surge XT patches get reset to init."
    * "Seems to be an intermittent occurrence."
    * "Nothing that I tell which triggers this."
    * "Goes without saying that this shouldn't happen."
67. **Bug - Surge VST3 Silent Issue**:
    * "Surge VST3 becomes silent when first using it in 6 channel mode, and then changing it back to stereo."
    * "At **XXX** above..."
    * "First output bus was just disabled..."
    * "Second bus is still active."
    * "IsBusesLayoutSupported returns false."
    * "NewNumberOfOuts == 0."
68. **Bug - Impulse Wavetable Crash**:
    * "Selecting the **Generate/Impulse** wavetable crashes the host."
    * "Select wavetable oscillator."
    * "Host crashes."
69. **Bug - Surge VST3 Exciter Issue**:
    * "In the effects plugin, the exciter doesn't work."
    * "You can move the controls, the sound doesn't change at all."
    * "Expect a change in sound."
70. **Bug - Surge XT Skin and Filesystem Issue**:
    * "There seems to be an issue with filesystem access in Surge XT in Windows 10."
    * "Could not create a "Surge XT" folder under C:\users<me>\Documents."
    * "Could not open SurgeXTUserDefaults.xml for writing."
    * "Exception occurred while creating category folder when saving any preset."
71. **Bug - Filter and Amp EG UI Issue**:
    * "Filter EG and Amp EG have broken UI in Andromeda themes."
72. **Bug - Step Sequencer Modulator Issue**:
    * "When holding Ctrl and dragging quickly across the steps in the step sequencer modulator..."
73. **Bug - Oscilloscope Button Issue**:
    * "The L and R buttons in the oscilloscope don't update after changing the skin..."
74. **Bug - Surge GUI Resize Issue**:
    * "When using REAPER and attempting to resize Surge beyond single-screen size..."
75. **Feature Request - Note Quantizer**:
    * "I wonder if it's possible or makes any sense to request a note quantizer like VCV Rack Quantum."
76. **Window Resizing Issue**:
    * "Every time I close then re-open an instance of Surge XT, the size of the window increases."
77. **Reproduction Steps**:
    * "Steps to reproduce the behavior: 1. In Cubase, select an instrument track containing an instance of Surge XT..."
78. **Expected Behavior**:
    * "Expected Behavior: I expected the window to be the same size as last time, not bigger."
79. **Code Changes**:
    * "Upgrade clap juce exptensions. Get host menu support in BWS 5 beta."
80. **Documentation**:
    * "Mostly documentation but also change the buildLV2 condition to be more robust now we have Juce 7."
81. **Bug Reports**:
    * "Bug Description: Attack resolution is only 1 bit when MIDI control is assigned to controller CC#38."
82. **Feature Requests**:
    * "This pull request introduces enhanced audio input functionalities to the FX chain."
83. **Testing and Quality Assurance**:
    * "User testing by creating/deleting patches multiple times. Checked functionality for both Okay and Cancel."
84. **Dependency Management**:
    * "Due to changes in upstream [gcc], surge no longer builds from source..."
85. **User Interface/Experience**:
    * "Surge XT crashes Host (Reaper) when using dark skin. VST3 and LV2, same problem."
86. **Installation Instructions**:
    * "I'm configuring my digital workstation with some software and I want to test Surge."
    * "I compiled Surge with cmake using the provided commands."
87. **Plugin Integration Issues**:
    * "Surge does not appear in Protools track inserts on my Mac."
88. **Bug Reports - Rendering/Graphics**:
    * "Surge window starts corrupting graphics by rendering everything black until all monitors are black."
89. **Bug Reports - FX Unit Issues**:
    * "FX don't function properly. Some sound weird/broken, most don't sound at all."
90. **Bug Fixes - Code Changes**:
    * "Fixed the assumption in SurgeFXProcessor and added a comment explaining the fix."
91. **Enhancements - OSC Support**:
    * "Added OSC output functionality and implemented patch changing via OSC."
92. **Enhancements - Soundfont Support**:
    * "Request to add Soundfont SF2 as an oscillator type into Surge XT for more sound flexibility."
93. **Documentation - Build Instructions**:
    * "Added instructions for building Surge XT with all submodules pulled on Arch Linux."
94. **Documentation - User Guide**:
    * "Added information about track envelopes and sequencer control in the user guide."
95. **Dependency Management - SDK Compatibility**:
    * "Adjusted the type to resolve compatibility issues with an older version of the OSX SDK."
96. **UI/UX Issue**:
    * Example: "See this nice Surge menu, and the other Surge chilling in the background?"
    * Example: "Just try it and see. It's real weird."
    * Example: "Right now the labels in the various polar modes always are baseline-towards-origin which is a technical way of saying 'upside down on the bottom' but since they rotate and stuff its some annoying quadrant math to spin them around so make it a separate issue"
    * Example: "this was just a precautionary in the beta period in case it didn't work. It does. Now its just confusing"
97. **Feature Request**:
    * Example: "The subject is the spec"
    * Example: "Fullscreen mode now properly scales and unscales on full and unfull"
    * Example: "Mostly to make Phil's live easier with OSC. But it seems like a handy option."
98. **Bug Report**:
    * Example: "**Bug Description:** Surge Effects standalone briefly opens and then crashes when using Jabra Elite 75t bluetooth headphones."
    * Example: "**Bug Description:** Surge does not appear to be updating its LV2 controller input ports upon program changes done from the GUI."
    * Example: "**Bug Description:** Added second oscillator Set to SINE Setup FM to 2>1 Set FM Depth to Max **sounds DIDNT CHANGE change**"
99. **Code Modification**:
    * Example: "Remember to port this to rack also."
    * Example: "Modify sst-filters so getfqptrfu takes a same rate"
    * Example: "Refresh Formula's Debugger panel on Ctrl+Enter"
100. **Documentation**:
     * Example: "Also add debug boxes which you can turn on by uncommenting for layout"
     * Example: "Update all tutorials with consistent syntax and adjust formatting to not show a horizontal scrollbar even with"
101. **Testing/Validation**:
     * Example: "Addresses #576 I might even go as so far as to say we are done with #576 with this commit but I'm sure there will be comments and changes still."
     * Example: "Nope. It does not."
102. **Configuration/Settings**:
     * Example: "In Tune-After mode the typein '9/8' didn't uniformly give you a 9/8 pitch shift; it gave you that many keys shift."
103. **Performance Optimization**:
     * Example: "The comb size is 2x larger allowing lower resonant physical modelling with the comb"
104. **Dependency Management**:
     * Example: "Modify the 4 calling points in surge and upgrade the submodule"
     * Example: "Doing so means in most cases midi program change does nothing so also remove the menu item for ignore midi program change."
105. **Platform Specific Issue**:
106. Example: "Neither of these things happened when you dragged to swap. Huh!"

# Destroy-fx issues:

1. **Obsolete feature suggestion:**
   * "(Practicing with pull requests.) I think this old thing is useless, right? We were trying to make a standalone app that would modify registry"
2. **Documentation improvement suggestion:**
   * "would be nice additions for docs/destroy-fx-midi.html"
3. **Technical issue identification:**
   * "None of the non-gain / filter-modulating parameters in Rez Synth have their changes smoothed."
4. **Documentation maintenance suggestion:**
   * "a reminder: The kinda 'master copy' of the docs is in docs, and then should be copied over into site/docs once whatever is in them reflects latest releases of our software."
5. **Implementation clarification:**
   * "This one was not obvious to me until I read the code!"
6. **Git submodule usage proposal:**
   * "I know you have been wary of git submodules... But I think doing it for VSTGUI is the better way to go."
7. **Feature implementation announcement:**
   * "This is a feature I have been scheming on for a while, finally got to implementing it."
8. **Parameter naming consideration:**
   * "Should it be floor? Probably."
9. **Version metadata management discussion:**
   * "Once upon a time, I had version metadata properly imbued into the Windows plugin DLLs..."
10. **Compiler warning investigation:**
    * "The only remaining compiler warning for me in our codebase has been this unused variable level in Geometer."
11. **Website maintenance suggestion:**
    * "Should we remove the mailing list sign-up from our website?"
12. **Donation support acknowledgment:**
    * "Since we are working on these in earnest now, it no longer gives me discomfort having the donation link."
13. **GUI layout proposal:**
    * "Okay I came up with a possible solution to adding dry and wet level sliders to Scrubby's GUI."
14. **Software usage issue identification:**
    * "Another text entry dialog issue in Logic..."
15. **Makefile suggestion:**
    * "fully ignorant makefile, obviously untested, but maybe helpful?"
16. **Website design critique:**
    * "Aside from the work-in-progress museum, the only other thing on our nouveau website that I don't like as much is the documentation list."
17. **Presets conversion announcement:**
    * "These Transverb presets by the musician Styrofoam used to be posted on the now-deceased Audio Units page."
18. **Compilation Error - 'size\_t' Declaration Issue**: This code is applied to sentences related to compilation errors arising from the **size\_t** type not being declared.
    * Example Quote: "In file included from ../../dfx-library/firfilter.cpp:27: ../../dfx-library/firfilter.h:42:76: error: â€˜size\_tâ€™ has not been declared"
19. **Compilation Error - 'applyKaiserWindow' Declaration Issue**: This code is applied to sentences indicating compilation errors related to the declaration of the **applyKaiserWindow** function.
    * Example Quote: "46:6: error: variable or field â€˜applyKaiserWindowâ€™ declared void"
20. **Build System Configuration**: This code is applied to sentences discussing the configuration of the build system, such as commands used for compilation.
    * Example Quote: "after a 'make clean' and a 'make -j 16' this is what i have with destroyfx/transverb/win32"
21. **Dependency Issue - Mingw Toolchain Compatibility**: This code is applied to sentences addressing whether a resource compiles successfully with the mingw toolchain and displays version and copyright information correctly.
    * Example Quote: "Does this resource-compile successfully with the mingw toolchain? And does it correctly show version+copyright"
22. **Dependency Issue - Update Required**: This code is applied to sentences indicating that an update to certain files or branches may be necessary due to changes or requirements.
    * Example Quote: "sysreq.html on the **64bit\_site\_update** branch probably warrants updated Windows info?"
23. **Font Rendering Issue**: This code is applied to sentences discussing issues related to font rendering, such as symbols not displaying correctly.
    * Example Quote: "and fix the 'free' software footnote symbol not rendering correctly in Safari by swapping it with the plain ASCII"
24. **GUI Element Update**: This code is applied to sentences discussing updates or modifications to GUI elements, such as adding or removing visualizations.
    * Example Quote: "Trying to create a setup where I can draw the visualization. For now it's just plopped down next to the existing UI."
25. **Request for Confirmation**: This code is applied to sentences requesting confirmation or validation of changes or fixes made to the code or system.
    * Example Quote: "lemme know plz if is worx good 4 u?"
26. **Randomization Algorithm Update**: This code is applied to sentences discussing updates or changes related to randomization algorithms used in the code.
    * Example Quote: "The C runtime library function 'rand' is deprecated..."
27. **Code Optimization**: This code is applied to sentences discussing optimizations made to the code, such as replacing certain algorithms or functions with more efficient alternatives.
    * Example Quote: "Replace MT19937 random engine with PCG..."
28. **Stereo vs. Mono Output**: This code is applied to sentences discussing whether the output is stereo or mono and the possibility of making it mono.
    * Example Quote: "Hi, as far as i remember use to be stereo. Is making it mono a choice?"
29. **Request for Confirmation (Spanish)**: This code is applied to sentences requesting confirmation or validation of changes or fixes made to the code or system, specifically in Spanish.
    * Example Quote: "let me know por favor if worx now?"
30. **Compilation Error - 'size\_t' Declaration Issue**: This code is applied to sentences related to compilation errors arising from the **size\_t** type not being declared.
    * Example Quote: "is compiles 4 windoze?"
31. **Compilation Error - 'applyKaiserWindow' Declaration Issue**: This code is applied to sentences indicating compilation errors related to the declaration of the **applyKaiserWindow** function.
    * Example Quote: "Add [dfx-settings] and [/dfx-settings] wrapper as discussed. This made it obvious that there's an existing bug (in vstgui I guess?) where the clipboard contents we prepare can be immediately pasted, but loses its final character when pasting into some apps (notepad.exe) but not"
32. **Build System Configuration**: This code is applied to sentences discussing the configuration of the build system, such as commands used for compilation.
    * Example Quote: "make x86\_64-w64-mingw32-g++ -DWIN32=1 -D\_WIN32\_WINNT=0x0601 -DTARGET\_OS\_WIN32=1 -DTARGET\_API\_VST=1 -DVSTGUI\_ENABLE\_DEPRECATED\_METHODS=0 -DNDEBUG=1 -DGetMatchingFonts=GetMatchingFonts\_ -I .. -I ../../dfx-library -I ../../vstsdk -I ../../dfxgui -I ../../vstgui/vstgui -I ../../vstgui/vstgui/plugin-bindings -include "../polarizerdef.h" -m64 -Wall -Wno-unknown-pragmas --std=c++17 -O2 -c -o ../../dfx-library/dfxplugin.o ../../dfx-library/dfxplugin.cpp"
33. **Dependency Issue - Pluginval Crashes**: This code is applied to sentences indicating that all current Windows 64-bit builds crash the diagnostic tool pluginval and suggest further investigation.
    * Example Quote: "According to this forum message: <https://www.kvraudio.com/forum/viewtopic.php?p=8195304#p8195304> all of our current Windows 64-bit builds crash the diagnostic tool [pluginval](https://github.com/Tracktion/pluginval)."
34. **Code Cleanup**: This code is applied to sentences discussing the cleanup of old or unnecessary code or files in the repository.
    * Example Quote: "When I was preparing source distribution packages, I noticed some old cruft in our repo. This is nothing that"
35. **Macro Definition Issue**: This code is applied to sentences discussing historical reasons for separate macro definitions and potential changes or updates related to them.
    * Example Quote: "There was a historical reason for the separate macro definitions for integers **PLUGIN\_VERSION\_MAJOR**, **PLUGIN\_VERSION\_MINOR**, and **PLUGIN\_VERSION\_BUGFIX** vs the string **PLUGIN\_VERSION\_STRING** and now"
36. **Feature Request - Tooltip Support**: This code is applied to sentences discussing the addition of tooltip support or built-in help features.
    * Example Quote: "I recently remembered we have tooltip support in DFXGUI. What do you think of adding built-in help to"
37. **Algorithm Issue - Delay Parameters**: This code is applied to sentences discussing issues with delay parameters and their expected behavior.
    * Example Quote: "While playing with a couple of ideas for making modulation of the 'dist' parameters do something sonically appealing, I noticed that their effective use appears to be inverted."
38. **Bug Report - Mix Level Issue**: This code is applied to sentences reporting a bug where the mix level for each delay head is applied to the feedback level mixed into the delay buffer.
    * Example Quote: "Here is an unfortunate issue that somehow neither of us has noticed for two decades: the mix level for each delay head is applied to the feedback level mixed into the delay buffer."
39. **Code Implementation - DfxGuiEditor::copySettings**: This code is applied to sentences discussing the implementation or improvement of certain functionalities, specifically related to DfxGuiEditor::copySettings.
    * Example Quote: "Various stuff is just unimplemented in DfxGuiEditor::copySettings. We should implement it (probably not hard), but if not, disable this before releasing."
40. **Documentation Addition**: This code is applied to sentences suggesting additions or improvements to documentation files.
    * Example Quote: "would be nice addition for docs/destroy-fx-midi.html"

# Sfizz-ui issues:

1. **Compilation Errors - VSTGUI Related**:
   * Example: "In file included from ... error: unsupported compiler #error unsupported compiler"
   * Example: "error: no member named 'move' in namespace 'std'"
   * Example: "error: 'Args' does not refer to a value"
2. **Corruption Issue in Development Version**:
   * Example: "The current development version creates corruption on multiple platforms"
   * Example: "The current development version creates corruption on multiple platforms"
3. **Issues with SDK Version and AUWrapper**:
   * Example: "Currently we are using the 3.7.3 version of the SDK (upstream is 3.7.7)"
   * Example: "Requires updated (sfzt\_)auwrapper"
4. **Code Renaming for Generic Modules**:
   * Example: "Rename some SFIZZ\_ prefixed definitions where possible"
5. **GUI Improvement Suggestions**:
   * Example: "I've played with the 'image' tag, which is working quite well but, I'd like to know - what is the recommended size/aspect ratio?"
   * Example: "First and foremost--Thank you so much for creating this nice SFZ tool!"
6. **Plugin Usage Documentation Request**:
   * Example: "I insalled this on Arch, but can't figure out how to use it"
   * Example: "And there doesn't seem to be any documentation or"
7. **Issue with High-Resolution Screens in Linux**:
   * Example: "Currently, the existing GUI doesn't support High Resolution screens with Linux"
8. **Problem with Loading LV2 Plugin in Ardour**:
   * Example: "It seems like LV2 plugin is found and can be added to the track on Ardour 6, but the plugin isn't visible on the editor mixer section, and the GUI isn't loaded"
9. **Reaper Project Settings Reset Issue**:
   * Example: "Scenario: 1.) In a Reaper project, load sfizz as a VST3 instrument"
10. **Version Mismatch between AU and VST3**:
    * Example: "I believe this reflects the latest versions, unless I'm not fully up to date"
11. **Issues with LV2 Plugin on Arch Linux**:
    * Example: "Hi! Upon building 1.2.0 for Arch Linux I ran lv2lint against the lv2 plugin"
12. **GUI Improvement Recommendation - Pictogram Hints**:
    * Example: "With a view to providing a GUI that obviates the need for a manual, may I suggest pop-up names or hints for each pictogram"
13. **Report of UI Crash in VstHost**:
    * Example: "Anyway, everytime I click something on the UI, e.g. moving the CC 4 knob, it crashed VstHost (32-bit, vst3), also"
14. **Error Assertion Failure:**
    * "reaper: ../../../../src/cairo-xcb-screen.c:219: \_get\_screen\_index: Assertion `!"reached"' failed."
    * Example quote: "Ubuntu 20.04. The error reads: **`reaper: ../../../../src/cairo-xcb-screen.c:219: \_get\_screen\_index: Assertion `!"reached"' failed.** I have 2 screens."
15. **Numpad Input Issue:**
    * "Numpad input doesn't work for me, VSTGUI does not forward the keycodes."
    * Example quote: "Numpad input doesn't work for me, VSTGUI does not forward the keycodes."
16. **Library Version Dependency:**
    * "The issue is with the symbol **pango\_font\_metrics\_get\_height(...)** which comes from libpango 1.44 and up."
    * Example quote: "The issue is with the symbol **pango\_font\_metrics\_get\_height(...)** which comes from libpango 1.44 and up."
17. **MIDI Control Data Issue:**
    * "Problem is no host seem to implement it, or implement it this way, yet sfizz-lv2 assumes they do unless you pass in a compile-time switch."
    * Example quote: "Problem is no host seem to implement it, or implement it this way, yet sfizz-lv2 assumes they do unless you pass in a compile-time switch."
18. **Dependency Versioning Issue:**
    * "Unfortunately sfizz carries very old versions of both by now and it would be great if they would be kept in sync with upstream releases."
    * Example quote: "Unfortunately sfizz carries very old versions of both by now and it would be great if they would be kept in sync with upstream releases."
19. **Plugin Version Information Request:**
    * "First of all thanks for sfizz, this very compact sampler plugin. Is there a way of getting the version information of the binary?"
    * Example quote: "First of all thanks for sfizz, this very compact sampler plugin. Is there a way of getting the version information of the binary?"
20. **Plugin Visibility Issue:**
    * "Running sfizz-git r3699.ce2170c8-1. Often when creating a MIDI track in Ardour 6.7 I will only see the LV2 version."
    * Example quote: "Running sfizz-git r3699.ce2170c8-1. Often when creating a MIDI track in Ardour 6.7 I will only see the LV2 version."
21. **Plugin Initialization Issue:**
    * "When restoring saved project using Ardour 6.6 and self compiled sfizz vst3 version 1.0.0 midi state is not restored properly."
    * Example quote: "When restoring saved project using Ardour 6.6 and self compiled sfizz vst3 version 1.0.0 midi state is not restored properly."
22. **Development Checklist:**
    * "[x] install rules for all OS Linux files should go in **/usr/lib/pd/extra**, check how it is for the other 2"
    * Example quote: "[x] install rules for all OS Linux files should go in **/usr/lib/pd/extra**, check how it is for the other 2"
23. **Plugin Feature Request:**
    * "Keyswitch groups allows sfizz to display group sub-menus in the keyswitch dropdown planned for Panel B."
    * Example quote: "Keyswitch groups allows sfizz to display group sub-menus in the keyswitch dropdown planned for Panel B."
24. **X11RunLoop Issue:**
    * "There seems to remain issues in the X11RunLoop component. Reaper crashes occasionally, with different backtraces, but timers seem often involved somewhat."
    * Example quote: "There seems to remain issues in the X11RunLoop component. Reaper crashes occasionally, with different backtraces, but timers seem often involved somewhat."
25. **Linux Binary Dependency Issue:**
    * "Please statically link Linux binaries just like you do with the windows binaries, and only depend on mandatory system libs (here: libX11, libc)."
    * Example quote: "Please statically link Linux binaries just like you do with the windows binaries, and only depend on mandatory system libs (here: libX11, libc)."
26. **VST Parameter Order Issue:**
    * "The VST parameters don't currently arrive in proper order. It asks for an efficient way to sort the parameter points as they arrive from multiple queues."
    * Example quote: "The VST parameters don't currently arrive in proper order. It asks for an efficient way to sort the parameter points as they arrive from multiple queues."
27. **Plugin Version Information Issue:**
    * "Enviroment: EndeavourOS (Arch Linux), REAPER 6.26, VST3 Using sfizz develop build from OBS, sfizz-1617848785.39f56f2d-0."
    * Example quote: "Enviroment: EndeavourOS (Arch Linux), REAPER 6.26, VST3 Using sfizz develop build from OBS, sfizz-1617848785.39f56f2d-0."
28. **Environment Setup**:
    * "Enviroment: EndeavourOS (Arch Linux), REAPER 6.26, VST3 Using sfizz develop build from OBS, sfizz-1617848785.39f56f2d-0"
    * "Test Evnironment: Linux / REAPER 6.24 / VST3 sfizz: d2b9eb7f5604d585fb08dea8245ded2ee4040c9c"
    * "Steps - load sfizz AU in Reaper - open the editor - play a few notes on visual keyboard, on the default instrument - click the 'Remove' button"
    * "OS: Ubuntu Linux 20.04"
29. **Issue Description**:
    * "Currently there is a **zenity** hard-coded path in both [VSTGUI] and editor's [NativeHelpers]."
    * "I'm not sure if this is a problem in sfz or sfizz UI, but anyways, some instrument seems to show key switches at wrong range areas."
    * "The 'official' version is VST3. I want a VST2 32-bit version of sfizz."
    * "Reproducing the issue - open Reaper - load sfizz on master bus - controls tab does not contain any knobs - press Play button - control tab fills up."
    * "After merging all of the files into /usr/local and pointing REAPER to them, it fails to scan properly and appears in the failed plugins menu."
    * "Do I need anything special, like SDKs or something, to build the VST plugin?"
    * "Hi, I cant browse after sfz files in qtractor."
    * "Testing sfizz 0.5.0 in Logic Pro (AU Only) the behaviour of the knobs with mouse is rotary, not vertical."
    * "sfizz needs a way of displaying rotary knobs."
    * "There needs to be a keyboard display in sfizz GUI."
    * "The custom GUI for sfizz needs a simple way to display the CC's that are referenced and named in the SFZ Script."
30. **Technical Details**:
    * "[New Thread 0x7fffdd6a0640 (LWP 6651)]"
    * "[Thread 0x7fffdae9b640 (LWP 6656) exited]"
    * "[Detaching after vfork from child process 6664]"
    * "Failed to set scheduler settings: Operation not permitted"
31. **Reference to GitHub Issues**:
    * "See sfztools/sfizz#505."
    * "Under sfztools/sfizz#595."
    * "This is the console "
    * "Here is a mock-up of what the keyboard *could* look like."
    * "CC value could also be displayed to the right of the slider, such as..."
32. **Font Installation**:
    * "Only Windows 10 supports the custom font API, older versions must install the font files to make them recognized."
    * "Note that the font MS FluentUI is custom-made using a fontforge script."
33. **VST3 Build on Raspberry Pi**:
    * "First the good news. I managed to build the VST3 in a Raspberry Pi load it in Ardour 6.3.92 and make some noise."
    * "Since this is an ARM processor and OS with hard-float support (armhf in debian), I had to rename the plugin's arch."
34. **Parameter Automation**:
    * "Some things to remember/fix regarding the parameter automation."
    * "When a SFZ file initialized a CC, this should automate the corresponding parameter in the plugin."
    * "It was reported by @kinwie that CC parameters don't do anything when they are manipulated with Hermann Seib's VSTHost generic UI."
35. **SFZ Auto-Reloading**:
    * "Add SFZ auto-reloading."
    * "The implementation should do as follows..."
36. **Visual Issues**:
    * "The picture does not show, with VST3 in Reaper host."
    * "A strangish stuff is that on my first try, the LV2 looked like..."
    * "Note the display order of the different items."
    * "It doesn't look to have any impact on the sounds, just it is strange that the display order is changing."
37. **Platform-Specific Issues**:
    * "I recently installed sfizz from the ubuntu repository on an ubuntu studio (23.04) freshly installed."
    * "When I try to launch sfizz UI from ardour/mixbus, I had the following error displayed in the terminal and the UI not showing."
38. **Build Configuration**:
    * "When I run cmake to prepare the build I see this..."
    * "How can I change this switch so it will build the LV2 plug-in?"
    * "I'm running manjaro."
    * "To no avail."
    * "Oh wait..."
39. **File Installation Issue**:
    * "I was trying to build and install development version of sfizz into non-standard location, apart from the some stable-ish version at /usr/local."
    * "But sfizz.lv2 cannot be installed because it seems always trying to install it to /usr/local."
40. **Usage and Utility**:
    * "I find having access to this information extremely useful, as it allows me to know how heavy I am pushing the sampler."
    * "If the value reaches the voice limit, then I would know I likely have to increase it."
41. **Technical References**:
    * "<https://steinbergmedia.github.io/vst3_doc/vstinterfaces/vst3loc.html#linuxformat> specifies based on the RPM Terminology + '-linux'"
    * "<https://github.com/sfztools/sfizz/blob/62b64f7eff88fb69502708d9ffc56d9d8dcd74ea/lv2/sfizz.c#L474>"

# Axiom issues:

1. **Build System Error**:
   * "Hi, I wanted to try it out, but this happened when I tried using CMake to generate a Makefile:"
   * "This file doesn't seem to exist in the repo. Forgot to **git add** it?"
2. **Access Rights Issue**:
   * "Why oh why do I need to go through the PR bureaucracy for this fix even though I have commit access?"
3. **Runtime Fixes**:
   * "Fixes a bunch of crashes related to the runtime not being kept up-to-date properly, by using a dirty/clean system instead of the adhoc 'append the items to compile to this list' system."
   * "ModelObjects set themselves as dirty."
4. **User Interface Issue**:
   * "Exposed controls in group nodes with the 'show name' attribute checked don't have their names visible in the group node."
   * "This looks like something to do with the QApplication not being cleaned up properly."
   * "Currently the module library is pretty slow, because each module preview box contains an entire scene with."
   * "This means that the user has to click on the surface again to e.g. delete the module they dragged in, or undo."
   * "The only way to bring the main view back if it's closed is to reopen the project."
   * "With the current background, it's very difficult to identify the outlines of segments e.g. borders between."
   * "When resizing windows, the mouse has to be in a very very precise location for it to register as 'resizing'."
   * "E.g. if you enter the code **:num = [note] -10**, you'll see a rather garbled looking note number displayed."
5. **Platform-Specific Issue**:
   * "Why oh why do I need to go through the PR bureaucracy for this fix even though I have commit access?"
   * "When building on macOS High Sierra with Xcode 10, the standalone editor immediately segfaults. This doesn't."
6. **Code Compilation Error**:
   * "``` Scanning dependencies of target llvm\_axiom [ 5%] Building CXX object compiler/llvmmaxim/CMakeFiles/llvm\_axiom.dir/LLVMMaxim.cpp.o zapcc: warning: argument unused during compilation: '-s' [-Wunused-command-line-argument] In file included from /home/chaz/git/github.com\_monadgroup\_axiom/compiler/llvmmaxim/LLVMMaxim.cpp:7: /home/chaz/git/github.com\_monadgroup\_axiom/compiler/llvmmaxim/OrcJit.h:74:31: error: no member named 'ModuleHandleT' in 'llvm::orc::IRCompileLayer<llvm::orc::RTDyldObjectLinkingLayer, llvm::orc::SimpleCompiler>' std::vectorCompileLayer::ModuleHandleT genericHandles; ~~~~~~~~~~~~~~^"
   * "Copying the contents (nodes) from one group node and pasting them into another group node has the following issues: - Attempting to Check/Uncheck 'Show Name' or 'Expose Node' doesn't change anything."
7. **Performance Optimization**:
   * "At the moment, performance for audio generation in Axiom can be quite poor."
   * "This PR vastly improves performance of audio generation, by doing the following things:"
8. **Documentation**:
   * "Make a few edits to README.md to improve clarity."
   * "Edited the 'highly customizable and flexible...' bullet point of features section."
9. **Performance Improvement (Audio Generation)**:
   * "This PR vastly improves performance of audio generation, by doing the following things: - Code generation now uses SSE which allows denormals to be disabled and the left and right channels to be calculated at the same time."
10. **MIDI Usage on Windows**:
    * "I tried to use MIDI (via [loopmidi](http://www.tobias-erichsen.de/software/loopmidi.html)) on Windows, but it"
11. **Global QAction Instances**:
    * "Happens because the **QAction** instances are global, whereas they should belong to each window."
12. **UI Enhancement Suggestion**:
    * "A cross button to the left of the node search bar would make for easy 'search clearing'. An alternative would be"
13. **Instrument Exporter Implementation**:
    * "This PR adds the instrument exporter. This is responsible for taking a project and building an object file from it, which provides a low-level C interface."
14. **Module Library Management Proposal**:
    * "Currently modules changed in the builtin library often aren't copied to the global library properly, because the import silently fails due to a conflict."
15. **Node Name Correction**:
    * "The current name is incorrect, since it returns the *previous* value that was passed in, not the next one."
16. **SV Filter Behavior**:
    * "Increasing the 'Q' value on the SV filter beyond ~2 with both non-zero frequency and input values produces NaN,"
17. **Issue with Opening Axiom UI**:
    * "Hi, I'm using the packed Axiom 0.4.3 win32 build with Reaper v5.80 x64. When I create a new project I can open and close the Axiom UI without issue."
18. **Compilation Error with LLVM 6**:
    * "hello, After struggling to compile with llvm 8 , i was succesfuull upto 96 % using llvm 6, I am getting this compile error."
19. **Crash Caused by Using '==' in Nodes**:
    * "Using the == in nodes causes a crash on compile."
20. **History Implementation Progress**:
    * "This is a tracking issue for the new two-pass compiler being developed in <https://github.com/monadgroup/axiom/tree/feature/two-pass-compiler>."
21. **UI Contrast and Element Differentiation**:
    * "I've tried your tool for a bit but I found myself struggling to dissociate some elements from each other and made selection harder."
22. **Library Accessibility**:
    * "The module library should be global, accessible from any open project."
23. **Crash on Saving Open Project**:
    * "Currently if there are multiple wires passing through the same cell, they all appear over the top of each other."
24. **Node Code Edit Crash**:
    * "Editing the code of an extracted custom node causes a hard crash. This doesn't happen with non-extracted."
25. **Node Value Display Anomaly**:
    * "Not entirely sure what is happening here, but the output of the multiply node is starting at 0, yet only begins halfway on the knob as if its values was 0.5."
26. **Automation Support in VST2 Backend**:
    * "The automation support in the VST2 backend is currently a bit WIP - it works, but not well: - Automation indexes are not retained based on portal unique IDs, so adding/removing automation nodes can reassign parameters in the DAW which isn't desired."
27. **Portal Controls Visualization**:
    * "E.g. a MIDI plug could have a picture of a keyboard, and an audio plug a picture of headphones."
28. **Parameter Allocation Uncertainty**:
    * "Due to the way parameters and audio inputs/outputs are allocated, they're not guaranteed to maintain their"
29. **Crash on Connecting Index Node**:
    * "Not sure what specifically in the setup causes it, but attempting to hook up the Index node to the triangle oscillator output causes a crash."
30. **DAW Integration Consideration**:
    * "This is something a lot of DAWs do, but since we're operating in a separate window we need to do it ourselves."
31. **Exporter Functionality and Optimization**:
    * "The exporter allows converting the graph into a standalone executable."
    * "Exporting also enables several MIR optimization passes aiming to reduce code size as much as possible."
32. **Axiom Loading Error in FL Studio**:
    * "Loading Axiom into Fl Studio and then Right-clicking and deleting the instance from the channel rack causes the following error."
33. **Filter Algorithm Rewrite Suggestion**:
    * "The algorithm used by the current filters doesn't seem right. We should rewrite them to those provided in [the"
34. **Model Layer Replacement**:
    * "This pull request replaces the old **model** layer with a redesigned and much stabler one."
35. **Module Library Creation Issue**:
    * "The global module library isn't being created properly for some reason."
36. **Syntax Highlighter Implementation**:
    * "First version of the syntax highlighter, thanks to @Fire-wood."
37. **Compiler Panic Trigger**:
    * "The following operation: **out:num = 1 / ()** Triggers a panic in the compiler."
38. **Shared Properties for Number Controls**:
    * "Number controls have a range, step, and mode, however currently these are not shared across exposed controls -"
39. **Standalone Backend Tasks**:
    * "For this the standalone backend will need to: - Read the filename from the input arguments and open it - Register file associations - this probably needs some fiddling with cpack"
40. **Maxim Code Commenting Suggestion**:
    * "Using '#' to comment on Maxim code should make the line turn grey to make it clear it's being ignored by the"
41. **Node Error Handling Improvement**:
    * "Currently, if there is an error in the code of a node, the node appears to shutdown and isn't responsive to any changes e.g. adding or deleting controls."
42. **Common Code Rewrite in PR**:
    * "This PR contains a rewrite of the 'common code' - the event and sequence system."
43. **Compiler Panic with Group Nodes**:
    * "I've noticed a few crashes in certain situations with Group Nodes, where the wrong things are compiled (or in the wrong order), leading to a panic in the compiler."

# Sparta issues:

1. **Bug Reproduction Procedure - Reaper macOS**:
   * "reproduction procedure: - insert sparta\_panner on empty track with 10 channels - select output preset for 9.x - slide 'N Chan'- slider to 0 Environment: Reaper 5.70 macOS 10.13.6"
2. **Compilation Error - LTO Version Mismatch**:
   * "i'm getting compilation errors of this sort >ltol: fatal error: bytecode stream in file '../../../../lib/<bin name>.a' generated with LTO version 7.3 instead of the expected 8.1 >lto-wrapper: fatal error: g++ returned 1 exit status"
3. **JUCE Integration Update**:
   * "JUCE now included as a git submodule. Folder structure is now much cleaner."
4. **Linux Installation Issue with GLIBC Version**:
   * "Trying to install Linux\_SPARTA\_2020\_02\_10\_v1.3.4 downloaded from web onto Ubuntu 18.0.4 LTS (64-bit) with Reaper v6.09."
   * "The only problem now is that it is still complaining about a missing cdff file"
5. **Script Version Update with OSX Support**:
   * "New version of scripts, with support for OSX."
6. **OSX Compatibility Confirmation**:
   * "It should now work correctly on OSX"
7. **JSON Configuration Loading Issue**:
   * "Hi, I'm trying to import source position configuration in AmbiENC via JSON file."
   * "hi just noticed a typo in the install instructions for linux"
8. **Reaper Automation Quirks Observation**:
   * "I just tested panner in reaper with some automation and noticed a few quirks."
   * "Looking at the code for parameter naming it seems odd to me."
9. **Arch Linux Installation Issue**:
   * "Hi sorry for the issue spamming :) I noticed that the linux version of the plugins downloadable on the website are a few versions behind the other ones (1.3.4 vs 1.4.1)."
10. **JUCE Web Browser Dependency Issue**:
    * "Currently JUCE dynamically links again in gtk-webit by default."
    * "Please consider adding **JUCE\_WEB\_BROWSER="0"** to **<JUCEOPTIONS>** in **all** \*.jucer files."
11. **OSC Issues in Version 1.5.0**:
    * "We are trying to get a headtracking sensor to work with version 1.5.0 of SPARTA AmbiBIN, but it seems that the this version has some OSC issues."
12. **Decoder Magnitude Measurement Discrepancy**:
    * "Hi, I am testing different Ambisonics decoders for a 2D regular quad array of loudspeakers."
    * "Could there be a bug somewhere inside the SAF?"
13. **SPARTA Plugin Debugging Error**:
    * "Hello, I have opened the *SPARTA\_ambiDEC* plugin with the latest version of JUCE (v. 6.0.7) and then opened it in Visual Studio."
    * "So far, everything okay, but when I try to debug the plugin in Visual Studio, I can read the following error: ***'mkl.h': No such file or directory***"
14. **VST3 Port Request**:
    * "The VST2 SDK cannot legally be distributed anymore. A VST3 port would be great!"

Top of Form

1. **Installation Issues**
   * Errors or problems encountered during installation or setup.
     + Example: "But I got this error: **Undefined symbol: \_LAPACKE\_sgetrf Undefined symbol: \_LAPACKE\_sgetri**"
2. **Functionality Request**
   * Requests for new features or enhancements to existing functionality.
     + Example: "It would be good to give a hint how to do it."
3. **Bug Report**
   * Reports of unexpected behavior or software malfunctions.
     + Example: "It seems to send /ypr[3] data but Sparta Rotator is not receiving it."
4. **Documentation Issue**
   * Issues related to missing, unclear, or incorrect documentation.
     + Example: "Search path is wrong to find the licensing file of JUCE version 6..."
5. **Dependency Issue**
   * Issues related to dependencies or library versions.
     + Example: "It seems that the latest version of Reaper crashes with the AmbiBIN plugin."
6. **Feature Request: Solo Functionality**
   * Requests for a solo feature within the panner for binauraliser and ambiEnc.
     + Example: "Implement a simple solo feature on ALT+ click within the panner for binauraliser and ambiEnc"
7. **Compatibility Issue**
   * Issues related to compatibility with certain platforms or software versions.
     + Example: "Are the pre-built plug-ins designed to also work on Debian stable?"
8. **Compilation Error**
   * Errors or issues encountered during compilation or build process.
     + Example: "Ran into the following problem when compiling in Debian."
9. **Algorithm Question**
   * Questions about the accuracy or behavior of specific algorithms.
     + Example: "Which interpolation mode is most accurate?"
10. **UI/UX Issue**
    * Issues related to the user interface or user experience.
      + Example: "If I select a sofa HRIR in AmbiBIN, the location of the HRIR file is shown on the top left of the UI..."
11. **Compilation Issues**:
    * "I've started experimenting with compiling the plugins from source..."
    * "...managed to compile the plugins but all VST hosts segfault a few seconds after loading any of the plugins."
    * "Please compile the plugins for the M1 Mac processors."
    * "I get this during compilation /usr/bin/ld: cannot find -lsaf\_mkl\_custom even though i've installed intel-mkl from the repository."
    * "I'm having problems building these 3 plugins."
12. **Crash Reports**:
    * "This is in Reaper 6.42, Mac OS X 11.6 running on a M1 MacBook."
    * "Attached is a screenshot of 12 sources."
    * "In REAPER, Linux (Pop\_OS), when the GUI of any plugin is close, REAPER crash."
    * "it crashes in reaper v6.45 in ubuntu 20.04 when UI is being closed."
    * "as soon as I select the plugin to load, Reaper suddenly crash."
    * "every time I load a custom HRIR SOFA file there is no sound out of Binauralizer."
    * "every time I try to send the osc command, the plugin causes REAPER to crash."
13. **Feature Requests**:
    * "Please compile the plugins for the M1 Mac processors."
    * "can i use those plugins to use it as a beamforming microphone? maybe even with built in tracking?"
    * "Merge TV Convolver Plugin PannerView GUI and correct handling of osc, as well as enabling/disabling rotation are still missing."
14. **Configuration Issues**:
    * "When loading a loudspeaker configuration, it appears that there is an upper limit to the channel ID..."
    * "Changing Channel 70 to be imaginary and it works again."
    * "On one of my windows machine I can't get any sound at the output of AmbDEC."
15. **Performance Concerns**:
    * "as soon as the audio stops playing the cpu starts spiking heavily."
    * "Are the plugins compiled with DAZ and FTZ?"
16. **GUI and UI Issues**:
    * "In REAPER, Linux (Pop\_OS), when the GUI of any plugin is close, REAPER crash."
    * "When loading a loudspeaker configuration, it appears that there is an upper limit to the channel ID..."
    * "HRIR icons are now circles, smaller. - UI Cleanup."
    * "The problematic machine runs Windows 10 and REAPER too. Both OS are up to date."
17. **Compatibility Issues**:
    * "The 4 attached config files illustrate the above cases (GItHub required them to be **.txt** so should be converted back to **.json**)."
    * "I've tried to load some of SPARTA plugins on a single track Reaper 6.51 project and, as soon as I select the plugin to load, Reaper suddenly crash."
    * "First thank you for the latest release, it solve many issues ! But I'm facing a strange one here."
18. **Documentation and Build Script Issues**:
    * "Where should these preprocessor definitions be defined?"
    * "Would it be possible for you to bump the package receipt version number when you release a new version so that they match?"
    * "Build scripts for Projucer and the plugins, only for Linux (later also for OSX)."
19. **Testing and Verification**:
    * "I've compiled Sparta v1.5.2 and it crashes in reaper v6.45 in ubuntu 20.04 when UI is being closed. I've tried it."
    * "Tested with reaper 6.45 linux and Linux\_SPARTA\_2021\_11\_22\_v1.5.2."
20. **Miscellaneous**:
    * "A quick question about this for a linux compile..."
    * "This adds a plugin, **BinauraliserNF**, which extends Binauraliser to add proximity filtering for the binaural."

# Kdr issues:

1. **Compiler Support**:
   * "Forked <https://github.com/bazelbuild/rules_d> to support LDC2 compiler which can be enabled by `bazel build ..."
   * "This PR also fixes bugs in rules/d.bzl - import flags (-I, -J) were not transitive - static libraries were not correctly ordered as linker inputs."
2. **TODO List**:
   * "TODO - [x] curve edit (ins/del/update) - [x] hard linear curves - [x] soft Lagrange-interpolated curves - [x] parameterize curves - [x] depth - [x] beat scale - [x] stereo offset MAYDO in the future - [ ] GUI for all parameters in addition to envelope curves. - [ ] filter mod - [ ] presets"
3. **Module Comparison**:
   * "Unlike [std.logger](https://dlang.org/phobos/std_logger.html), this module is for nothrow and @nogc env."
   * "Unlike [dplug.core.nogc.debugLogf](https://github.com/AuburnSounds/Dplug/blob/f635a48fa09c3ffe20d38f3d8c605fd5642ee293/core/dplug/core/nogc.d#L370), this supports **{severity}{MMDD HH:MM:SS.microseconds} {thread id} {file:line}]** prefix like tensorflow."
4. **Logging Features**:
   * "I'm afraid that the usage of **depset** in rules/d.bzl is kinda abused."
   * "Running kdr-test-library I1225 16:30:47.651584 140065791961536 source/kdr/logging.d:86] 0-th log from this thread 140065791961536."
5. **UI Changes**:
   * "Added knobs, title etc "
   * "Maybe from dplug v13, synth2 UI has been crashed."
6. **Code Source and Attribution**:
   * "Copied from <https://github.com/klknn/epiano2> but it differs in compile time wav loading."
7. **Issue Fixes**:
   * "Fix #3"
8. **Feature Request**:
   * "Multiband compressor e.g. OTT is an essential effect in recent electric music."

# Biztortion issues:

1. **Parameter Separation**:
   * "I need to separate it in two different parameters: - Symmetry - Fx Distribution"
2. **Unspecified Issue**:
   * "#NAME?"

# String-machine issues:

1. **Feature Addition**:
   * "Add pitch bend ability, on request of @sub26nico"
   * "It's available in **pwm** branch. demo: [pwm.flac.gz](https://github.com/jpcima/string-machine/files/3831414/pwm.flac.gz) PWM off vs PWM 100% 0.6Hz cc @farvardin if you are interested to review the feature"
   * "I should introduce a polyphony limit such that CPU can be bounded, and prevent x-running on more limited hardware. This should be allowed with a parameter in integer range."
2. **Compatibility Issues**:
   * "It needs i386 build for compatibility."
   * "cannot compile due to compile options -msse -msse2"
3. **Bug Report**:
   * "Observed on Zynthian. 1. I push C3 and don't release it -> I hear C3 2. I push any other key than C2. -> I hear the two notes 3. I release the second key -> I still hear C3 4. I push C2 -> I hear C3 only"
   * "I'm not sure, whether this is intentional, but I'm experiencing strange behaviour of the ADSR envelope: \* The attack is still very slow at the lowest settings. \* If the sustain is 0 and decay > 0 and attack is 0, there is no sound, even when the decay is increased. \* Generally the envelope settings react in unexpected ways, which I haven't fully grasped yet. Is this supposed to behave like a standard ADSR? I had a short look at the source code and AFAICS it doesn't"
4. **Documentation Request**:
   * "Hi there, thanks for this awesome plugin. I had been hoping for a release of a good Open Source string machine plugin for a long time. I'm in the process of packaging the plugin for the Arch User Repository. I'll do a package for the release version (0.1.0) and a VCS package, which always compiles the latest state of the Git repo. For the latter it would be helpful, if the version number of the software was included somewhere in the sources. so my PKGBUILD can extract it. The obvious place would be the **#define** on line 8 of **plugins/string-machine/DistrhoPluginInfo.h**, e.g.:"
5. **Build Instruction Enhancement**:
   * "add **--recursive** to build instructions. Fixes #32"
6. **Hardware Specification**:
   * "Allows to use the Solina Chorus as independent plugins (1 in 2 out, or 2 in 2 out). Noted from TCA-350-Y datasheet: - ouput filter is a butterworth at cutoff 8kHz (model uses a 10kHz cutoff) - it says "has attenuation of **110 dB at kHz**" (ie. datasheet troll'd, slope of filter unknown) from what I know, output filter cuts a lot of high frequency, so maybe there's need of a different filter but I can't verify it."

# Adlplug issues:

1. **Parameter Control**:
   * "The synthesizer should be able to receive parameters by either GUI or MIDI interaction."
   * "When the synth changes its parameters,"
   * "[x] I want ability to browse the programs selection, a 2-level popup menu, by usage of the mouse wheel over the selector"
   * "Change the work model to enable these settings to be changed in UI-less settings."
2. **Instrument Reset Issue**:
   * "When the emulator or chip count is changed, the instrument is reset to default each time. Fix it."
3. **Bug Report**:
   * "He has a problem: Can't save settings when all channels are playing. This report I have got from one guy whom I have showcased"
   * "There is a report of a Windows failure on SAVIHost software, version 1.42 It happens as the chip count is raised (example 8) and"
4. **Documentation Inquiry**:
   * "En espÃ©rant que Ã§a aide. Merci pour ce chouette manuel en franÃ§ais !"
   * "I was hoping to build the plugins, but can't at the moment as cmake version required is quite high. Is there a reason for 3.5 specifically?"
5. **Feature Request**:
   * "On request of @trebmuh Allow setting up the MIDI keyboard to respond to key presses using the french keymap."
   * "Add an ability to add and remove programs from the UI directly."
   * "Feature request: - Have a higher default volume level. Other request by me: - Add the global volume control."
6. **Build Issue**:
   * "Hello, Here is a small fix I had to perform in order to compile on Raspberry Pi (v4, using an image based on Debian 10 Buster from"
   * "I am trying to build on Fedora. I have Jack-audio-connection-kit and qjackctl installed. pkg\_check\_modules(JACK jack REQUIRED)"
7. **UI Enhancement**:
   * "I could be pleasant to have in the UI the current value of the parameter we are editing: - either from a pop-up which display the"
   * "Implement the functionality of the save button which does currently nothing. It must be an easy job now the editor keeps the"
8. **Version Control**:
   * "Version is LV2 adlplug-git-v1.0.0.beta.2.r12.6a23226-1 (Arch AUR Build from just now) Loading in carla-jack-multi the first time"
9. **Code Modification**:
   * "According to gcc doc, **-pthread** flag will link the program against libraries like libatomic on demand, which is the expected usage"
10. **Localization**:
    * "Comme [avec adljack](https://github.com/jpcima/adljack/issues/8), Ã§a serait super de pouvoir autoconnecter l'application autonome-"
11. **GUI Update Notification**:
    * "it should notify GUI so it updates its display"
    * "notify GUI so it updates its display"
    * "Juce has its mechanism to achieve it"
    * "Juce has its mechanism to achieve it"
    * "it should notify GUI so it updates its display"
    * "notify GUI so it updates its display"
12. **Tuning Slider Mouse Wheel Increment**:
    * "Make the tuning slider have a mouse wheel increment equal to 1 semitone"
    * "Make the tuning slider have a mouse wheel increment equal to 1 semitone"
13. **Redesign Load/Save Buttons**:
    * "Redesign load/save buttons"
    * "Redesign load/save buttons"
14. **VST Plugin Compatibility**:
    * "la version VST fait planter Qtractor 0.9.1"
    * "la version VST fait planter Qtractor 0.9.1"
    * "la version VST fait planter Qtractor 0.9.1"
    * "la version VST fait planter Qtractor 0.9.1"
15. **Issue Reporting**:
    * "he have reported me the issue with it"
    * "he have reported me the issue with it"
    * "he have reported me the issue with it"
    * "he have reported me the issue with it"
16. **Missing MinGW**:
    * "Missing MinGW"
    * "Missing MinGW"
    * "Missing MinGW"
    * "Missing MinGW"
    * "Missing MinGW"
    * "Missing MinGW"
17. **VST2 Assembly**:
    * "VST2 assembly"
    * "VST2 assembly"
    * "VST2 assembly"
    * "VST2 assembly"
    * "VST2 assembly"
18. **French Canadian Keyboards**:
    * "French Canadian keyboards"
    * "French Canadian keyboards"
    * "French Canadian keyboards"
    * "French Canadian keyboards"
19. **Preset Conversion**:
    * "converting bank/preset libraries to LV2 ttl format"
    * "converting bank/preset libraries to LV2 ttl format"
20. **CMake Usage**:
    * "I'm not used at all with cmake"
    * "I'm not used at all with cmake"
21. **Transmission of Programs UI to RT by FIFO**
    * Example: "[X] transmission of programs UI->RT by FIFO"
22. **Applying Instrument Changes**
    * Example: "[X] applying instrument changes (implemented in master/classAudioProcessorValueTreeState.html)"
23. **Linux File Dialog Issue**
    * Example: "the linux file dialog has an important delay, and it's not visually indicated that the click has been well received."
24. **Better Knob Component Needed**
    * Example: "Better knob component"
25. **LibADLMIDI Configuration**
    * Example: "options ==== libADLMIDI\_STATIC = ON libADLMIDI\_SHARED = OFF WITH\_UNIT\_TESTS = OFF WITH\_CPP\_EXTRAS = OFF WITH\_ception d'objets"
26. **Hex Code Request**
    * Example: "If you can tell me the hex code for the background color, the font and the colors"
27. **RT Update Requirements**
    * Example: "at libADMIDI, RT will need to call **adl\_setNumFourOpsChn** ~~and then **adl\_reset** in order to make this change effective."
28. **Program Bug**
    * Example: "reflects a bug in the program. The error was 'BadWindow (invalid Window parameter)'."
29. **Coredump**
    * Example: "And here is my coredump"
30. **Prebuilt JavaScript Object**
    * Example: "The source tarball contains a prebuilt (minified) JavaScript object."
31. **Default Value Assignment**
    * Example: "back to RT, a default value is going to be assigned for on and off delays."
32. **Comparison with Other Software**
    * Example: "It's especially useful for comparing the precise values from another piece of software (for example adlib tracker II)."
33. **DRO2MIDI Solution**
    * Example: "With current dro2midi solution the drawback is that DROv2 format is not supported."
34. **Integration Request**
    * Example: "it would not require much work to fully integrate this wonderful wrapper."
35. **Compiler and Environment Information**
    * Example: "cmake version 3.7.2 - gcc (Debian 6.3.0-18+deb9u1) 6.3.0 20170516"
36. **DAW Reproduction Issue**
    * Example: "Reproduced in 2 different DAWs on Win10: Reaper and LMMS."
37. **Tooltip Enhancement**
    * Example: "I think I can use **CallOutBox** from Juce instead of tooltip hacking for help boxes."
38. **Usage of Emulators**
    * Example: "USE\_DOSBOX\_EMULATOR = ON USE\_NUKED\_EMULATOR = OFF"
39. **Source Directory Cleaning**
    * Example: "cleaning the source directory first."
40. **X Error Handling**
    * Example: "Note to programmers: normally, X errors are reported asynchronously."
41. **Command Line Information**
    * Example: "Command Line: /usr/bin/python3 /usr/share/carla/carla-jack-multi"
42. **Dependency Bug**
    * Example: "You may want to report this as an upstream bug, in case there is no sign that this was intended."
43. **KSL Bug in Opal**
    * Example: "About Opal, it suffered a terrible bug of KSL handling which we fixed in libADLMIDI."
44. **Git Clone Instructions**
    * Example: "The 'clone' passed off without a hitch: $ git clone --recursive <https://github.com/jpcima/ADLplug.git>"
45. **CPU Usage Issue in DAW**
    * Example: "freezes the position cursor. Steps to reproduce: 1) create a midi track with a single long sustained note in a DAW program on Windows and assign"
46. **VST2 Compilation**
    * Example: "Then, I wanted to compile a VST2 module in order to try it in Jeskola Buzz (which runs on Windows)."
47. **Compiler Configuration**
    * Example: "USE\_NUKED\_EMULATOR = ON"
48. **Dependency Installation**
    * Example: "prerequisites needed installed"
49. **Coredump Inspection**
    * Example: "And here is my coredump"
50. **Source Directory Cleanliness**
    * Example: "cleaning the source directory first."
51. **X Error Handling**
    * Example: "You can then get a meaningful backtrace from your debugger if you break on the gdk\_x\_error()"
52. **Lintian Missing Source Warning**
    * Example: "The source of the following file is missing. Lintian checked a few possible paths to find the source, and did not find it."
53. **Instrument Replication Issue**
    * Example: "I wouldn't say it would 'replicate music' composed in that tracker."
54. **JUCE Cloning**
    * Example: "Clonage dans '/home/collette/repositories/ADLplug/thirdparty/JUCE'..."
55. **Build Configuration**
    * Example: "EXAMPLE\_SDL2\_AUDIO = OFF Build VHello"
56. **Painting/Redrawing Issue**
    * Example: "I am guessing that it is repainting/redrawing too quickly in a tight loop."
57. **Review Request**
    * Example: "please give this a review if you don't mind."
58. **Debugging Command Line**
    * Example: "To debug your program, run it with the --sync command line option to change"
59. **ADLplug Usage Instructions**
    * Example: "command line option to change this behavior. You can then get a meaningful backtrace from your debugger if you break on the gdk\_x\_error()"
60. **Savi State Saving**
    * Example: "current state into 'default'... Close Savi and start it again."
61. **Sound Outcome Prediction**
    * Example: "hear what will happen with the sound."
62. **Speaker Identification**
    * Example: ">Vladimir Kuznetsov:"
63. **File Reference**
    * Example: "Opnmidi.fxb"

# Analogtapemodel issues:

1. **Release 2.0 Preparation**
   * Example: "Prep for release 2.0"
2. **Bug Report: Sound Spikes at 96kHz**
   * Example: "Anybody tried running this at 96kHz? I have some trouble getting it to work. It seems to cause some massive +400dBFS spikes (seen during rendering to a floating point file)."
3. **Bug Report: Compilation Error**
   * Example: "When running **bash build\_linux.sh** I get ... ``` In file included from ../../JuceLibraryCode/include\_juce\_core.cpp:8:0: ../../../../modules/juce\_core/juce\_core.cpp:81:13: fatal error: curl/curl.h: No such file or directory #include <curl/curl.h>"
4. **Delay due to Enjoyment**
   * Example: "First of all many thanks for this incredibly good sounding plugin. This PR got delayed by many hours because I couldn't stop listening to my mixes trough CHOWTapeModel! :)"
5. **Cloning Error**
   * Example: "I'm packaging it for NixOS and during cloning it complains: **Unable to checkout 49c87190bcf3bd3fe1dcc281faff0793afaeb775 from https://github.com/ffAudio/foleys\_gui\_magic.git**"
6. **Build Issue with SDK**
   * Example: "Since it requires an unfree SDK, it's a lot more practical for packagers if it does not get built by default."
7. **Request for Review**
   * Example: "could you take a look and make sure everything looks clear to you?"
8. **Feature Request: Mono Version**
   * Example: "To reduce resource usage, a mono version would be very welcome."
9. **Installation Guide Suggestion**
   * Example: "I'm writing this to suggest that you offer up this information alongside the download."
10. **Bug Report: UI Disappearance**
    * Example: "I am facing a problem with the plugin GUI disappearing after some time in my session."
11. **Standalone App Error**
    * Example: "Getting an error when attempting to open the standalone app on Mac Catalina 10.15.7"
12. **Feature Request: Parameter Naming**
    * Example: "When looking at the parameter list in a DAW (useful for automation) some of the parameter names are not very descriptive (for example there are two parameters called 'Depth')."
13. **Bug Report: Plugin Instability in Reaper**
    * Example: "Plugin going unstable in Reaper, when using extreme settings in Tone Control."
14. **Feature Request: Wow Processing Enhancement**
    * Example: "The Wow processing is a little too plain and predictable."
15. **iOS Integration Request**
    * Example: "an iOS integration or documentation on how to adapt to an iOS app would be really helpful."
16. **Neural Network Porting Suggestion**
    * Example: "The State Transition Network used by the Hysteresis 'STN' mode is a small dense neural network. This should be ported to use the RTNeural library as a submodule."
17. **Code Refactoring**
    * Example: "Refactored tone filters to use Shelf filter from chowdsp\_utils, with corrected coefficient calculation."
18. **Artifact Report with Chimes Sounds**
    * Example: "When using 'chimes' (mark tree) sounds the model produces strange artefacts in the low to lower mids spectrum (sounds similar to rumble / hum on a vinyl player)."
19. **Feedback on Wow and Flutter**
    * Example: "The wow and flutter are just right but finding the right speed and how much depth to add is hard."
20. **Bug Fix and Issue Closure**
    * Example: "Closes #137"
21. **Feedback on Hysteresis Clicks**
    * Example: "after a certain point of playback, hysteresis begins to start introducing clicks that gradually progress to an explosion of dangerously loud noise."
22. **Feature Request: Preset Navigation**
    * Example: "There should 'arrow' buttons to be able to cycle through presets."
23. **Bug Report: Glitches with Buffer Size**
    * Example: "Using Focusrite ASIO driver. Use buffer size 4096. Move one of the loss parameter sliders. Hear glitches."
24. **Bug Fix**
    * Example: "Fixes #151"
25. **Feature Request: Degrade Section Enhancement**
    * Example: "The Degrade section should have a 'Release' parameter, so that the noise is enveloped to the amplitude of the original signal."
26. **Bug Report: Latency Compensation**
    * Example: "Double-check the latency compensation from the hysteresis section."
27. **Bug Report: Glitches with White Noise**
    * Example: "Turn on the hysteresis section. Put the Dry/Wet parameter at 50%. Play white noise through the plugin."
28. **Compilation Errors:**
    * Description: Issues related to compilation errors or build failures.
    * Example Quote: "With recent JUCE they changed: AudioProcessorValueTreeState::getRawParameterValue now returns a std::atomic<float>\* instead of a float\*. So now AnalogTapeModel is unable to compile."
29. **Dependency Issues:**
    * Description: Problems related to dependencies or missing libraries during compilation or installation.
    * Example Quote: "The Linux Deb packages provided for Ubuntu don't really work dependency wise for people with Debian systems as there are minor differences with libcurl versions etc."
30. **GUI/Display Issues:**
    * Description: Bugs or issues related to the graphical user interface or display.
    * Example Quote: "On iOS (especially with small screens) the Wow controls can get cutoff so you can't read the values."
31. **Feature Requests:**
    * Description: Requests for new features or enhancements to existing features.
    * Example Quote: "Currently oversampling is saved in presets, but I'm not sure if it should..."
32. **Platform-Specific Issues:**
    * Description: Issues specific to certain operating systems or platforms.
    * Example Quote: "When I try to compile on NixOS, I get a lot of ld errors..."
33. **Testing and Validation:**
    * Description: Comments related to testing, validation, or compatibility testing on different platforms or software.
    * Example Quote: "First time running in Cubasis 2 iOS 12, Ran fine. Closed Cubasis, reopened Cubasis, chow tape crash."
34. **Performance Optimization:**
    * Description: Suggestions or discussions related to optimizing the plugin's performance, reducing CPU usage, etc.
    * Example Quote: "Currently this plugin is quite expensive on the CPU."
35. **Documentation Issues:**
    * Description: Problems or suggestions related to documentation, user manuals, etc.
    * Example Quote: "From reading the user manual, the order of the processing sections is not immediately obvious."
36. **Packaging Issues:**
    * Description: Problems with packaging the plugin for distribution, including issues with installers, directories, etc.
    * Example Quote: "I think the installer should create directory like **C:\Program Files\ChowTapeModel**."
37. **Crashes and Segmentation Faults:**
    * Description: Reports of crashes, segmentation faults, or other runtime errors.
    * Example Quote: "The deb package has -dev dependencies..."
38. **Build Errors/Issues**:
    * "Building CXX object"
    * "Linking CXX static library"
    * "Error: 'transform' is not a member of 'xsimd'"
    * "Aarch64 build fails"
    * "Errors with JUCE\_DEPRECATED\_WITH\_BODY"
    * "Immediate XRUNS"
    * "Plugin UI rescale issue"
39. **Feature Requests**:
    * "Control over plugin formats"
    * "Request for balance control"
    * "Request for multi-channel version"
    * "UI control grey-out for stereo-only processing"
    * "Text resizing with UI"
40. **Documentation/Configuration**:
    * "Correcting BUILDING.md initialization"
    * "Environment variable or CMake option for plugin formats"
    * "Advice on plugin packaging"
41. **Testing and Deployment**:
    * "Test on various platforms"
    * "Submitting iOS build for review"
    * "Release process checklist"
42. **Compatibility/Platform-specific Issues**:
    * "Flatpak/aarch64 build issues"
    * "Update checker confusion with git master"
43. **General Comments/Questions**:
    * "Unspecified comment on plugin building"
    * "Inquiry about multi-plugin repository structure"
44. **UI Scaling Issue**
    * Code: UI\_SCALE\_ISSUE
    * Example Quote: "When the plugin UI is rescaled the controls (knobs/faders) get larger but the text labels stay the same."
45. **Latency Compensation Discrepancy**
    * Code: LATENCY\_COMP\_ISSUE
    * Example Quote: "AnalogTapeModel 2.11.0 does not have the same latency compensation between CLAP and VST3."
46. **Build Error on Raspberry Pi**
    * Code: RPI\_BUILD\_ERROR
    * Example Quote: "RPi users cannot build AnalogTapeModel because of 'cmake\_minimum\_required' error."
47. **Crash on Loading LV2 Plugin in Ardour**
    * Code: ARDOUR\_LV2\_CRASH
    * Example Quote: "Ardour crashes when loading TapeModel LV2 plugin."
48. **Freezing Issue**
    * Code: FREEZING\_ISSUE
    * Example Quote: "Freezes then unfreezes for a second, then freezes again (looped ad infinitum)."
49. **Compatibility Issue with Cubase**
    * Code: CUBASE\_COMPAT\_ISSUE
    * Example Quote: "Every time I open it in Cubase it freezes Cubase and the plugin."
50. **LV2 Channel Support Limitation**
    * Code: LV2\_CHANNEL\_LIMITATION
    * Example Quote: "LV2 does not support setting number of channels dynamically."
51. **Crash on Switching to Sink->LoFi Plugin**
    * Code: SINK\_LOFI\_CRASH
    * Example Quote: "After switching to the Sink->LoFi Plugin the plugin crashes."
52. **Segmentation Fault in Ardour**
    * Code: ARDOUR\_SEGFAULT
    * Example Quote: "A segfault occurs immediately when inserting the plugin into a channel in Ardour."
53. **Request for 32-bit VST DLL**
    * Code: REQ\_32BIT\_DLL
    * Example Quote: "Can you please add a dll compiled for 32 bit VST hosts to the release assets?"
54. **Request for Additional Knobs**
    * Code: REQ\_ADDITIONAL\_KNOBS
    * Example Quote: "I think it would make sense to have a second set of 2 knobs for wow."
55. **Volume Boost Issue**
    * Code: VOLUME\_BOOST\_ISSUE
    * Example Quote: "Just had a play with 2.3 (and 2.3.1) and there is a MASSIVE volume boost."
56. **Dry/Wet Knob Behavior Issue**
    * Code: DRY\_WET\_KNOB\_ISSUE
    * Example Quote: "I've tested v2.3.0 on Windows, and found some weird behavior with the Dry/Wet knob."
57. **Installer Issue for Mac**
    * Code: MAC\_INSTALLER\_ISSUE
    * Example Quote: "There is currently no Mac installer. It would be nice to have a method for packaging the Mac builds."
58. **Build Error on Linux GCC**
    * Code: LINUX\_GCC\_BUILD\_ERROR
    * Example Quote: "Hi, it doesn't build on Linux GCC. The 'f'-suffixed functions are absent."
59. **Knob Movement Issue**
    * Code: KNOB\_MOVEMENT\_ISSUE
    * Example Quote: "Since 2.3.3 the knob movement stopped being buttery and became jittery."
60. **Phase Issue with Dry/Wet Knob**
    * Code: PHASE\_ISSUE\_DRY\_WET\_KNOB
    * Example Quote: "I've tested v2.3.3 and found the phase issues with the dry/wet knob."
61. **Version Number Display Issue**
    * Code: VERSION\_DISPLAY\_ISSUE
    * Example Quote: "Just downloaded 2.3.4 for Mac, and all plugin formats show '2.3.0' on the GUI."
62. **Request for Additional Features**
    * Code: REQ\_ADDITIONAL\_FEATURES
    * Example Quote: "Add different ODE solving options, bring back similar-style processing to V1."
63. **Feature Request - VCV Rack Portability**:
    * Sentence: "Would it be feasible for you to port this plugin to the VCV Rack module format, so that it can be used as a native VCV module?"
    * Example Quote: "Would it be feasible for you to port this plugin to the VCV Rack module format, so that it can be used as a native VCV module?"
64. **Bug Report - Slider Behavior**:
    * Sentence: "With the first two controls, Gap and Thickness, the sliders jump when moved from their default setting of 0.0000010."
    * Example Quote: "With the first two controls, Gap and Thickness, the sliders jump when moved from their default setting of 0.0000010."
65. **Bug Report - Ableton Live Crash**:
    * Sentence: "Ableton Live is crashing when trying to open existing projects that contain VST3 instances of Chowtape."
    * Example Quote: "Ableton Live is crashing when trying to open existing projects that contain VST3 instances of Chowtape."
66. **Bug Report - Broken Download Link**:
    * Sentence: "When I click that link Dropbox shows me a 404 Not Found screen."
    * Example Quote: "When I click that link Dropbox shows me a 404 Not Found screen."
67. **Feature Request - Frequency Response Control**:
    * Sentence: "Would like to have control of the frequencies being distorted by the hysteresis function."
    * Example Quote: "Would like to have control of the frequencies being distorted by the hysteresis function."
68. **Bug Report - High CPU Usage**:
    * Sentence: "Running the plugin (VST3 version, Windows 7 64bit, Ableton Live 10.1) causes extreme CPU spikes."
    * Example Quote: "Running the plugin (VST3 version, Windows 7 64bit, Ableton Live 10.1) causes extreme CPU spikes."
69. **Feature Request - Mix Groups**:
    * Sentence: "Add mix groups for communication between plugins."
    * Example Quote: "Add mix groups for communication between plugins."
70. **Bug Report - Loss Effect Units**:
    * Sentence: "The units for the loss effect parameters currently reads 'cm'."
    * Example Quote: "The units for the loss effect parameters currently reads 'cm'."
71. **Feature Request - Preset Management**:
    * Sentence: "Current preset manager doesn't allow for saving/loading presets, or managing presets from different contributors."
    * Example Quote: "Current preset manager doesn't allow for saving/loading presets, or managing presets from different contributors."
72. **Feature Request - Input/Output Signal Visualization**:
    * Sentence: "A VU meter, or dB readout for the input and output signals of the plugin, to help users with gain staging."
    * Example Quote: "A VU meter, or dB readout for the input and output signals of the plugin, to help users with gain staging."

# VSTSID issues:

1. **Project Modification - CMakeLists Integration**:
   * Sentence: "Took basic AGain sample project and created CMakeLists system to allow building new VST 3.0 plugins with GUI."
   * Example Quote: "Took basic AGain sample project and created CMakeLists system to allow building new VST 3.0 plugins with GUI."
2. **Bug Report - Clicking Noise in Ring Modulators**:
   * Sentence: "Nasty clicks occur when the ring modulators value changes, this should be less abrasive."
   * Example Quote: "Nasty clicks occur when the ring modulators value changes, this should be less abrasive."

# 4klang issues:

1. **Project Modification - CMake Integration**:
   * Sentence: "This adds CMake support."
   * Example Quote: "This adds CMake support."
2. **Question - Purpose of AUTHORING Mode**:
   * Sentence: "I'm not sure about the purpose of the AUTHORING flag, but I noticed that it stores the current tick - so I assumed that it would be useful to use that stored value when **\_4klang\_render** is invoked the next time."
   * Example Quote: "I'm not sure about the purpose of the AUTHORING flag, but I noticed that it stores the current tick - so I assumed that it would be useful to use that stored value when **\_4klang\_render** is invoked the next time."
3. **Bug Report - Clicking Noise in Ring Modulators**:
   * Sentence: "...nasty clicks occur when the ring modulators value changes, this should be less abrasive."
   * Example Quote: "...nasty clicks occur when the ring modulators value changes, this should be less abrasive."
4. **Question - Purpose of Low-pass Filtering in Gate Oscillator**:
   * Sentence: "I'm wondering why is the gate oscillator low-pass filtered."
   * Example Quote: "I'm wondering why is the gate oscillator low-pass filtered."
5. **Bug Report - Recording Failure in 4klang**:
   * Sentence: "Using the current 4klang 3.2.2 from master, recording fails when exporting a local STORE command (target: LOAD) in a global instrument."
   * Example Quote: "Using the current 4klang 3.2.2 from master, recording fails when exporting a local STORE command (target: LOAD) in a global instrument."

# Octasine issues:

1. **Bug Report - VST Automation Issue**:
   * Sentence: "I just installed the plugin and I tried to automate the controls without any luck."
   * Example Quote: "I just installed the plugin and I tried to automate the controls without any luck."
2. **Feature Request - MIDI Controller Support**:
   * Sentence: "Hi, I'd like to suggest that this plug-in could handle the MIDI CC64 hold controller (or any other foot /sustain controller))"
   * Example Quote: "Hi, I'd like to suggest that this plug-in could handle the MIDI CC64 hold controller (or any other foot /sustain controller))"
3. **Bug Report - Missing Pitch Bend Support**:
   * Sentence: "Is it correct, that this synth currently does not have support for pitch bend?"
   * Example Quote: "Is it correct, that this synth currently does not have support for pitch bend?"
4. **Bug Report - Plugin Crash on Loading**:
   * Sentence: "The bug is my DAW crashing when I try to launch Octasine."
   * Example Quote: "The bug is my DAW crashing when I try to launch Octasine."
5. **Bug Report - GUI Crashing DAW**:
   * Sentence: "The DAW crashes (unconditionally terminates with backtrace) when the OctaSine GUI launches."
   * Example Quote: "The DAW crashes (unconditionally terminates with backtrace) when the OctaSine GUI launches."
6. **Bug Report - Patch Loading Issue**:
   * Sentence: "When editing a patch, and moving to another preset and back again, the GUI changes back to the original patch- but the plugin doesn't load the settings."
   * Example Quote: "When editing a patch, and moving to another preset and back again, the GUI changes back to the original patch- but the plugin doesn't load the settings."
7. **Feature Request - CLAP Plugin Version**:
   * Sentence: "Would be nice to have a CLAP plugin version."
   * Example Quote: "Would be nice to have a CLAP plugin version."
8. Compilation Error:
   * "I get a compilation error when trying to compile OctaSine 0.8.3 on Linux Aarch64 (on a Raspberry 4)."
   * "When I tried to build OctaSine, cargo threw an error having to do with the baseview dependency."
9. Plugin Crashes:
   * "Loading OctaSine in Ableton makes it crash."
   * "Attempt to reset to 'init' state using the 'Clear Patch' action crashes the plugin."
10. Platform-Specific Issue:
    * "Version 0.9.0 fails to compile on aarch64 due to the error shown below."
    * "The website has incorrect instructions for getting OctaSine working on macOS."
11. GUI Issue:
    * "Still no GUI in Bitwig."
    * "Thnx for your work! Some problem with graphic."
12. Performance Issue:
    * "Plugin exhibits constant buffer underruns or audible crackles in the audio output."
    * "In the new version, I noticed some problem with synchronizing notes when the buffer increases."
13. Configuration/Setting Issue:
    * "Theme preference (dark mode) not persisted across sessions."
    * "When the plugin is launched, a /tmp folder is created in my home folder."
14. Feature Request:
    * "Would it be possible to add a window resizing option?"
    * "Velocity should not affect the MOD OUT amount, at least by default."
15. Dependency Issue:
    * "I eventually built baseview myself (using the same fork and branch specified in Cargo.toml) and pointed Cargo at the directory where I had built the patched version, instead of the version on GitHub."
    * "This should make Windows SIMD builds possible - [x] Update dependencies listed with **cargo outdated**"
16. **Bug: Crash on Wayland**
    * Sentence: "0.5.4 crashes when running on Wayland (gnome-shell, ArchLinux) but works when running gnome-shell via X11."
17. **Bug: Build Failure on Nightly Cargo Toolchain**
    * Sentence: "Installed the nightly cargo toolchain. build went fine until..."
18. **Bug: Incorrect LFO Behavior**
    * Sentence: "In most synths, as the amount is increased, it is applied in both directions equally and linearly."
19. **Bug: Theme Switching Issue**
    * Sentence: "the dark theme switched back into white theme when the interface is re-opened."
20. **Bug: Ableton Crash on VST Click**
    * Sentence: "clicking the vst causes ableton to crash."
21. **Bug: Decay Phase Issue**
    * Sentence: "The Decay phase of the envelope does not end with a NoteOff event."
22. **Bug: Envelope Adjustment Precision**
    * Sentence: "The smallest amount one can adjust the envelopes is not small enough for the needs of some percussive sounds."
23. **Bug: 1-shot LFO Behavior**
    * Sentence: "After a 1-shot LFO completes, it appears to send a modulation amount of 0 (or just no longer affect modulation)."
24. **Feature Request: Square Waves for Operators**
    * Sentence: "It would be great to have square waves available as an option for the operators."
25. **Feature Request: Parameter Automation**
    * Sentence: "It appears currently there are no parameters exposed for automation."
26. **Performance Improvement: Testing Results**
    * Sentence: "Testing suggests performance gains of around 10%."

# Cardinal issues:

1. **Performance Issue (Cardinal):** Issues related to Cardinal plugin's performance.
   * Example quote: "Cardinal is slower in graphical performance compared to the original VCV Rack."
2. **Audio/Output Issue:**
   * Example quote: "Seems that we only need to create a variant of Cardinal is slower in graphical performance compared to the original VCV Rack."
3. **Video Playback Issue:**
   * Example quote: "I was trying the plug-in but just outputting a sine seems to do some weird ringmod-ish noise?"
4. **Scrolling Functionality Issue:**
   * Example quote: "Scrolling with touchpad 2 fingers should work same as desktop Rack2 Scrolling to work at same speed when set to (1.2) in the 'Scroll Wheel Knob Sensitivity.'"
5. **Crash (Bitwig):**
   * Example quote: "I am getting a crash when running Cardinal inside Bitwig."
6. **Build/Installation Issue:**
   * Example quote: "When I try to build Cardinal on NixOS, I get: [error message]."
7. **Compatibility Issue (Bitwig, Ableton, Reaper):**
   * Example quote: "Used to zoom (ctrl+scroll) and scroll sideways (shift+scroll)."
8. **GUI/UI Issue:**
   * Example quote: "I can't resize the window."
9. **Functionality Issue (Clock Sync):**
   * Example quote: "Correct BPM should be received from Reaper."
10. **Feature Request (Host Parameter Mapping):**
    * Example quote: "Being able to map host params to various knobs or buttons that don't have a cv-in would be."
11. **Project Reload Issue (Reaper):**
    * Example quote: "I cannot reload projects saved with a cardinal instance. Reaper crashes on load."
12. **Documentation Issue:**
    * Example quote: "I'm getting pmd on how to install Cardinal."
13. **Library Integration Issue:**
    * Example quote: "Leads to vcvrack library site which doesn't suit well to represent many modules in cardinal."
14. **Bug (Pulse Issue):**
    * Example quote: "The missing pulses seem random."
15. **Window Manager Compatibility Issue:**
    * Example quote: "Happens to be on fluxbox with Debian 11/stable."
16. **Dependency Issue (QuickJS):**
    * Example quote: "The bundled QuickJS breaks."
17. **Audio DSP/CPU Usage Issue:**
    * Example quote: "After discovering high CPU usage on one of my (reasonably simple) patches."
18. **MIDI Issue:**
    * Example quote: "It seems there is an issue with module Host MIDI Gate."
19. **Resource Linking Issue:**
    * Example quote: "When I run a regular install, for some reason the resources do not get linked into the plugins."
20. **Assertion Failure:**
    * Example quote: "At least 2 assertion failures can be seen."
21. **Save/Load Issue:**
    * Example quote: "When Cardinal crashed for some reason - next restart brought back the initial screen and all modifications were lost."
22. **Launcher/Installation Issue (Linux):**
    * Example quote: "After installation I didn't find any launcher in my application's list in Gnome."
23. **Text Input Issue (Module Search):**
    * Example quote: "When I try to enter text into the module search input I hear the system 'input blocked' beep and nothing happens."
24. **Resource Directory Issue:**
    * Example quote: "For some reason the resources do not get linked into the plugins."
25. **Scrolling/Crash Issue (Module List Window):**
    * Example quote: "As the title suggests, the plugin crashes when I try to scroll down in the module list window."
26. **Keyboard Input Issue:**
    * Example quote: "Hi, input fields (search ++) are not receiving proper keyboard input."
27. **OSDialog Issue:**
    * Example quote: "We cannot use osdialog because it blocks the event loop."
28. **Bitwig UI Integration Issue:**
    * Example quote: "Normally when tweaking a UI knob it will show/activate in Bitwig internal UI so that it can be modulated."
29. **Building Cardinal**
    * "Can't figure out from docs how to build it myself on MSYS2/MinGW, drops with error: **Makefile:96: \*\*\* OpenGL dependency not installed/available. Stop.**"
    * "Did a **git submodule update --init --recursive**, gcc should in theory compile it with **-lopengl** option"
    * "Build works, but there is a licensing issue with the included font."
    * "Builds and seems to work, but the rendered display is a bit weird obviously."
    * "When trying to build the latest commit I ran into issues building voxglitch, as it fails to build with -Werror=format-security."
    * "Hi, just downloaded and the first thing I noticed is that when running the VST2 version of Cardinal in Ableton Live 11 at 48000hz, the reset trigger on the Host TIME module will act erratically, sending out triggers completely randomly."
30. **Dependency Issues**
    * "Did a **git submodule update --init --recursive**, gcc should in theory compile it with **-lopengl** option."
    * "It might be easier to simply have Ildaeil ask for Carla's path on Windows than to ship Carla with Cardinal."
    * "Whole bunch of warnings **"DEBUG" redefined**."
31. **Licensing**
    * "Re adding Befaco modules, with added permission for panel license."
    * "Build works, but there is a licensing issue with the included font."
    * "See <https://github.com/hires/Dintree-Virtual/pull/9> for the discussion. if license remains unchanged, Cardinal cannot use dintree."
32. **Functionality Requests**
    * "Hi! Is it possible to make some automatic fresh binaries for win and osx if possible? Please help coding\compiling."
    * "Maybe somebody will be so kind and will commit dependency list here (or in comments)."
    * "Maybe due to single-precision optimizations, need to investigate."
    * "Super weird situation. The plugin crashes after closing the UI IFF we have added a module via plugin browser with a tag set."
33. **User Experience**
    * "Not functional yet, needs work for dark panels and resolving of font licensing."
    * "Some panels have a slightly off-white background, which is quite obvious after inversion. Should we correct this with a different color replacement?"
    * "Arguably the panel is no longer **lilac** though ... (I think it was a bit light to be called lilac in the first place :#)."
    * "Not 100% happy with the colors. I tried to stick to colors already part of the designs, but maybe you have some."
34. **Installation and Setup**
    * "I may be able to assist with the creation of a windows installer in msi format, if you have that in your roadmap."
    * "Expectation: Can run the installer and then use the VST2 plugin. Actual experience: Have to manually copy files from c:\Program Files\Common Files\Cardinal to the VST2 folder where the vst2 dll is to make the Cardinal plugin register and load, and operate."
    * "Latest build - no way to get keyboard input win 64 8.1."
    * "First of all, this is a wonderful project! it's getting me back into the world of VCV and modular synthesis!"
35. **Bug Reports**
    * "Gives **undefined reference to 'modelHamptonHarmonicsArp'** at plugin linker stage, but almost works."
    * "Left channel is mono when nothing is connected to the right channel."
    * "With both the LV2 and VST3 I see up to dozens of xruns when closing and re-opening the UI."
36. **Feature Requests**
    * "I saw my modules on the list of possible additions and I'd like them to be included with Cardinal if possible."
    * "VCV Rack has, I believe, a Favorites option for modules, so you can save a selection of favorite modules for quick access on the module browser. I'm guessing Cardinal does not have it because it doesn't save config files in the first place."
37. **Licensing Issues**
    * Example Quote: "- included font does not have proper license -> replace?"
    * Example Quote: "Needs some included font licensing resolved (not all have clear license afaik)"
38. **Functionality/Usage Issues**
    * Example Quote: "Tried it in both reaper and carla. I using this build from the actions tab [81ad41ad.](https://github.com/DISTRHO/Cardinal/commit/81ad41ad5afb54f86a6c7b3d42b66f91d1446509) It"
    * Example Quote: "When Cardinal is installed system-wide, loading these files should not be done the usual way. The files should be used as templates, with a save operation asking where to save them instead of trying to override system files."
39. **Installation/Build Issues**
    * Example Quote: "The Windows installer is missing at least the resources folder inside the Cardinal.vst folder. Possibly more."
    * Example Quote: "AU in Logic doesn't pass auval. It is workin in Abelton, Waveform 11, Unify, BespokeSynth though. Any solutions to this?"
40. **Compatibility Issues**
    * Example Quote: "Cardinal inherits scroll value multiplication from Rack, but because of differences in GUI stack on macOS we get scrolling speed that is way over the top (x10 comparing to Rack, where it is somewhat optimal, at least scrolling"
    * Example Quote: "AU in Logic doesn't pass auval. It is workin in Abelton, Waveform 11, Unify, BespokeSynth though. Any solutions to this?"
41. **GUI/Display Issues**
    * Example Quote: "If I drag using the corner tool, it allows me to make the plugin window bigger, but its just empty white space that appears and the GUI remains the same. Unless, I drag to resize the bottom or sides of the window (but NOT the corner tool). I was able to resize the GUI by double clicking to make it full screen - in this case it does resize correctly. Odd behaviour, there is a chance you already know but I looked through the issues and didn't see anything obvious so I thought I'd report it. :)."
    * Example Quote: "Hi, Just for info: In the 'Another armhf fix build #1026 Nightly Cardinal-win64-e8613895', there is a important resizing bug (witch is not present in the good 'nightly Cardinal-win64-62181c10 release where you introduced the fantastic Host Parameters Map' :-) )."
42. **Performance Issues**
    * Example Quote: "I'm using the LV2 version of Cardinal ("regular" â€” i.e. not FX nor Synth) in Reaper under windows 10 with an AMD Ryzen 7 3700 (8 cores, 16 threads) processor. Everything works perfectly (multi-channel midi in/output, host parameter modulation, sidechain audio in/out, 16x oversampling, etc.) except for the fact that the performance meter in Cardinal always shows a CPU usage 16 times higher than the one in Reaper (67.5% vs 4.2% with my current patch)."
43. **Standalone Issues**
    * Example Quote: "Hi all, when I try to run fully installed standalone version of Cardinal, I get this error: VST version runs correctly inside DAW. Any idea what is the problem?"
44. **Integration Issues**
    * Example Quote: "I haven't seen anyone discussing this so it's likely I'm the one at fault here but I can't seem to make the midi out from cardinal work with fl studio."
    * Example Quote: "I'm using the LV2 version of Cardinal ("regular" â€” i.e. not FX nor Synth) in Reaper under windows 10 with an AMD Ryzen 7 3700 (8 cores, 16 threads) processor. Everything works perfectly (multi-channel midi in/output, host parameter modulation, sidechain audio in/out, 16x oversampling, etc.) except for the fact that the performance meter in Cardinal always shows a CPU usage 16 times higher than the one in Reaper (67.5% vs 4.2% with my current patch)."
45. **Request for Additional Features**
    * Example Quote: "Being able to adjust mouse (or overall) sensitivity to slider and linear mode knob movement would be pretty"
    * Example Quote: "WOULD LOVE TO HAVE TOUCH SUPPORT ON THE CARDINAL.KX.STUDIO WEBSITE... SO I CAN USE IT ON MY ANDROID DEVICE THROUGH WEB BROWSER"
46. **Documentation/Configuration Issues**
    * Example Quote: "Cardinal has a great feature to automatically update a remote embedded instance, originally for the MOD devices. I'm currently trying to get Cardinal onto [Zynthian](https://zynthian.org/), where this functionality would also be very useful. Cardinal itself runs fine there as LV2, by the way (compiled on Raspberry Pi 4). However, Cardinal has the remote host and port [hardcoded](https://github.com/DISTRHO/Cardinal/blob/20e6f30bcc6fe6aa0889a6c4d51daaee1ef955ee/src/CardinalCommon.hpp#L24) to 192.168.51.1:2228."
47. **Compilation Error (Linux Specific)**
    * "get the following error when compiling"
    * "when compiling cardinal-22.07 on Fedora 36"
    * "when compiling cardinal-22.07/ 22.09 on Fedora 36/37"
    * "error message"
    * "error messages in Jack"
48. **Polyphony Issues**
    * "poly patch"
    * "poly for 16 notes"
    * "polyphony"
    * "multiple sounds"
    * "monophonic"
    * "sustains the last key being triggered"
    * "max of 16 notes"
    * "maximum of 4 voice notes"
49. **Compatibility Issues (macOS)**
    * "mac catalina intel"
    * "macOS Monterey 12.5"
    * "MAC OS Logic plugin managers' validation"
    * "not get it past the plugin validation"
    * "macOS"
50. **Plugin Load and Functionality Issues**
    * "load modules from a **.vcvplugin**"
    * "load VST2 version of Cardinal"
    * "load the VST3 version of Cardinal"
    * "Cardinal as an effect in FL studio"
    * "load the Cardinal instance"
    * "Cardinal standalone"
    * "Cardinal VST3 version not detected"
    * "Cardinal VST3 version locked at 40 fps"
    * "run Cardinal with pipewire and wayland"
51. **GUI and Display Issues**
    * "blank white screen"
    * "black screen"
    * "display issues"
    * "display is working in time with logic"
52. **License and Legal Issues**
    * "licensing"
    * "GPL-3.0 licenses"
    * "GNU General Public License"
53. **Feature Requests**
    * "let Cardinal load modules from a **.vcvplugin**"
    * "export patches"
    * "disable or hide specific modules"
    * "order internal modules according to cable connections"
    * "compare between the standalone of Cardinal and VCV"
    * "build with pipewire and wayland"
54. **Miscellaneous**
    * "forgive me, I'm sure I'm missing something"
    * "test"
    * "not finished yet"
    * "runtime selftest mode"
    * "runtime memory issues"
    * "memory leaks"
    * "make a PR upstream"
    * "runtime kernel"
    * "Segmentation fault"
    * "XRUN callback"
    * "HEAP SUMMARY"
55. **Synthesizer Description:**
    * "A classic polyphonic 2-oscillator synthesizer \* 2 VCOs with blendable sawtooth and pulse waves \* 1 multi-mode filter \* 1 filter envelope \* 1 VCA envelope \* 1 multi-waveform LFO"
    * "The LFO is patched to oscillator pitch by default."
    * "The amount can be controlled via the 2A and 2B level knobs of the 'Matrix44' mixer module."
    * "You can control additional destinations with the LFO by patching its output(s) into the 'Matrix44' module's input..."
    * "The pitch bend amount can be controlled via the 3A and 3B level knobs of the 'Matrix44' module..."
    * "The number of polyphonic voices can be set via the context menu of the 'Cardinal Host MIDI' module."
56. **Sound Production Issue:**
    * "Sorry, I just realized that the example patch produced no sound..."
    * "...when either loaded into a stand-alone version of Cardinal or the host doesn't set the mixer levels..."
57. **Project Overview and Explanation:**
    * "To help newcomers to the project get their hands dirty more quickly and messing around with the code, we can create a little overview of the repository to explain where things are and why."
58. **Installation Issue:**
    * "Windows 10 Bitwig 4.4.3 My main CLAP Folder is **C:\Program Files\Common Files\CLAP\...**"
    * "But if I drop Cardinal.clap Folder into \CLAP An Popup in Cardinal tell me: **System directory: C:\Program Files\Common Files\Cardinal does not exist.**"
    * "That is true because it should be the CLAP Folder where to search."
    * "...If this is a Standard then Cardinal should search the .clap there."
    * "I can add the Cardinal Folder with ease, and it probably will work, but then every Developer will do the same."
59. **Build Error (Windows):**
    * "I did a fresh checkout of the main branch and trying to build on Windows."
    * "...In file included from CarlaPluginLV2.cpp:25: ../../utils/CarlaLv2Utils.hpp:75:10: fatal error: lilv/lilvmm.hpp: No such file or directory..."
60. **VST3 Plugin Identification Issue:**
    * "The VST3 SDK version information is being reported in Cubase (10.5.30, 11.0.41 an 12.0.52) as 'Travesty 3.7.4' rather than 'VST 3.7.4'..."
    * "...which means that the plugin is not listed as a VST3 plugin in the Cubase plugin insert menus..."
61. **Plugin Submission Request:**
    * "I would like to submit my [Sapphire](https://github.com/cosinekitty/sapphire) plugin, particularly its module [Elastika](https://github.com/cosinekitty/sapphire/blob/main/Elastika.md), as a candidate for inclusion in Cardinal."
62. **Performance Optimization:**
    * "Currently at least the MIDI out uses a queue on a separate thread, which introduces jitter and latency. We should override whatever file in question handles that."
63. **Integration and Testing:**
    * "I was able to get Sapphire integrated and working in Cardinal."
    * "Updated commit hash of Sapphire plugin to include this fix: <https://github.com/cosinekitty/sapphire/commit/b30d20745dd028961b0047b506d560ed48f2656c>"
64. **Feature Request (AU Plugin Support):**
    * "It would be useful to have cardinal also as an au plugin app. Than it’s possible to use it on the go with other compatible apps like Cubase 3."
65. **Configuration Issues:**
    * Codes related to issues with configuration settings.
      1. Example quote: "In VCV Rack we have **pixelRatio** in the **settings.json** file. Where is this setting in Cardinal?"
66. **User Interface/Experience (UI/UX) Issues:**
    * Codes related to problems or suggestions regarding the user interface or user experience.
      1. Example quote: "Every time if I touch the cardinal's window I have to click back to Ableton's"
67. **Build/Compilation Issues:**
    * Codes related to errors or problems encountered during the build or compilation process.
      1. Example quote: "I'm trying to build freshly-released Cardinal 23.07 with gcc13 and LTO enabled, and I'm getting the following error"
68. **Stability/Performance Issues:**
    * Codes related to crashes, segmentation faults, or performance problems.
      1. Example quote: "When I add Aida-X module and then close the Cardinal window, I get segmentation fault"
69. **Dependency/Installation Issues:**
    * Codes related to problems with dependencies or installation procedures.
      1. Example quote: "The build instructions does not list autoreconf as a dependency. Builds fail if this package is not installed."
70. **Compatibility Issues:**
    * Codes related to compatibility issues with other software or systems.
      1. Example quote: "Tested version : SHA - 4a85fc8 Scenario: Audio Control to have available audio devices that I have in normal Desktop VCV Rack 2"
71. **Environment Configuration Issues:**
    * Codes related to issues with environmental variables or system configurations.
      1. Example quote: "It seems like Cardinal is looking for the env var **XDG\_DOCUMENTS\_DIR**"
72. **Versioning/Release Issues:**
    * Codes related to discrepancies or problems with version numbers and releases.
      1. Example quote: "We've come across some inconsistencies with the release version number listed on GitHub and the version numbers of the installed Apps, plugins, and package receipts."
73. **Plugin Functionality Issues:**
    * Codes related to problems with specific plugin functionalities.
      1. Example quote: "Patch didn't seem to matter, the default patch crashed, even a completely empty patch crashed."
74. **Code Contributions/Version Control Issues:**
    * Codes related to contributions, merge requests, or version control problems.
      1. Example quote: "So I just saw a removed merge request on GitLab about memory leaks in my module..."
75. **Documentation Issues:**
    * Codes related to problems or suggestions regarding documentation.
      1. Example quote: "The build instructions does not list autoreconf as a dependency."
76. **Feature Requests:**
    * Codes related to suggestions or requests for new features.
      1. Example quote: "It would be advantageous to be able to exclude some build targets..."
77. **Segfault Issue with CLAP Plugins**:
    * Example Quote: "When attempting to load the **/usr/lib/clap/Cardinal.clap/Cardinal.clap** (or other the other two Cardinal) the program sometimes segfaults, with the following logs: (Note it sometimes also hangs at the same point before being killed by the system)"
78. **Plugin Loading Logs**:
    * Example Quote: "Initializing plugin browser DB"
    * Example Quote: "Loading patch /home/johnh/Documents/Cardinal/templates/main.vcv"
79. **OSC Remote Control Feature**:
    * Example Quote: "OSC Remote control is not enabled in this build"
80. **Version Mismatch Warning**:
    * Example Quote: "Patch was made with Rack 2.1, current Rack version is 2.3.0"
81. **Unsupported Feature in DPF**:
    * Example Quote: "Supported in pugl, not yet exposed in DPF"
82. **File Path Corrections**:
    * Example Quote: "All the weird 'Windows.h' like includes should be renamed as 'windows.h'."
83. **Module Suggestions**:
    * Example Quote: "I thought it would be good to start a topic with suggestions of modules that could be included."
84. **License Recommendations**:
    * Example Quote: "Main guideline would be to try and pick only foss modules that allow redistribution of assets to make life easy on us."
85. **Carla Integration Issue**:
    * Example Quote: "Carla has little hacks to support file path based lv2 parameters as lv2 guis, but this won't work in ildaeil + cardinal due to its async nature."
86. **Issue with Host Sync in Audio Files**:
    * Example Quote: "When host sync is enabled, audio is messed up."
87. **UI Rendering Issue**:
    * Example Quote: "ImGui rendering should be improved so it always looks crisp."
88. **File Loading Bug**:
    * Example Quote: "When right clicking/choosing the option to load/save, the open file window doesn't appear."
89. **Build Instructions Request**:
    * Example Quote: "Simple instructions that could help new developers or users who need to build."
90. **Platform-Specific Issue**:
    * Example Quote: "finding this issue in reaper (latest) and ableton 9(latest) on my win10 32b tablet."
91. **Assertion Error**:
    * Example Quote: "Empty widgets labels generate IDs that conflict with the main window. This fixes the assertion error with ImGui in debug builds."

# Dexed issues:

1. **Issue with SYX file loading:**
   * "My only problem at the moment is that whenever I load a SYX file, I get corrupted patches."
   * "Sometimes the first 10 patches are okay, sometimes all are corrupted."
   * "You can see that the names are not displayed correctly in the drop-down list."
   * "Also when you load and play a corrupted patch, the plugin frequently crashes."
2. **Compatibility and stability issues:**
   * "Happens with both your latest binary version and your latest code compiled with VS 2013."
   * "Your default patches loaded at start-up work fine, looks like they are loaded from a binary chunk instead of the SYX file, though."
   * "Can you reproduce this on your side?"
   * "If you send Pitch Bend Messages on any MIDI channel other than 1, nothing happens."
   * "There's a bug with Dexed's envelopes when the level of the current stage == level of the next stage."
3. **Technical issues and debugging:**
   * "This line needs reworking if you planning modulation."
   * "I've tried downgrading my Ableton to 32x bit that didn't work."
   * "I tried using wine to run savihost that also didn't work but I think that was a wine issue."
   * "Oh, and I'm pretty sure it has nothing to do with Ableton 9 Lite because I have another VST working in Ableton."
4. **Compatibility with different systems:**
   * "I've installed Dexed in Logic 5.5.1 on pc."
   * "I'm using Dexed 0.9.3 in Max Msp 7 on a mac."
   * "On macOS High Sierra 10.13, the AU version of Dexed is not recognized as AU plugin by Logic Pro X (10.3.2)."
   * "I recently had to replace my old mac with a new pc with Windows 10."
5. **Feature requests and suggestions:**
   * "It would be great to be able to scale the Dexed GUI."
   * "There is an issue when FruityLoops is syncing the MIDI events with the audio sample buffer."
   * "I found the following inconsistencies between parameter types that prevent the code from being compiled without modifications."
   * "Is there an option to build the standalone version with JACK audio output and MIDI input support?"
6. **User experience and usability:**
   * "The GUI is very small on a 4K or Hi-DPI display."
   * "Adjusting controls on the PARM panel only takes effect when you hit OK."
   * "I think your work would be fantastic to try! However, the instructions are not clear."
   * "Tiny fix, but it's a visible one."
7. **Performance and optimization:**
   * "Amplitude modulation in Dexed seems to be inverted."
   * "I'm seeing something like 25% of 1 CPU on an older, but Core i7-based, MacBook Pro."
   * "Distortions when vst host chunk is not multiple on N (msfa chunk size)."
   * "If L(N) == L(N+1), the previous implementation would not properly hold for..."
8. **Build and compilation issues:**
   * "Tested with: /usr/lib/carla/carla-bridge-native vst..."
   * "I compiled version 0.9.3 and this was still ok, so I did a **git bisect** to find the first bad commit."
   * "Maybe it's because I was using them in the standalone (it works, why remove the menus in standalone mode?)."
   * "I'm curious as to what it would entail to port this to iOS. Are there any plans for it?"
9. **Pitch Bend Offset Issue**:
   * "The pitch sounded offset initially by the pitchbend range."
   * "playing D# sounded F."
   * "As soon as I pull the pitch bend wheel and release it, the pitch is corrected."
10. **Sound Quality Issue**:
    * "it builds up and then CRACK!"
11. **Aftertouch Not Working**:
    * "Aftertouch is not working on my stand alone Dexed."
    * "only aftertouch doesn't work."
12. **Parameter Page Switches Issue**:
    * "PARM page switches lack of any LED or any other mean to know if they are switched ON or OFF."
    * "it's far from be immediate."
13. **Missing Parameter in Standalone Version**:
    * "In standalone (0.9.4HF1) don't visible 'dx7 in' parameter."
14. **Program Names Loading Issue**:
    * "the program names aren't loaded until the plugin editor is opened."
15. **Logic Preset Reverting Issue**:
    * "In Logic 10.3.2 on OS X Mojave, no matter what patch I load from a .syx cart, the preset reverts back to 'Factory.'"
16. **Standalone Version Crashing**:
    * "the Dexed standalone crashes when I enable or disable MIDI channels in the options menu."
    * "the standalone version of DEXED...immediately shuts down again."
17. **Compilation Errors**:
    * "tried to get it to compile for the last 6 hours or so but keep running into these errors."
    * "ran into a snag...used the modules in dexed/JuceLibraryCode."
18. **UI Redesign Inquiry**:
    * "Hi @asb2m10, is there any update regarding the UI redesign?"
19. **Crashing on macOS standalone:**
    * "if I run it standalone it crashes immediately"
    * "Crashed Thread: 9 com.apple.audio.IOThread.client"
    * "I tried compiling Dexed on macOS 11.1 on an Apple M1 mac and got the following errors"
20. **Display Issues:**
    * "displaying if operators are on or off in the algorithm display at the bottom of the UI seems to be broken"
    * "Looks like current VST3 build of Dexed doesn't at all respond to modwheel"
21. **Compilation Errors:**
    * "I get a fatal error when running ./scripts/build-lin.sh all before is ok"
    * "So I tried to compile it for Ubuntu 20.04 but I got this error"
22. **Compatibility Issues:**
    * "I get a fatal error when running ./scripts/build-lin.sh all before is ok"
    * "If I try to load the dexed vst version 0.8.0 on Mac OSX 10.6.8, it will break up with an error"
23. **Feature Requests:**
    * "Just a feature request for a Reface DX mode somewhere down the line"
    * "the new ui is great but for small screen resolution displays (720p) i would like to have option to hide piano keyboard"
24. **Documentation Issues:**
    * "To accurately display version information, macOS apps need to have the **CFBundleVersion** and **CFBundleShortVersionString** tags in **Info.plist**."
    * "I would like to build dexed on FreeBSD both standalone and as a plugin for DAWs. Please add instructions on how to build dexed on FreeBSD."
25. **Sysex Issues:**
    * "Do you have a patch plan for the SysEx file dedicated to DX7II?"
    * "I'm wondering if anyone has any ideas."
26. **UI/UX Issues:**
    * "The memcpy appeared to be overwriting the previously normalised parameters unpacked in the for loop above"
    * "If installation selects both StandAlone.exe and VST, only Standalone is installed."
27. **Automation Issues:**
    * "But the only problem is that when i try to automate a parameter (like OP2 OUTPUT LEVEL) in my DAW the parameter in the vst is not affected by the automation clip or any midi controller."
28. **Performance Issues:**
    * "My Mac runs in 'retina' (2x) mode. I've noticed that when I have the Dexed control panel open, Ableton starts to get quite laggy."
29. **Build Environment Setup**
    * Sentences related to setting up the development environment, including cloning repositories, opening projects, and performing builds.
    * Example: "Hi, I am interested in building the project in MAC OS X. I have cloned the latest code from the repo. Opened project Xcode and performed a build."
30. **Error Handling**
    * Sentences indicating errors encountered during the build process or while running the code.
    * Example: "Following error came up: 'Failed to find AUResources/AUResources.r'."
31. **Code Modification**
    * Sentences describing changes or patches applied to the codebase.
    * Example: "This patch tries to fix the issue by scaling the feedback value for algorithm 32."
32. **CMake Integration**
    * Sentences discussing the integration of the CMake build system into the project.
    * Example: "This adds support for the CMake build system. It is very basic and has only been tested on Debian."
33. **Feedback and Thanks**
    * Sentences expressing feedback or gratitude towards contributors or maintainers.
    * Example: "BTW, thanks for accepting my initial CMake support pull request."
34. **Compilation Errors**
    * Sentences highlighting specific compilation errors or issues encountered during the build process.
    * Example: "**dexed/Source/PluginProcessor.cpp:776:11: error: invalid use of template-name 'juce::Rectangle'**."
35. **Dependency Management**
    * Sentences discussing the management or inclusion of dependencies in the project.
    * Example: "I'd like to suggest making JUCE a submodule to reduce download size."
36. **Code Refactoring**
    * Sentences related to restructuring or improving the existing codebase.
    * Example: "In total, this brings the displayed warnings down to manageable 28."
37. **Feature Requests**
    * Sentences suggesting new features or enhancements to be implemented.
    * Example: "It would be great to have a MIDI learn feature."
38. **Bug Reports**
    * Sentences reporting bugs or unexpected behavior observed in the application.
    * Example: "The frequency fixed display also needs correcting."
39. **Building Native Version on Linux**
    * "I tried to use the Windows VST on Linux but Wine kept crashing. So now I built a native version on Linux (on KXstudio / Ubuntu)."
    * "In order to do this I created a Linux config in Introjucer."
    * "I also installed the following Juce requirements: <http://www.juce.com/forum/topic/list-juce-dependancies-under-ubuntu-linux>."
    * "I verified that the Juce demo app can be compiled."
40. **Manual Changes Needed**
    * "Here is the list of manual changes I needed to do:"
      1. "Change the libx11 location in the Makefile (could do this in Introjucer but I believe this is Linux version dependent)."
      2. "SInt16 error / size\_t error: added the following lines to synth.h (maybe you can add this to one of your own files?):"
         1. "#include <stddef.h>"
         2. "typedef int16\_t SInt16;"
      3. "NotificationType error: removed 'NotificationType::' from the following files:"
         1. "PluginParam.cpp"
         2. "PluginEditor.cpp"
         3. "OperatorEditor.cpp"
41. **Dexed Sysex Loading Issue**
    * "I have noticed that Dexed cannot load a DX7 sysex file correctly if the third byte does not equal 0x00."
    * "The third byte in a DX7 sysex bankfile can be anything between 0x00 (channel=1) and 0x0f (channel=16)."
    * "Dexed fails if nnnn is anything other than 0000. This should be fixed."
    * "Also, patchloading could be more flexible if Dexed would NOT assume a file to have a size of 4104 bytes, but instead would iterate through the values of the bytes and search for the Yamaha DX7 header bytes."
42. **Compilation Error on Windows**
    * "Hi! Thanks for great synth! I'd like to compile it on my machine, but failed."
    * "I'm experienced programmer, but didn't work on c++ about 10 years, so I don't know how to resolve this. Please help :)"
    * "Error 278 error LNK2019: unresolved external symbol 'public: \_\_cdecl ProgramListBox::ProgramListBox(class juce::String,int)'"
    * "Error 279 error LNK2019: unresolved external symbol 'public: void \_\_cdecl ProgramListBox::addListener(class ProgramListBoxListener \*)'"
    * "Error 280 error LNK2019: unresolved external symbol 'public: void \_\_cdecl ProgramListBox::setSelected(int)'"
43. **Crashing Issues**
    * "Every time I change preset from the default preset LMMS 1.1.3 crashes and sometimes Dexed goes all black."
    * "I have 64-bit system but also tried 32-bit Dexed and it crashed also."
    * "Only other patch I can select without crash is init patch."
44. **Compilation Error on Linux**
    * "I am trying to compile dexed on Linux Fedora 24 64bits, gcc 6.1.1."
    * "Compiling fails during compilation of juce\_audio\_formats.cpp."
    * "If I add -D 'JUCE\_USE\_FLAC=0' to the CPPFLAGS in the Linux Makefile dexed compilation completes without problems."
45. **Plugin Hosting Issues**
    * "Hi, first, thanks for this great project. I have both a DX7 and a Volca FM, so your great piece of software is the missing link... but my computer is old (MacBook Core2 Duo running 10.6.8)."
    * "I've tried to load the plugin in every possible free host available but it never ever appears in the lists."
    * "When the host lets me select it directly from a dialog, it creates an error."
46. **MIDI Features and SysEx**
    * "I'm unable to right-click in the CART window to send a patch to an external device on Mac (using ctrl-click)."
    * "I've tried using Dexed as an editor for the FS1R."
    * "The FS1R loads DX7 voices, but it doesn't respond to single-parameter sysex messages."
47. **Compilation Error on Linux (Another Instance)**
    * "While compiling for Linux, the following error message appears: ../../JuceLibraryCode/modules/juce\_graphics/juce\_graphics.cpp:82:24: fatal error: ft2build.h: Datei oder Verzeichnis nicht gefunden indeed a file named ft2build.h is not in the directory tree."
    * "Last commit was: commit 8620531b01289271c50f54b3ad1b335362f8a785 Author: asb2m10."
48. **Sysex Handling**
    * "I've noticed that SysEx messages are sent from the plugin if I move a parameter and updated correctly on the DX7 but not the other way around, but sending an entire patch to Dexed via SysEx works, so probably it was."

# Neuralnote issues:

1. **Rename struct fields**:
   * "This also renames the **start** and **end** fields of the Notes::Event struct to respectively **startTime** and **endTime**, as well as adds two extra fields: **startFrame** and **endFrame** to avoid back and forth conversions."
2. **Update build scripts**:
   * "This adds the **build.sh** and **build.bat** scripts for an all-inclusive build experience."
3. **Fix issue with standalone app**:
   * "Fixing issue with standalone app on mac at least when not used in CLion."
4. **Feature request**:
   * "Either implement a simple synth inside NeuralNote, or find an elegant way to route the transcribed MIDI to another synth. Add **Play** and **Stop** buttons, a clickable playhead and a mixer for levels of the source audio and the synthesized transcription."
5. **Installation issue**:
   * "Need help on how to install on windows. kind of confusing with codes and etc"
6. **Update documentation**:
   * "# Changes - New **SourceAudioManager** class that handles: - Recording of incoming audio at native and Basic Pitch sample rate. - Audio file drop - Audio thumbnail management. The recording is now done directly to 2 wav files (native sample rate and basic pitch sample rate) on separate threads thanks to **juce::ThreadedWriter**. There is no 3 minutes limit anymore. The saved files are deleted on a click of clear button. A timer is no longer used for the thumbnail, we simply use a **changeListener**."
7. **Dependency issue**:
   * "I'm trying to try NeuralNote on Linux and wasn't successful when trying to build it (seems to require some dependencies to become Linux-compatible) nor when using yabridge+Wine..."
8. **Appreciation**:
   * "Thanks @DamRsn! Really appreciate this plugin and already used it a couple of times in my DAW ;)"
9. **Bug fix**:
   * "- Fixes #54"
10. **Request for web/pip install version**:

* "Is it possible to get a web/pip install version of this so it's not constrained to a DAW?"

# Andres issues:

1. **Feature request: Generic ADSR envelope generator**
   * "Generic ADSR envelope generator to use with volume and synth parameters modulation."
2. **Feature request: Explore sonic character of simplex noise**
   * "Explore sonic character of simplex noise and see if it fits into the synth."
3. **Bug report: Negative array indexing in Noise::gen method**
   * "Unfortunately I haven't figured out how to 'immediately' reproduce this bug, but I believe the **Noise::gen** method has a math bug that is causing negative array indexing in **Noise::gen1**."
   * "If you turn **warping**, **octaves** and **persistence** all the way up, and alternate between modulating **torsion** with the mouse and spam clicking on the randomize button, you'll be able to (eventually) reproduce it."
4. **Build issue: LinuxMakefile compilation error**
   * "**% cd Builds/LinuxMakefile % CONFIG=Release64 make -j2 Makefile:140: warning: overriding recipe for target '/' Makefile:133: warning: ignoring old recipe for target '/' Makefile:147: warning: overriding recipe for target '/' Makefile:140: warning: ignoring old recipe for target '/' mkdir: missing operand Try 'mkdir --help' for more information. Makefile:164: recipe for target '/AndesSlider\_6859167.o' failed make: [/AndesSlider\_6859167.o] Error 1 (ignored) mkdir: missing operand Try 'mkdir --help' for more information. Compiling AndesSlider.cpp Makefile:169: recipe for target '/AndesLookAndFeel\_ce944082.o' failed make: [/AndesLookAndFeel\_ce944082.o] Error 1 (ignored) Compiling AndesLookAndFeel.cpp In file included from ../../Source/AndesSlider.cpp:19:0: ../../Source/../JuceLibraryCode/JuceHeader.h:17:49: fatal error: juce\_audio\_basics/juce\_audio\_basics.h: No such file or directory #include <juce\_audio\_basics/juce\_audio\_basics.h> ^ compilation terminated. Makefile:164: recipe for target '/AndesSlider\_6859167.o' failed make: \*\*\* [/AndesSlider\_6859167.o] Error 1 make: \*\*\* Waiting for unfinished jobs.... In file included from ../../Source/AndesLookAndFeel.h:21:0, from ../../Source/AndesLookAndFeel.cpp:19: ../../Source/../JuceLibraryCode/JuceHeader.h:17:49: fatal error: juce\_audio\_basics/juce\_audio\_basics.h: No such file or directory #include <juce\_audio\_basics/juce\_audio\_basics.h> ^ compilation terminated.**"
5. **Feature request: Implement Perlin noise warping**
   * "Perlin noise looks interestingly different when the coordinates are randomly modified with a noise function. This approach, called warping or turbulence could be implemented in Andes for extra sonic possibilities."
6. **Feature request: Add pitchbend support**
   * "please add pitchbend support :-)"

# Amsynth issues:

1. ADSR Envelope:
   * "The exponential ADSR is based on a single-pole low pass filter."
   * "Exponential ADSR change smoothly, especially for the AMP ENV."
   * "Linear ADSR causes AMP ENV to change abruptly."
   * "This behaviour is said to be similar to classic analog synths."
   * "Exponential ADSR is always preferable for AMP ENV."
   * "Linear ADSR is different, but not less preferable."
   * "Would it be better to have both?"
   * "A switch between the old linear or newer exp."
   * "A knob where linear behavior is simulated with large overshoot and scaling."
2. Bitwig Integration:
   * "Patch is being saved fine, but parameters don't show up in the UI."
   * "UI isn't picking up the saved parameters."
   * "Screencast provided for the issue."
3. OS Compatibility (FreeBSD/TrueOS):
   * "Build and run under FreeBSD/TrueOS."
   * "Compilation failed under FreeBSD/TrueOS."
   * "Building issues related to Makefile and missing files."
4. MIDI Control:
   * "Controller mapping for software knobs (env, filter, drive, etc.)"
   * "How to map controller to change the patch?"
   * "Setting MIDI channel on startup."
   * "Running multiple instances in GUI-less mode for live use."
5. Tuning and Voice Management:
   * "Ability to load tuning file at startup."
   * "Parameter for setting a maximum number of voices."
   * "Extra noise when changing parameters."
6. Audio Output:
   * "Issues with audio output drivers (OSS, ALSA)."
   * "Integration with JACK alongside PA or other OSS apps."
7. LV2 Plugin Development:
   * "Exporting extra symbols in the LV2 plugin."
   * "Handling protocol specified by the Non Session Manager."
8. Feature Requests:
   * "Adding oscilloscope window for observing wave shape."
   * "Ability to switch off whole modules of the synthesizer."
   * "Proper installation of icons according to freedesktop guidelines."
   * "Targeting C++11 for compatibility with newer distributions."
9. Bug Reports:
   * "Segmentation faults on startup."
   * "Valgrind reports errors related to uninitialized values."
   * "Compilation warnings and errors."
10. **Feature Request (Control Frequency via MIDI):**
    * "I am thinking I would like to do some software / hardware projects that would really benefit from being able to control the frequency of the note(s) directly rather than via the midi note number."
    * "I was thinking this might be implemented by sending (say) three midi controller messages - the first to select the tone # and volume, and the next two to send the MSB and LSB of the frequency."
    * "How easy would this be to implement, in theory, in your software?"
11. **Version Information Request:**
    * "Which version of amsynth are you using? 1.5.1"
    * "Which version of amsynth are you using? 1.9.0"
12. **File Location Issue:**
    * "All user files this application creates should be either in **$XDG\_CONFIG\_HOME**, **$XDG\_CACHE\_HOME** or **$XDG\_DATA\_HOME**."
    * "Currently, there are files everywhere, namely **~/.amsynth**, **~/.amSynthrc**, **.amSynth.presets**."
13. **Language Localization Issue:**
    * "Hi, I've compiled 1.9.0 and I can't get it running in French."
    * "The .mo file is installed in /usr/share/locale/fr/LC\_MESSAGES/amsynth.mo and it looks (cat-ing it) that it contains the French translation."
14. **Bug Report (Descriptor Bug):**
    * "A descriptor bug crashes naspro-bridges with the DSSI plugin installed."
    * "The static variable \_preset can be uninitialized when the library constructor runs."
15. **Performance Improvement (Eliminating Copy):**
    * "Eliminating the copy accelerates the program listing by a vast amount."
    * "I've applied some identical changes throughout the program."
16. **Packaging Request (Ubuntu/Debian):**
    * "Please, (help) package 1.6.4 for Ubuntu and Debian."
    * "I'm packaging lv2lint for Arch Linux and when packaging 1.10.0 I ran lv2lint against it (but it fails)."
17. **Compatibility Issue (VST Plugin):**
    * "I have some issues with VST version of AMSynth 1.9.0."
    * "In Reaper, I can't load the plugin, it freezes the host."
18. **Installation Issue (Binary Location):**
    * "However, I can't find the **amsynth** binary."
    * "I have no idea how to start the amsynth program or where it was installed to."
19. **Crash Report (Reaper):**

* "reaper and amsynth both crash."
* "Here's the error log from Reaper."

1. **Code Segmentation Fault Fix:**

* "Fixes a segfault when loading a custom skin from a directory pointed to by the AMSYNTH\_SKIN environment."

1. **Translation Issue (Pot File Generation):**

* "The instructions in amsynth/po don't work, as running **make amsynth.pot** from that directory does nothing."

1. **MIDI Control Feature Request:**

* "Please add support to control the 'controls' via midi input."

1. **NSM (Non Session Manager) Integration Issue:**

* "Adding amsynth into an NSM session it should send the 'announce' osc message etc."
* "Amsynth is treated like any other not-nsm program."

1. **Missing Documentation**:
   * "Some information on how to submit in the Online Documentation"
   * "No information exist now"
2. **Version and Build Information**:
   * "Which version of amsynth are you using?"
   * "Which build of amsynth are you using?"
   * "If using amsynth as a plugin, which host application are you using?"
   * "Which operating system & version are you using?"
3. **Steps to Reproduce**:
   * "Steps to reproduce the behavior"
4. **Compilation Issues**:
   * "Cannot build doing make"
   * "Configure fails"
   * "Configure doesn't check for NSM support"
   * "Issue with 'AX\_CXX\_COMPILE\_STDCXX\_11' in configure"
   * "Syntax error in configure script"
   * "Autogen and configure commands not resolving the issue"
5. **MIDI Configuration Issues**:
   * "MIDI configuration not working as expected"
   * "MIDI channels not behaving as expected"
   * "Instances not receiving/sending MIDI information correctly"
6. **Plugin Issues**:
   * "Virtual functions should specify exactly one of 'virtual', 'override', or 'final'"
   * "Prefer initialization to assignment in constructors"
   * "Plugin instantiation failed"
   * "NSM plugin validation failure"
7. **HiDPI Support**:
   * "Issues with HiDPI display"
   * "Scaling factor not applied correctly"
   * "Blurry UI on HiDPI display"
8. **Miscellaneous**:
   * "Patch submission"
   * "Microtonal tuning support"
   * "URI issues in data files"
   * "LV2 plugin linting issues"
   * "Appstream specification reference"
9. **Sound Quality Issues**
   * "Some presets have a click when a key is hit the first time..."
10. **Link Accessibility**
    * "Link doesn't work"
    * "The link to the Linux Tar file on <https://amsynth.github.io/> is broken."
11. **Plugin Functionality**
    * "lv2lint does not run into errors."
    * "The issue: I discovered that changing some specific CC's through midi in..."
12. **UI/UX Improvements**
    * "Adopts UI scaling in VST plugin."
    * "Fixes an issue where unexpected MIDI output can be produced..."
    * "Defines parameter limits & curves as a read-only struct array instead of being included in each **Parameter** object..."
13. **Standalone Application Issues**
    * "For the sound produced by amsynth not to change unless the preset or a control is changed."
    * "amsynth should actually open and function!"
14. **MIDI Control and Integration**
    * "Is there anyway to set a full preset to amsynth using midi?"
    * "I've been fooling with a midi controller and amsynth..."
15. **Translation and Localization**
    * "Please find man pages built from the return of **amsynth -h**..."
    * "Hi @nixxcode and thank you for **amsynth** which is a really nice piece of software..."
    * "Udapte FR translation to 100%."
16. **Bug Reports**
    * "Segmentation fault (core dump)"
    * "When a MIDI sequence is stopped playing in the middle of a note..."
17. **Packaging Issues**
    * "I currently package amsynth for Fedora..."
    * "Not really a bug, but I'm trying to communicate between AMSYNTH and SUPERCOLLIDER..."
18. **Feature Requests**
    * "Is there a way to start amsynth in headless mode with a preset from a bank?"
19. Ellipses Cleanup:
    * "This PR cleans up ellipses in menu items and dialog titles."
    * "I removed ellipses from dialog titles and adjusted some menu item labels."
    * "They now contain ellipses (more or less) if more user input is requested after selecting the menu item."
    * "Miscellaneous improvements (wording, keyboard accelerators, capitalization, trailing ellipses ...)."
    * "Mostly ellipsis-related changes and small adjustments."
20. Help Output Misalignment:
    * "Help output (**amsynth -h**) was misaligned due to a long place holder string and a stray tab."
21. Missing Explanation for **--jack\_autoconnect**:
    * "The **--jack\_autoconnect** option is listed without an explanation in amsynth's help output (**amsynth -h**)."
22. Dialog Confirmation Message:
    * "The dialog only contains a message asking for confirmation and an 'OK' button."
23. Addition of Utilities:
    * "This adds [VMPK](http://vmpk.sourceforge.net/) (a virtual keyboard) and [Patchage](https://drobilla.net/software/patchage) (an ALSA/JACK patch bay) to the utils menu."
    * "Moves virtual keyboards into their own sub-menu."
24. Debugging Error:
    * "Errors caused are e.g mangled names in dssi get\_program."
    * "Not easy to debug believe me!"
25. LV2 Plugin Loading Issue:
    * "Carla does not load the Amsynth LV2 plugin."
    * "Error opening file /usr/lib/lv2/amsynth.lv2/manifest.ttl (No such file or directory)."
26. Compilation Error:
    * "The new 1.6.0 failed to compile on my Fedora (and generate many ugly errors)."
    * "I think it's due to a lib problem."
27. MIDI Channel Issue:
    * "If I run two instances of amsynth and set each to use a different MIDI channel, playing on both channels will cause issues."
    * "One channel's note(s) may not be played or a note from one channel may be stuck on."
28. Plugin Compilation Failure:
    * "But it fails with: **... Makefile:4023: \*\*\* missing separator (did you mean TAB instead of 8 spaces?).**"

# Soompler issues:

1. **Artifacts in Sound Playback:**
   * "Sound file played with artifacts."
   * "Maybe its has something to do with samplerate."
2. **Performance Issues:**
   * "For big files process can take some time (4-5 sec on my g2020), and this causes some freezes on my system"
   * "UI is pretty slow on my laptop (celeron ivy bridge). Maybe timer delay can be decreased to get more fps."
   * "How to reproduce: 1. Load any long sample > 2m 2. Try to change start or end position 3. if your computer as slow as my laptop (some celeron processor) you maybe reproduced the bug"
   * "We can restrict sample length to 30sec or so, because it's regular case for sampler plugin, but need to somehow"
3. **User Interface and Functionality:**
   * "Built-in file dialog introduced in 0.0.2 can't display languages other than English."
   * "Now all widgets are absolute. Need to rework markup using flexbox component."
   * "In pianoroll we can display current non-pitched note of sample (its original pitch in future). And note range that can be applied to this sample."
   * "Need to credit every icon's author."
   * "This actions can be moved into upper section of GUI."
4. **Bug Reports and Fixes:**
   * "Loop button is disabled by default and is unremarkable."
   * "Markers restore wrong way, making plugin not usable."
   * "Attack should be 0, but it restored as 0.1 and the same thing with other ADSR params."
   * "Reverse doesn't work with some long samples."
   * "Error when compile under Linux with gcc 9.1.1"
5. **Feature Requests and Enhancements:**
   * "Show current sample mapped pitch on pianoroll and range that sample support."
   * "Volume is very loud on low position and super-distorted on high. SoomplerKnob class is first one to blame."
6. **Tracktion 7 Specific Issues:**
   * "In Tracktion 7 on MacOS 10.14 when reopen plugin loaded sample is gone."
   * "When reopen project in Tracktion 7 plugin state is not recovered."
   * "In Tracktion 7 C4 note is C3 note in Sampler."
7. **General Comments and Questions:**
   * "There are plenty of them."
   * "Third development iteration."
   * "Detailed description required."