

ReSet

Entwicklung einer integrierten Settingsanwendung für Linux

Students



Felix Tran



Fabio Lenherr

Introduction: With the modular design that Linux offers, everything from the core part of the system to every program used can be chosen by the user. This includes the part that is responsible for drawing and managing windows, which is called a window manager or compositor. Usually, these tools are bundled with other programs like a start menu, a taskbar and more. This bundle creates the experience users are accustomed to from conventional user facing operating systems. Examples of such bundles are GNOME or KDE, which are the most common environments found on general Linux desktops.

Problem: Not everyone is fond of predetermined environments, some users would like to use a window manager/compositor without the extra software or determine it themselves. This however means that the user has to choose software providing basic functionality themselves. For example, should the user want to connect to a Bluetooth device with a graphical user interface, then the user needs to install a program specifically for this use case, the same would apply to wireless networks, or to changing the volume of an audio device. In addition to the problem of needing a specific program for every feature, with an increasing number of programs, the probability of receiving a uniform user interface shrinks. ReSet specifically aims to reduce the number of programs a user needs to install to provide the listed features and to provide a uniform application without being bound to a specific environment. This means ReSet intends to work on any Linux environment.

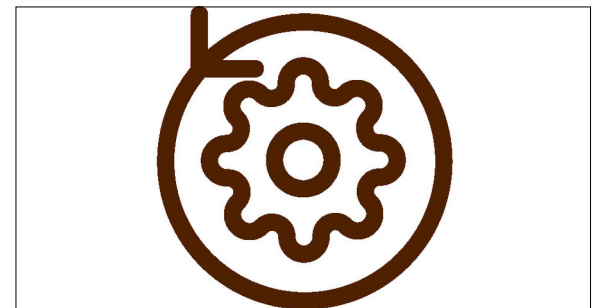
Result: ReSet is comprised of two parts, the first is a non-user facing service that provides the aforementioned functionality, while the second is a modern and responsive user interface application that interacts with the service. This structure allows users

to use their own program to access the same functionality as the user interface application provided by this ReSet.

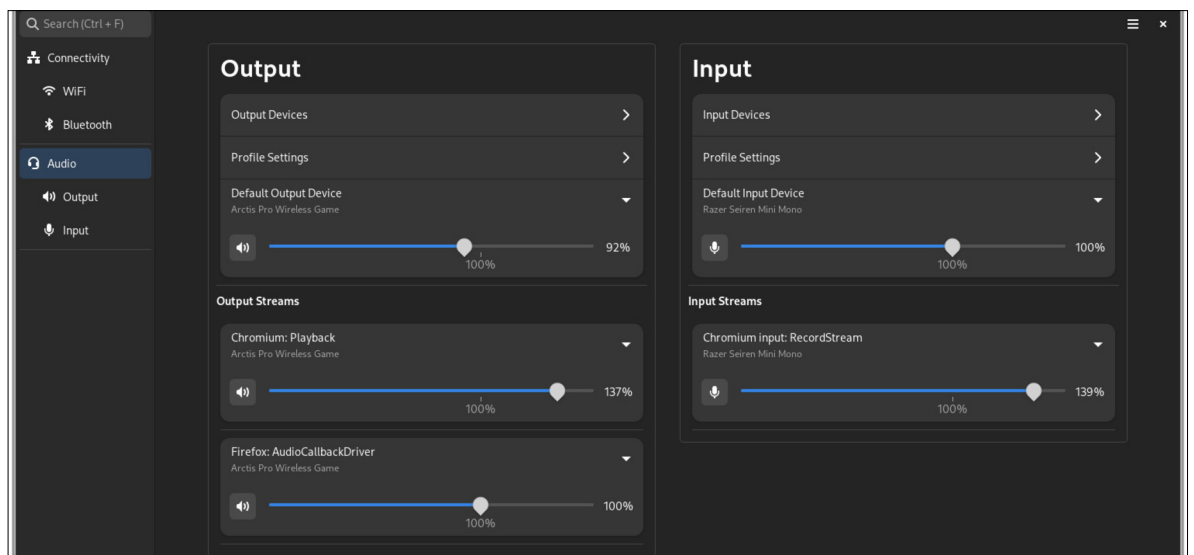
Desktop-Environments, Window Managers and Compositors
GNOME, KDE, Hyprland, i3, dwm, xmonad,



ReSet-Logo
Derivation of feathericons settings.svg



Screenshot of ReSet Audio Settings
Own presentment



Advisor
Prof. Dr. Frieder Loch

Subject Area
Software, System
Software